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Facilitating and Hindering Factors in Implementing Managerial Technology: A Socio-Technical System Process

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FACILITATING AND HINDERING FACTORS IN IMPLEMENTING

MANAGERIAL TECHNOLOGY: A SOCIO-TECHNICAL SYSTEM PROCESS

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ABSTRACT

FACILITATING AND HINDERING FACTORS IN IMPLEMENTING
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Old Dominion University, 1984
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In recent years scientists, researchers and practitioners have focused on the application and theory of managerial technologies in developing countries. Evidence suggests that the implementation of these technologies is widely sought in these countries, but that they suffer from several limitations. Among these are: (a) lack of environmental compatibility in the societies and cultures in which attempts are made to apply such organizational theories and practices; (b) differences between economic systems of developing nations and industrialized nations (c) differences in political history, values and practices and (d) differences in organizational functioning and behavior as a result of these three conditions.

Employing a socio-technical system conceptual framework, the present study was designed to discover, through examination of decision-making processes of managers, what are the macro-environment and organizational factors that either facilitate or hinder the implementation of human resources management technologies commonly found

in advanced industrial nations (e.g., in training, organizational development and performance measurement programs) by companies residing in a less industrially developed country.

Initially, in the planning and design stage, 29 interviews were conducted with managers from 18 companies in Peru. These were content analyzed to: (1) uncover problems, issues and procedures involved in human resources management in that country, (2) identify factors helping and hindering implementation of human resources technologies, and (3) design realistic scenarios, given certain environmental and organizational conditions, policy-capturing analysis of managers' decisions. Then, a comprehensive survey containing socio-technical analysis measures, 15 scenarios, and personal as well as organizational characteristic items were presented to 125 upper-level managers from 85 multinational and locally owned organizations.

Results identified the political, economic and socio-cultural factors that have a strong effect on managers when making decisions about implementing human resources technologies. Specifically, quality of management and of blue-collar employees, availability of local resources to support the technologies, top-management commitment to human resources development, employees' commitment to organization, budget provisions for human resources development, inflation, financial solvency of the company

and specific laws were found to be major determinants of their decision whether or not to implement a managerial technology.

The theoretical, methodological practical and socio-cultural implications, as well as cross-cultural management issues are discussed.

DEDICATION

"Que El te bendiga! y te doy gracias por toda la felicidad que hasta hoy nos haz dado, espero asi seras siempre...un hijo maravilloso!...mucho te vamos a extrañar, tu carro, tu casa, tus hermanos, tus padres...aguardamos el feliz regreso..."

Dec. 24, 1974

- A mi madre Sarita (1929 - 1977), a mi hermano Alejo, y a mis hermanas Lissy y Mariel.

..."Es una etapa muy linda la que inician, y creo yo la comienzan bien, pues sobre la base del amor, de la comprension, de la mutua necesidad, van a construir juntos, partiendo de cero, todo el edificio de sus vidas futuras...ojala tengan suerte y tengan fe en los momentos dificiles...ojala sepan compartir mutuamente sus anhelos y sus inquietudes, sus alegrias y sus pesares, sus ilusiones y sus fracasos...si estan dispuestos a guiarse por la razon y por el amor, y si han decidido llevar una vida de honor y de principios y no de conveniencia y de comodo, pues creo yo que tendran una vida plena, rica, intensa, propia, intimamente satisfactoria, fully rewarding!...deseandoles con todo mi corazon que logren concretar sus ilusiones, alcanzar sus metas y arribar al puerto de la felicidad..."

Lima, 24 de Mayo de 1978

- A mi padre Eduardo y a mi esposa Virginia por haberlo hecho posible.

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Nine years have passed by since I first came to this country and I never imagined that what was once a dream, would become an accomplished reality. As the years went by I realized that my education and experiences were taking me farther from my family, friends and culture. I knew that old relationships, customs and values would not be the same. They will be richer, distant and caring, but never the same. However, my heritage, the love of my mother, the wise advice of my father, the tenderness of my brother and sisters, the encouragement of my family, the respect and support of my friends, are a part of the past that will always be in me. Thus, this accomplishment marks a new beginning...

I would like to thank my father, Eduardo, who in his own way encouraged me to be the best...to never give up...to be independent, self-suficient...and to live by my principles.

I also wish to express my appreciation to my father-in-law, Don Pedro Amado Z., who throughout the years never hesitated to help us in any way that he could.

In these nine years my personal and professional growth has been enhanced by the interaction and relationships I have had with many friends and colleagues.

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CHAPTER 1

THE ROLE OF MANAGERIAL TECHNOLOGY IN DEVELOPING NATIONS

In the less technologically advanced and economically advantaged nations, as in the more developed nations, in order for organizations to achieve desired goals and growth they need knowledge and resources adequate for producing the goods or delivering the services sought. However, the long-term functioning and survival of such organizations depends not only upon production or process knowledge, but also upon the know-how required for planning and organizing the human and technological resources of the organization. As these less advantaged countries get involved in ambitious developmental efforts they seek to draw upon modern administrative philosophies and managerial technologies for their implementation. These managerial technologies are comprised of systemic elements, concepts and procedures used by organizations to reduce gaps between existing and desired conditions, processes, and end states. Pelz and Munson (cited in Tornatzky et al., 1983) refer to these practices as knowledge-based innovations as opposed to hardware-product oriented innovations.

Managerial technology will be broadly defined as Negandhi (1973, 1975) conceptualizes these technologies. That is, in terms of their managerial functions and practices. He defines them as the way in which a manager from an industrial organization conceives and carries out his/her function of planning, organizing, staffing, motivating, directing, and controlling the behavior and effectiveness of people. In the context of this study attention is centered specifically upon those managerial technologies impacting upon human resources utilization and development. Obvious examples of these are selection and training programs, assessment centers, and performance evaluation systems. Also relevant are those aspects of strategy and system functioning that interlock with human resource management within an organization; these technologies include the marketing approach, commitment to management by objectives, or the company's methods of financing. System-wide technologies, such as organizational development interventions, are also part of this domain.

These managerial technologies, especially human resources development efforts, need to be conceptualized as planned organizational change. Goodman and Kurke (1982) make an important distinction between planned change which is characterized by the deliberate introduction of a specific technique, with the intention of altering either the organization in specific ways, or

its members, or both and unpremeditated changes that occur during an organization's life cycle, as reactions to pressures from the external environment (Goodman & Kurke, 1982).

As the less developed nations attempt to industrialize and vitalize their economies, major historical and social problems influence the work environment in ways that alter the values attributed to the managerial methods introduced to achieve industrialization. Among the problems are: a high level of illiteracy and poverty, social systems dominated by a few multipurpose institutions, little mobility between social strata, low productivity, low investment in research and development, runaway inflation rates, high unemployment and underemployment, high dependency on foreign capital for technology, and low skilled manpower (Davis, 1971; Davis & Goodman, 1972; Flores, 1972; Glen & James, 1980; Gillin, 1971; Heller, 1973; Negandhi, 1973, 1975; Rugman, 1983).

One of the most significant contributions of North American industrial/organizational researchers and practitioners is the generation of managerial technologies. In fact, historically the United States has been one of the leaders in the development of management theory, research, practice and technologies. These technologies reach the developing nations of Latin America through the technological transfer process

largely initiated by multinational corporations, North American sponsored agencies and institutions, as well as organizations in higher education (Rugman, 1983; Terpstra, 1978; Solo & Rogers, 1972). It becomes imperative for industrial and economic progress of the developing nations that such managerial technologies be implemented and utilized effectively to improve the management of activities as new technologies in business, industry, education, agriculture and health are adopted.

Technology Transfer and Managerial Technology

Industrial and economical development in the Third World is largely dependent upon the long-term viability of local organizations. These local organizations continually attempt to strengthen their capabilities by importing and adopting new technology (both hardware and software). However, this importation and adoption of technology is useless unless the organization has the adequate managerial resources for planning how the technology will be used, for organizing personnel to efficiently use the technology, and for anticipating and diagnosing problems which arise from the implemention of the technology and the generation of solutions to these problems. Managerial technologies can play an important role in enhancing the human and production resources within organizations in developing nations (Fayerweather,

1969; Negandhi, 1971; Negandhi & Robey, 1977; Wallender, 1979).

A crucial element in the process of ameliorating the foregoing problems is the transfer of managerial technologies to indigenous organizations. As mentioned before, this process in the last decade has been largely undertaken by multinational corporations (MNC) operating in Third World nations who have been able to achieve greater effectiveness through their advanced utilization of managerial technologies (e.g., Solo & Rogers, 1972; Wallender, 1979; Zeira & Adler, 1980). In the late 1960s this issue of transfer of technology became the subject of international policy between developed and developing countries (Rugman, 1983; Stahl, 1979; Steade, 1978) giving impetus to an increased emphasis upon technological infrastructure, especially managerial technology as it contributes to industrial and socio-economic development.

Research on the managerial technology transfer process has been very unsystematic and without much theory or sound methodology (Adler, 1983c; Bhagat & McQuaid, 1982; Boseman & Phatak, 1978; Kiggundu, Jorgense, & Hafsi, 1983; Negandhi, 1971, 1974, 1975; Negandhi & Robey, 1977; Roberts, 1970; Sekaran, 1983). Furthermore, the emphasis has been primarily on the supplier firm; i.e., the MNC (Wallender, 1979). A different perspective would be fostered by giving major

emphasis to the study of the local user instead of to the supplier when implementing managerial technologies. This shift, as has been suggested by Negandhi (1975) and others, allows the identification of specific factors or combinations of factors which have the maximum impact upon implementation and transferability of these technologies. This examination would determine the feasibility and limitations of the transfer process. However, in order to fully understand the successes or failures in transfering managerial technologies, social scientist must go beyond the methods of transferring or adaptation of such techniques. For example, what are the socio-cultural, political or economical factors that facilitate or that hinder the implementation process; what organizational characteristics mediate the implementation; and what policies do decision-makers use to implement such technologies? Only by addressing questions such as these through research is it possible to define and diagnose the most crucial problems; to find out which input, process and environmental factors are most important in the implementation process; and to develop the insights and sophistication essential to effective selection, design, assimilation, application, evaluation and institutionalization of these technologies, so as to realize fully the potential advantages for the economy and citizenry of the less developed country.

However, there are indications that the scene is shifting. With increasing sensitivity to bargaining concerns and the growth of "internationalism", managers (local and expatriate) in the developing nations, in search of competitive shares of the industrial market, have started paying more attention to their human resources activities and managerial approaches. Numerous managerial innovations such as quality circles, participative management, organizational development efforts, assessment centers, performance management systems, have gained popularity and have been applied by these managers as means to increased productivity (e.g., Davis & Cherns, 1975; Faucheaux, Amado & Laurent, 1982; Negandhi, 1974; Kiggundu et al. 1983; Ouchi, 1981; Strauss, 1982; Spier, Sashkin, Jones & Goodstein, 1980).

These innovations, either managerial or technological, produce many changes in the flow of work as they are implemented in the organizational settings. Still, managers and organizational researchers seldom assess the impact of those innovations in the social system or technological system of the organization. For example, as a new managerial system or program is implemented throughout the organization, new technological, structural and social interactions are developed in the work place. It is essential to identify and understand developing interactions as managers formulate their strategic planning and control of people,

goods, organizational processes, and behavior within the content of demands imposed by the environment. Therefore, an open-systems perspective is called for that allows managers and researchers to gain insights into the factors, that affect innovation.

DeGreene (1973) has said that:

> We believe that among the most important socio-technical systems research that could be performed would be studies of top management [executives, decision-makers] values, motivations, and leadership attributes in the context of different system configurations; with performance criteria expressed in terms, not only of system success or failure [profits, meeting contract requirements, employee turnover, etc.] but also in terms of inter-relation with other systems and environmental impacts. (p. 374).

Managerial Technology and Socio-Technical Analysis

The following paragraphs present a literature-based discussion of (a) the fact that managerial technologies have been used successfully in developing nations, (b) the notion that there are problems that need to be anticipated and confronted in the use of these technologies, and (c) the conditions under which the uses of these technologies are successful (e.g., under a closed system) and under which they do not work unless there is careful analysis of the systems involved (e.g., an open-system perspective).

A recent review by Kiggundu, et al. (1983) on the theory and application of administrative science

(managerial technology) in developing countries shows that such technologies are of interest to organizations in these nations and gives examples of their successful implementation. A few number of authors have reported successful experiences in the application of managerial technology in less developed nations. Neubauer (1978) described a program where performance appraisal and wage or salary administration techniques were applied successfully by a health-care manufacturer in Mexico. Flores (1972) reported a case study conducted in the Philippines where new organizational planning and management control techniques were used by local organizations. Jaggy (1977) reported a strong association of job satisfaction with participative leadership style implemented by Indian managers. Similarly, Kraut (1973) reported on the successful use of the assessment center methodology in Brazil and other nations. He concluded that assessment centers can be adopted cross-nationally because of the need of growing industries for sophisticated managerial skills. A number of other researchers have reported applications of these technologies in developing nations (e.g., Bass & Burger, 1979; Bass, 1977; Bohannan & Dalton, 1971; Cochran & Reina, 1971; Davis, 1971; Heller, 1973; Lambert, 1971; Sekaran & Mowday, 1981; Montgomery, 1972; Farris & Butterfield, 1972).

In summarizing successful applications of technology, Kiggundu et al. (1983) concluded that no significant problem arises in organizations applying managerial technologies when managers have control over the technologies. This is true particularly when two conditions prevail: either when the environment has little or no effect on the organization, or when the effects of mediating variables can be controlled by the organization's task and technology. As they stated, "Whenever the organization can behave as a closed system, conventional theory does apply" (p. 75).

On the other hand the difficulties of application are many. In reviewing the articles reporting such difficulties, Kiggundu et al. (1983) related their summary of findings to three clusters of differences in administrative theory and practice between "advanced" and "developing" societies.

First, there are the differences between the cultures where these organizational theories and practices are originated and subsequently applied. Theories and managerial technologies developed in the U.S. or a Western setting may be largely irrelevant or inadequate for a particular developing nation. Some of the reasons listed by Kiggundu et al. (1983) included: different friendship patterns, social norms, authority of the elder, closer emotional interactions, corruption, elitism, and status related to personal and group

alignment rather than merit (e.g., Bourgeois & Boltvinik, 1981; Caiden, 1978; Glen & James, 1980; Shor, 1960; Stahl, 1979).

The second category involves the differences between the economic systems of developing nations and of industrialized nations. The differences Kiggundu et al. (1983) found, some already mentioned, initially revolved about the assumptions of Western organizational behavior and functioning. That is, North American organizations are characteristically larger in size, higher in specialization of labor, and experience strong market competition; characteristics which most developing countries lack (Deva, 1979; Negandhi, 1974).

The last group clusters around differing political practices and institutions in the developing countries. Most governments in the developing countries are very centralized and authoritarian, have large public sector components in the economy, a heavy input of political influence and corruption on managerial behavior, and management functioning characterized by crisis reactions (e.g., Iboko, 1976; Marston, 1978; Singhal, 1982).

In summary, Kiggundu et al. (1983) conclude,

> ...each time the environment is involved, the theory developed for Western settings does not apply, because it assumes contingencies that may not be valid for developing countries. In these situations, utilization must be preceded by a situational analysis to identify the relevant contingencies and their interrelationships. To the extent that contingencies for the utilization of administrative science in developing countries

differ from those of industrialized countries, the transfer of management knowledge and technology (e.g. management development, curriculum development, technical assistance) should emphasize process rather than content theories (Campbell et al. 1970) and methods (p.81).

Elaborations and illustrations of these themes came from several sources. Cherns & Davis (1975) explain that the technologist trained in an advanced country (including most technologists in policy-making roles) faces daily constraints upon his/her efforts when seeking to transfer the scientific values and technological solutions of the advanced countries. The technologists may adapt to the social and political climate, or may learn new ways of doing things, or may even solicit the aid of other professionals (e.g. sociologists, lawyers) to assess the acceptability of his/her proposal and examine the likely effects on the life of the people concerned.

However, many times those persons do not grasp the need for socio-technical analysis prior to implementation of innovations. Every objective regarding improvements in the quality of work and life in developing nations needs to be projected through both social and technical prospectives; it should become a socio-technical objective. Otherwise, the developing nations are just importing a quality of work life or a managerial technology from a foreign environment along with imported machinery (Trist, 1975). Thus, success in multicultural

operations depend on matching organizational strategies and capabilities to demands imposed by the particular environment. Achieving this match requires a thorough socio-technical analysis (further elaborated in Chapter 2).

Problems and failures also arise when new technologies (either process or product oriented) introduced to a developing country are not complemented by the manpower, skills and know-how necessary to put them into operation. This situation is accentuated further in that these countries are very largely dependent on the West to provide the infrastructure and managerial procedures. Since as stated earlier, most of the organizational research theories and practices that appear in the literature follow a "North American model" or "Western-approach", they are too frequently used and disseminated in other cultures as "the best way" to go about managing and operating organizations. This basically reflects the "universalist" school which assumes that there are no fundamental differences in principles governing behavior and practices among managers from different countries. According to this view, all managers are involved in the same basic activity (see Barrett & Bass, 1970). Recent reviews still reflect this universality perspective in organizational theory literature (Adler, 1983 a,b; Adlerfer, 1977). This assumption of "universalism" by

organizational researchers and practitioners largely ignores the dynamic interaction between organizations and environments specially in developing nations.

A full understanding of cross-national organizational behavior in developing nations requires the study of the impact of the external environment on the organizational environment and vice versa (Negandhi, 1971, 1974, 1975; and Boseman & Phatak, 1978). Different cultural environments demand different organizational behaviors. This view is by no means new, since most researchers who apply organizational theory and practice in other cultures acknowledge the environmental constraints that influence organizations. However, little has been done to establish empirically the nature of the adaptation process in macro-organizational terms (Child, 1976; Flores, 1972; Hofstede, 1980; Kraut, 1975; Miller & Simonette, 1971; Negandhi, 1971, 1975). The concentration remains largely on the "classic" micro-organizational oriented concepts of leadership, motivation, values, attitudes, job satisfaction, need hierarchies and communication (e.g., Barrett & Bass, 1976; Bhagat & McQuail, 1982; Machungnwa & Schmitt, 1983; Tannenbaum, 1980). On the contrary, much research time is spent dealing with the behavioral approach (Negandhi, 1983) which attempts to determine pattern differences between individuals and groups. Furthermore, as Machungnwa and Schmitt (1983) stated,

addressing the motivation literature, most cross-cultural research tends to emphasize comparison across nations and ignoring the practical, solution-oriented applications needed by these countries.

Additionally, studies of the impact of environmental factors on organizational behavior are essential to advance organizational theory. Insightful information can be gained in this manner following Dill's (1958) early proposition that:

> ... until we can identify relevant environmental variables and can predict their impact on behavior, we cannot know how finding about behaviors in one situation must be modified if they are to serve as prescriptions for behavior in other situations where groups are subject to different environmental demands (p. 409).

The Present Research Rationale

The purpose of the present research is to reflect such thinking in a systematic study of the factors that facilitate and hinder the implementation of managerial technologies. This study will investigate how these factors are affected by and impact upon socio-technical systems in a developing country.

The rationale for conducting this research in a developing country (Peru) is two-fold. First, one can deal with the issues in a setting where the technological stages of emergence, growth and evaluation, the factors affecting implementation and the outcomes attending them

are somewhat easier to observe. Consequently, they can be dealt with conceptually and empirically.

Secondly, it is felt that more effort should be invested in understanding behavior in a single culture to develop middle-level theories that can be used to guide further explorations across nations, as an earlier review by Roberts (1970) has suggested.

CHAPTER 2

SOCIO-TECHNICAL SYSTEMS: A THEORETICAL FRAMEWORK

A thorough understanding of organizations requires that we conceptualize them as systems; that the organization be studied holistically taking into consideration the interrelationships among its component parts and with its environment.

Business organizations, like any other social system, are "open systems". They depend on the transformation of energy and exchanges with the external environment. Katz & Kahn (1978) have identified certain systematic characteristics to define all open systems. These include: importation of energy, throughput, output, negative entropy, informational input, a steady state, differentiation, equifinality, integration and coordination.

The view of organizations as open systems gives frame and substance to socio-technical analysis and the emergence of models of the socio-technical system as means to valued social and personal ends.

Socio-Technical System: A Definition

The socio-technical systems concept derives from the premise that any product or service-oriented system requires two components: (1) a technological subsystem, characterized by plants, machinery, and its transformation processes and (2) a social structure composed of work roles, human interrelations and work organization.   As the originators of socio-technical system (Trist and Bamforth, 1951) argued neither of these two components should be regarded as operating in isolation or independence.   In fact, a viable organization has to be seen as a synthesis of both of these components.   Thus, a production system is a socio-technical system (Trist and Bamforth, 1951).

Similarly, Rousseau (1977) defines socio-technical system as "any unit in the organization composed of a technological and a social subsystem having a common task or goal to accomplish"; and Cummings and Srivastva (1977) define it as: "a nonrandom distribution of social and technological components that coact in physical space-time for a specified time" (p.60).   These definitions, though broad, are critical in that they provide the ground rules for relating a socio-technical system to its environment.   To establish this relationship, two postulates are called for.

First, the above definitions differentiate the socio-technical system from its environment. This postulate emphasizes that socio-technical systems are also organized wholes. The combination of people, objects, relationships, attributes and processes, work in a "holistic" perspective. This needs to occur, "since it is not possible to relate two things to each other without first differentiating between them, socio-technical systems have to be defined as distinct from the environment" (Cummings & Srivastva, 1977, p.59).

The second postulate is that the socio-technical system is relatively "open" in relation to its surrounding environment. This asserts that the socio-technical system continually interacts with an environment which both influences and is influenced by the work system. Viewed in this light, a socio-technical system (or production system) exists and grows only to the extent that it maintains viable interchanges with its environment. This open-system perspective further assumes the need for the organization to analyze and maintain contact with environmental changes, and to build capacity for adaptation into the organization that provides it with a readiness to respond to both anticipated and unpredictable change (Emery & Trist, 1965; Davis, 1977; Negandhi, 1975).

Socio-Technical System Theory

Many scientists have contributed to the development
and growth of socio-technical systems theory (e.g.,
Cummings 1976; Cummings & Srivastva, 1977; Cherns, 1976;
Davis, 1977, 1979; Davis & Cherns, 1975; Davis & Trist,
1972; Emery & Trist, 1978; Pasmore & Sherwood, 1978a;
Tichy & Nisberg, 1976; Trist, 1977, 1978; Walton, 1975,
1979). The characteristics and principles underlining
the theory are briefly discussed below.

As stated before, socio-technical system theorists
view an organization as a dynamic, interactive and living
system, much like the proponents of open-system theory
(Katz & Kahn, 1978; Lawrence & Lorsch, 1967; Thompson,
1967). The political, social, and economic
environments, as well as the actions of other
organizations, exert pressures on an organization to
function or structure itself in a given manner. For
example, social norms change, machinery becomes obsolete,
new legislation is passed, the economy shifts and union-
management relations deteriorate. Then, for
organizational survival, policy-makers or managers need
to be sensitive to the environmental changes surrounding
the organizational boundaries so that they may generate
actions, induce intraorganizational changes, that will
set the direction and provide the means effective
adaptation.

In this context, there is derived in socio-technical system theory the fundamental proposition that two structurally independent, but functionally related organizational sub-systems must be defined and designed, such that the social and technological aspects of both sub-systems are integrated and are as complementary of one another as possible. Operationally, this involves a striving for joint optimization of the social system and the technical system that function and interact in organizations, rooted in the assumption that results in greater organizational effectiveness than can be achieved by optimizing the functioning of the technical system at the expense of the social system, or vice versa (Davis, 1979).

Socio-technical system theorists (Cherns, 1976; Emery & Trist, 1972; Pasmore & Sherwood, 1978a; Davis 1977; Pasmore, Francis, Haldenan & Shari, 1982) have presented a set of principles and conditions necessary for the joint optimization to occur. Stated in the context of work design, this optimization requires structuring both systems based on explicit concern for the psychological consequences of participating in the work system. Most organizational designers concentrate their efforts in the technological system and subordinate the needs of the people interacting with it.

Those conditions are: first, that the design of the organization must fit its goals and be compatible with

organizational purposes and objectives. Second, the workers must be actively involved in designing the structure of the work system. Third, the socio-technical joint optimization criterion must be met. This condition implies that unprogrammed events must be controlled (if they cannot be, they should be eliminated) as close to their source (point of departure) as possible. Fourth, both systems must be designed around relatively whole and recognizable tasks and only those which are necessary for task completion should be specified. Fifth, groups of people that share the same technology, territory and time should be formed ("group technology"). This allows for function to be performed in different ways by using different combination of elements in the "group technology", rather than having highly specialized and fractionated tasks. These conditions fasten adaptability to rapid environmental changes. Sixth, there should be support congruence by top management. This means that the system of training, selecting, promoting, rewarding, controlling or measuring workers should be consistent with the socio-technical design philosophy (e.g., Beer, 1980; Cherns, 1976; Davis, 1977; Hackman & Oldham, 1980; Margulies, 1968). Management should make explicit and take actions consistent with such philosophy. Seventh, a high quality of work life should be provided when designing the work system or the organization as a whole. That is the creation of work that is challenging,

provides variety, permits self-direction (autonomy), provides feedback and offers social support as well as recognition (e.g., Cumming & Srivastva, 1977; Cooper & Foster, 1971; Faucheax, Amado & Laurent, 1982; Susman, 1976; Trist, 1981). Theorists argue that high productivity and organizational effectiveness can only be achieved by integrating individual and organizational needs in the design of work (Hackman & Lawler, 1974; Lawler, 1969; Rousseau, 1977).

Finally, because socio-technical systems are open-systems, adaptable to environmental changes, there is constant mobility and evolution. Changes should continue to be made as to avoid organizational obsolescence. This effort is never ending in that as some actions are put into closure others will open (Pasmore et al., 1982).

A key concept is that there will take shape in the course of the establishment of the above set of conditions the processes of analysis and integration that will make salent the key variances of the organizational production or service system. This discovery process becomes the socio-technical analysis (Davis & Trist, 1974; Taylor, 1971).

The socio-technical system theory appears to have maximum relevance, as a framework for the analysis of organizational processes, actions and relationships (see, for example Cherns, 1976; Cummings, 1977; Davis, 1977;

Davis & Trist, 1974; Miles, 1980; Pasmore & Sherwood, 1978a; Rousseau, 1977; Taylor, 1971; Trist, 1981).

Therefore, it offers a systems approach to the study of work behavior and processes while these adapt to the environment and as innovations (such as managerial technologies) for example, are implemented throughout the organizational settings. It is in this fashion that the present research conceptualizes socio-technical systems theory and analysis.

This systems approach reflects also the multidisciplinary perspective of recent socio-technical systems theorists, researchers and practitoners. Disciplines such as organizational and social psychology, administrative science, organizational development, human relations, industrial engineering and organizational behavior and management have contributed to the development and growth of socio-technical systems theory and intervention (e.g., DeGreene, 1973; Robinson, 1982).

Criticisms of the Socio-Technical Systems

Over the years, researchers have pointed out weaknesses of the socio-technical approach (Hackman & Oldham, 1976; McCuddy, 1977). One frequent criticism is the lack of specificity in the theory. This issue relates to the difficulty in determining where the social system ends and the technical system begins (Pasmore & Sherwood, 1978b; Eveland, 1981). The resolution to this problem has yet to appear. It may be more a peripheral

than a substantial issue, more pertinent to differences among researchers, than damaging to the validity and utility of the theory and its application.

A second weakness is that this theory does not consider individual differences in how people react to work arrangements. Certain individuals and groups are highly susceptible (or resistant) to change regardless of what benefits it may bring them.

Another crucial issue is the confusion about the meaning and content of dimensions like technology, autonomy, or social system (Aldrich & Mueller, 1982; Cherns, 1976; McCuddy, 1977). Many of the definitions have been nebulous and imprecise. For example, Dubin (1968) defines technology in a broad sense as the tools, instruments, and machines to accomplish the work. Hunt (1970) defines technology as a process such that "various things are done, with or without tools and machines, to transform imputs into outputs" (p.239). Woodward (1965) and Hickson, Pugh and Pheysey (1969) defined technology in terms of the operations required to complete a task with emphasis on the continuity or autonaticity of the production system. Dubin's definition represents one of the most accepted conceptualizations (McCuddy, 1977). However, it is limited to the effort of describing and understanding the diversity of existing organizations.

An even greater shortcoming of this approach is the fact that most socio-technical studies and interventions

have been based on the work group, offering only a micro-organizational level perspective. Moreover, most studies have dealt only with individuals performing a task-oriented or routinized job. This in turn presents an aggregation problem in that the theory is at one level of analysis (i.e., organizations adapting to the environment), while the data have been drawn from and applied at a another level (i.e, individual or group). Roberts, Hulin and Rousseau (1978), and Gowler and Legge (1982) have discussed this problem thoroughly and have criticized organizational researchers for not attempting to overcome this issue. The present research will attempt to adjust the balance of data.

CHAPTER 3

RESEARCH PLAN

A cross-sectional conceptualization of socio-technical system theory and analysis within the focus of the present research is illustrated in Figure 1. A similar model has been presented by Negandhi (1975, 1983). The model shown in Figure 1 is an adaptation of that model to fit the theoretical background and emerging concepts and philosophy of the current research, in which the point of origin of information is the reports of those in management roles.

The model illustrates the different layers that influence and surround the socio-technical system in an organization. The environmental layer is formed from the economic, political and socio-cultural factors present in this macro-environment where the organization operates. The organizational layer is made up of the organization's unique characteristics such as size, ownership, type of industry and so forth. Finally, the production system or socio-technical system encompasses within the framework provided by Cummings and Srivastva (1977) the organization technology, decision-making process and

ENVIRONMENT

Socio-Cultural

ORGANIZATION

Management Style   Size

SOCIO-TECHNICAL SYSTEM

Economic

INDIVIDUAL

Type
of
Industry

Ownership

Task/Technology

Decision-making
Structure
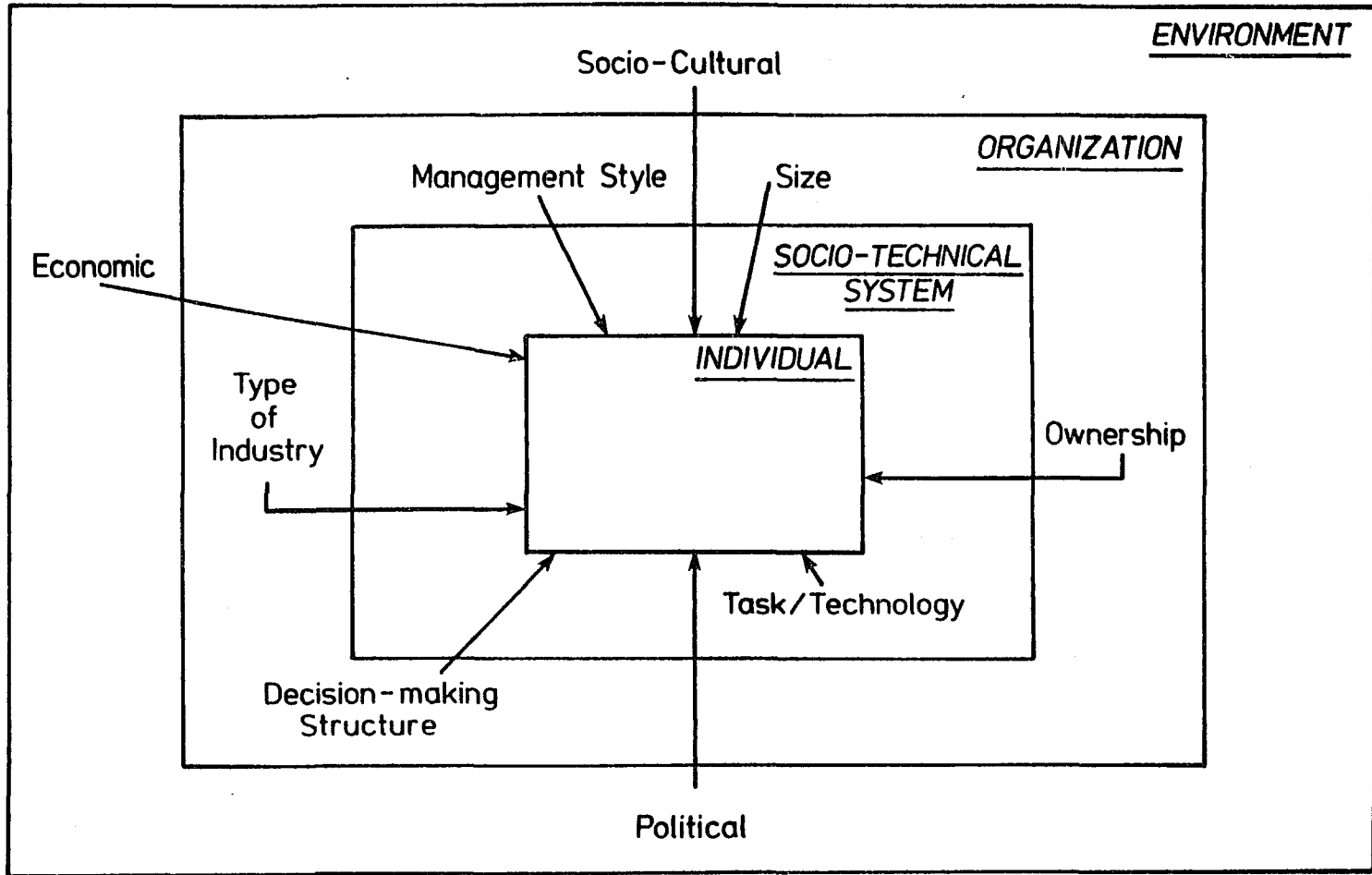
Political

Figure 1. Filtering Model

structure, managerial style, individuals and group attitudes, and so forth.

As indicated by the arrows, this "filtering" model illustrates that the socio-cultural, political and economic factors (environmental layer) cross the organizational boundaries so as to affect the policy-making structure in terms of organizational practices and effectiveness. Therefore, the socio-technical analysis must be made at three levels: the primary work system, the whole organization and the macro social phenomena (Trist, 1981).

In order to examine and to further our understanding of how these factors affect the organization, the specific decision-making strategy of policy-makers needs to be uncovered. As Goodman and Kurke (1982) have stated, planned organizational change (i.e. implementation of an human resources technology (HRT)) is a managerial decision or choice, while adaptation (i.e. being a process) is the interface between management and the organization with its surounding environment. Child (1972) in his review about adaptation of organizations to their environments argues that in order to understand such processes it is necessary to examine the strategic choices made by decision-makers. Bass (1983) states that "organizational decision-making is problem solving, where the problem is sensed [pressures from the environment], solutions are sought [need for adaptation], evaluated,

and accepted or rejected for authorization and implementation [a managerial technology, for example]" (p. 3). These thoughts reflect the evolutionary interaction between policy-makers, the socio-technical system and implementation of innovation in organizations, as they adapt to their environment.

The statistical methodology referred as "policy capturing" (Christal, 1968; Hobson, Mendel & Gibson, 1981; Slovic, Fleissner & Bauman, 1972; Slovic & Lichtenstein, 1971; Taylor & Wilsted, 1974) has been widely used for uncovering the bases of specific strategic choices that are operationalized by actions taken by those in positions of authority. A procedure is designed to describe mathematically the unique information processing strategies of individual decision-makers.

In the literature there have been several successful applications of this methodology within different settings such as determining policies in: performance appraisal (Hobson et al., 1981; Naylor & Wherry, 1964; Stumpf & London, 1981; Taylor & Wilsted, 1974; Zedeck & Cascio, 1982; Zedeck & Kafry, 1977), decisions regarding union-management negotiations (Balke, Hammond & Meyer, 1973), selection of managers for overseas assignments (Dickinson & Russell, 1978; Russell & Dickinson, 1978), selection of salesmen (Roose & Doherty, 1976), stockholders decisions (Slovic, 1969), nuclear safeguard

design (Brady & Rappaport, 1973) and marketing research (Schwartz, de Pontbriand & Laughery, 1983).

The policy-capturing analysis procedure is generally characterized as follows: (a) managers are presented with a series of situational scenarios; (b) the scenarios are constructed from a number of dimensions that serve as stimulus cues and that can be represented by a series of scores; (c) managers are instructed to review each scenario and then provide an overall judgment as to the decision/choice justified by the information given; (d) multiple regression analysis (linear model) is used to calculate the extent to which the overall judgment is predictable from the scores of the stimulus cues (i.e., dimensions), and (e) to compute the relative importance of each of the cues in determining the overall judgment. The statistical equation obtained from the regression analysis defines/captures the "policy-decision" employed by each individual in an objective manner. Such policy is taken to represent the explicit way in which the individual combined and weighted the information elements presented.

The application here is to study the managers processes in determining what facilitates or hinders the implementation of managerial technology. Table 1 summarizes the steps necessary to operationalize this procedure in the context of the present study.

By determining the managers' policies one can specifically uncover what factors are considered or influence them in the decision whether or not to implement a particular managerial technology. Early studies (Flores, 1972; Lawler, 1969; Phatak, 1968) have provided evidence to support such contingency.

Conceptual Model

The integrative framework guiding the present research is illustrated in the model presented in Figure 2.

It has long been agreed that planned organizational change is a central issue in organizational theory and practice (Beer, 1980; Burke, 1976; Friedlander & Brown, 1974; Hage, 1980; Goodman & Kurke, 1982; March, 1981). However, very little has been learned about the process of change. This is mainly due, as Goodman, Bazerman and Conlon (1980) pointed out in a review of the institutionatization of planned organizational change, to the fact that "the primary mode of examining organizational change has been to outline phases of change, describe intervention techniques or review research findings" (p.216). Moreover, the innovation diffusion literature has generated several propositions, hypotheses and models, without any consensus with regard to a single innovation implementation model that

Table 1

A Procedure for Managerial Decision-Making Analysis

Step	Description
1	The important dimensions affecting implementation of managerial technology are identified (based on interviews – content analysis).
2	Dimensions are operationally defined and anchored with examples.
3	The example-anchors are scaled on their dimensions.
4	Profiles of dimensions are generated for realistic enviromental and organizational states.
5	Managers make judgments about the degree to which the managerial technology could be implemented in their organization.
6	A policy equation is derived for managers to be used in ascertaining which are the most influential factors involved in the decision-making process when implementing managerial technology.
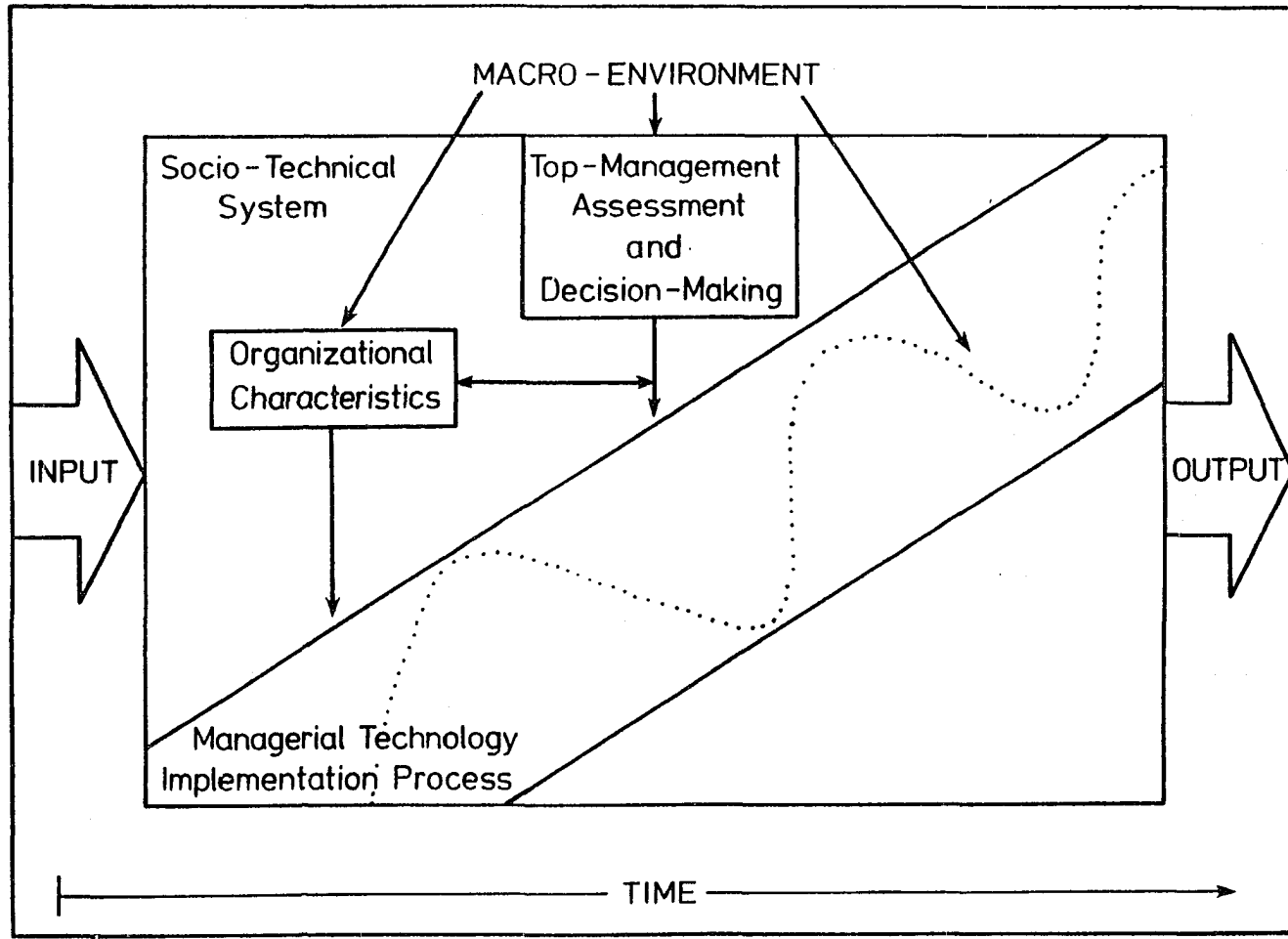
Figure 2. Integrative Conceptual Framework of Present Study

satisfactorily explains observed patterns across different organizations and types of innovations (e.g. Goodman & Associates, 1982; Tornatzky et al., 1983; Zaltman, Duncan & Holbek, 1973). Certainly, the same problem is encountered in the transfer of managerial technologies literature, especially the transfer to Third World countries.

Therefore, the model shown in Figure 2, is offered, not as "the one best model" or as representing definitively the state-of-the-art in explaining organizational change or the implemention process, but rather to articulate a synthesis that depicts the conceptualization and rationale driving the present research, providing some specific and coherent set of propositions and concepts that put forth our understanding of the implementation process and the factors affecting it in a developing nation. Several implications can be drawn from the model that reflect the literature reviewed and the direction taken in the present research.

First, the organizations under study are viewed as open systems. The existence of the organizations, the goals and objectives that determine their ability to survive, and the human and technical resources that shape the organizations' outputs, are constrained and molded by its macro-environment in the socio-cultural, political

and economical context (Beer, 1980; Miles, 1980; Staw, 1982; Strand, 1983; Tichy, 1981).

Second, for the purposes of studying organizations in the present research the socio-technical system is defined and conceptualized as Cummings and Srivastva (1977) and Pasmore and Sherwood (1978a) outlined (see Chapter 2).

Third, the implementation of managerial technologies is a process. It evolves is around the socio-technical system as illustrated by the dotted line. This also indicates that the implementation of managerial technologies is "a process within a process" explaining the time continium at the bottom of the model.

Fourth, top-management assesses the influence of the macro-environment, which shapes their decisions-making process as they adapt their organizations to such pressures. These decisions in turn affect the degree to which managerial technologies are needed and implemented. As suggested by Figure 2, the decisions are mediated by certain organizational characteristics (for example, organizational size or type of industry). Further, the organizational characteristics also determined the degree to which managerial technologies are needed and implemented.

Finally, as has been elaborated all along, the implementation of innovations (such as a managerial technology) in organizations is an interactive process.

As this process is diffused through the different layers of the organization and shaped by its characteristics and managerial decision-making, other processes emerge.

The above conceptual framework, rationale and relationships have never been studied systematically through a socio-technical analysis. The implementation of the present research contributes in four ways to the industrial/organizational psychology literature; namely, conceptually, methodologically and practically, as well as for comparative purposes.

Aims and Hypotheses

The present study has four aims (A):

A 1.   To test socio-technical systems theory from macro and micro organizational perspectives.

A 2.   To determine the potential utility of the policy-capturing methodology as it relates to decision-making in the implementation of technology.

A 3.   To determine the feasibility of using the socio-technical systems theory and analysis for the cross-cultural study of organizational behavior and functioning.

A 4.   To uncover socio-technical contributions to the implementation of managerial technology.

The following predictive hypotheses (PH) and their rationale derive from the introductory chapters:

PH 1. Economic factors will be more influential than social-cultural or political factors in the process of implementation of managerial technology.

The external environment (i.e., socio-cultural, political and economic demands), according to the framework constructed, exerts pressure on the socio-technical system and the implementation process in the organization (e.g., Evan, 1965; Terreberry, 1968; Baldridge & Burnham, 1975). These environmental forces do not have equal impact on the organization. Wallender (1979) reported that economic factors, more than any other factors, play an important role in the implementation of technologies, especially in the developing nations. This is particularly true, when organizations seeking better methods for managerial functioning want, as a return for their investment, more profits and a greater share of the market. This position is supported by other theorists and researchers who have made observations and studies in developing nations (e.g., Bourgeous & Boltvinik, 1981; Deva, 1979; Glen & James, 1980; Kiggundu et al. 1983; Negandhi, 1975). However, Leon (1981) in a recent review of the industrial/organizational psychology studies conducted in Peru from 1956 through 1981 pointed out that economic

variables have been largely ignored by psychological researchers. He argued that studying such variables could provide valuable insights into the Peruvian social reality.

PH 2. Political factors will be more influential than socio-cultural factors in the process of implementation of managerial technology.

Even when the economic factors are overcome (i.e., the organization is surviving) the organization still has to adapt to: (a) legal requirements and constraints dictated by government policy and (b) the instability of those policies and governments. Negandhi's (1975) study showed that political instability (as well as economical) has a great impact on the organizations in Latin America, (as it does in other developing nations) where revolutions, and dictatorships are common. Thus long-term strategic planning is inhibited.

Glen and James (1980) noted that in India, for example:

> ... government restrictions and regulations
> and such matters as prices for products,
> ... amounts allowed for export sales,
> importation of parts and material and the
> distribution of profits earned. Many wage
> and salary matters are also controlled.
> Employment policies are such that once a
> person is hired, it is next to impossible to
> remove him from the payroll (p. 40).

As a consequence, he argued, new managerial technologies that are implemented are limited in effectiveness.

Since there is no specific empirical literature relating macro variables to the implementation of managerial technologies in developing nations, PH 1 and PH 2 are considered exploratory in nature.

PH 3. **Differences in organizational characteristics will not affect the degree of implementation.**

There has been a lot of research on potential moderator effects in implementing technologies. Organizational size and structure, for example, are two of the variables that yield inconsistent results. However, many theorists and researchers argue that these two factors mediate the extent to which organizational change occurs (e.g., Pierce & Delbecq, 1977). This is even more of a potential problem when the structure and size of an organization is a function of the organization's relation to the environment (Kiggundu et al, 1983). Therefore, their inclusion in the present research is warranted. Furthermore, several researchers have argued that organizations functioning in unstable or heterogeneous environments have a greater susceptibility to problems when implementing innovations (Baldridge & Burnham, 1975; Evan, 1965; Terreberry, 1968). These researchers support the hypothesis, for example, that "large, complex organizations are more likely to adopt innovations than a small, simple organization with relatively stable, homogeneous environments" (Baldridge & Burnham, 1975, p. 175). These comparisons or premises

are not appropriate for the organizations in developing nations, since a heterogeneous environment (i.e., turbulent, unstable) in an industrialized nation is not the same as one in a developing nation.

Organizations in developing nations vary greatly in terms of their technology (type of industries), size, age and other structural characteristics. It is proposed here that the complexity and instability of the environment (i.e., all the socio-cultural, political and economical factors) pose implementation problems to all kinds of organizations without regard to their organizational characteristics. In order to cope with the environment, survive financially and stay competitive, both large or small organizations must innovate (within their resources limitations). Therefore, it is hypothesized that organizational characteristics such as size, age, or technology will have little impact on the process of implementing managerial technology in a developing nation.

PH 4. Managerial resources (e.g. skills, style) are a critical limiting factor in the implementation of managerial technologies in a developing nation. This implies that in the socio-technical system the social system characteristcs and operations will be most critical to the success of the implementation.

Managerial resources (i.e. skills/manpower available) also determine the degree to which managerial technologies are implemented in developing countries. The lack of (or availability of) these resources seems to contribute to the awareness of the perceived utility and potentials of particular technologies which in turn become instrumental for organizational decisions as they seek these technologies (Wallender, 1979).

Managerial style (e.g., democratic or autocratic) also contributes to, or restricts, the implementation of managerial technologies. Democratic management styles may lead to more commitment by employees to the change being implemented due to their participation, while authoritarian styles incur more resistance because the change is imposed on employees with no regard to their reactions (see Pierce & Delbecq, 1977; Negandhi, 1974).

PH 5. Multinational corporations will have a higher incidence of use and successful implementation of managerial technologies than locally owned organizations.

Many cross-cultural researchers have concluded that multi-national corporations (mainly North American) are more progressive in their management philosophy and practices (cf. Flores, 1972). Consequently, these organizations are more likely to implement managerial technologies. On the average, they have more managerial

resources, tangible resources, and relevant experience that can be brought to bear in support of innovation.

The following two conceptual hypotheses (CH) will be explored by the present study:

CH 1. There are socio-cultural,political and economical factors that will facilitate or hinder implementation of managerial technology in a developing nation.

CH 2. Environmental events will have an impact on the socio-technical system as managerial technologies are implemented.

In a recent review of the cross-cultural management research, Negandhi (1983) argues that "the various environmental factors [socio-cultural, political or economic] have not been operationalized, nor have testable hypotheses emerged from this approach [environmental]" (p. 18). Critics of cross-cultural research have stated that both macro and micro variables have seldom been taken into account in this type of research (see review by Kiggundu et al., 1983). Sekaran (1983) responded to such criticism by stating: "Culturally patterned behaviors are, thus, distinct from the economic, political, legal, religious, linguistic, educational, technological, and industrial environment in which people find themselves. Some of these latter variables, however, could have a direct or indirect influence on patterned behaviors" (p. 67). She concludes

"Culturally normed behaviors and patterns of socialization could often stem from a mix of religious beliefs, economic and political [or socio-cultural] exigencies, and so on. Sorting these out in a clear cut fashion would be extremely difficult, if not totally impossible" (p. 68).

However, these factors can not be ignored if we are to progress as a science and provide valid guidelines to organizations operating in different environments. Therefore, this study is an attempt to operationalize these environmental factors and generate testable hypothesis from the results. Even though this research is conducted in a single-culture/environment the potential contributions for the cross-cultural management literature as well as the transfer of technology are possible.

Purposes

The purposes of this study are: (1) within a decision-making perspective, to uncover specific socio-cultural, economic and political factors that either facilitate or hinder the implementation of managerial technology within a socio-technical system as a conceptual framework, (2) to learn more about the policy-makers in business and industrial enterprises in a developing nation, as they seek to adapt managerial

technology to fit their internal and external environment, and (3) to generate innovative theoretical, methodological and practical approaches, and advance the state-of-the-art for cross-cultural management research.

CHAPTER 4

METHOD

The present study was conducted in two sequential phases. As shown in Figure 3, the developmental phase consisted of initial interviews and survey design and construction. The data collection phase included a short pilot study, instrument modifications, and the final administration of surveys to the upper-level managers in Peru. The time periods for each stage are also shown in Figure 3.

Developmental Phase

Interviews

Purpose of Interviews

The purpose of these initial interviews were exploratory, descriptive and qualitative in nature. The main objectives were to (a) determine and operationalize the economic, political, socio-cultural and organizational factors that hinder or facilitate the implementation of human resources technologies (HRTs) and (b) uncover the problems, issues and procedures involved in human resources management in Peru. The information

DEVELOPMENTAL PHASE | DATA COLLECTION PHASE

| INTERVIEWS | - - - → | SURVEY DESIGN AND CONSTRUCTION | - - - → | PILOT | SURVEY ADMINISTRATION |

May 1983   June-July 1983   August-September 1983
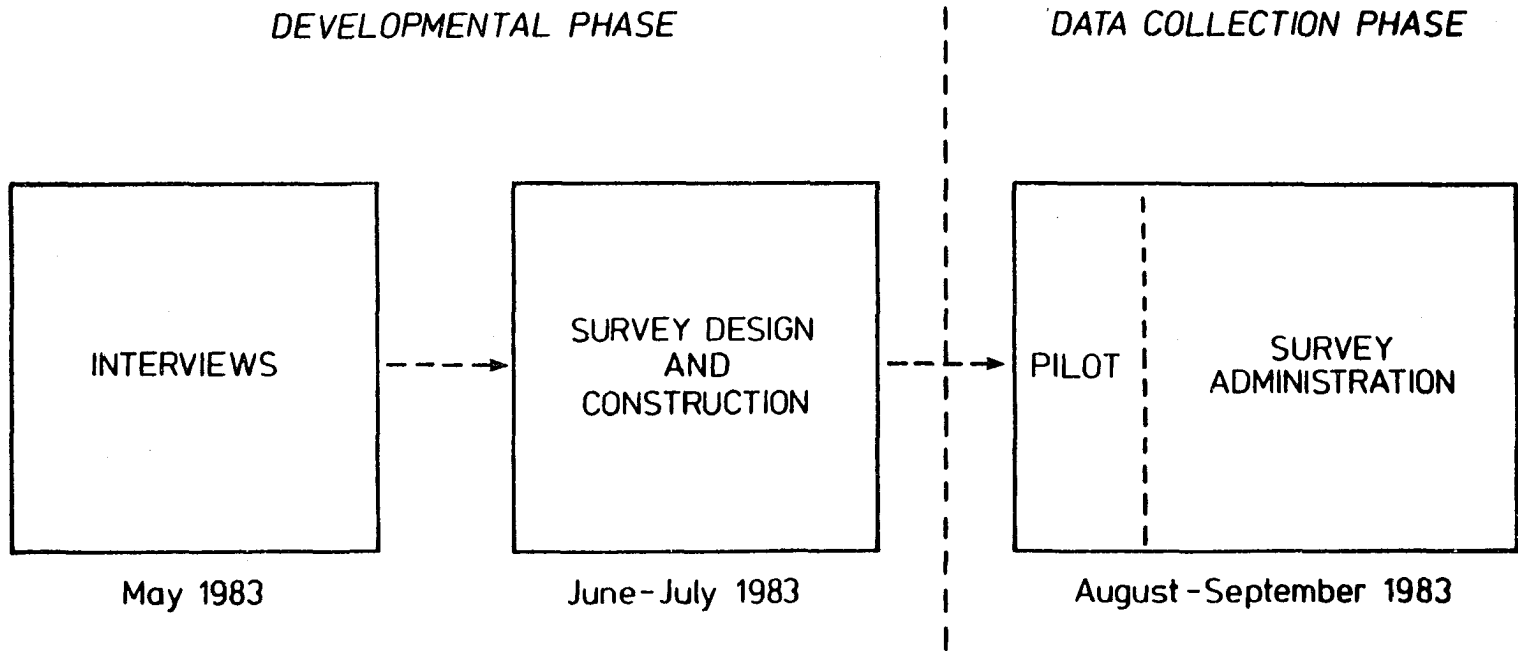
Figure 3. Methodological Procedure for Present Study

from these interviews was then synthesized to serve as the input for the design and final format of the survey.

Sample and Organizations

The total sample of interviewees consisted of 29 upper-level managers from 19 locally-owned and 7 multinational organizations (one organization was a mixed ownership). All but one of the organizations were profit-making. The managerial levels ranged from President to Industrial Relations Supervisor (position equivalent to a second-line supervisor). Table 2 provides a summary of the type of organizations visited and personnel interviewed.

The table includes the type of industry, size (total number of employees), whether it was Peruvian or multinational (foreign owned), number of interviews per organization, and the level and title of the managers interviewed. In addition, Table 3 presents a summary of the managers' characteristics.

Interview Procedure

The purposeful sampling strategy (i.e., maximum variation) of Patton (1980) was followed in order to identify a variety of organizations typical of those operating in Peru. This process identified nine types of industries: (a) finance or insurance, (b) chemical or pharmaceutical, (c) textiles, (d) representatives or distributors, (e) mining, (f) manufacturing (i.e. retail), (g) tires, (h) oil and (i) others such as

Table 2

Summary of Organizations Interviewed

Type of Industry	Size	PE or MN*	Number of Interviews	Managerial Level
Finance	242	PE	1	Adm. Mgr. in charge of HRM
Distributor	400	PE	1	President
Manufacturing	950	PE	2	Gen. Mgr., Ind Relations Mgr.
Hotel	490	MN	1	General Mgr.
Mining	6,250	MN	2	Ind. Relations Mgr., Finance Mgr.
Construction	2,500	PE	2	President, VP – Human Resources
Finance	5,300	MX	1	VP – Human Resources
Chemicals & Pharmaceuticals	600	MN	1	Industrial Relations Mgr.

(table continues)

Type of Industry	Size	PE or MN*	Number of Interviews	Managerial Level
Manufacturing	250	MN	2	Plant Manager, Industrial Relations Mgr.
Rubber & Tires	689	MN	2	Plant Manager, Industrial Relations Mgr.
Chemicals & Pharmaceutical	212	MN	1	President
Chemicals & Pharmaceuticals	220	PE	2	Commercial Mgr Industrial Relations Mgr.
Mining	18,000	PE	2	Personnel Mgr.
Manufacturing	1,300	PE	1	V. President for Personnel
Manufacturing Representatives	35	MN	3	VP General Mgr (HR) Sales Mgr.
Finance	2,500	PE	1	Personnel – Psychologist

(table continues)

Type of Industry	Size	PE or MN*	Number of Interviews	Managerial Level
Chemical	2,200	PE	2	General Mgr., Industrial Relations Mgr.
National Agency	207	PE	1	V. President Personnel
Consulting	N/A	PE	1	President

* PE = Peruvian, MN = Multinational, MX = Mixed
  N/A = Not available

Table 3

Summary of Managers' Characteristics (Interviews)

* Age: Ranged from 26 to 58 years old; median = 44.

* Tenure: Ranged from 1 year to 32 years

* Education Level: From high school graduate

                to Ph.D.

* Areas of Specialization: Ranged from economics,

                law, industrial relations to

                no specific area ("self-made

                man").

* Type of Positions: Staff - 16; Line - 13

hotels, construction companies, private clinics, and so forth. From the list of organizations generated, two organizations from each category were contacted through letters (see Appendix A for sample of letter), and subsequently by phone, to set an appointment. The interviewer then visited the companies of those who agreed.

The interviews followed the outlined protocol (see Appendix B and C), with minor modifications made as new information emerged. The meeting started with the interviewer giving a brief description of what the project was about and how the interview would be. Then, at the request of the interviewer, the interviewee first described the human resources philosophy and activities within the organization. After this, the discussion was narrowed to each of the HRTs of interest (e.g., selection system, training and organizational development programs and performance appraisal systems), where the interviewee was asked directly what economic, socio-cultural, political and organizational factors facilitated or hindered the implementation of these technologies. Some examples of economic, socio-cultural, political and organizational factors were given when needed. The interviews lasted from 45 minutes to 3 hours. The interviews were not tape recorded. However, answers were transcribed later (as much as possible) by the interviewer. The interviews were conducted in English

and/or Spanish, as appropriate for the interviewee, by the author, who was born and spent his youth in Peru.

Two other organizations believed to hold high promise for important contributions of information to the study because of the nature of their work were also contacted and interviewed. These two organizations were a large organizational development consulting firm and the National Institute of Public Administration which regulates policies and administers all public personnel in Peru (this was the only non-profit-making organization).

Several organizations were not able to set an appointment during the time period that the interviewer was in Peru. However, they all agreed to participate in the data collection phase of the study.

Synthesis of Findings From Interviews

Overview

The following sections describe the observations, insights and conclusions from the information collected during the interviews. These conclusions have guided the development of the survey and scenarios that are outlined in the next section. It should be mentioned that though the observations that follow are framed as declarative statements, they should not be read as prejudgements of the outcome of the study. The aim throughout this

section is just to make explicit and salient some facts, social realities, procedures, and elements derived from the exploratory interviews that became part of the survey. The purpose of this section is to describe how human resources development and technologies are used/implemented/applied/managed in Peru as described by the managers and interpreted by the author.

Human Resources Management

Overall, in Peru, human resources development (HRD) and its applications (i.e. the technologies) are part of the administration of industrial relations. Indeed, very few organizations (only four from the sample in this phase) had large HRD divisions.

Industrial relations dominates the personnel functions in Peru. Industrial relations as described by the managers is basically comprised of eight functions: (1) personnel administration (including training); (2) recruitment and selection; (3) labor relations (handling grievances and collective negotiation of contracts); (4) wages and salary administration; (5) social services; (6) industrial hygiene (health and accident prevention); (7) sports and recreation; and (8) plant security. With some variations the industrial relations manager is in charge of all of these functions, with two or three people under him in charge of one or more specific functions. Most Peruvian companies have this structure. Multinationals

separate the traditional industrial relations functions (i.e., union-management relations, labor law) from personnel administration or human resources (i.e., selection, training, performance appraisal, etc.). This dominance of the personnel administration by the industrial relations function is largely due to the "social" role in which organizations relate to their personnel (i.e., the role of a social agency) plus the fact that most organizations are unionized (union leaders demand social benefits). Recent literature on industrial democracy in Latin America lends support to this observation (de Marquez, 1981).

Because of the environmental conditions existing in the country (i.e., high inflation, high unemployment, high cost of living, low education of people, etc.), union demands and government regulations organizations have to provide their personnel with social welfare packages. These packages (mainly for blue-collar workers) include the provision of milk, sugar, toilet-paper, clothing, school scholarships, periodic cost of living salary adjustments and so forth. Similar practices have been found in other developing countries (e.g., Glen & James, 1980; Negandhi, 1975).

As a result, the human resource management functions as they are known in North America are not applied/used (again with few exceptions), and managers fail to recognize the utility of HRD/HRTs. In industrialized

societies, social welfare concerns are more largely regarded as the obligation of the society at large, administrered through government programs financed by general taxation. In the developing nations, a more direct obligation for the general social welfare is often imposed upon and administered through the business and industrial firms. In Peru, the government dictates policies like the Law of Labor Stability (law that provides job security after 3 months) or of Indemnification (law that guarantees a monthly salary for each year of employement), or social packages which organizations have to absorb.

Furthermore, lacking relevant experience or knowledge, managers do not appreciate that investment in HRD has long-term payoff. Consequently, HRD has a low priority in the organizational philosophy. Even in those large and progressive organizations whose companies have HRD departments, among their major functions is the management of social welfare packages, and the obligation to deal directly and continuously with the unions.

At the managerial level, as will be explained later, treatment is different, but still extra-organizational problems strongly affect the implementation of HRT as reported by managers and reflected in illustrative critical incidents. It is also true, as elsewhere, that the industrial relations or HRD functions are basically

staff positions. This results in low visibility, and lack of power and autonomy within the organization.

Selection. The selection procedures used by this sample of organizations in Peru were by and large simplistic, unsystematic and non-structured. Like in many other nations they use aptitude and personality tests as well as employment interviews and referals from other managers. Family relationships or "high social status" carry heavy weight in employment decisions (well known family names can get an individual into the company without any screening). Though aptitude and personality tests were in rather common use by the companies in our sample, these selection procedures were not validated. They usually were administered and scored by a "staff psychologist" and then passed on to the managers who make the final selection.

Only two organizations reported using techniques other than the ones described above. These organizations were using assessment centers or adaptations of it for selection. However, most managers reported that the expense of sophisticated systems was not justifiable in the Peruvian context. Consequently, these types of managerial technology were eliminated from consideration in the present study.

Training Programs. Most organizations reported providing training both at the technical level and the managerial level. At the technical level (basically

unskilled blue-collar employees) the employees received only the required training, either in-house or through a national technical school. After that, employees at this level get no training unless a new machine or equipment is put in place or the parent company (for multinationals) so dictates.

At the managerial level, incoming managers or current ones do get exposed to various kinds of development efforts. Most managers (ten of the 29 interviewed) reported that their organizations were implementing or using training program to improve overall supervisory skills. In addition, training programs were reported to improve communications,to remedy poor relationships, etc. Also, organizations seemed to use a lot of local universities and institutes where they send their managers to take one or two courses, workshops or seminars in a topic of interest.

<u>Performance appraisal systems</u>. Performance appraisal systems are used mainly at the managerial level. These systems serve as a foundation for pay increase and promotion purposes. However, the systems used are not as sophisticated as some of those used in North America. The systems used were narrative descriptions of global traits or responsibilities (e.g., honesty, responsibility) of the manager. In spite of this, all managers argue that performance appraisal systems are important and in some form or another

(subjective or objective) they were implementing and using such systems.

Organizational development. Here again, few Peruvian organizations use these programs. However, as reported by the interviewed managers, they are now more aware of these systems and are trying to implement them. There are in the country several institutes now offering courses or workshops in organizational development. This has contributed to the recent increase in usage. Also, organizations are now using more the services of consultants in HRD/HRT (a practice which was unheard in the past). The President of the OD consulting firm said that Peruvian organizations do not know how to use or work with a consultant. This idea has just started to appeal to Peruvian managers. Multinational organizations have consultants that visit them once or twice a year. These consultants are sent by the parent company.

Programs like MBO, participative decision-making, T-groups, and transactional analysis, were reported as being implemented by some organizations (mainly large and progressive Peruvian or multinational).

In summary, there was no set pattern across organizations as to rules, procedures, structure, implementation or use of human resources technologies. Organizations have different philosophies and expectations which guide their approaches not only for the implementation process but for the overall policies

and procedures for management of human resources. Moreover, some organizations (again multinationals and large, progressive Peruvian) were more sophisticated and advanced in the implementation of HRTs, which clearly distinguished them from the rest.

Additional Observations

In most of the organizations interviewed (11 reported doing so) it was clear that employees at different organizational levels received different treatment with regard to growth and development opportunity (cf. Negandhi, 1975). This is a historical and socio-cultural factor because over the years people with high socio-economic status have received better treatment in all situations in the Peruvian society than people with better or no education, little cultural enrichment or low socio-economic status power. In other words, there is "open" social discrimination which is transferred to the organizational environment. Peru is a class-bound society.

Organizations with unions or with low skilled personnel treat these people differently than people in managerial positions. The low skilled personnel (blue-collar) just get the skills training necessary to do their jobs. That is, training or any other HRD at this level is done only if there is a new machine, or if the

employees are deficient in some required technical skills. These employees are not developed or prepared to move up in the organizational hierarchy. The typical Peruvian blue-collar worker has: (1) always lived in poverty areas and conditions, (2) little or no schooling, (3) a very barren cultural background, (4) a large family, (5) few technical skills, (6) heavy dependency on others, with strong needs for social support, (7) indigency, (8) not expected to be reliable or responsible, (9) submissive attitude, (10) low motivation. These observations derive from the managers interviewed, the literature (Negandhi, 1971; 1975; Glen & James, 1980; Flores, 1972; Kiggundu, et al. 1983; Whyte, 1983) and the interviewer's experience and interpretations. These characteristics are important to note in order to provide a perspective crucial to interpretation of present and future findings, as are the attitudes toward workers typical of managers. Managers often assert that their people are too politically oriented, have no motivation to achieve or desire for personal or economic growth, would avoid work if they could, and are not to be trusted to do anything. Certainly, these could be prejudices and self-fulfilling prophecies of the managers. An analysis of the validity or invalidity of such assertions lies beyond the limits of this study. They are reported here to indicate the perceptual filter through which the questions to managers

and the answers given passed, and to provide a sense of what respondents regard as "social reality". These observations have to be taken into account in interpreting historical events and current socio-economic conditions in the Peruvian society (see Whyte, 1983). Tables 4, 5, 6 and 7 provide examples of the comments made by the managers.

Similar observations were found in the Negandhi (1975) study of Latin American managers and the Negandhi (1974) review of cross-cultural management literature.

People in management, on the other hand, get a lot more attention. Personnel at the managerial level do get better training, more resources are allocated to them and they have better opportunities for growth personally and within the company. People in management have distinct characteristics different from those in blue-collar positions: (1) higher socio-economic status, (2) better education and culture, (3) better technical skills, and (4) somewhat higher motivation. However, some of the managers reported that at this level there are also people who are very unreliable, irresponsible, dependent and lacking in decision-making skills. It is at this managerial level where the majority of human resources technologies get implemented.

From the interviews it was clear that there were more factors that hinder than those that facilitate. Table 8 lists the factors, as interpreted by the

Table 4

Comments of Managers Dealing with Socio-Cultural Aspects

of Implementing HRTs

* "...universities and technical schools are mediocre"

* "...workers are badly prepared"

* "...our people are not motivated nor ambitious..."

* "...we don't have good leadership to carry out
  thoroughly our HRD philosophy..."

* "...too many people with low cultural level for
  sophisticated systems like HRTs..."

* "...managers don't have entrepreneural minds,
  most techniques are too sophisticated..."

* "...we don't know nor do we trust what technical or
  professional schools can offer us for these
  matters..."

* "...I don't trust my manager...delegation is
  impossible..."

=====================================

Note. Comments translated by author.

Table 5

Comments of Managers Dealing with Economic Aspects of

Implementing HRTs

* "...our budget for HRD is too low...can't do much".

* "...the market conditions are not important...if investment is good for the company".

* "...our company is economically sound...we can afford all developmental activities now..."

* "...inflation obscures the analysis of performance... makes it more costly".

* "...under the current conditions, we can't worry about HRD, only about staying in business..."

  "...our company is too concerned with surviving... we don't have cash flow...our money is worth less every day, so why bother with HRD..."

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Note. Comments translated by author.

Table 6

Comments of Managers Interviewed Dealing with Political

Aspects of Implementing HRTs

* "...government does not provide incentives..."

* "...too many studies...no time to worry about evaluating or training them..."

* "...Peruvian worker is too political...interferes with management practices..."

* "...job protection limits the movement of our personnel..."

* "...the Law of Labor Stability is not healthy for our organization..."

* "...we have too many employees with more than 20 years in the company...difficult to motivate them"

* "...our company is not on good terms with the government...too risky to invest...consequently, HRD is our least concern..."

* "...the union interferes in everything that may mean job rotation, training, etc."

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Note. Comments translated by author.

Table 7

Comments of Managers Dealing with Organizational Aspects

of Implementing HRTs

* "...there is little opportunity for advancement..."

* "...our management wants constant personnel changes..."

* "...the autonomy we have for this is a big help..."

* "...the management style helps..."

* "...we only prepare our people when its highly useful for our purposes..."

* "...most of our people are not interested in the success of the company...so we do not invest in them...only the necessary is provided..."

* "...our top-management requires constant development of people..."

* "...it's a business necessity..."

=======================================

Note. Comments translated by author.

Table 8

Factors Extracted from Interviews that Affect

Implementation of HRTs

1. Law of Labor Stability.

2. Union.

3. Inflation.

4. Number of employees under Law of Indemnification.

5. Quality of blue-collar workers.

6. Top-management commitment to HRD

7. Budget for HRD.

8. Quality of managers.

9. Opportunity for growth and development in organization.

10. Availability of local resources to support implementation of an HRT.

11. Organizational financial solvency.

12. Employees commitment to organization.

13. Decision-making autonomy for HRD.

14. The utility of an HRT.

interviewer from the responses, that in one way or another affect the implementation of HRTs. The definitions of such factors are listed in the survey questionnaire (see Appendix D). These definitions were derived from the managers inputs.

The listing of factors does not represent any qualitative ranking or order of frequency. Most of these factors affect the organization in different ways. For some organizations a factor may hinder (i.e. union) while for others it may facilitate or have no affect. Most organizations try to operate by avoiding or beating the system. For example, one manager reported that the Law of Indemnification was their biggest concern with regard to merit increases. This Law states that people are entitled to one year of salary for each year that they have been employed (if hired before 1962) at the time that they are fired, layoff or quit. For those originally employed after 1962 the termination benefit has a fixed value. Therefore, if a manager has been working in the company for more than 25 years and makes 1,000,000 soles per year (about $750 dollars), the organization needs to set aside 25 million soles for that individual. If the number of pre-1962 employees is high, the reserves are high. A pay increase to those employees could create a financial burden on the organization. In order to get away from this they provide bonuses (which do not become part of salary) or other such benefits.

Overall, multinational corporations are much more sophisticated and complex in their management procedures. The large multinationals do have human resources experts (trained in North America or Europe in HRD) and they have separate departments for industrial relations matters and personnel development functions.

The managers in multinational organizations reported that they implement HRTs because it is a "business necessity" and, no matter what the company's or country's conditions are, these technologies need to be implemented for the benefit of the organization. They spend considerable funds in HRD/HRTs without much regard for the many factors that could affect them (such as laws, inflation, quality of management).

Multinationals have the financial support,as well as the commitment from their parent companies, to implement these technologies. Managers of the seven multinationals interviewed reported that the parent company had Western philosophies, and consequently believed in and where highly committed to HRD. The Peruvian managers working in these companies were foreign trained (mostly in North America). Therefore, they were highly aware of the importance placed by Western companies upon managerial strategy, planning and forecasting, which includes efficient HRD.

Managers from multinational companies reported also that these HRTs were working (at the management level at

least), showing positive results in their subjective evaluation, even with the restrictions placed upon them by the different laws.

The managers interviewed from the multinational companies seemed to have a different attitude towards their employees (especialy blue-collar) than those from Peruvian organizations. This may be due to the fact that multinational companies pay better, are more prestigious, and conduct more efficient business operations. This situation allows multinations to recruit and select the best (i.e., better educated, high socio-economic status) managers available. While, at the blue-collar level the employees' attitudes, as described by two managers, is that since "...this company is a multinational, has a good name and reputation, I am secure...". Consequently, by the standard of these managers, productivity is low from these employees.

Most Peruvian organizations do not see the need/utility of HRTs or HRD. Only the progressive and large, financially solvent companies do. However, at one point or another, Peruvian organizations implement HRTs in an attempt to solve their problems. But organizations seem to give higher priorities to other managerial functions. For example, a company is doing well financially (i.e., making profits) they implement/use HRTs, if the company is doing poorly it does not bother with HRTs. Peruvian organizations are much more affected

by environmental factors than multinationals mainly because of their management style, attitude and lack of resources and perspective. It seemed to the interviewer that most companies in Peru spend much of their time avoiding or working around different government policies that affect the management of their human resources. This interference keeps the personnel/HRD manager trying to beat the system (e.g., avoiding or paying less social benefits).

Interview problems. During the interviews two problems emerged: (1) the "confidentiality" issue and, (2) the rating of factors. The "confidentiality" issue became apparent when the interviewer observed that managers were not giving honest answers about their HRD/HRT problems. They were staging a "show" for the interviewer on how well they managed their organizations. Therefore, the interviewer began to remind managers two or three times during the interview that no company or individual was going to be identified. This solved the problem to a considerable extent, since after the reminders the managers began to spell out the problems more fully and cordially.

The second problem that emerged was that of rating the facilitating or hindering factors. Most respondents saw each of the factors as impacting in a different manner. However, in order to obtain criticality asessment, the managers were asked to indicate which were

the <u>most</u> critical limitations and facilitators for the implementation/use of HRTs.   These factors were later included in the survey and scenarios.

<u>Economic and political environment in Peru</u>.   During the interviews and during the administration of the survey, the Peruvian economic and political situation was rather unsettled.   These issues are important to describe because of the possible reprecussions upon inputs to and interpretations of the study.

Since January of 1983 the economy had been in a major recession/depression causing many business to close (including banks).   During 1983 some organizations (Peruvian and multinational) were struggling to survive, while others were doing better than ever because of factors such as closed markets and high demand for their products. Inflation was running at a rate of 90%. As a result, employees demanded and got (by law) quarterly salary increases, which obviously created a problem for performance appraisal systems.   As one manager reported "....a 5% merit increase has no significance when inflation is high...".

Politically, because of the economic situation and the "guerrilla" operations in the country, there were constant rumors of a coup (Latin American Report, 1983). Managers perceived this as a threat to their companies since a coup or any change in government (as the next upcoming elections in 1984) was expected to change people

in power, policies, and laws. All of these could have a detrimental effect on an organization. The political uncertainty/instability forces the companies to put restraints upon long-term planning (see Negandhi, 1975 for similar findings).

When nothing changes politically, the companies have to struggle in order to meet the norms/demands which they previously ignored. Multinationals (especially mining and oil companies) are such examples. These companies have to pay heavy taxes, lobby to ease the restrictions on exportation, and have to get a multitude of permissions for oil or mining explorations in certain areas of the country. Therefore, it is important for their efficient forecasting that the government remain stable. These affect HRTs in that with no long-term planning for investment or expansion there is no need for HRTs.

A final issue before discussing the survey design and construction must be addressed. All the interviews were conducted by the author. Consequently, all the interpretations are subjected to the author's biases and limitations. The interviews were not taped and they were conducted in Spanish. Therefore, no reliability checks could be performed. Furthermore, the content analysis was limited to the author's own insights and procedures, although the nature of the designed interview protocol (i.e., direct questioning and extrapolation, see Appendix

B) might have minimized this bias. However, as stated earlier, the purposes of the interviews were heuristic, instrumental to construction of the survey, rather than to provide definitive findings.

Survey Design and Construction

Based on a socio-technical systems conceptual framework, a comprehensive survey was designed and constructed to uncover the political, economical, socio-cultural and organizational factors that facilitate or inhibit the implementation process of three specific managerial technologies. These environmental factors were operationalized by managers during the interviews and the organizational characteristics that mediate the process were derived from the literature. The survey had four parts. The first part was designed to measure aspects of the socio-technical system in the context of an HRT implementation. The second and third parts were designed to specifically determine what environmental factors impact on the implementation of these managerial technologies. The last part asked for the personal and organizational characteristics of respondents.

Measures

Socio-technical analysis. The socio-technical system was described using 24 items modified from the Job Diagnostic Survey developed by Hackman and Oldham (1974)

to measure five work characteristics: (1) feedback, (2) skill variety, (3) task significance, (4) autonomy, and (5) task identity. The items were modified to assess the socio-technical system at the organizational, group and individual levels. These same items were used by Rousseau (1977) in a study integrating the socio-technical system theory approach to work with the job redesign literature. Rousseau argued that socio-technical systems provide, ..."a theoretical base for job redesign along with an emphasis on the importance of analyzing the role of the unit within the organization prior to developing change strategies" (p. 24). Also, Slocum and Sims (1980) provided a linkage of these five work characteristics with socio-technical system (see also Griffin, 1982). The job characteristic dimensions included in this socio-technical analysis has been found to have good psychometric qualities and independence by several researchers (Evans, Kiggundu & House, 1979; Hackman & Oldham, 1976; Orpen, 1979). Items from the Survey of Organization (Taylor & Bowers, 1972) measuring decision-making practices, human resources primacy and technological readiness were also included, as were items from Gordon and Cummings (1979) measuring organizational vitality and human resources development.

Finally, three items measuring the degree of implementation of each HRT technology under study were added to the questionnaire. In all there were 43 items

presented in random orders, for which responses were elicited on a five-point Likert-type scale. A value of one was attached to "a very little extent " and five to "a great extent".

Environmental factors. The political, economical and socio-cultural factors affecting implementation were measured in two ways. First, three specific situations dealing with the implementation of training, performance appraisal and organizational development programs were presented and respondents were to indicate which facilitated, which hindered, and how much (see Apprendix D and F for details). Second, analysis of the decision-making process of managers who decided the fate of HRT implementatio:. was carried out. This was done through the policy-capturing approach described in detail below.

Policy-capturing scenarios. The format and methodology to develop the scenarios followed the Hitt and Middlemint (1979) and Russell and Dickinson (1978) approaches with some modifications. The format, as seen in the survey instruments (see Table 9 and also Appendix D and F for complete details), is clear and easy to understand. It also allows for the incorporation of a representative number (i.e., all inclusive) of factors (dimensions) that affect the implementation of HRTs.

The selection and inclusion of factors was completed through a small-scaled content analysis. That is, managers identified and defined variables that affect the

implementation of HRTs. The answers were recorded by the interviewer, as the interview protocol called for, and ultimately provided the foundation for the factors seen in Table 4. These variables were taken from the recording sheet and transcribed as such, keeping the same meaning (and language) managers displayed during the interview. Two factors were coded separately because they embedded many related issues. These were the quality of management and the quality of blue-collar workers.

The quality of management factor covered managers having the necessary skills to carry out the implementation process; having adequate educational and cultural background, autonomy (independence), and responsibility; and making use of good criteria in decision-making. Most of these terms were used by the managers to describe their overall management resources (e.g. as skills). The factors of quality of blue-collar employees covered the socio-economic background of these employees, their educational and cultural background, initiative, productivity and autonomy (see "Results from Interviews" section for further details).

In addition to using the protocol content from the interviewees, two more factors were drawn from the literature review. These were (a) political instability, and (b) market conditions (e.g., Boseman & Phatak, 1978; Glen & James, 1980; Negandhi, 1971, 1974, 1975).

A limit of 30 scenarios was imposed for reasons of practicality. The dimension levels (i.e., low, average, ...) were assigned randomly and tested for independence. In each scenario the manager's task was to make three decisions regarding the likelihood of implementing an HRT under the situation presented. There was one decision for each HRT under study. Also, the 30 scenarios were divided into two equal sets of 15, representing decisions applicable to the managerial and the blue-collar level. As the interviews showed, the two levels received separate treatment. Table 9 provides an example of a scenario at the managerial level.

Organizational and personal factors. The organizational characteristics and factors were measured in a number of ways. Most of the items were adapted from previous research studies and surveys such as Haire, Ghiselli, and Porter (1966), Gordon and Cummings (1979), and Wallender (1979). These included: (1) size (defined as total number of employees and levels of supervision), (2) organizational age, (3) span of control, (4) degree of professionalism, (5) decision-making structure, (6) type of industry, (7) supervisory levels above the managers position, (8) ownership and (9) tenure educational and age of manager.

Table 9

Original Scenario Format at Managerial Level

SITUATION 01

		Applies	Not Applicable
1.	Law of Labor Stability....................................X		
2.	Union in Company.........................X		

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation..X					
4.	Number of people under Law of Indemnification.............X					
5.	The quality of blue-collar workers.....................................X					
6.	Top-management commitment to HRD........X					
7.	Budget for development of human resources................................X					
8.	The quality of managers........X					
9.	Opportunity for growth and development in company.....................................X					
10.	Local resources to support use of HRT..X					
11.	Financial conditions of company......................................X					
12.	Market conditions..X					
13.	Employees commitment to company.........X					
14.	Decision-making autonomy for development of HRT......................X					
15.	Political uncertainty-instability...X					
16.	Utility of HRT...........................X					

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the MANAGERIAL LEVEL (circle one number).

	Not Likely					Very Likely	
Training Programs	1	2	3	4	5	6	7
Performance Management Systems	1	2	3	4	5	6	7
Organizational Development Efforts	1	2	3	4	5	6	7

Survey Data Collection Phase

Procedure

The entire survey was first constructed in English (see Appendix D) and later translated into Spanish by a professional translator (see Appendix E). The Spanish version was pilot tested in Peru with three managers. Some modifications were then made in the Spanish questionnaire, which was independently translated back into English. This follows the procedures suggested by Brislin (1970, 1980). The final back-translated English survey was determined to be an equivalent to the original English version (see Appendix F).

A major structural modification was made in the final survey. The questionnaire was reduced from 30 scenarios to 15 because it was taking managers up to two hours to complete the questionnaire. This was too much of a time demand to impose on managers. The survey questionnaire and scenarios were very complex, demanding thorough reading and evaluation.

In each of these 15 scenarios the managers had to make six decisions. For each of the three HRTs under study, two decisions were called for : one applicable to managers and one to blue-collar workers. Table 10 illustrates the final format. The numbers used here, will identify the factors in subsequent tables as well.

Table 10

Final Format of Scenario both at Managerial and Blue-Collar Level

SITUATION 05

| | | | | Not |
| | | Applies | | Applicable |
1. Law of Labor Stability.....................................X
2. Union in Company........................X

	Low	Moderate Low	Average	Moderate High	High

3. Inflation..X
4. Number of people under Law
   of Indemnification.............X
5. The quality of blue-collar workers.......................................X
6. Top-management commitment to HRD........X
7. Budget for development of
   human resources................................X
8. The quality of managers........X
9. Opportunity for growth and
   development in company...X
10. Local resources to support
    use of HRT..X
11. Financial conditions of company..X
12. Market conditions..X
13. Employees commitment to company.........X
14. Decision-making autonomy for
    development of HRT......................X
15. Political uncertainty-
    instability..X
16. Utility of HRT...........................X

Decisions

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human-Resources Technologies mentioned will be successfully implemented in your organization at the MANAGERIAL AND BLUE-COLLAR LEVEL (circle one number).

		Not Likely						Very Likely
1.	Training Programs							
	Managerial Level	1	2	3	4	5	6	7
	Blue-Collar Level	1	2	3	4	5	6	7
2.	Performance Management Systems							
	Managerial Level	1	2	3	4	5	6	7
	Blue-Collar Level	1	2	3	4	5	6	7
3.	Organizational Development Effort							
	Managerial Level	1	2	3	4	5	6	7
	Blue-Collar Level	1	2	3	4	5	6	7

As for the interview phase, a purposeful sampling strategy (Patton, 1980) was used for the survey. Random sampling would have been ideal, but attention was given to the selection of a representative national sample as to provide more meaningful data and match it to the objectives of the study. Also, practical reasons (e.g. time constraints, personal contacts) prevented random sampling. Brislin and Baumigardner (1971) and recently Sekaran (1983) have argued that non-random sampling can also be valuable in guiding other researchers in choosing samples more meaningfully (when full descriptions of procedure are provided, see below for details) and allowing the evaluation of possible rival hypothesis.

In this phase the variety and number of organizations was extended to increase the number of potential respondents. The questionnaire was delivered first to all managers in the organizations who had agreed to participate during the interview phase (in the survey phase the OD consulting firm and the government agency did not participate). Another group of organizations was contacted either by phone or letter (see Appendix D), appointments were set up, and then the questionnaire was delivered. In these two groups, managers were usually instructed individually or in small groups at their offices on the purpose of the research and on how to complete the survey. When personalized

instruction by the investigator was not possible, managers were given instruction by their supervisors or co-workers (35 out of 84 respondents), who had already received instructions.

For the policy-capturing part, managers got specific verbal and written instructions. First, all went through an example of how to conceptualize the scenarios. Then they were told to concentrate upon the two or three factors that were relevant to their own situation and make the decisions on that basis. This was done because the factors included in each of the scenarios covered a wide panorama, and some would obviously be irrelevant for several organizations. Further, as the literature indicates people have limited information processing capabilities (Dawes & Corringa, 1974; Slovic & Lichtenstein, 1971) and only two or three factors have appeared to be important in the decision-making process (Zedeck & Kafry, 1977). After the instructions were given, a specific date was determined by which the survey instrument was to be completed. Phone calls were made to remind managers to complete the survey on time. However, many took two or three weeks longer than the time allowed to return the questionnaires. Additional phone calls and personal appearances at the organization by the experimenter were made to ensure returns.

In this fashion, approximately 120 surveys were personally distributed to the organizations of which 100

of them were returned. The final number of complete and useful returns was 84. A few had to be eliminated because either they were not complete or not filled out correctly.

In addition to those managers individually contacted, another group of respondents was obtained at two professional schools where managers were enrolled in HRD-related classes. One school was primarily a technical business school. The purpose of this school was to provide certificates to individuals who could not get into college. Most of their enrollees are working people who attend classes at night. Two classes were relevant to the purposes of this research. One was a seminar dealing with personnel selection and the second a course in industrial relations.

The second school was a professional school offering the masters degree to managers who had a college degree and had a position in an organization. Also they offered advanced seminars in current business topics. Three classes were relevant here. One was a class of managers pursuing a masters degree in business administration. The other two were two advanced seminars in HRD.

The procedure was the same with these two schools as that employed with managers contacted at their own organizations, except the questionnaires were group administered. That is, the research purposes and utility was explained to the managers in these classes and

instructions were given, including the specific instruction on how to do the policy-capturing part.

At these schools, approximately 100 questionnaires were distributed to four classes, and 55 were returned. Of these, several were eliminated because of: (a) failure to complete the questionnaire, (b) failure to follow instructions, (c) the respondents' employers was not a profit-making company. The inspection process left a total of 44 useful surveys from this group.

Sample of respondents and organizations. The final number of respondents comprised of 128 upper-level managers from 85 different organizations. The majority of them worked in industrial relations or HRD departments. In situations where the organization was small, it was the general or adminsitrative managers who filled out the questionnaire. Table 11 summarizes the characteristics of these managers. Table 12 provides a breakdown by type of industry and ownership. It can be seen that there were 61 Peruvian organizations represented by a total of 91 managers responding to the survey, and 37 managers from 24 multinational organizations. Three managers from mixed organizations (partly owned by Peruvians and foreigners) were included with the multinational group. The industry classification labeled "other" included organizations such as educational institutions (privately owned),

Table 11

Summary of Managers' Characteristics Responding

to Survey

* Age: Ranged from 20 to 59 years old

               Median of 34 years old

* Tenure: Ranged from one month to 33 years.

               Median of 13 years

* Managerial Level: Ranged from 0 to 13 managerial levels

                    above the respondents position.

                    Median of 2.0 managerial levels.

* Span of Control: Ranged from 0 to 50 employees.

                    Median of 4.8 employees.

Table 12

Industry Classification and Number of Respondents by

Ownership (N=128)

	Peruvian (61 Organizations)	Multinational[a] (24 Organizations)
Finance or Insurance	16	1
Chemical or Pharmaceutical	8	5
Oil	1	5
Textiles	7	1
Representatives or Distributors	6	5
Tires	0	3
Mining	9	3
Retail	8	0
Other	36	14
Total Number of Managers	91	37

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[a]
Includes 3 respondents from mixed organizations.

hospital (private), export and import agencies, construction business and small manufacturers.

All the organizations were profit-making and represented organizations that played an important role in the economy of the country. Half of the 50 organizations listed by Peru Economico (1982) as having the highest income for 1981 are included in this sample (the percentage was in fact higher than 50% because the 10% of the organizations listed in Peru Economico that were government owned had not been approached). The size of the organizations sampled ranged from 5 to 18,300 employees (median was 400), while the levels of supervision ranged from 1 to 28 levels with a median of 4.8. The organizational age ranged from new to 150 years of operation (median of 20.5 years).

CHAPTER 5

ANALYSIS AND RESULTS

This chapter is divided into four main sections. Each of these sections is broken down into two parts: (1) a procedure section which explains the research aims to be served and the rationale for conducting each analysis, the data analyses that were performed and the hypotheses that were tested, and (2) the specific results obtained.

The first section deals with the socio-technical system analyses through which the work characteristics and processes in the implementation of managerial technologies emerge.

The second section contains analyses of the perceptions of managers with respect to influences facilitating or hindering the implementation of three specific HRTs.

The third section, the most crucial to this study, addresses the policy-capturing analysis. This section discusses the specific macro-environmental and organizational dimensions most influential in the decision-making process for each manager. These variables are then grouped by their similarities, and

organizational characteristics and personal background data are then used to described them.

The last section deals with the degree of HRT implementation in the organizations sampled as perceived by the managers.

Socio-Technical System Analysis

Analytic Procedure

In order to identify the parameters of work characteristics and processes involved in the implementation of the managerial technologies being studies, the 43 socio-technical items of the survey were subjected to a principal-components factor analysis and rotated to a VARIMAX solution. This process yielded 13 orthogonal factors. These 13 factors were reduced to seven based on three standards: (a) eigenvalues of at least 1.0; (b) interpretability of factors and (c) variance accounted for by the factor. Items that loaded .40 or above on a given factor comprised the seven separate scales. Reliabilities (Cronbach alpha) were computed for each factor-based scale. In addition, factor scores based on all the item loadings were computed and served as measures in subsequent socio-technical analyses.

The analyses here pursued aims A1 (to test socio-technical system theory from macro and micro

organizational perspectives) and A3 (to determine the feasibility of using the socio-technical system theory and analysis for the cross-cultural study of organizational behavior and functioning) and provided the data to test other hypotheses.

Results

Table 13 lists the seven factors with the eigenvalue, the percent of variance accounted for, the number of items included in each factor scale, and the reliability of each scale. Table 14 presents the scored items and their loading on each factor.

As shown in Table 13, the variance explained by these seven factors was 80.8%. The reliabilities of the scales composed of the scored items are .78, .79, .82, .72, .65, .53 and .62 for the seven factors, respectively. For the purpose of this research, these reliabilities were deemed satisfactory, even though three factors-based scales had internal consistencies less than .70. The lower reliability of these scales is in part due to the fact that these consist of only two items. On the other hand, they appear to make sense for the understanding of aims A1 and A4 (to uncover socio-technical contributions to the implementation of managerial technology). Also, Nunnally (1976) argued that .50 and .60 reliabilities suffice for exploratory research.

Table 13

Principal-Components Factor Analysis of the Socio-Technical Analysis Survey

Factor	Eigenvalue	% of Variance (Total 80.8)	No. of Survey Items	Reliability [a]
1. Human Resources Technology Effectiveness	9.26	40.0	6	.78
2. Individual Autonomy	2.38	10.3	5	.79
3. Organizational Vitality in HRD	1.92	8.3	6	.82
4. Organizational Support for Innovation	1.54	6.7	4	.72
5. Manager's Performance Impact Upon Others	1.40	6.1	2	.65
6. Organizational Integration/Cooperation	1.19	5.2	2	.53
7. Performance Feedback	1.00	4.3	2	.62

[a] Cronbach alphas

Table 14

Items and Loadings for the Socio-Technical Scales

Item	Factor Loading

FACTOR 1 – Human Resources Technology Effectiveness

The organization requires you to do many different things at work, using a variety of your skills and talents. — .67

The organization allows you to learn new skills and information related to your work. — .62

Management has the ability to attract and retain high-level personnel. — .61

Performance appraisal systems have been extensively used in this organization. — .51

The organization allows many opportunities for me to increase my skill and knowledge of job-related information. — .48

Training programs to increase supervisory skills have been fully implemented in this organization. — .40

FACTOR 2 – Individual Autonomy

The organization gives me considerable opportunity for independence and freedom in how I do the work. — .82

The organization provides me with the chance to completely finish pieces of work I begin. — .71

This organization permits you to decide on your own how to go about doing the work. — .67

The organization denies me any chance to use my personal initiative or judgement in carrying out work tasks (reverse code) — .52

(table continues)

Item	Factor Loading
My job can be done adequately by a person working alone without talking to or checking with other people.	.40

FACTOR 3 - Organizational Vitality of HRD

Item	Factor Loading
The decisions about using human resources technologies in this organization are based on adequate information.	.73
The organization has a real interest in the welfare and happiness of those who work here.	.59
This organization is committed to the development of human resources.	.56
This organization can be described as flexible and continually adapting to change.	.49
Management encourages people to all levels to give their best effort.	.41
The talents of employees are appropriately matched to the demands of their job.	.40

FACTOR 4 - Organizational Support for Innovation

Item	Factor Loading
This organization is open and responsive to change.	.73
Management has trust in the people responsible for adopting and using human resources technologies.	.54

FACTOR 5 - Manager's Performance Impact Upon Others

Item	Factor Loading
My job is one where a lot of other people in other units can be affected by how well our work gets done.	.63
The results of my work are likely to affect other individuals in my department.	.62

(table continues)

Item	Factor Loading
My job requires me to use a number of complex or high level skills.	.53
This organization provides opportunities for individual growth and development.	.47

FACTOR 6 – Organizational Integration/Cooperation

My job requires me to work closely with other individuals in related jobs in my department.	.61
My job requires a lot of cooperative work with other units in this organization.	.61

FACTOR 7 – Performance Feedback

The supervisors and workers of other units almost never give me any feedback about how well I am doing my work. (Reverse code).	.79
Managers let you know how well you are doing on your job.	.46

==

Factor 1 accounts for 40% of the total variance and clearly represent a human resources technology effectiveness factor. This factor can be interpreted as addressing the process of implementation in keeping with the framework presented earlier (i.e., implementation of innovation is a process).

Factor 2 accounts for 10.3% of the variance. Highly loaded items that stress independence and initiative, define an individual autonomy factor. This is in congruence with Hackman and Oldham's (1975, 1980) model. The factor scale includes four positively stated items and one negatively stated item (reversed for analysis).

Factor 3 (8.3%) describes a dimension of organizational vitality in human resources development. It includes six positively stated items displaying management commitment to and efforts to facilitate HRD.

Factor 4 (6.7%) represents the organizational support for innovation. The two items address organizational openness and trust of their people's efforts to effect change and HRT innovation.

Factor 5 (6.1%) describes the manager's impact upon the performance of others. The four items reflect the manager's influence and consequences of his performance for others.

Factor 6 (5.2%) represents organizational coordination. The two items stress cohesiveness and

cooperation among departments or units within an organization.

Finally, Factor 7 accounts for 4.3% of the variance and the two items describe performance feedback information. The items reflect information that others give about the manager's performance.

Facilitating and Hindering Factors

Analytic Procedure

In the second part of the survey, in order to determine specifically the facilitating and hindering implementation of HRT, managers were asked to indicate whether each of the 16 previously identified macro environmental and organizational influences facilitated, or hindered, or had no effect upon (classified "neutral") or was not applicable to the implementation process in the given situation.

In order to determine if there was a significant difference between the number of managers who said a particular factor facilitated or hindered, the frequencies were subjected to a series of Chi-square analyses. The "not applicable" responses were treated as missing data and excluded from further analyses. A three- (HRT: training, performance appraisal, and organizational development) by-three (response: facilitated, hindered, or neutral) contingency Chi-square

analysis indicated that there were no significant differences in the sixteen factors.

In the next analysis, the neutral responses and facilitating responses were combined into one category because, as the interview results here indicated, the identified factors were essentially hindering. Therefore, a neutral response would indicate a non-hindrant perception by the managers. For example, according to Peruvian managers, the union either restricts the implementation of any innovation, or they are just compliant. Then a three- (each HRT) by-two (response: facilitated vs. neutral hindering) contingency Chi-square was computed. This analysis yielded one significant result (political instability/uncertainty X^2 (2) = 6.248, $p < .05$) but still there was no explanation of the data.

The two previous analyses indicate that managers did not see any differences among the 16 influences in effecting implementation of the HRTs. Therefore, three one- (each HRT) by-two (facilitated versus hindered responses only) tables were constructed. These results are presented below.

These analyses examined conceptual hypothesis CH1 (there are socio-cultural, political and economical factors that will facilitate or hinder implementation of managerial technology in a developing nation) and provided input to other hypotheses.

<u>Results</u>

Table 15 shows for each of the three HRTs, how many (f) managers perceived a specific factor as facilitating (F) or hindering (H) the implementation process. It also indicates how much the variable facilitated or hindered, as represented by the mean (m) rating. The subsequent Chi-square analyses were based on these frequencies.

<u>Training Programs</u>

Table 16 summarizes the perceptions of managers as to what factors tend to facilitate or hinder the implementation of training programs. The Table provides the Chi-square results and its significance level for each factor. The organizational financial solvency was the only factor not significant.

The results here suggest, as perceived by the managers in Peru, that the economic and political conditions, figure most prominently as impediments to the implementation of this training HRT, while organizational and socio-cultural variables tend to be seen as facilitators.

<u>Organizational Development Programs</u>

Table 17 summarizes the perception of managers as to what facilitates or hinders organizational development efforts.

Availability of local resources, organizational financial solvency and market conditions were not significant influences.

Table 15

Frequencies (f) and Means (m) for Facilitating (F) and Hindering (H)

Factors for Each HRT

	Training				O.D.				Perf. Appraisal			
	F		H		F		H		F		H	
Factor[a]	f	m	f	m	f	m	f	m	f	m	f	m
1	17	(3.53)	45	(3.11)	15	(3.20)	40	(3.15)	25	(3.36)	35	(3.03)
2	10	(2.90)	43	(3.23)	8	(2.38)	43	(2.98)	10	(2.50)	50	(2.74)
3	7	(3.14)	104	(3.67)	11	(2.36)	90	(3.42)	10	(3.10)	71	(2.90)
4	5	(4.20)	24	(2.46)	6	(2.00)	26	(2.46)	9	(2.44)	31	(2.39)
5	32	(3.63)	50	(2.70)	32	(3.38)	50	(2.36)	37	(3.05)	38	(2.42)
6	84	(3.44)	19	(3.16)	91	(3.45)	22	(2.77)	91	(3.08)	19	(2.21)
7	67	(3.12)	45	(3.18)	61	(3.07)	50	(3.00)	61	(2.82)	43	(2.63)
8	93	(3.66)	76	(2.73)	87	(3.66)	29	(2.48)	65	(3.49)	24	(2.83)
9	95	(3.71)	24	(2.75)	95	(3.45)	17	(2.65)	88	(3.40)	23	(1.91)
10	65	(3.12)	40	(2.90)	65	(3.18)	48	(2.48)	61	(3.30)	42	(2.60)

(table continues)

Factor[a]	Training				O.D.				Perf. Appraisal			
	F		H		F		H		F		H	
	f	m	f	m	f	m	f	m	f	m	f	m
11	57	(3.12)	57	(3.46)	64	(3.08)	47	(3.30)	64	(2.86)	38	(3.03)
12	44	(3.09)	66	(3.14)	50	(2.86)	58	(2.98)	48	(2.96)	48	(2.98)
13	78	(3.19)	24	(2.58)	79	(3.06)	31	(2.26)	79	(3.16)	32	(2.22)
14	76	(3.11)	32	(2.59)	80	(3.26)	27	(2.41)	87	(3.00)	20	(2.40)
15	7	(2.00)	71	(3.07)	11	(2.64)	59	(2.81)	12	(2.83)	43	(2.74)
16	74	(3.52)	12	(3.00)	93	(3.31)	14	(2.50)	91	(3.32)	12	(2.33)

a. See Table 10 for identification of factors.

Table 16

Perceived Facilitating and Hindering Factors in

Implementing Training Programs

Facilitators	χ^2	p [a]
Commitment of management to HRD	41.01	.001
Budget for HRD	4.32	.05
Quality of management	37.72	.001
Opportunity for growth and development	42.36	.001
Availability of local resources	5.95	.02
Employees commitment to organization	28.58	.001
Autonomy for HRD decisions	17.92	.001
Utility of HRT	63.43	.001

Hindrances	χ^2	p [a]
Law of Labor Stability	12.64	.001
Union	20.54	.001
Inflation	84.76	.001
Number of Employees under Law of Indemnification	12.44	.001
Quality of blue-collar workers	3.95	.05

(table continues)

Hindrances	X^2	p [a]
Market conditions	4.40	.04
Political uncertainty/instability	52.51	.001

==

Note: See Table 15 for frequencies; on the basis of those frequencies the factors are classified as either facilitators or hindrances.

[a] df = 1

Table 17

Perceived Facilitating and Hindering Factors in

Implementing Organizational Development Programs

Facilitators	χ^2	p [a]
Commitment of management to HRD	42.13	.001
Quality of management	29.00	.001
Opportunity for growth and development	54.32	.001
Employees commitment to organization	20.94	.001
Autonomy for HRD decisions	26.25	.001
Utility of HRT	58.32	.001
Hindrances	χ^2	p [a]
Law of Labor Stability	11.36	.001
Union	24.02	.001
Inflation	61.79	.001
Number of Employees under Law of Indemnification	12.50	.001
Quality of blue-collar workers	3.95	.05
Political uncertainty/instability	32.91	.001

===

Note: See Table 15 for frequencies; on the basis of

those frequencies the factors are classified as either

facilitators or hindrances.

[a]
 df = 1

In this case the pattern is much the same as for training programs, although economic factors seem to restrict the implementation of organizational development programs to a lesser extent.

Performance Appraisal Programs

Table 18 shows which factors facilitate or hinder the implementation of performance appraisal programs. The Law of Labor Stability, quality of blue-collar workers, budget for HRD, availability of local resources, and market conditions were not significant indicators. Here again the same pattern of results was found, confirming the initial belief that the operationalized macro-environmental and organizational influences are perceived as having the same impact across each of the HRTs.

At this point it is necessary to discuss two issues. First, the results presented above are only relevant to the managerial level, since the examples given focused on supervisory personnel. Second, two explanations may be offered as to why all influences essentially had equal impact here on the three HRTs. One, managers might have been responding without full knowledge of what each HRT entailed. That is, no qualitative difference was perceived in the nature of the HRTs. Two, due to the heterogenity of the sample, some managers might have responded to each of the HRTs even though they might have only implemented one or two in their organization.

Table 18

Perceived Facilitating and Hindering Factors in

Implementing Performance Appraisal Programs

Facilitators	χ^2	p [a]
Commitment of management to HRD	47.12	.001
Quality of management	42.36	.001
Opportunity for growth and development	38.06	.001
Organizational financial solvency	6.62	.01
Employees commitment to organization	19.90	.001
Autonomy for HRD decisions	41.95	.001
Utility of HRT	60.59	.001
Hindrances	χ^2	p [a]
Union	26.66	.001
Inflation	45.93	.001
Number of Employees under Law of Indemnification	17.00	.001
Political Uncertainty/Instability	17.47	.001

===

Note: See Table 15 for frequencies; on the basis of

those frequencies the factors are classified as either

facilitators or hindrances.

[a] df = 1

Policy-Capturing Analyses

The analyses presented below comes closest to simulating processes in real life. Previous analyses and results reflect only attitudes and opinions as to the effect of influences. The policy-capturing analysis decomposes judgments into the elements that most directly influence the formation of policies (i.e., makes explicit through analysis, "captures", that which, for the respondent, is largely implicit in the operations and judgments through which decisions are processed and emerge). It puts in dynamic context the human judgment process. This policy-capturing analysis was used to test predictive hypothesis PH1 (economic factors will be more influential, be given more weight, than social or political factors in the process of implementation of managerial technology), PH2 (political factors will be more influential than socio-cultural factors in the implementation process), and PH4 (managerial resources are a critical limiting factor in the implementation process in a developing nation). This information also entered into development of aim A2 (to determine the potential utility of the policy-capturing methodology as it relates to decision-making in the implementation of managerial technology) and conceptual hypothesis CH1 (there are socio-cultural, political and economical

factors that will facilitate or hinder implementation of managerial technology in a developing nation).

Analytic Procedure

In order to find out how the variables were considered by the managers in decision-making, stepwise multiple regression analyses were performed for each manager. This was done by regressing the likelihood of HRT implementation judgments on the scores for the 16 macro-environmental and organizational influences. This analysis was repeated for each of the six decisions solicited: (1) training programs at the managerial level, (2) training programs at the blue-collar level, (3) organizational development efforts at the managerial level, (4) organizational development efforts at the blue-collar level, (5) performance appraisal system at the managerial level and (6) performance appraisal system at the blue-collar level. Thus, six policies were determined for each manager. The number of variables allowed to enter into each equation (i.e., policies) was restricted to a maximum of three, to lessen problems arising from the limited degrees of freedom. Only those dimension variables that were statistically significant at the .05 level of confidence were entered into the policies. Therefore, some managers had only one, or two regression weights while others had three. The weights indicate the relative strength of influence of the forces

in their decision-making process; while the respective squared multiple-correlation coefficient (R^2) serves as a consistency index. These R^2s were based on the number of variables entered in the equation. It should be noted here that there were managers for whom no policy was identified (i.e., none of the dimensions entered into an equation). Two reasons may have contributed to this: either (a) they had missing data, or (b) they were responding randomly so that no independent variable could be consistently associated with the decision which was the dependent variable.

Once variables most influential in the managers' judgment about implementing an HRT (as defined by the beta weights) was determined, the next step was to see if there were any similarities among managers' policies. For this purpose a hierarchical clustering procedure was used (Veldman, 1967). The program was modified and adapted to fit the data structure (i.e., different number of beta weights for each manager).

Veldman's (1967) procedure iteratively combines individual policies so as to minimize intragroup differences and maximize intergroup differences. The program takes the total number of policies and combines them into two groups, with the first group having all managers but one. Then it takes all but two, with those two having the most similar policies. In this study, the 128 managers policies were combined into 127 groups with

the 2 most similar policies grouped into one. This procedure continues until all are grouped into one large set.

During each iteration an error index is computed. Veldman (1967) defines this index as the "sum of the squared differences between corresponding scores in the profiles, divided by the number of objects in the potential group" (p.310). This error index can be used to identify the most interpretable clustering solution. Where the error index has the largest increment, the clustering procedure should end.

Once this procedure was completed, regression analysis was performed on the composite judgments of all managers within each cluster. This was done by regressing the likelihood of HRT implementation judgments on the 16 factor scores. A regression equation was computed for each cluster as well as a multiple R^2. This analysis was done to validate the clustering procedure (i.e., consistency within the clusters; cf. Hobson, Mendel & Gibson, 1981).

Following identification of the final clustering solution, and to gain more information about the nature of the groups, the organizational and personal data were used in an attempt to describe those clusters by means of multiple discriminant analysis.

The discriminant analysis was conducted to determine the set of characteristics most useful in differentiating

among the resulting clusters. Cluster membership was used as the criterion variable and the following personal and organizational characteristics were used as discriminators: tenure, manager's age, span of control, levels of supervision above his position, total levels of supervision in the organization, size, organizational age, whether it was a Peruvian or multinational organization, and the degree of professionalism. In two instances the results from the analyses fall within the .05 to .10 level of confidence. These were reported because of suggestions of directions for future explorations and the exploratory nature of the data.

Results

Factor Independence

An intercorrelation matrix was constructed to test for factor independence (i.e., multicollinearity). Several researchers (e.g., Dudycha & Naylor, 1966; Naylor & Schenck, 1968; Schenck & Naylor, 1968) have argued that interrelationships among factors or dimensions may artificially affect the outcome of the analyses. That is, factors that have a greater than zero intercorrelation are more systematically a linear function of those factors or dimensions than the actual manager's decision.

In this study the random assignment of levels to the factors should have maintained their independence. Table

19 shows the bivariate correlations for each of the pairings of the 16 factors (cues) over the 15 scenarios (N=15). As it can be seen, the highest r between any pair of factors is .79 (common variance of 62%). Also 96 percent of the pairwise r's were below .40 and 78 percent were below .30. Therefore, it can be argued that the factors were reasonably independent and free of collinearity.

Managers Policies

Training programs. Table 20 provides the computed beta weights, with their corresponding R^2 in the implementation of training programs at the managerial level, for the factors considered most influential by each manager. The range of R^2 varies from a low of .26 to a high of .95 with a median of .49 and a mean of .48. All the R^2s were significant at the .05 level or below. These relatively high R^2 values indicate (as a quality check) that on the whole the managers were processing and utilizing the information presented in the scenarios reliably. Further, applying the formula for shrinkage (Nunnally, 1978) to the mean R^2 resulted in a drop of .14, from .48 to .34 (i.e., 71% of predictive efficiency was retained). This decrease was negligible as compared to other policy-capturing studies reporting shrinkage (cf. Anderson, 1977; Stumpf & London, 1981, Zedeck & Kafry, 1977) and suggests that the ratio of scenarios to

Table 19

Correlation Matrix for Dimensions

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	--	-.327	.231	-.221	-.086	-.067	.316	.076	-.551	-.118	.186	-.045	.089	-.104	-.229	-.014
2		--	-.187	.042	-.040	.034	.322	.155	.709	-.040	.321	.023	.068	.494	-.316	-.066
3			--	-.192	.336	-.199	.040	-.065	-.121	.007	.129	-.157	-.161	-.059	-.124	-.076
4				--	-.036	-.470	-.327	.088	.247	-.480	.239	-.186	.060	.147	-.366	.253
5					--	.264	-.039	.127	.118	.242	.193	.136	.190	-.142	.146	-.480
6						--	.033	.251	-.246	.540	-.126	-.151	.119	-.481	.078	.122
7							--	.450	-.034	.349	.414	.180	.263	.171	-.043	.170
8								--	-.216	.265	.049	-.398	.379	-.073	-.149	.053
9									--	-.064	.303	.409	-.108	.366	-.156	.082
10										--	-.077	.008	.147	-.204	-.073	.254
11											--	.382	.422	-.068	-.234	-.068
12												--	.057	-.029	.358	.129
13													--	.165	.101	-.251
14														--	-.208	-.371
15															--	.020
16																--

Note. See Table 10 for identification of factors.

Table 20

Managerial Policies for Implementing Training Programs at

the Managerial Level

Manager	Factor(s) (Beta Coefficient)[a]			R^2
001	10 (.52)	8 (.50)	16 (.32)	.87
002	8 (.70)	5 (.41)	4 (-.38)	.86
003				
004	6 (.75)	15 (-.40)	11 (.28)	.86
005				
006	8 (.97)	12 (.65)	13 (-.39)	.71
007				
008				
009	3 (-.59)	8 (.55)		.70
010	7 (.58)			.34
011	8 (-.58)			.34
012	8 (-.74)	9 (.37)		.80
013	6 (.60)	13 (.44)		.63
014				
015	7 (.58)			.34
016	7 (.61)	2 (.39)		.68
017	11 (.74)			.54
018	7 (.51)			.26
019	6 (.64)	9 (.51)		.51
020	8 (.68)			.46
021	3 (-.61)			.37
022	13 (.54)			.29
023	8 (.69)	15 (.59)	14 (.45)	.76
024	6 (.68)	16 (.45)	11 (.38)	.80
025				

(table continues)

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Manager	Factor(s)[a] (Beta Coefficient)			R^2
026	10 (.65)	15 (.43)	13 (.33)	.78
027	10 (.47)	6 (.45)		.65
028				
029	1 (-.81)	14 (-.45)		.79
030				
031				
032	10 (.52)	5 (.54)	7 (.27)	.87
033	11 (.87)	1 (-.52)	10 (.26)	
034	11 (.65)			.43
035	8 (-.76)	3 (.62)	13 (.43)	.88
036	16 (.83)			.69
037	13 (.46)	8 (.61)		.80
038	7 (.54)	12 (.52)	12 (.43)	.68
039	9 (.59)			.34
040	6 (.69)			.48
041	16 (.61)			.37
042	9 (.60)			.36
043	13 (.50)	10 (.49)		.56
044	8 (.82)	12 (.53)		.61
045	10 (.95)	4 (.66)		.74
046	1 (-.57)			.33
047	1 (-.58)	10 (.42)		.58
048				
049				
050				
051				
052	13 (.67)	12 (.43)		.67
053	3 (-.58)			.34
054	7 (.71)			.51
055	8 (.60)	6 (.52)	7 (.18)	.94

(table continues)

Manager	Factor(s)[a] (Beta Coefficient)			R^2
056	6 (.66)	13 (.33)	7 (.32)	.79
057	7 (.58)	6 (.38)	13 (.35)	.77
058	14 (.75)	5 (.49)	14 (.33)	.70
059	11 (-.64)	8 (-.53)		.77
060				
061	2 (.57)	10 (.75)	4 (.51)	.78
062	6 (.66)	7 (.32)	8 (.32)	.87
063	8 (.81)	15 (-.25)	13 (.20)	.95
064				
065	3 (-.56)	13 (.47)	15 (-.48)	.32
066	2 (.45)			.79
067	6 (.63)			.40
068				
069	8 (.63)			.40
070	2 (.64)			.41
071	10 (.78)	11 (.45)	1 (-.29)	.85
072	10 (.73)			.54
073	15 (-.78)	14 (-.53)	4 (-.40)	.72
074	6 (.55)	5 (.41)		.60
075	8 (.83)	12 (.48)		.60
076	12 (.59)			.35
077	8 (.66)			.43
078	8 (.54)			.30
079	9 (.69)	6 (.45)	11 (.35)	.77
080	7 (-.88)	11 (.43)		.66
081				
082	8 (.88)	10 (.24)		.95
083	13 (.66)			.43
084				
085	7 (.56)	10 (.50)		.32
086	12 (.63)	2 (.37)		.80

(table continues)

Manager	Factor(s)[a] (Beta Coefficient)			R^2
087	11 (.62)			.39
088	7 (.53)			.28
089	13 (-.59)			.35
090	3 (.65)			.42
091	7 (.63)			.40
092	12 (.65)	6 (.44)		.53
093	8 (.74)	10 (.33)		.78
094	13 (.59)	9 (.50)		.54
095	16 (.51)			.26
096	6 (.68)	8 (.48)		.87
097	1 (.64)			.41
098	10 (.80)	16 (-.47)		.67
099				
100				
101				
102	10 (.67)			.45
103	5 (-.70)			.76
104	8 (.78)			.61
105	8 (.67)			.46
106	9 (.57)			.53
107	12 (.73)			.53
108	6 (.58)	6 (.56)	1 (-.41)	.71
109	10 (.53)	16 (-.50)		.49
110	7 (.54)	13 (.43)	12 (.40)	.63
111	9 (.58)	3 (-.45)		.33
112	13 (.91)	13 (.45)		.88
113	8 (.70)			.49
114	10 (.56)	15 (-.44)	16 (.25)	.31
115	8 (.54)			.66
116	11 (.71)	15 (.61)	2 (.43)	.51
117	9 (.70)			.49

(table continues)

Manager	Factor(s)[a] (Beta Coefficient)			R^2
118	3 (-.52)			.27
119	6 (.56)			.86
120	11 (.90)	1 (.55)	8 (.37)	.81
121	2 (.53)	1 (-.34)		.28
122				
123	8 (.53)	16 (.52)		.58
124				
125	8 (.54)	5 (.58)	3 (-.47)	.78
126	8 (.52)			.27
127	7 (.71)	5 (.39)		.64
128				

===

[a] Refer to Table 10 for number identification.

factors provided a reasonable statistical stability for the results. This pattern of shrinkage or variation of sampling error was consistent across the five other decisions, as will be shown below.

As shown in Table 20, for 24 of the 128 managers, no dimension was found to be a statistically significant policy indicators. Consequently, all the results are based on 104 managers for this HRT.

Although, as one would expect, each manager based his decision on different factors, some overall observations can be made regarding the frequencies with which variables entered the manager's policies. This analysis was done to summarize and provide indications of the relative degree of generality in the use of the various cues when deciding whether or not a training program is to be implemented.

By tallying the variables that emerged in all the 104 individual policies (i.e. the one, two or three factors that were entered were added across managers), a total of 191 elements were counted. Of these, 16% were "quality of management" elements (largest frequency). The next most frequent, each with 9%, were: the availability of local resources, the commitment of management to HRD; and the commitment of employees to the organization. Also of importance were the budget for HRD (8.9%) and the organizational financial condition (6.2%). In total, these six elements accounted for

58.1% of the variables that entered the different policies.

The clustering procedure resulted in a seven group solution. The computed R^2 values for each of the clusters as shown in Table 21 were .18, .48, .37, .30, .36, .36 and .65.

These indicated that the information presented across the scenarios was processed and responded to in a fairly consistent manner by the managers within each cluster. The same moderate consistency (i.e., R^2 values in high 20's and 30's) was found, with few discrepancies, throughout the other cluster analyses.

Table 21 indicates the number of managers within each cluster, the variable or variables common to the majority (at least 60% of them) of the managers' policies and the overall predictive efficiency of the cluster as indicated by the R^2 value. It should be noted that Cluster 1, which was the largest with 48 managers, had a low R^2 value because the managers with unique factors were grouped in this "residual" cluster. Even though two factors were found to be common among most of these managers (quality of management and budget for HRD activities), 30% of them included other variables resulting in a relative poor consistency (R^2 = .18).

The multiple discriminant analysis was done in two phases. The initial analysis or trimming phase was performed by entering the personal and organizational

Table 21

General Characteristics of Resulting Clusters for Training Programs

(Managerial Level)

Cluster	N	Factor(s) in Common	R^2
1	48	Quality of Management Budget for HRD Activities	.18
2	6	Quality of Blue-Collar Workers	.48
3	20	Top-Management Commitment to HRD	.37
4	12	Market Conditions	.30
5	8	Organizational Financial Conditions	.36
6	8	Opportunity for Growth and Development	.36
7	2	Number of Employees under Law of Indemnification Local Resources to Support HRT	.65

characteristics in a stepwise manner to determine the set of characteristics that best differentiates between the clusters. This procedure has been suggested by Gondeck (1981) and Mathieu (1983). This initial analysis found the clusters be differentiated by one canonical discriminant function (Chi-square, $\underline{p} < .10$). This confidence interval used in these analysis to aid the interpretation of the clusters. However, any findings from this analysis, as stated before, must be subjected to further verification and exploration. Four variables contributed significantly to the canonical discriminant function identified: (a) the organizational age, (b) span of control, (c) degree of professionalism, and (d) tenure of the manager.

In the second step, a simultaneous multiple discriminant analysis was performed with only the four variables previously identified. Again, only one significant function was found ($\chi^2(24) = 33.963$, $\underline{p} = .08$). This function accounted for 65.19 percent of the total between-cluster variance.

Structure coefficients were computed because they "tell us how closely a variable and function are related" (Klecka, 1980, p. 31). Further, "we can 'name' a function on the basis of the structure coefficients by noting the variables having the highest coefficients. If those variables seem to be measuring a similar characteristic, we could name the function after that

characteristic" (Klecka, 1980, p. 31). The resulting structure coefficient was rotated to a VARIMAX solution to aid in the interpretation (Krus, Reynolds, and Krus, 1976). Table 22 shows the final matrix.

Pedhazur (1982) argues that only coefficients that are .30 or higher are meaningful for the function interpretation (p. 704). As can be seen in Table 22 the function clearly relates to the organizational age. Therefore, this function was labeled organizational age.

Table 23 shows the beta weights and R^2s (all significant at the .05 level) for each manager dealing with implementation of training programs at the blue-collar level. The range of R^2 was from .27 to .93 with a mean and median of .40. The sampling error estimated was .16, dropping the R^2 value from .40 to .24.

At this level, a total of 163 statistically significant elements entered into policies (35 managers had none). Here five elements accounted for 48.1% of the total number of times entered. These were: (a) the quality of blue-collar employees (12.0%), (b) the availability of local resources (11.6%), (c) the commitment of management to HRD (9.2%), (d) the budget for HRD (7.9%) and (e) the commitment of employees to the organization (7.4%). Further, of the 93 factors that entered the equation first, 15% were "the quality of blue-collar workers".

Table 22

Rotated Structure Coefficients for Cluster of

Policies – Training Program (Managerial Level)

Discriminant Function

	I
Organizational Age	.980
Span of Control	-.010
Degree of Professional	.162
Tenure	.108
% of variance	41.89

Note. Underlined coefficient indicates characteristic considered as contributing to the function interpretation.

Table 23

Managerial Policies for Implementing Training Programs at

the Blue-Collar Level

Manager	Factor(s)[a] (Beta Coefficient)			R^2
001	5 (.54)			.29
002	5 (.62)			.39
003	1 (-.89)	2 (-.44)	5 (.35)	.93
004	6 (.86)			.75
005				
006				
007				
008				
009	11 (.47)	5 (.46)		.52
010				
011	5 (-.70)	6 (.65)		.67
012				
013	11 (.62)	6 (.47)		.54
014	5 (.51)	2 (.64)	15 (.40)	.71
015				
016	7 (.61)	2 (.39)		.68
017				
018	16 (.74)	2 (.51)	13 (.35)	.78
019	3 (-.59)			.35
020	10 (.66)	16 (-.52)	15 (-.46)	.81
021	7 (.58)			.33
022	7 (.73)			.53
023	7 (.63)	3 (-.46)		.59
024				
025	4 (-.62)			.38

(table continues)

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Manager	Factor(s)[a] (Beta Coefficient)	R^2
026	10 (.66) 16 (-.55)	.56
027	10 (.57) 5 (.47)	.69
028		
029	7 (-.53) 14 (-.45)	.57
030	1 (-.60) 8 (.56)	.62
031	2 (-.59)	.34
032	5 (.67) 10 (.34) 7 (.30)	.82
033	1 (-.52)	.27
034		
035		
036		
037	10 (.73)	.53
038	13 (.51)	.26
039	13 (.70)	.49
040		
041	6 (.60) 14 (-.49)	.36
042	7 (.70) 3 (-.57)	.62
043	5 (.74)	.59
044	11 (.58)	.33
045	6 (.70)	.49
046	10 (.68)	.46
047	7 (.60)	.36
048		
049	9 (-.52)	.27
050	9 (-.52)	.27
051	9 (-.52)	.27
052	5 (.60) 10 (.42)	.67
053	16 (-.59)	.35
054	10 (.60) 1 (-.25)	.36
055	10 (.72) 6 (.27)	.93

(table continues)

Manager	Factor(s) (Beta Coefficient)[a]			R^2
056	6 (.71)			.51
057	11 (.59)	6 (.52)	12 (.37)	.79
058	12 (.52)			.27
059	16 (.51)	9 (.48)		.54
060				
061	16 (.78)			.61
062	7 (.58)			.34
063	7 (.58)			.34
064	5 (.61)	12 (.50)	7 (-.33)	.78
065	10 (.94)	16 (-.60)	4 (.30)	.88
066	1 (.54)			.29
067	6 (.62)			.38
068				
069	5 (.52)			.27
070	2 (.64)			.41
071	10 (.95)	4 (.53)	1 (-.26)	.89
072	10 (.67)			.44
073	15 (-.80)	4 (-.50)	14 (-.42)	.70
074				
075	8 (.81)	12 (.47)		.57
076	12 (.66)			.44
077	5 (.84)	12 (-.32)		.74
078	3 (-.72)	10 (.41)	14 (-.31)	.81
079	5 (.56)			.32
080				
081				
082	6 (.61)	11 (.45)	16 (.43)	.73
083				
084	13 (.63)	3 (.60)		.64
085	5 (.55)	10 (.45)		.64
086	12 (.69)	10 (.44)	2 (.40)	.84

(table continues)

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Manager	Factor(s)[a] (Beta Coefficient)			R^2
087	1 (-.68)			.78
088	16 (.61)	5 (.50)		.37
089				
090				
091				
092				
093	6 (.58)	15 (.58)		.65
094	8 (.61)	1 (-.52)		.38
095	7 (.75)			.51
096				
097	6 (.57)	13 (.55)	15 (-.39)	.82
098				
099				
100	3 (.56)	13 (.55)	9 (-.35)	.74
101	12 (.54)			.29
102	5 (.70)	10 (.44)	3 (-.34)	.79
103	7 (.62)	3 (-.45)		.58
104	8 (.67)			.45
105				
106				
107	14 (-.66)	5 (-.46)	4 (.41)	.67
108	3 (-.42)	6 (.56)	12 (.45)	.78
109	5 (.60)			.36
110	13 (.33)	10 (.53)	11 (.47)	.76
111	2 (.68)	16 (.40)		.59
112				
113	14 (.55)	11 (.46)		.48
114				
115	14 (.57)	14 (-.63)	7 (.41)	.33
116	9 (.77)			.70
117				

(table continues)

Manager	Factor(s)[a] (Beta Coefficient)			R^2
118	13 (.63)	3 (.60)		.64
119				
120	15 (.66)	13 (-.51)	10 (.46)	.73
121	11 (.63)			.40
122	6 (.72)			.52
123	10 (.53)			.29
124	13 (.55)	9 (-.47)		.58
125	1 (-.74)			.55
126				
127	13 (.66)			.44
128	13 (.59)			.45

==

[a] Refer to Table 10 for number identification.

Veldman's procedure resulted in 14 clusters for training programs at this level. Table 24 shows the general characteristics of these clusters. In this situation the R^2 values again indicated moderate information processing consistency within each cluster.

The cluster with the lowest R^2 value (.20) was Cluster 4 which contained all of those managers with unique policies. For this cluster no common factor could be identified.

As shown in Table 25 the first multiple discriminant analysis (stepwise) found two significant discriminant functions (Chi-square, $p < .05$) and five characteristics contributed to those functions. These were: (a) organizational age, (b) size of the organization, (c) number of organizational levels above the managers, (d) degree of professionalism and (e) span of control.

The second multiple discriminant analysis (variables entered simultaneously) yielded two significant functions ($\chi^2 (65) = 133.71$, $p < .01$; $\chi^2 (48) = 66.05$, $p < .05$). These functions accounted for 77.86% of the total between cluster variance. The rotated structure coefficients matrix is presented in Table 25. Function I represents the relative hierarchical position of the managers. This function was labeled the managers' organizational influence. while function II represents organizational age and therefore was labeled as such.

Table 24

General Characteristics of Resulting Clusters for Training Programs

(Blue-Collar Level)

Cluster	N	Factor(s) in Common	R^2
1	14	Quality of Blue-Collar Workers	.35
2	4	Law of Labor Stability	.42
3	10	Top-Management Commitment to HRD	.32
4	4	(No common elements; all unique)	.20
5	9	Organizational Financial Conditions	.40
6	4	Union	.31
7	9	Budget for HRD	.28
8	11	Local Resources to Support HRT	.27
9	2	Political Instability/Uncertainty	.34
10	3	Autonomy for HRD Decisions	.25

(table continues)

Cluster	N	Factor(s) in Common	R^2
11	4	Quality of Management	.47
12	8	Commitment of Employees to Organization	.33
13	4	Opportunity for Growth & Development	.62
14	6	Market Conditions	.37

Table 25

Rotated Structure Coefficients for Clusters of

Policies – Training Program (Blue-Collar Level)

Discriminant Function

	I	II
Organizational Age	.085	.907
Levels above	.804	.077
Size	-.018	-.001
Span of Control	-.137	-.025
Degree of Professional	.078	.032
% of variance	44.53	22.49

===

Note. Underlined coefficients indicate characteristics

considered as contributing to interpretation of the

function.

Organizational development programs. Table 26 shows the beta weights and R^2 for 102 manager's policies with regard to the implementation of organizational development programs at the managerial level. The mean and median R^2 values (all significant at the .05 level at least) were .47 and .50, respectively, and the R^2 for this type of program ranged from .26 to .94. After making the shrinkage correction mean R^2 dropped to .33. One hundred and ninety-two elements appeared with statistical significance in these policy equations. Six elements accounted for 55.9% of these appearances. These were: (a) quality of management with 13%, (this variable also most frequently first entered managers' policies, 14.2% of 105 instances) (b) commitment of management to HRD (10.4%), (c) availability of local resources (9.3%), (d) budget for HRD (9.3%). (e) the organizational financial condition (7.2%), and (f) union (6.7%).

At this level, the clustering procedure yielded the 11 clusters shown in Table 27. All the manager's with unique policies were grouped in Cluster 2, therefore the low consistency (R^2 = .16). No common elements found for this cluster even with the large number (36) of managers in it. The remainder of the clusters were moderately consistent (R^2 = .22 to .69) with different elements distributed among them.

The initial multiple discriminant analysis resulted in only one significant canonical discriminant function

Table 26

Managerial Policies for Implementing Organizational Development

Programs at the Managerial Level

Manager	Factor(s)[a] (Beta Coefficient)			R^2
001	13 (.54)			.29
002				
003	3 (-.75)	2 (-1.04)	9 (.62)	.94
004	6 (.68)	8 (.51)	9 (.36)	.83
005				
006	14 (-.64)			.41
007				
008	14 (.66)			.44
009	8 (.63)			.40
010				
011	8 (-.65)			.42
012				
013	11 (.63)	6 (.60)		.66
014				
015	16 (.56)			.31
016	7 (.61)	2 (.39)		.68
017	11 (.70)			.49
018	7 (.62)			.38
019	3 (-.60)			.36
020	15 (-.61)	5 (.46)		.51
021	7 (.59)			.35
022	7 (.63)			.40
023	8 (.76)			.58
024	6 (.64)	11 (.46)		.55
025	1 (.51)			.26

(table continues)

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Manager	Factor(s) (Beta Coefficient)	R^2
026	10 (.68), 11 (.56), 9 (-.34)	.76
027	6 (.57), 7 (.51), 5 (.39)	.86
028	14 (-.64), 4 (.44), 7 (.30)	.52
029	10 (.60), 1 (-.41), 8 (.35)	.60
030	2 (-.66)	.44
031	5 (.66)	.82
032	9 (.60)	.78
033	11 (.62)	.38
034	2 (1.00)	1.00
035	1 (-.52)	.27
036	16 (.75)	.56
037	7 (.71), 10 (.34)	.75
038	13 (.51), 11 (.45)	.57
039	5 (.58)	.34
040	6 (.77), 13 (.35)	.60
041	7 (.70), 4 (.38)	.62
042	2 (.60), 7 (.43)	.53
043	6 (.54)	.76
045	10 (.90), 14 (-.49), 12 (.39)	.67
046	7 (.62), 10 (.43)	.62
047	1 (.56), 8 (.63)	.31
048	5 (.65), 4 (.64)	.77
049	5 (.65), 6 (.56)	.77
050	5 (.65), 2 (-.70), 14 (.54)	.77
051	11 (.73), 2 (-.70), 14 (.54)	.85
052	3 (-.53), 2 (-.70), 14 (.54)	.28
053	6 (.53), 8 (.45), 3 (-.34)	.59
054	10 (-.64), 8 (.43)	.87
055	6 (.42)	

(table continues)

Manager	Factor(s)[a] (Beta Coefficient)	R^2
056	6 (.58) 7 (.45)	.56
057	12 (.42) 7 (.51) 6 (-.46)	.77
058	11 (.79) 7 (-.59) 3 (.37)	.79
059	16 (.72) 8 (.40) 7 (.27)	.52
060	6 (.66)	.92
061	7 (.66)	.43
062	8 (.91)	.84
063	1 (-.74) 7 (.63) 6 (.38)	.85
064	2 (.57)	.33
065	6 (.59)	.35
066	6 (.70) 11 (.43) 1 (-.26)	.60
067	2 (.64) 4 (.53)	.41
068	10 (.95)	.89
069	10 (.70)	.49
070	8 (.80) 12 (.51) 1 (-.37)	.69
071	12 (.52) 9 (.50) 4 (-.33)	.83
072	3 (-.66) 10 (.43) 15 (-.39)	.73
073	3 (-.66) 10 (.43) 15 (-.39)	.73
074	8 (-.51) 9 (.49)	.61
075	16 (.71) 3 (-.47) 8 (.42)	.50
076	16 (.50)	.74
077	10 (.51) 11 (.40) 8 (.41)	.69
078	12 (.60) 10 (.51) 2 (.36)	.76

Manager	Factor(s)[a] (Beta Coefficient)			R^2
087	11 (.60)	6 (.45)		.50
088	8 (-.55)			.31
089				
090	7 (.67)			.44
091	8 (.56)			.31
092	7 (.70)			.49
093	8 (.59)			.35
094	6 (.61)	8 (.58)		.91
095				
096	8 (.74)	9 (.50)		.64
097	10 (.74)			.55
098	10 (.63)	5 (.47)		.77
099	3 (-.71)	14 (.50)	4 (-.43)	.81
100	8 (.70)			.49
101				
102				
103				
104				
105				
106				
107	5 (-.54)	12 (-.43)		.30
108	6 (.58)	15 (-.45)		.72
109	3 (-.63)	10 (.52)	3 (-.36)	.53
110	13 (.61)			.74
111	9 (.58)	5 (.48)		.63
112	2 (.55)			.30
113	8 (.61)			.38
114	10 (.56)			.31
115	8 (.85)	9 (-.53)	15 (.44)	.83
116	11 (.49)	8 (.46)	14 (-.46)	.77
117	1 (-.61)			.37

(table continues)

Manager	Factor(s) ^{a} (Beta Coefficient)			R^2
118	13 (.63)	3 (.60)		.64
119	15 (.55)			.31
120	2 (-.52)	10 (.47)		.52
121	11 (.85)			.73
122	6 (.81)	9 (.38)	16 (.30)	.82
123	12 (.58)			.33
124	8 (.55)			.30
125	1 (-.67)			.46
126	13 (.58)	10 (.47)	9 (.47)	.78
127	12 (.53)			.28
128	13 (.65)	12 (.39)		.61

a Refer to Table 10 for number identification.

Table 27

General Characteristics of Resulting Clusters for O.D. Programs

(Managerial Level)

Cluster	N	Factor(s) in Common	R^2
1	6	Commitment of Employees to Organizational	.31
2	36	(No common elements; all unique)	.16
3	7	Quality of Management Opportunity for Growth & Development	.22
4	12	Organizational Financial Conditions	.30
5	5	Utility of HRD	.40
6	12	Budget for HRD Activities	.24
7	5	Inflation	.27
8	7	Quality of Blue-Collar Workers	.33
9	5	Law of Labor Stability	.24
10	8	Market Conditions	.39
11	2	Local Resources to Support HRT	.69

(Chi-square, $p < .10$). Three characteristics contributed to this function: (a) degree of professionalism, (b) the total number of levels of supervision in the organization and (c) whether the organization was multinational or Peruvian.

In the second step these characteristics were entered simultaneously. The discriminant function was significant at the specified confidence interval ($\chi^2_{(3)}$ = 41.796, p = .07). This function accounted for 51.30 percent of the total between cluster variance. Since, as stated earlier, the heuristic range was increased to explain the nature of clusters, future research should verify this finding.

Table 28 shows the rotated structure coefficients. It can be seen that whether the organization was multinational or Peruvian clearly defines the function. This discriminant function was labelled ownership.

Table 29 illustrates the most influential element(s) (again defined by the beta weights and R^2) for organizational development programs at the blue-collar level. The lowest R^2 value was .27 while the highest was .95. All R^2s were significant at the .05 level. The mean was .47 and the median .49. The shrinkage estimated was .14, dropping the mean R^2 value to .33. Examination of the factors entered showed that five dimensions accounted for 48% of the total of 199 that were statistically significant in the equation for all of the

Table 28

Rotated Structure Coefficients for Clusters of

Policies – Organizational Development (Managerial Level)

Discriminant Function

	I
Multinational or Peruvian	.<u>998</u>
Degree of Professionalism	-.039
Levels of Supervision	-.030
% of variance	36.89

==

Note. Underlined coefficient indicates characteristic

considered as contributing to interpretation of function.

Table 29

Managerial Policies for Implementing Organizational Development

Programs at the Blue-Collar Level

Manager	Factor(s) (Beta Coefficient)[a]			R^2
001	9 (.82)	6 (.54)	3 (.40)	.74
002	5 (.84)	12 (-.49)	7 (.41)	.91
003	1 (-1.10)	2 (-.71)	7 (.34)	.93
004	6 (.58)	10 (.39)		.75
005				
006				
007				
008	12 (.52)			.27
009	16 (-.73)	15 (-.38)	9 (.34)	.81
010	15 (-.67)			.46
011	16 (.56)			.32
012				
013	8 (.70)	9 (.56)		.64
014	5 (.51)	2 (.64)	15 (.40)	.71
015				
016	7 (.61)	2 (.39)		.68
017				
018	7 (.54)			.29
019	8 (-.65)	3 (-.45)		.58
020	5 (.61)	8 (.50)		.71
021	10 (.55)			.30
022	7 (.67)	5 (.45)		.64
023	13 (.62)	7 (.41)	2 (.32)	.91
024				
025				

(table continues)

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Manager	Factor(s)[a] (Beta Coefficient)			R^2
026	10 (.76)			.59
027	10 (.52)	5 (.62)		.82
028	2 (.85)	14 (-.51)	3 (-.41)	.55
029	7 (-.62)			.38
030	1 (-.57)			.33
031	11 (-.48)	2 (-.46)		.60
032	10 (-.44)	5 (.54)	7 (.33)	.81
033	2 (.58)	10 (.77)	4 (.59)	.84
034	7 (.52)	13 (.43)		.58
035				
036				
037	4 (-.64)	2 (.59)		.73
038	13 (.64)			.41
039	10 (-.52)			.27
040	5 (-.43)	2 (-.54)	3 (-.44)	.70
041	15 (-.65)	6 (-.46)	8 (.39)	.84
042	9 (.55)	11 (.54)	10 (.49)	.95
043	5 (.50)	9 (.47)		.53
044	11 (.57)			.32
045	6 (.62)			.39
046	1 (-.55)			.30
047	5 (-.78)			.61
048				
049	11 (-.52)			.27
050	11 (-.52)			.27
051	11 (-.52)			.27
052	5 (.86)	3 (-.48)		.71
053				
054	2 (.55)	2 (-.41)	5 (.42)	.31
055	6 (.51)			.73

(table continues)

Manager	Factor(s)[a] (Beta Coefficient)			R^2
056	6 (.82)			.84
057	7 (.60)	15 (.42)	3 (.31)	.37
058	6 (-.36)	7 (.66)	4 (.45)	.72
059	2 (.64)	16 (.51)	11 (.40)	.95
060	5 (.62)	5 (.51)		.82
061	9 (.71)	5 (.36)		.70
062	9 (.55)			.30
063	13 (.56)			.31
064	5 (.53)			.28
065	6 (.65)	15 (-.43)		.59
066	5 (.58)	6 (.69)	4 (.42)	.93
067	2 (.64)			.41
068	1 (.76)	2 (-.55)	6 (.38)	.78
069	10 (-.87)	4 (.61)		.62
070	1 (.58)			.33
071	10 (.54)			.30
072	8 (.83)	12 (.48)		.60
073	4 (-.57)			.33
074	5 (.75)	8 (.46)	14 (-.44)	.56
075	3 (.49)	9 (.57)	14 (-.32)	.49
076	7 (-.74)	9 (-.42)		.74
077	7 (-.63)			.90
078	5 (.51)	11 (.54)	6 (.34)	.86
079	13 (.59)			.34
080	1 (.61)			.37
081	5 (.60)	10 (.44)		.68
082	12 (.69)	10 (.44)	2 (.40)	.84
083				
084				
085				
086				

(table continues)

Manager	Factor(s)[a] (Beta Coefficient)	R^2
087	5 (.60) 16 (.53)	.36
088	11 (.52)	.76
089	16 (.57)	.32
090		
091	1 (.52) 13 (.49) 3 (.40)	.76
092	2 (-.65) 6 (.53) 15 (.31)	.92
093	8 (.86) 1 (.27)	.86
094	13 (.53)	.28
095		
096	8 (.50) 13 (.46)	.65
097		
098	13 (.75) 10 (.33) 13 (.34)	.75
099	15 (.68) 8 (.50) 12 (.39)	.62
100	2 (.69)	.47
101	10 (.56) 5 (.38)	.81
102	4 (-.50) 2 (.53)	.76
103	8 (.59)	.35
104	5 (.79) 11 (.33)	.85
105	4 (.69)	.47
106	5 (.63) 8 (.43) 9 (.40)	.52
107	6 (.69) 7 (.51)	.77
108	5 (.55) 16 (.36) 11 (.34)	.31
109	13 (.68)	.78
110	12 (.64)	.41
111	13 (.58)	.33
112	13 (.70)	.49
113		
114	7 (-.57) 11 (.52) 10 (.41)	.33
115	5 (.45)	.81
116	1 (-.77)	.59
117		

(table continues)

Manager	Factor(s)[a] (Beta Coefficient)			R^2
118	4 (.54)			.29
119	2 (-.95)			.91
120	11 (.61)	16 (.26)	1 (-.24)	.37
121	8 (.58)	2 (.47)	10 (.39)	.90
122				
123				
124				
125	1 (-.71)			.50
126	7 (.67)	3 (-.41)		.59
127	8 (.57)			.33
128	4 (-.61)	8 (.56)		.63

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[a] Refer to Table 10 for number identification.

managers. These were: (a) the quality of blue-collar workers (12.5%) (also entered as being the most influential in 17.3% of the 104 dimension that first entered in the policy equation), (b) the availability of local resources (10.5%); (c) the union (10%); (d) the budget for HRD (8.0%) and (e) the quality of management (7.0%).

The clustering analysis resulted in only three clusters. Table 30 shows that their respective R^2 values were .26, .22, and .19. The R^2 values are not as high as previous ones. Because of the heterogeneous mixture of policies employed in these decisions only three groups were grouped which yielded relatively low consistencies. This could be explained by the fact that blue-collar employees in Peru seldom are part of OD efforts. The interviews had found this to be the case for most of the organizations. Confusion as to the frame of reference with regard to O.D. activities has likely been induced in those responding, thus the lack of meaningful clusters and low consistency.

The multiple discriminant analysis yielded no significant discriminant functions (Chi-square, $p > .10$). Consequently, it can be said that across and within the clusters the organizational and personal characteristics there were more or less randomly distributed throughout.

Table 30

General Characteristics of Resulting Clusters for O.D. Programs

(Blue-Collar Level)

Cluster	N	Factor(s) in Common	R^2
1	23	(No common elements; all unique)	.26
2	78	(No common elements; all unique)	.22
3	3	Autonomy for HRD Decisions	.19

Performance appraisal programs. Table 31 presents the results of the regression analyses performed on the decisions made by the managers concerning the likelihood of implementing performance appraisal programs at the managerial level. Here again, the results are presented in terms of the beta weights and R^2 values. The range of R^2 was from .26 to .95 with a mean of .47 and a median of .52. The shrinkage estimate decreased the mean to .33. As shown in Table 31, six variables were most influential in the decisions about performance appraisal programs for management. These were: (a) quality of management, 19.2% of the total of 192 significant variables, (b) the commitment of management to HRD (8.3%), (c) the organizational financial condition (7.8%), (d) the union (7.3%), (e) availability of local resources (7.3%), and (f) inflation (6.7%). Overall these variables accounted for 56.6% of all the variables represented, the balance was distributed among the remaining variables. It should be noted that 102 factors entered first in the policies with the quality of management variable representing 27.4% of those.

The six clusters identified by Veldman's procedure are shown in Table 32. Their respective R^2 values were .14, .51, .38, .28, .56 and .31.

As in the previous clustering results, some consistency can be detected across clusters and within

Table 31

Managerial Policies for Implementing Performance Appraisal

Programs at the Managerial Level

Manager	Factor(s) (Beta Coefficient)[a]			R^2
001	9 (.77)	10 (.42)		.74
002	8 (.65)	5 (.47)	4 (-.31)	.80
003				
004	6 (.59)	11 (.52)	8 (.32)	.78
005	8 (.47)	1 (.47)		.48
006	1 (.72)			.51
007	10 (.72)	16 (-.45)		.56
008	12 (.59)			.35
009	3 (-.67)	8 (.53)		.78
010	11 (.63)	4 (-.55)	9 (.42)	.69
011	7 (-.58)	3 (-.49)		.60
012	11 (-.88)	4 (-.55)	9 (.42)	.69
013	8 (.61)	11 (.57)	1 (-.38)	.77
014				
015	2 (.62)	8 (.45)		.68
016	7 (.66)			.43
017	11 (.70)			.49
018	8 (.64)	2 (.40)		.65
019	8 (-.63)			.40
020	8 (.92)	12 (.69)	11 (-.46)	.75
021	3 (-.63)	9 (-.44)	7 (.40)	.68
022	8 (.62)			.39
023	8 (.67)	1 (-.37)	13 (.35)	.84
024	5 (.67)			.45
025				

(table continues)

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Manager	Factor(s)[a] (Beta Coefficient)	R^2
026	10 (.64) 5 (.46)	.42
027	10 (.53)	.61
028		
029	1 (-.67) 10 (.46)	.45
030	2 (.54)	.49
031		
032	10 (.59) 5 (.45)	.68
033	2 (.57) 10 (.73)	.78
034	11 (.56) 4 (.58)	.32
035		
036	16 (.73) 11 (.54)	.54
037	13 (.65)	.43
038	10 (.60)	.61
039		
040	6 (.42) 4 (-.50) 8 (.39)	.84
041	9 (.55) 11 (.54) 10 (.49)	.95
042	2 (.61) 3 (-.49)	.74
043		
044	6 (.65) 7 (.47)	.67
045	1 (-.57) 4 (.42)	.32
046	8 (-.79)	.75
047	1 (-.55)	.30
048		
049		
050		
051	13 (.75) 2 (.58) 14 (-.37)	.80
052		
053		
054	8 (.59) 8 (.48)	.35
055	6 (.59) 16 (.30)	.89

(table continues)

Manager	Factor(s)[a] (Beta Coefficient)			R^2
056	6 (.63)	8 (.62)	12 (.32)	.88
057	8 (.95)	12 (.53)		.78
058	7 (.51)			.26
059	11 (.74)	16 (-.41)	7 (-.42)	.74
060				
061	2 (.62)	8 (.40)	7 (.27)	.39
062	6 (.66)			.92
063	9 (.65)			.43
064	7 (.57)	14 (.38)	15 (-.36)	.76
065				
066	13 (.70)	15 (-.46)	5 (-.42)	.77
067	6 (.49)	8 (.45)		.55
068				
069	6 (.61)	8 (.60)	9 (.28)	.84
070	2 (.64)			.41
071	1 (-.76)	2 (-.50)	6 (.36)	.74
072	10 (.85)	4 (.48)	14 (-.41)	.57
073	6 (.46)	15 (-.51)		.74
074				
075	8 (.83)	12 (.48)		.60
076				
077	8 (.82)			.67
078				
079	2 (.60)	14 (-.34)	5 (.26)	.36
080	8 (-.87)	6 (.36)	11 (.34)	.87
081				
082	8 (.72)	3 (.60)	10 (.40)	.91
083	6 (.61)	12 (.42)	2 (.37)	.38
084	13 (.63)	10 (.50)		.64
085	8 (.66)			.69
086	12 (.63)			.80

(table continues)

Manager	Factor(s)[a] (Beta Coefficient)			R^2
087	1 (-.63)			.40
088	11 (.69)	16 (.42)		.62
089	8 (-.57)			.32
090				
091	11 (.68)	3 (.37)		.67
092	8 (.73)			.54
093	12 (.65)	1 (.27)		.42
094	8 (.86)	6 (.60)	14 (.32)	.86
095	14 (.58)			.34
096	8 (.79)	3 (.54)		.63
097	8 (.65)			.88
098				
099	13 (.64)	5 (.63)	3 (-.39)	.60
100	2 (.62)	3 (-.48)		.39
101	7 (.62)			.38
102	10 (.52)	12 (.68)	3 (.37)	.81
103	2 (.83)	3 (.49)		.62
104	6 (.55)			.31
105	8 (.86)	7 (.55)	9 (.34)	.76
106	4 (.75)			.66
107				
108	6 (.68)			.79
109	3 (.51)			.26
110	13 (.74)			.55
111	8 (.56)			.31
112	3 (.59)	1 (.39)		.35
113	8 (.70)			.68
114	10 (.56)	15 (-.46)		.31
115	8 (-.84)			.81
116				
117	9 (.62)			.38

(table continues)

Manager	Factor(s)[a] (Beta Coefficient)			R^2
118				
119	15 (-.69)			.64
120	6 (.60)			.36
121	11 (.85)	9 (-.52)		.72
122	8 (.62)	2 (.53)	11 (-.35)	.76
123				
124	8 (.55)			.31
125	1 (-.53)			.29
126	8 (.59)	7 (.40)		.73
127	13 (.61)			.38
128	13 (.52)	5 (.46)		.59

===

[a] Refer to Table 10 for number identification.

Table 32

General Characteristics of Resulting Clusters for Performance Appraisal

Programs (Managerial Level)

Cluster	N	Factor(s) in Common	R^2
1	44	(No common elements; all unique)	.14
2	6	Quality of Blue-Collar Workers	.51
3	15	Quality of Management Top-Management Commitment to HRD	.38
4	18	Local Resources to Support HRT	.28
5	8	Market Conditions	.56
6	11	Commitment of Workers to Organization	.31

each one. No common factor was found for Cluster 1 which contained most of the managers with unique policies.

The multiple discriminant analysis failed to yield a significant discriminant function (Chi-square, $p > .10$). This indicated that the people in the clusters at this level were similar with regard to their personal background and the organizational characteristics.

At the <u>blue-collar level</u>, Table 33 provides the results. The mean R^2 value was .48, while the median was .57 (the range was .27 to .93).   The sampling error estimated for the mean similar to previous results, was .14, decreasing the R^2 to .34.

In the analysis of the frequency of elements entering into the policies, again 6 factors (representing 56.5% of the 191 factors) were the most common.   These were: (a) the quality of blue-collar employees with 18.8% and also with 26.6% of the 94 that entered first into the policies, (b) the budget for HRD (8.49%), (c) availability of local resources (8.4%), (d) market conditions (7.3%), (e)commitment of employees to organization (7.3%), and (f) the commitment of management to HRD (6.3%).

Fourteen clusters were identified by Veldman's procedure at this level, as shown in Table 34. The R^2 values range from a low of .12 to a high of .68 (i.e., showing moderate consistency within clusters).

Table 33

Managerial Policies for Implementing Performance Appraisal

Programs at the Blue-Collar Level

Manager	Factor(s) (Beta Coefficient)[a]			R^2
001	5 (.61)			.37
002	5 (.84)	7 (.49)	12 (-.35)	.89
003	1 (-.99)	9 (-.51)	5 (.31)	.81
004	6 (.74)			.55
005				
006				
007				
008				
009	5 (.54)			.29
010				
011	5 (-.77)			.60
012				
013	13 (.70)			.49
014				
015	7 (.62)	13 (.44)		.73
016	7 (.61)	2 (.39)		.68
017				
018	7 (.66)	1 (-.43)	11 (.37)	.73
019				
020	8 (.70)			.50
021	10 (.65)	2 (.47)		.62
022	10 (.69)			.48
023	8 (.59)			.34
024	7 (.62)			.38
025				

(table continues)

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Manager	Factor(s) (Beta Coefficient)			R^2
026	12 (.40)	10 (.58)	5 (.39)	.75
027	6 (.73)			.54
028				
029	7 (-.82)	16 (.57)	13 (.42)	.72
030	8 (.55)			.30
031	2 (-.69)	11 (-.36)		.78
032	5 (.60)	10 (.43)	7 (.31)	.85
033	9 (.65)			.42
034	13 (.54)			.29
035				
036	5 (-.80)	16 (-.56)	16 (.38)	.52
037	10 (.55)	12 (.43)	12 (.36)	.80
038	13 (.60)	5 (.44)		.86
039	7 (.62)			.39
040	3 (.63)	14 (-.42)	13 (-.41)	.69
041	5 (.49)	4 (-.58)	8 (.40)	.78
042	16 (.56)	15 (-.52)	10 (.38)	.87
043	5 (.49)	9 (.57)	4 (-.37)	.69
044				
045	8 (.77)	12 (.65)		.62
046	10 (.86)	4 (.62)		.61
047				
048				
049				
050				
051				
052	5 (.83)	3 (-.52)	7 (.44)	.82
053				
054	5 (.63)	13 (.45)		.71
055	6 (.82)	11 (.50)		.82

(table continues)

Manager	Factor(s) (Beta Coefficient)	R^2
056	6 (.68) 15 (.44)	.67
057	7 (.73)	.54
058	2 (.56) 12 (.43) 6 (-.40)	.71
059		
060		
061	2 (.72) 10 (.40)	.65
062	6 (.58) 5 (.55)	.81
063	5 (.93)	.87
064	4 (.53)	.28
065	5 (.52)	.27
066	5 (.81) 1 (.38)	.76
067		
068		
069	5 (.74) 1 (.40)	.66
070	2 (.64)	.41
071	10 (.97) 4 (.43)	.72
072	10 (.71) 12 (.37)	.65
073	1 (.62)	.38
074	6 (.53) 13 (.48)	.58
075	8 (.83) 12 (.48)	.60
076	4 (-.73) 9 (.61) 5 (-.43)	.79
077	5 (.73) 7 (.44)	.54
078	3 (-.59) 14 (-.56) 16 (-.23)	.34
079	9 (.71)	.68
080	1 (-.85)	.89
081		
082	5 (.80) 10 (.27) 7 (.22)	.91
083	5 (.92) 14 (.75) 16 (.46)	.77
084		
085	5 (.67) 7 (.41) 12 (.31)	.80
086	12 (.69) 10 (.44) 2 (.40)	.84

(table continues)

Manager	Factor(s)[a] (Beta Coefficient)			R²
087	5 (.83)			.82
088	11 (.64)	1 (-.29)		.41
089	16 (.45)	9 (.50)	10 (.44)	.76
090				
091	3 (.59)	1 (.42)		.65
092	12 (.50)	5 (.50)		.58
093	15 (.35)	9 (-.34)		.80
094	8 (.80)			.64
095	13 (.58)	9 (.53)		.55
096				
097	6 (.59)	13 (.60)	15 (-.29)	.83
098				
099	13 (-.65)	3 (-.48)		.56
100				
101	12 (.83)	5 (-.51)	6 (.34)	.78
102	5 (.66)	10 (.46)	3 (-.43)	.80
103	4 (-.73)	1 (-.45)		.59
104	8 (.74)			.55
105				
106	12 (-.69)			.48
107	6 (.55)	12 (.63)		.71
108	5 (.74)			.56
109	7 (.67)	5 (.38)	8 (.45)	.73
110	16 (.70)	15 (-.53)	9 (.36)	.78
111	13 (.92)	15 (-.47)	7 (-.34)	.92
112	13 (.64)	14 (.40)	16 (.26)	.67
113				
114				
115	5 (.88)	15 (-.50)	10 (-.41)	.86
116	11 (.57)	5 (.70)	16 (.40)	.83
117	10 (.60)	11 (.47)	9 (.36)	.76

Manager	Factor(s)[a] (Beta Coefficient)			R^2
118				
119				
120				
121	7 (.63)	6 (.49)		.67
122	11 (.71)	5 (.38)		.76
123	11 (.70)	6 (.56)		.71
124	13 (.66)			.43
125	1 (-.69)	3 (-.51)	4 (-.36)	.48
126	5 (.86)	5 (.64)	3 (-.52)	.79
127	8 (.46)			.78
128	5 (.75)			.56

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a. Refer to Table 10 for number identification.

Table 34

General Characteristics of Resulting Clusters for Performance Appraisal

Programs (Blue-Collar Level)

Cluster	N	Factor(s) in Common	R^2
1	15	Quality of Blue-Collar Workers	.33
2	3	Law of Labor Stability	.68
3	7	Top Management Commitment to HRD	.41
4	8	(No common elements; all unique)	.31
5	6	Commitment of Employees to Organization	.28
6	8	Budget for HRD	.28
7	7	Quality of Management	.37
8	5	Union	.29
9	6	Local Resources to Support HRT	.32
10	5	Utility of HRT	.12

(table continues)

Cluster	N	Factor(s) in Common	R^2
11	9	Opportunity for Growth & Development Quality of Blue-Collar Workers	.29
12	7	Inflation	.26
13	5	Organization Financial Conditions	.35
14	1	Autonomy for HRD Decisions	.52

The multiple discriminant analysis again failed to show significant discriminant functions (Chi-square, $p >$ .10), i.e. the clusters were homogenous with regards to the organizational characteristics and personal background.

Degree of HRT Implementation

Analytic Procedure

In order to determine the degree to which the HRTs had been implemented in the organizations sampled, three items used in the socio-technical analysis were pooled to form an index. The three items (Likert-type items with responses ranging from "strongly agree" to "strongly disagree ") dealt with each of the HRTs under study: (a) training program to increase supervisory skills have been fully implemented in this organization; (b) performance appraisal systems have been extensively used in this organization, and (c) organizational development systems have been fully implemented in this organization. Responses to these items were averaged to provide an index of the degree of HRT implementation.

One-way analyses of variances were used to test predictive hypotheses PH3 (differences in organizational characteristics will not have and affect the degree of implementation), PH4 (managerial resources, e.g., skills, style are a critical limiting factor in the

implementation of managerial technologies in a developing nation, implying that in the socio-technical system the social system characteristics and operations will be most critical to the success of the implementation), and PH5 (multinational corporations will have a higher incidence of use and successful implementation of managerial technologies than locally owned organizations). These analyses were applied to the above index as well as the organizational-characteristics and personnel data. The socio-technical measures were also analyzed to gain further insight into aim A4 (to uncover socio-technical contributions to the implementation of managerial technology). This was done by means of a regression analysis.

Results

To test predictive hypothesis PH3, three organizational characteristics (organizational age, type of industry and size) and one structural variable (degree of professionalism) were used. The first organizational characteristic was the organizational age. For analysis purposes, this variable was divided into 3 categories: (a) new organizations-- those having less than 16 years of operation, (b) middle-age organizations--those between 16 and 30 years in operations, and (c) old organizations--with more than 30 years of operation. The

sample was divided among the three categories, with one-third in each.

The second characteristic, type of industry, was divided into nine categories. See Table 12 for definition of categories and distribution. The last characteristic was organizational size (i.e., total number of employees). This characteristics was also broken into 3 categories: (a) small size--fewer than 100 employees, (b) medium size--101 to 500, and (c) large size--more than 500 total employees. The number of managers from each size category was also approximately equal (about a third of the sample in each group). A similar breakdown was used in Miller and Canaty's (1982) study in order to compare organizations by size.

The only structural variable used was the degree of professionalism. This refers to the presence and use of professionals within an organization (Thompson, 1965). It is implied that the professionals introduce a variety of ideas, as well as bring along specialized training that contributes to organizational diversity, and hence, a higher probability for innovation to occur.

In this study managers were asked to provide their estimate of the number of professionals in their organizations. This was used as an index of the degree of professionalism. This index was divided into 3 categories: (a) low professionalism--organizations with 10 or less professionals, (b) moderate professionalism--

organizations having between 10 and 50 professionals, and(c) high professionalism--organizations with 50 or more professionals. This categorization divided the sample into approximately equal thirds.

The analysis of variance for organizational age is summarized in Table 35. These results yielded no significant difference among the three categories. This indicates that the degree of reported HRT implementation was independent of the age of the organizations.

As shown in Table 36, the analysis of variance for type of industry also yielded no significant difference among the means of the nine types of industry sampled. Table 36 presents the summary. In sum, the type of industry had no effect on the degree of HRT implementation.

Table 37 presents the summary for the results of the analysis of variance with size. Again, there were no significant differences between the means of the three size categories although the mean for large organizations ($\underline{M}$ = 3.00) was higher than the one for small organizations ($\underline{M}$ = 2.59). As shown in Table 38, the one-way analysis of variance performed on the degree of professionalism yielded no significant difference. This indicates that a greater number of professionals in an organization is not necessarily associated with greater implementation of HRTs in developing countries. In sum,

Table 35

Summary of Analysis of Variance for Degree of

HRT Implementation by Organizational Age

Source of Variation	DF	Sum of Squares	Mean Squares	F
Between groups	2	2.14	1.07	1.34
Within groups	125	99.49	.79	
Total	127	101.64		

Table 36

Summary of Analysis of Variance for Degree of

HRT Implementation by Industry Type

Source of Variation	DF	Sum of Squares	Mean Squares	F
Between groups	8	11.96	1.49	1.98
Within groups	119	89.68	.75	
Total	127	101.64		

Table 37

Summary of Analysis of Variance for Degree of

HRT Implementation by Size

Source of Variation	DF	Sum of Squares	Mean Squares	F
Between groups	2	4.60	2.30	2.96
Within groups	125	97.03	.77	
Total	127	101.64		

Table 38

Summary of Analysis of Variance for Degree of

HRT Implementation by Professionalism

Source of Variation	DF	Sum of Squares	Mean Squares	F
Between groups	2	3.00	1.50	1.90
Within groups	125	98.63	.78	
Total	127	101.64		

this structural variable shows no effect on the degree of HRT implementation.

The current data clearly indicates that the three organizational characteristics and one structural variable tested here are unrelated to the adoption of HRT in Peruvian companies. Further research in similar environments should test the effects of other such variables.

To test further predictive hypothesis PH4, the reported decision-making process was used as a definition of the perceived management style operating in the organization. These were divided into six main categories: (a) centralized/individualized (n = 24), (b) hierarchical (n = 54), (c) group participation (n = 28), (d) family dominance (n = 10), (e) subject to special considerations (political dominance) (n = 9)and (f) other (n = 3). Examples of this last category were Board of Directors makes all decisions, parent company is consulted for the most important ones, and group consultation. This group was deleted from further analysis because of its low mean and heterogenity of response.

A one-way analysis of variance was performed on the categorized five means with degree of HRT implementation as the dependent measure. Table 39 presents the summary of these results. As can be seen, there is a significant

Table 39

Summary of Analysis of Variance for Degree

of HRT Implementation by Managerial Style

Source of Variation	DF	Sum of Squares	Mean Squares	F
Between groups	4	14.37	2.84	3.97
Within groups	120	85.90	.71	
Total	124	101.64		

* p = .004

difference among the means of the six groups (F (4,120) = 3.97, p = .004). To determine if there were any differences among groups on the specific type of management style, a Duncan multiple-comparisons test was used. The Duncan test indicated one significant difference (p .05) regarding the degree of HRT implementation: organizations with group decision-making structure (as reported by managers) had a higher incidence of HRT implementation (M = 3.29) than those with centralized/individual structure (M = 2.38).

To test predictive hypothesis PH5, one-way analysis of variance was performed, once again using the degree of HRT implementation index as the dependent measure. Table 40 summarizes these results. No significant difference for the means was found, even though the mean for multinational organizations was slightly higher (M = 3.01) than for Peruvian (M = 2.89). In order to follow up on aim A4 a multiple regression analysis was conducted. Six socio-technical measures were regressed on the degree of HRT implementation index. These variables were entered simultaneously. The set of variables and each individual variable within the set were tested using F tests (see Cohen and Cohen, 1983).

In this analysis, the human resources technology effectiveness factor was not used because two items from this factor were the same as the one comprising the index of degree of HRT implementation and, thus, would have

Table 40

Summary of Analysis of Variance for Degree of

HRT Implementation by Ownership

Source of Variation	DF	Sum of Squares	Mean Squares	F
Between groups	1	1.14	1.14	1.43
Within groups	126	100.49	.79	
Total	127	101.64		

spuriously inflated the R^2. Table 41 shows the results of this analysis. A significant group $\underline{F}$ was found, and further inspection of the individual variables revealed four significant facets: (a) work feedback, (b) work integration, (c) climate for innovation and (d) the HRD organizational vitality.

Table 41

Summary of Multiple Regression Analysis for Degree of HRT

Implementation with Socio-Technical Measures [a] (N=128)

Variables Entered	Beta	R^2	Fi	Fg
Performance Feedback	.28	.08	15.36**	11.32*
Individual Autonomy	-.04	.08	.34	
Organizational Integra-tion/Cooperation	.34	.22	22.23**	
Organizational support for Innovation	.14	.24	3.92***	
Work Significance	-.12	.26	2.80	
Organizational Vitality for HRD	.34	.36	20.85**	

==

Note. Variables entered simultaneously.

[a] The HRT effectiveness factors was not included.

Fi for individual variables; df = (1,121)

Fg for group variables; df = (6,121)

* $p < .001$

** $p < .01$

*** $p < .05$

CHAPTER 6

DISCUSSION AND CONCLUSIONS

This chapter is divided into four sections. The first section discusses the socio-technical system analysis (i.e., conceptual framework of the study) and is divided into two parts. The first part summarizes the aims of the study and highlights the results. The second part offers the general interpretation and implications of the data.

The second section discusses the environmental/organizational factors (i.e., the facilitating and hindering factors) and the decision-making influences (i.e., policy-capturing) in the implementation of managerial technology. This section is also divided into two parts. First, the study aims the hypotheses tested, and the pertinent results are summarized. In the second part the interpretation, implications and directions for future research are discussed.

The third section addresses the HRT implementation analyses. Again, the section is divided into two parts. First, the hypotheses tested and a summary of results are presented. The second section contains a discussion of the interpretations and implications derived.

The fourth section presents some concluding remarks, bringing into focus the decision-making process analyses and socio-technical assessments as a quality of work life issue for developing nations.

Socio-Technical System Analysis

Aims and Summary of Results

The body of socio-technical systems theory has provided the conceptual framework for study and the framework for the socio-technical system analysis that was done. In this process attention was centered on two aims of the study (as identified in Chapter 3):

A1. To test socio-technical systems theory from macro and micro organizational perspectives.

A3. To determine the feasibility of using the socio-technical systems theory and analysis for the cross-cultural study of organizational behavior and functioning.

Serving these two aims are the following principal findings (summarized from general to specific):

1. The factor analysis of socio-technical system elements affecting implementation of human resources technology yielded seven orthogonal factor dimensions.

2. Four factors are at the macro organizational level: (a) human resources technology effectiveness, (b) organizational

vitality towards HRD, (c) organization support for innovation, and (d) organizational integration/cooperation. Three factors are at the <u>micro</u> level: (e) managerial autonomy, (f) manager's performance impact upon others, and (g) performance feedback.

Interpretations and Implications

In pursuing <u>aim A1</u>, testing the socio-technical system theory from both macro and micro organizational perspectives, the results of the factor analysis provide reasonable support for further exploration in this direction. The measures used in this study were designed to operationalize system dimensions at both macro and micro levels. In this we were successful in that, as noted above the seven-factor solution, generated four factors that were at the macro-organizational level, while three were at the micro or individual level.

Two inferences follow therefrom. One is that in order to best represent the socio-technical system in an organization, the measures have to be tailor-made to fit the organization's objectives, scope and purpose. That is, the organization's policy-makers need to define the above elements before the assessment is conducted. Different objectives or purposes (e.g. work redesign, transfer of technology or formation of autonomous groups) will necessitate inclusion of different measures so as to discover the key variances existing in a given

organizational setting (Cherns, 1976). In this study in order to uncover the key variances affecting implementation of a managerial technology, managers were asked about the technologies, their influence upon them and their work process and relationships with others. The measures designed here addressed the implementation process (technical system) as well as the social system. Most of the measures used by researchers and practitioners for socio-technical assessment have dealt with the social component (see Pasmore et al., 1982) and they only speculate about the technological aspects. In fact, in this study, the technical component seemed to be the most important since the HRT effectiveness factor accounted for 40% of the total variance. Thus, as adherants of social-technology theory assert, in defining the organizational purpose and in systems assessment consideration of both components is critical for joint optimization, as managerial technologies are implemented in the organization.

A second issue relates to the levels of analysis within the theory. As stated earlier, Trist (1981) suggested that the socio-technical analysis must examine macrosocial phenomena, the whole organization and the primary work system. However, most researchers and practitioners have concentrated on the primary work system (see Hackman & Oldham, 1980a, 1980b; Pasmore et al. 1982). The present study extended this perspective

to include the organization but failed to address the macrosocial level as such. That assessment must be approached with caution. As was reflected in Table 13, factors 2, 5, and 7 represent the primary work system, while factors 1, 3, 4, and 6 represent the whole organizational contest. Major inferences about the organization are questionable when built exclusively upon aggregations of individual data since it is obtained at a different level of the system. Nevertheless, they do represent individual perceptions of the total organization and, as such, the responses can be used for diagnostic purposes.

Contributions to organizational theory. An important contribution of this study has been to test, in an exploratory manner, the socio-technical system theory from a macro and micro organizational perspective. As stated in Chapter 2, the traditional socio-technical approach has been to create autonomous work teams (i.e., micro) as the most effective combination of social processes and technical structure (Cummings & Srivastva, 1977). The results here suggest that the socio-technical system theory can be translated into methods to better explain organizational behavior as a process, extending beyond the limits of the job redesign approach that has been most typical heretofore. Moreover, this study has shown that the theory can be used across organizational levels, so that managers as well as blue-collar workers

(the traditional target group) become part of the socio-technical analyses for strategic purposes such as implementation of managerial technologies.

The above thoughts imply that employment of a combination of several levels of analysis would help to integrate and/or develop more encompassing theories of organizational behavior to guide research and practice. As Hage (1982) states, "if we start with a basic three-tier perspective of organization – micro, meso and macro – then we can begin to pose a number of theoretical questions about how these levels set limits or conditions on each other" (p. 142). These constraints and events become important in order, for example, to understand the implementation process of innovations at the different levels in an organization. Furthermore, since socio-technical systems are formed from processes emerging in the organization in interaction with its environment, then its theory and framework (as presented in Figures 1 and 2) can be used in observing and analyzing organizational (as well as individual) relationships, when they interact with the external environment.

In sum, the socio-technical systems theory can be (and should be) tested at the macro and micro level and can be applied to managerial employees as well subordinate levels. Future developments should measure all levels discussed, getting inputs from both top-management and blue-collar employees so as to allow for

"triangulation". Similarly, as Pasmore et al. (1981) have discussed, the lack of convergence between assessment methods makes it "...difficult to compare the adequacy of difference socio-technical system diagnosis, and hence the possible causes for successes or failures of different experiments" (p. 1183).

Contributions to cross-cultural management research. When considering the implications of these results for aim A3 (feasibility of using socio-technical system theory for cross-cultural research), in light of the previous discussion of aim Al, an important contribution to cross-cultural management research emerges.

Utilizing the socio-technical systems framework allows a focus on action-research phenomena (i.e., created behavior). Although this approach is not popular among cross-cultural researchers (Adler, 1983c), its problem-solution oriented framework seems suitable for understanding interactions between people of different cultures. Moreover, such an approach can enhance cross-cultural management studies in two respects.

First, at the theoretical level, as presented in Chapters 2 and 3 and discussed above with respect to aim Al, socio-technical system theory and the levels of analysis proposed by Trist (1981) seem suitable for cross-cultural management research. The major value of this orientation is that it takes a system approach to

the understanding of interactions between organizations and their environment.

Researchers generally agree that there is not a strong theoretical base for cross-cultural management (e.g. Roberts, 1970; Sekaran, 1983; Adler, 1983c; Negandhi, 1975). However, Hofstede's (1980, 1983) study in 40 countries may set the stage for more adequate scientific theory. Although the present study does not literally cross national and cultural boundaries, the results do have implications for cross-cultural research and theory in that deal with the transfer of technology across such boundaries in a given instance.

The major advantages of applying socio-technical systems theory to the study of cross-cultural management is that it: (a) provides a conceptual framework to guide research, (b) organizes existing knowledge about social and technical systems, as well as incorporates emerging ones, (c) allows for multi-level assessment (e.g., individual, group and organizational), and (d) aids in the development of interventions. Consequently, if this body of theory can be used in one particular setting (as this study), then with further refinements and empirical testing, socio-technical systems theory can be extended in the future to provide the needed conceptual framework to guide study of organizational behavior and functioning that crosses cultural boundaries and to permit broader generalizations of principles and applications. Socio-

technical systems theory as suggested here, becomes a "synergistic approach" (Adler, 1983c) to cross-cultural management research, therefore, guiding the search for answering: "How can organizations create structures and processes which will be effective in working with members of all cultures?" and "What is the appropriate balance between culturally specific and universal processes within one organization?" (Adler, 1983c, p. 31).

Second, such research can provide guidelines and practical alternatives to managers looking to answer: "When is it best to create universal approaches to managing the interactions of people within organizations and when is it better to use indigenous, culturally specific approaches?" (Adler, 1983c, p. 43). Therefore, this kind of theory not only provides a conceptual framework but a problem-solving approach needed by developing nations. This perspective is needed in cross-cultural management studies if their results are to have an impact upon the socio-economic growth of developing nations.

An additional contribution of this study to the field of cross-cultural management is the operationalization of the macro-environment variables. Negandhi and Robey (1977) have long argued that the usefulness of the macro approach to cross-cultural managment studies has been rather limited because "the environmental factors have not been operationalized, nor

have various hypotheses been tested in a rigorous manner" (p. 17). The results here have indeed given more operationalized meaning to at least some of the important variables, as the managers here defined and classified them, and as the influence of factors upon their decision has been established. In addition, hypotheses were generated and tested, even though the results obtained turnabout to be counter to expectations. Within the conceptual framework and with the methodology described in this study, then, macro-environmental factors can be operationalized and it has been demonstrated that relevant hypotheses can be tested.

In sum, socio-technical systems theory (with further measurement developments) can be made suitable for the study of organizational behavior in developing countries. This implies that socio-technical systems analysis could provide a useful framework for cross-cultural management research.

Environmental/Organizational Factors
and Decision-Making Influences
Aims, Hypotheses and Summary of Results

One of the main thrusts of this study was the application of policy-capturing analysis to uncover the specific influences affecting the decision-making process in the implementation of managerial technology.

Therefore, this study had as one of its aims (identified in Chapter 3):

A2. To determine the potential utility of the policy-capturing methodology as it relates to decision-making in the implementation of managerial technology.

In order to gain insights into the influences affecting the decision-making process, the following predictive hypotheses were tested:

PH1. Economic factors will be more influential (be given more weight) than social or political factors in the process of implementation of managerial technology.

PH2. Political factors will be more influential than socio-cultural factors in the implementation process.

PH4. Managerial resources are a critical limiting factor in the implementation of managerial technologies in a developing nation. This implies that in the socio-technical system the social system characteristics and operations will be critical to the success of the implementation.

At the conceptual level, the following two hypotheses were examined:

CH1. These are socio-cultural, political and economical factors that will facilitate or hinder implementation of managerial technology in a developing nation.

CH2. Environmental events will have an impact on the socio-technical system as managerial technologies are implemented.

The results can be summarized as follows:

1. The policy-capturing analysis (i.e., regression analyses) showed overallthat socio-cultural, economic and political factors <u>do</u> have an impact on the implementation of managerial technology.

2. The most influential socio-cultural variables were: (a) quality of management (largely a macro problem, but organizationally bounded, as defined by managers), (b) availability of local resources to support a managerial technology, and (c) the quality of blue-collar workers.

3. The organizational factors that showed the greatest influence in deciding whether or not to implement a managerial technology, were: (a) the organization's financial solvency, (b) the commitment of management to HRD and (c) the opportunity for growth and development in the organization.

4. The political and economic factors, although

largely outside of the managers control, seemed to have influence on the decision-making process, but the impact of these factors are diffused as they pass through other systems and environmental layers (e.g., organizational).

5. The discriminant analyses performed on the different clusters indicated that organizational age, the manager's organizational influence, and intranational versus international ownership, seem to weigh heavily in shaping policy and in determining the variables used in making decisions affecting the implementation of training programs (at both managerial and blue-collar levels), and organizational development programs at the managerial level.

6. Quality of management, provision of a budget for HRD, commitment of management to HRD, employee's commitment to the organization, autonomy of HRD decision-making, organizational opportunity for growth and development, and utility of HRT (all perceived as positive valences) tend to _facilitate_ the implementation of all three types of HRT technologies dealt with in this study.

7. The Law of Labor Stability, union, inflation,

number of employees under Law of
Indemnification, quality of blue-collar
workers, market conditions, and the current
political uncertainty/instability (perceived as
negative valences) tend to <u>hinder</u> the
implementation of the three HRTs.

8. Managerial resources, defined as skills, <u>do</u>
<u>restrict</u> the adequate adaptation of managerial
technology.

Interpretation and Implications

<u>Predictive hypothesis PH1 and PH2</u> can be discussed
together. The results presented in Chapter 5 clearly
suggest that managers perceived socio-cultural (e.g.
quality of management or blue-collar workers) and
organizational factors (e.g. opportunity for growth and
development) as most influential in their decision to
implement managerial technology. This is in the order
opposite to the hypotheses advanced that economic
influences would dominate. These results could be
attributed to certain forces within the manager's
immediate and external environments.

For example, the closer the point of origin of
influences are to the individual's immediate environment
the more likely these will have a strong effect upon the
individual. In an organization, factors that managers
can control and manipulate to some degree (the quality of

management or autonomy for HRD decisions, for example), will tend to strongly influence their decision to implement. While, factors in the macro-environment, that are further removed from the individual (e.g. inflation, laws, political uncertainty/instability), and, therefore, beyond their control will exert little or no influence. It can be argued that the latter factors are diffused or mediated through other layers in a manager's life space (see Figure 1). Mathieu, Glickman, Cauthorne and Woods (1983) provided similar explanations in their study of Cadet career commitment.

Even though, in our findings economic and political factors were less influential than socio-cultural or organizational factors, their importance can not be overlooked. As the Chi-square analyses and the interview results indicate these factors certainly exert influence (mostly by hindering) the implementation process. One could speculate that what organizations in Peru do is to find ways to reduce or diffuse their impact through loopholes or by beating the system. The economic factors become more difficult to deal with and largely depend on the options open to the organization as to market conditions or their technological infrastructure (Kim & Utterback, 1983; Negandhi, 1971). However, if the impact of adverse economic conditions is strong, what organizations typically do in Peru, is to cut HRD budgets

as well as to restrict the implementation of HRTs (see interview results).

According to attributional theory (see Weiner, 1980) the fact that quality of management seems to be the most influential factor may suggest that managers attribute success of an innovation to their skills and abilities (i.e., internal attribution) and not to macro-environmental influences (i.e., external attribution). The managers decision-making process might have been influenced by their managerial-ego and not the actual pressure of the defined influences.

In conclusion, the policy-capturing analysis and the overall frequency of factors found in the policies suggest, that socio-cultural and organizational factors are more influential than economic or political factors. This conclusion, in combination with the interviews and Chi-square analyses, also supports conceptual hypothesis 1.

A different point of view can be taken with respect to predictive hypothesis PH4 (managerial resources will be a critical limiting factor in implementing managerial technology). Taking the quality of management factor as the most influential factor for successful HRT implementation, one can argue that if upper-level managers can not trust their people (both their managerial team and employees) with regard to their responsibility, skills, decision-making criteria or

overall leadership, no innnovation (product or managerial) can successfully be carried out (cf. Wallender, 1979). Therefore, managerial resources are a limiting factor for the implementation process. Both the interview results and Chi-square analyses clearly support this hypothesis.

Methodological contributions. With respect to aim A2 (determined the potential utiity of policy-capturing methodology as it relates to implementation of managerial technology) the results from this study indicate that the policy-capturing technique can be meaningfully applied to managerial technology implementation decisions. Since the factors or policies most influential in the manager's decision whether to implement or not can be successfully identified and subsequently grouped.

The computed R^2s indicated that the examined variables account for a major proportion of the variance in the implementation process and that the managers are consistent (with only few exceptions) in utilizing this information. This supports Slovic, Fischloff and Lichenstein's (1977) conclusion that the linear model is effective in dealing with the complexity and variation of human judgments.

The clustering procedure provided interpretable solutions, but definitive statements about its utility can not be made due to the limitations of the study. However, the procedure can be tentatively useful to

clustering manager's policies on the basis of these similarities.

The implementation of managerial technology may be a much more complex process that the present study suggests. Nevertheless, several implications and applications of the results can be useful to organizations in Peru as well as for other developing nations. First, once the manager's most influential factor (s) (macro-environmental and organizational) for the implementation of managerial technologies are identified within an organization, these can be used to: (a) aid policy-makers to develop specific strategies (both short and long-term) for management of human resources organization, control and planning (Fayerweather, 1981); (b) more clearly articulate the operant managerial philosophy towards human resources management in the organization; (c) determine choice and design of interventions to optimize utilization of the organization's human resources; and (d) provide indications of how, and under what circumstances, managerial technologies can best be implemented.

These potentialities exist not only for local organizations in search of growth, but also for multinational organizations adapting to their surrounding environment. For example, a specific practical benefit to multinational organizations would be for training future managers to deal with the shifting and evolving

political, economical and socio-cultural constraints imposed upon the implementation of managerial technologies in developing nations. After the influences are identified from the current managers and critical incidents collected, simulation exercises (e.g., in baskets, problem-solving, leaderless group discussion) could be designed and used as a training technique for new managers before their overseas assignment. These exercises could be used also to aid in the selection of such managers.

Criticisms of policy-capturing research. Recently, Hobson and Gibson (1983) have critized policy-capturing studies on conceptual and methodological grounds. Most of them seemed to apply to this study, so their discussion is warranted.

The decision-making process at any level is not as systematic nor as rational as this technique may lead researchers or participants to believe. That is, the format or lay-out in which the scenarios are presented may not be a real world situation, especially for factors affecting the implementation of a technology. Further, decision-making is subject to many situational factors (i.e. idiosyncrasies) such that a decision taken at one time maybe not the same later, even if the contents and measures are constant. This issue is an important consideration in the interpretation of the current results because managers might have been influenced by

factors (such as time limitations and political pressures) that were not identified or measured here.

In terms of the methodology, Hobson and Gibson (1983) discuss two issues relevant to this study: (a) dimension factor intercorrelations and (b) ratio of scenarios to dimensions. Hobson and Gibson (1983) point out that when significant multicollinearity exists among the dimensions, major problems arise when using multiple regression to infer the policies. These include unstable regression coefficients, spurously high R s and lack of accuracy in the clustering procedures. The problem for this study was not one of muticollinearity but one of orthogonality of the 16 factors. Observation of Table 19 does not categorically lead to the conclusion that the factors were orthogonal. Therefore, interpretation of the results must be tentative and handled with caution. Nevertheless, in combining the Chi-square analyses with the policy-capturing analyses provide results that are indeed meaningful and consistent.

The ratio of scenarios to dimensions in this study produced an "overjustified" regression model (i.e., 16 variables to 15 scenarios). Although these 16 variables could have been reduced by mean of factor analysis, they were kept to provide specificity in the macro-environmental factors. Also the identified variables were intended to be "all inclusive", so as to provide the maximum number of responses from different organizations.

Hobson and Gibson (1983) point out two problems when the ratio is low: (a) spuriously high R values and (b) large sampling error.   However, the stepwise regression analysis, as seen in Capter 5, yielded reasonable statistical stability as indicated by the shrinkage estimate.   The "overjustification" of the regression model also did not permit simultaneous or hierarchical regression analysis.   These two types of analyses are more powerful than stepwise regression which capitalizes on chance (Cohen & Cohen, 1983).   Nevertheless, the statistical stability was reasonable for the purpose of this study.

In sum, the criticisms addressed here threaten the generalizability of some results and those are to be taken tentatively but not disregarded!   They are to be taken as part of a developmental effort, subjected to validation in subsequent studies.   As Sekaran (1983) stated, if cross-cultural management research is going to progress scientifically, because of the many constraints (e.g. time span, financial resources, sampling difficulties) researchers in this area may have "to settle for less than ideal research designs" (p. 69).

Research recommendations.   In light of these findings, further research appears warranted to determine managerial policies affecting the implementation process that are formulated by specific types or groups of organizations.   These can be grouped by their

similarities in technology, size, ownership, structure and so forth. Then (following the methodology in this study) the number of variables presented in the scenarios could be reduced, ameliorating the problems described by Hobson and Gibson (1983). Once the policies are uncovered, these could be used to determine interventions and strategies best designed for specific types of organizations. Also, these findings could be integrated to aid governments formulate national policy. This recommendation can be appropriate also for uncovering policies of product technology implementation.

The recent popularity of Japanese management system and the decline of the industrial productivity growth rate in North America attributed to deficiencies of management practices (Mroczkowski, 1983) argues for expanding the horizon for technology transfer. That is, the lesson from this study implies an expansion of the transfer of technology process, especially that of managerial technology.

The thrust needs to come from multiple directions (as Negandhi, (1983) suggests): from North America to developing countries and vice versa, from Japan to North America and vice versa, from developed countries to developing nations. If there is a benefit for North American organizations, researchers and practitioners from the results of this study, it lies in the clues uncovered as to what facilitates or hinders the

implementation of emerging managerial technologies. Future research should then take a multi-perspective approach to the study of behavior and organizational functioning in different cultures in order to provide benefits (i.e., provide prescriptions to managers in multinational organizations) to all parties involved.

HRT Implementation

Aim and Hypotheses and Summary of Results

In order to learn more about the organizational bahavior of policy-makers in business and industrial enterprises in a developing nation, as they seek to adapt managerial technology to fit their internal and external environment, the following aim was pursued and hypotheses were tested:

A4. To uncover socio-technical contributions to the implementation of managerial technology.

PH3. Differences in organizational characteristics will not have an effect on the degree of implementation.

PH4. Managerial resources are a critical limiting factor in the implementation of managerial technologies in a developing nation.

PH5. Multinational corporations will have a higher incidence of use and successful implementation of managerial technologies than locally owned

organizations.

Findings relevant to these hypotheses can be summarized as follows:

1. The ANOVAs indicated organizational characteristics such as age, type of industry, and degree of professionalism <u>do not</u> differ statistically with regard to the degree of HRT implementation. Therefore, regardless of how old they are, or what lines of business organizations are in, or what degree of professionalism characterizes its people, their manager's report the same degree of HRT implementation.

2. The ANOVA performed showed a significant difference between the different management styles. The post-hoc test indicated that organizations with group decision-making tend to have a higher degree of HRT implementation than those with an individual/centralized management style. Therefore, managerial resources, defined as style do restrict the adequate adaptation of managerial technology.

3. Multinational corporations and Peruvian organizations <u>do not</u> differ statistically (ANOVA showed no differences) with regards to their degree of HRT implementation, although

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they differ (qualitatively) in their philosophy
and approach to overall HRD.

4. The regression analysis showed (the socio-
   technical measures accounted for 36% of the
   variance) that if the socio-technical system
   within an organization allows for managerial
   and organizational cohesiveness (i.e.,
   performance feedback, work integration, climate
   for innovation and the HRD organizational
   valitity) the degree of HRT implementation
   maybe enhanced.

Interpretation and Implications

With regards to predictive hypothesis PH3 (see above
for details), although it can not be stated
categorically, the four analyses of organizational
characteristics and structural variable provide marginal
evidence in the direction of the stated hypothesis.
Further research in similar environments should confirm
or disprove this hypothesis.

In light of the results and discussion presented in
this study, what developing nations need, although
ambitious, is the development of a transfer of technology
model that integrates environmental factors, planned
organizational change issues, innovation characteristics
and innovation adoption-implementation findings (e.g.,
Tornatzky & Klein, 1982), organizational characteristics
and structural variables, and decision-making processes

of organizational and political leaders. Such a complex and contingent model would aid leaders of developing nations to determine the appropriate technology (e.g., managerial, product or rural education), its potential pay-off, resources needed, limitations and constraints, and any forecasting and planning information needed for implementation (see Bowonder, 1982). Research oriented toward identification of these relevant variables must be assembled piece-by-piece to develop the model. Future research should be directed towards uncovering interactions and linkage of the concepts presented above. Therefore, the model's goal should be that of providing criteria and not homogenization of variables, as such of the organizational theory and many research findings have implied. The results from this study are a small step in that directions.

In interpreting the findings bearing upon <u>predictive hypothesis PH4</u> (see previous section), the fact that organizations with group decision-making structure (as reported by managers) had a higher incidence of HRT implementation than those with centralized/individual structure as their management style, in conjunction with the previous policy-capturing results, shows that managerial resources (both in skills and style) do have an distinct <u>impact</u> on the implementation of HRTs in developing countries. Specially, a higher quality management (e.g., proper leadership, training and trust)

and participatory decision-making structure, seemed to be two determinants of whether a managerial technology will be successfully implemented. This is not a surprising result, but it confirms that a major socio-cultural problem that developing nations face is the lack of adequate human resources and the capabilities to support technology transfer.

The absence of statistical significance in testing predictive hypothesis PH5 does not imply that qualitative differences do not exist among multinational and locally owned organizations (see also interview results). What this may indicate, as Boseman and Phatak (1978) pointed out in explaining the lack of statistical differences in managerial functions between U.S. and Mexican organizations, is that "both sets of firms have to operate under similar driving and constraining environmental forces and have to adapt to these forces" (p. 48).

An additional reason for the lack of significant results may have been the index used and the type of managerial technology it measured. Human resources functions and efforts are highly influenced and regulated by behavior of key individuals in organizations. Therefore, any organizational differences may be diffused through individual responses and the index used may not have been sensitive enough to detect overall differences.

In conclusion, managerial resources are a limiting factor in implementation of managerial technology. Therefore, the social system resources in the organization must be enhanced in order for the technologies to be implemented successfully. In addition, multinationals and locally owned organizations do not differ in their degree of HRT implementation.

In addressing aim A4 , it was found that the degree of HRT implementation in developing countries may be a function of the organization's cohesiveness (i.e., conceptualized as represented, in part at least, by the four significant facets found in the regression analysis). Taken together, the six variables accounted for 36% of the variance in HRT implementation. It seems apparent that while the above socio-technical measures impact upon the implementation proces, there are other sources of variance not tapped by this study.

From previous results, for example, one can argue that participatory management style (defined as group decision-making) may contribute to the implementation process as well as the sophistication of managerial practices (i.e., conceptualized as the quality and style of management found in previous analysis).

These findings may increase our understanding of planned organizational change and on the conditions needed for joint optimization of the social and technical system. Four facets (i.e., performance feedback, work

integration, climate for innovation and HRD organizational vitality) were identified here as critical processes in planned organizational change. These characteristics of the organization's environment provides insights into those facets that may facilitate or inhibit the systematic evolution of organizational change. Such that, for example, the greater the organizational cohesiveness, the better the organizational commitment surrounding the planned change (i.e., increased chance for successful implementation of an innovation) and thus the greater the likelihood of joint optimization of the socio-technical system.

Identification of these critical processes also provides practical applications for management in developing nations as they attempt to implement managerial technologies. This diagnosis directs management to focus on the fitting of the innovation to the organization's work processes and characteristics (see Goodman et al. 1980), allowing for interventions to be developed as needed.

Concluding Remarks

The overall purposes of this study were three fold: (a) within a socio-technical systems decision-making perspective, to uncover specific socio-cultural, economic and political factors that either facilitate or hinder

the implementation of managerial technology, (b) to learn
more about the organizational behavior of policy-makers
in business and industrial enterprises in a developing
nation, as they seek to adapt managerial technology to
fit their internal and external environment, and (c) to
generate innovative theoretical, methodological and
practical approaches, and advance the state-of-the-art
for cross-cultural management research.

Several results from the study supported these three
overall purposes. The proposed socio-technical system
framework and policy-capturing analysis showed the
importance and value of uncovering the components
involved in strategic decision-making when implementing
managerial technology. The specific facilitating and
hindering factors influencing the managers decision-
making in Peru were identified and operationalized (see
Table 16, 17 and 18 as well as policy-capturing results).
Practical applications for better adaptation of these
managerial technologies were suggested and discussed.

This study also provided information about
organizational behavior and functioning in developing
nations with regard to the implementation of managerial
technology. For example: (a) multinational corporations
and locally owned appeared to implement HRTs to the same
degree although their approach and philosophy toward
human resources management differ, (b) organizational
characteristics did not affect the degree of

implementation, and (c) extent of managerial resources imposed a limiting factor upon adaptation of HRTs.

The findings also contributed to the industrial/organizational psychology literature by generating: (a) theory developments through examining the socio-technical system from a macro and micro organizational view as well as its applicability to upper-level managers, (b) methodological efforts such as the policy-capturing approach, to uncover decision-making influences, (c) prescriptions for managers to better deal with the environmental and organizational forces impinging upon managerial practices in developing nations, and (d) understanding of cross-cultural management factors that may facilitate innovative use of the socio-technical systems framework for cross-national research.

Current findings and conclusions need to be refined and generalized by similar efforts. Future research recommendations have been made all along.

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APPENDIX A

Letters and Summary of Project Used to

Contact Organizations for Interviews

OLD DOMINION
UNIVERSITY

Old Dominion University • (804) 440-3000 • Norfolk, VA 23508

Lima, May 10, 1983

[Addressee]

Dear Sir:

As part of my doctoral disertation, I am trying to find
out what are the factors that facilitate or hinder the
implementation of technologies for the development of
human resources within organizations. Please find
enclosed a summary of the project.

I will appreciate very much a meeting with you to
discuss these matters, for about 45 minutes. During
the next few days, I will contact your office to
arrange a day and time that best suits your schedule.

Thank you for your consideration and time.

Very truly yours,

Eduardo Salas
Business Consultant
PH.D. Candidate in
Industrial/Organizational
Psychology
Old Dominion University
U.S.A.

Old Dominion University is an affirmative action/equal opportunity institution.

Old Dominion University • (804) 440-3000 • Norfolk, VA 23508

Lima, 10 de Mayo de 1983

[Addressee]

Estimado Señor:

Como parte de mi tesis doctoral, estoy dirigiendo un proyecto para descubrir que factores limitan o facilitan la implementacion de sistemas orientados al desarrollo de los recursos humanos dentro de una empresa. Para su mayor informacion, incluyo a la presente un resumen del proyecto en que estoy empeñado.

Desearia por lo tanto, se sirva usted distraer unos 45 minutos de su valioso tiempo para concederme una cita y de esta manera, poder intercambiar conocimientos sobre los sistemas de desarrollo de los recursos humanos dentro de su importante empresa.

En los proximos dias me comunicare con su oficina para concretar una cita en la fecha y hora mas convenientes para usted.

Le agradezco de antemano su valiosa colaboracion.

Muy atentamente,

Eduardo Salas
Consultor Empresarial
Desarrollo de Recursos Humanos
y Sistemas Organizacionales

Old Dominion University is an affirmative action/equal opportunity institution.

PROYECTO

FACTORES QUE FACILITAN O IMPIDEN LA IMPLEMENTACION
DE TECNOLOGIAS GERENCIALES: UN PROCESO SOCIO-TECNICO

OBJETIVOS: El proyecto tiene por objetivos:

1. Descubrir los factores politicos,
    economicos y socio-culturales que
    facilitan o impiden la implementa-
    cion y efectiva utilizacion de
    sistemas gerenciales para el
    desarrollo de recursos humanos
    dentro de la organizacion.
2. Descubrir, de igual manera, los
    factores y procesos organizacionales
    que facilitan o impiden la implemen-
    tacion de dichos sistemas.
3. Establecer como gerentes, departa-
    mentos u organizaciones toman
    decisiones para implementar dichos
    sistemas.

METODOS: Se emplearan tres metodos para colectar
                    informacion:

1. Entrevistas con gerentes. (Mayo)
2. Cuestionarios. (Agosto)
3. Escenarios u ejemplos. (Agosto)

UTILIDAD PARA
LAS ORGANIZA-
CIONES: Las organizaciones que participen se
                    beneficiaran en la siguiente manera:

1. Recibiran un resumen de los
    resultados.
2. Los resultados proveeran a las
    organizaciones y gerencia con los
    factores ambientales externos
    (politicos, economicos y socio-
    culturales) que afectan la
    implementacion de sistemas para
    el desarrollo de recursos humanos
    en la empresa. Dicha informacion
    podra usarse como diagnostico para
    adaptar la organizacion a factores
    identificados, facilitando la
    eficiente y eficaz utilizacion de
    la tecnologia.

3. Resultados indicaran a las empresas
   que caracteristicas y procesos orga-
   nizacionales facilitan o impiden la
   efectiva utilizacion de sistemas de
   desarrollo empresarial. Informacion
   que podra ser utilizada para esta-
   blecer y conducir intervenciones en
   la empresa.
4. Resultados indicaran como gerentes
   procesan informacion (tanto externa
   como interna) para llegar a una
   decision (individual o colectiva)
   de implementar los mencionados
   sistemas.

DIRIGIDO POR: Eduardo Salas
                Consultor Empresarial
                Candidato al doctorado en Psicologia
                Industrial y Organizacional de Old
                Dominion University
                Master en Psicologia Industrial de
                University of Central Florida

APPENDIX B

Interview Protocol-English

FACILITATING AND HINDERING FACTORS IN
IMPLEMENTING MANAGERIAL TECHNOLOGY:
A SOCIO-TECHNICAL SYSTEM PROCESS

INTERVIEW PROTOCOL

Developed By:

Eduardo Salas

Center for Applied Psychological Studies

Old Dominion University

1983

CONTENT

This document contains the questions to be asked of managers, as well as the procedures to be followed by the interviewer. In addition, definitions, clarifications and examples are given. The purpose of this protocol is to provide a guide to standarize the interview process and maximize the consistency and reliability of the collected data.

The answers to the questions in this document should be written on the separate response recording forms provided.

OVERVIEW

1. Date

2. Introduction

3. Explain purpose of study and interview.

     * I am studying the management of human resources
        in order to acquire more knowledge of such
        things as how people are selected and trained,
        how they are organized, supervised, and
        motivated and how their problems are dealt with
        and their performance evaluated. In other
        words, I am interested in all the things that
        have an effect upon how managers make plans,
        formulate policies and make decisions that
        affect the people with whom they work.

        In particular I want to find out what things
        managers in Peru have tried, or think that
        they would like to try, in order to make human
        resources management more effective. Sometimes
        these things work, sometimes they do not. I
        would like to find out what are the factors
        that help and what are the factors that hinder
        the implementation of such efforts to improve
        methods and techniques of human resources
        management, or that help or hinder using such
        methods and techniques to achieve greater
        effectiveness -- effectiveness (1) of workers,
        (2) of supervisors and managers, (3) of the
        work groups and organization units, and (4) of
        the company as a whole. This effort is part of
        a research project that will be reported as the
        dissertation for my Ph.D. degree in Industrial
        and Organizational Psychology at Old Dominion
        University. All the information provided by
        you will be kept confidential.

        Of course, at the end, I expect to be able to
        point out some ways to make it easier for
        managers in Peru to understand their own human
        resources problems, as well as to know better
        how to formulate appropriate policies and how
        to choose and put in place appropriate
        techniques to deal with those problems and to
        make the organization operate more effectively.

        To begin with, let us talk about the technology
        of human resources management.

MANAGERIAL TECHNOLOGIES

1. Interviewer defines/explains what managerial technologies are in the context of this study:

    *   As I have explained to you before, I am specifically studying the application of human resources technologies (HRT). These HRT have various purposes and forms. For example, an HRT can be a new <u>selection</u> method used in the organization. Techniques such as employment test(s), in-baskets, assessment centers, etc., are a few of the methods organizations use. HRTs are also <u>training</u> programs designed to enhance the overall skills and/or managerial resources within the organization. More specifically I am talking about training programs for better decision-making and communication; or organization and planning programs to improve safety or implement a new safety system; or programs for better management of industrial relations within the company. Furthermore, training programs aimed at workers (blue-collar) to improve a specific skill or trade, or for adapting to new machinery, tools or labor laws (e.g., safety, union-related).

        HRTs are also <u>performance management systems</u> used by companies for better control of their managerial and worker pool. Examples are MBO program, performance appraisals or reviews, and development systems.

        <u>Organizational Development</u> interventions or systems are also HRTs. Such techniques like managerial grid, reward systems, profit-sharing system, redesignment of jobs, career development or counselling, are a few examples.

2. Did your company attempt to implement one or more of these techniques within the past year? What type(s) specifically? (Apply following questions to each, if more than one). Please tell me what was done and what happened. Interviewer - <u>follow-up</u> with questions:

    Why was this undertaken?
    What was the problem?
    How did you start?
    How was decision made and by whom?
    What happened then?

What factors helped?
What factors hindered?
Critical incidents (Interviewer.- These
could provide links between MT and the
environmental factors).

* Critical incidents - are situations involving
  a task requiring an action that produced some
  result that was clearly effective or that was
  clearly ineffective. Some actions may have
  both effective and ineffective outcomes.

3. If no attempts have been made in that time period:
   Are there problems that exist now, or that might be
   coming up during the next year where you think one
   of these HRTs should be tried?
   Interviewer.- follow-up as with No. 2 (different
   tense).

ENVIRONMENTAL FACTORS

* You have mentioned the HRT used by your
  organization and some of the problems
  and benefits associated with them. Let
  me now shift and ask you about other factors that
  may also help or hinder the implementation of
  these HRTs.

Political

1. Interviewer - define what "political" factors are

   * Basically we are talking about government
     regulation, the laws and policies that
     support or restrict HRT. Also, the
     tax incentives to encourage companies to
     use new HRT; government programs to
     facilitate the development of HRT in
     organizations.

2. Interviewer - refer back to the HRT currently
   being implemented, that was implemented or that
   could be.

3. Were there any "political" factors that facili-
   tated the implementation process?
   Any other factors listed or defined by me that you
   could tell me about?
   Can you give me some critical incidents.

4.   These critical incidents that you have described
     (interviewer briefly paraphrases), rank them in
     order of importance?
     What are the value(s) assigned to them? (Scale 0-5)
     Why? What makes you rank this critical
     incident as one with the highest value?

5.   Were there any "political" factors that <u>hinder</u>
     the implementation process?
     Cite critical incidents.
     Interviewer - <u>follow-up</u> with No. 4 above.

<u>Economic</u>

1.   Interviewer - define what "economic" factors are

     *   We have discussed some "political" factors
          that affect the implementation of HRTs.
          Of course, there may also be "economic"
          considerations such as inflation, interest
          rates, uncertainty of the market, the financial
          state of the company (i.e., profits lower) or
          the country. These factors can limit or lead   to
          HRT implementation.

          Additional factors to consider are labor
          costs or the cost of implementing the HRT.

2.   Interviewer - refer back to HRT currently being/
     was implemented/could be implemented.

3.   Were there any "economic" factors that <u>facili-
     tated</u> the implementation process?
     Any other factors (economic in nature) not
     listed or defined by one that you think is
     relevant in implementing such HRT?
     Cite critical incidents.

4.   Rank in order of importance the critical incidents you
     have described?

     What are the value(s) you would assigned to them?
     Why? What makes you think this way?

5.   Were there any "economic" factors that <u>hinder</u>
     the implementation process?
     Cite critical incidents.
     Interviewer - <u>follow-up</u> with No. 3 above.

<u>Socio-Cultural</u>

1. Interviewer - define what "socio-cultural" factors
    are:

    *   In the implementation of these HRT, which are
        largely designed/developed in advanced
        societies, socio-cultural factors in this
        environment may facilitate or hinder the
        successful implementation of HRT. Socio-
        cultural factors like union-management
        relations, stability of organization,
        appropriateness of the HRT, the local
        infrastructure to support these HRT, social
        values and traditions, the education of
        workers, or the overall resources needed are not
        available in this environment.

2. Interviewer - refer back to HRT currently being/
    was implemented/could be implemented.

3. Were there any "socio-cultural" factors that
    facilitated the implementation process?
    Any other factors (socio-cultural in nature)
    not described to you, that is relevant here?
    Cite critical incidents.

4. From these critical incidents you have described
    ranked them and assigned a value to them?
    Why? What makes you think this way?

5. Were there any "socio-cultural" factors that
    <u>hinder</u> the implementation process?
    <u>Cite critical</u> incidents.
    Interviewer - <u>follow-up</u> with No. 3 above.

ORGANIZATIONAL FACTORS

1. Interviewer - define organizational factors that
    could affect HRTs.

    *   We have discussed factors external to your
        company that affect(ed) the implementation
        process. However, there are also organiza-
        tional factors that affect such process.
        That is, characteristics or qualities
        within your company facilitate or hinder
        HRTs. Consequently, it is important to
        know what these characteristics are.

Those are things like the size, structure, the management style, the age of the company, the managerial resources, the utility of the HRT as perceived by management, and the type of industry.

2. Relate back to HRT.

3. Were there any "organizational" factors that facilitated the implementation process?
Any additional factors not listed (organizational in nature) that you think facilitated this process?
How so?
Cite critical incidents.

4. Were there any "organizational" factors that hinder the implementation process?
Any additional factors not listed that you think is unique to the organization that hinder the process.
How so?
Cite critical incidents.

5. What value/importance would you assign to these incidents?

Other Factors

1. Are there any other factors that we have not discussed that you think are important facilitators or impediments?
Cite critical incidents.
How would you classify such incidents.

2. What value would you assign to these incidents in relation to the others mentioned.

ORGANIZATIONAL CHARACTERISTICS

* Let's discuss now some specific characteristics of your company.

1. Approximately how many employees in your entire company?

2. What are the most important functions of the department/unit for which you are directly responsible?

3. What are the levels of management and supervision in
   your entire company (from first-level to the
   Chief Executive)?
   At which level are you?
   Immediately below you is....?
   Above you is.....? Correct?

4. Are you employed in a line or staff function?
   How many persons report to you directly?

5. Your organization is owned by....?

6. Name of organization:
   Multinational? Peruvian?
   If multinational, from what country....

INDIVIDUAL CHARACTERISTICS

1. Sex:
   Age:
   What is the highest level of education that you
   have had? Degrees?
   Did you attend school outside this country?
   Where, when? What level? Degrees?
   Major area(s) or specialization(s)/

2. Number of years working with present company?
   About how old in this company?

3. Title of your job?
   Responsibilities? Major functions?

APPENDIX C

Interview Protocol-Spanish

Factores que facilitan e impiden la implementacion de
tecnologia gerencial: Un proceso socio-tecnico.

PROTOCOLO DE ENTREVISTA

Centro de Estudios Psicologicos Aplicados

Old Dominion University

1983

==

Estoy estudiando el manejo de recursos humanos
para adquirir mayor conocimiento de cosas tales como:
como son seleccionadas y entrenadas las personas; como
estan organizadas, supervisadas, y motivadas; como
tratan con sus problemas y como evaluan su desempeno.

En otras palabras, estoy interesado en todas las
cosas que afectan a los gerentes al hacer sus planes,
y tomar decisiones que afectan a las personas con quien
trabajan.

En particular, quiero averiguar que factores han
tratado los gerentes en el Peru (o piensan que les
gustaria tratar) para hacer el manejo de los recursos
humanos mas efectivo. A veces estas cosas funcionan, a
veces no. Me gustaria averiguar cuales son los
factores que facilitan y cuales son los factores que
impiden la implementacion de los metodos y tecnicas
para el manejo de los recursos humanos.

Este esfuerzo es parte de un projecto que viene a
ser mi disertacion doctoral en Psicologia Industrial y
Organizacional de Old Dominion University. Toda la

informacion obtenida en esta entrevista sera
extrictamente confidencial.

Al final, espero poder detallar algunas de las
maneras de facilitar a los gerentes del Peru para que
entiendan sus propios problemas de recursos humanos asi
como el entender mejor el como formular reglas
apropiadas y como escoger e implementar tecnicas
apropiadas para tratar con esos problemas y para hacer
que la organizacion opere mas efectivamente.

TECNOLOGIAS GERENCIALES

1. Como he explicado anteriormente estoy estudiando
especificamente la aplicacion de Tecnologias de
Recursos Humanos (TRH). Por ejemplo, una (TRH)
puede ser un metodo de seleccion nuevo, usado en
la organizacion. Tecnicas tales como examenes de
empleo, (in-baskets), centros de evaluacion, etc.
son algunos de los metodos que usan las organiza-
ciones.
TRH son programas de entrenamiento disenados para
mejorar las habilidades y/o recursos gerenciales
dentro de la organizacion. Especificamente estoy
hablando de programas de entrenamiento para
mejorar la toma de decisiones y comunicacion; o
programas de organizacion y planeamiento para
mejorar seguridad o implementar un nuevo sistema
de seguridad; o programas para mejorar la gerencia

de relaciones industriales dentro de la Cia.
Ademas, programas de entrenamiento dirigidos hacia
trabajadores (obreros) para mejorar una habilidad
especifica, o para adaptarse a una nueva maquina,
herramienta. TRH tambien son sistemas de
capacitacion gerencial usados por companias para
controlar mejor su conjunto de gerencia y
trabajadores. Algunos ejemplos son programas de
gerencia por objetivos, evaluacion de personal, o
resumenes y desarrollo de sistemas.
Intervenciones o sistemas de desarrollo organiza-
cional son tambien de interes en este projecto.
Algunos ejemplos son tecnicas de sistemas de
recompensa, sistema de participacion gerencial,
rediseñamiento de puestos.

2. Atento su Cia. implementar algunas de estas
tecnicas en el ultimo año?
Que tipos de tecnicas especificamente?
Digame por favor que hizo la Cia. y que fue lo que
paso.
Porque intentaron hacer esto?
Cual era el problema?
Como comenzo esto?
Como y quien tomo la decision?
Que paso despues?
Que factores ayudaron?
Que factores impidieron?

Cite incidentes criticos.

* Incidentes criticos son: situaciones que implican una tarea que requiere una accion que produce algun resultado que es efectivo e inefectivo.

3. Si nada ha sido intentado en este periodo de tiempo: que problemas existen actualmente o que pueden ocurrir dentro del proximo año, en el cual Ud. piensa en que algunos de estas tecnicas pueda servir?

FACTORES DEL MEDIO AMBIENTE

Ud. ha mencionado los TRH usados por su Cia. y algunos de los problemas y beneficios asociados con ellos. Dejeme preguntarle ahora de otros factores que tambien pueden facilitar o impedir la implementacion de TRH.

Politico

1. Entrevistador - defina que factores politicos existen.

    * Basicamente estamos hablando de regulaciones de gobierno, leyes y reglas que soportan o restringen las TRH. Tambien algunos incentivos tributarios para animar a las Cias. para que usen nuevas tecnicas, programas de gobierno para facilitar el desarrollo de TRH en organizaciones.

2. Follow-Up

3. Hubieron factores politicos que facilitaron el

proceso de implementacion?

Existen otros factors politicos definidos

por Ud. el cual facilitan el uso de estas

technicas?

Cite incidentes criticos.

4. De estos incidentes criticos que me acaba de

describir, me los podria poner en order de

importancia?

Que valor les pondria Ud. en una escala de 0-5?

Porque? Porque evalua Ud. este incidente critico

como el de mayor valor?

5. Hubieron factores politicos que <u>impidieron</u> la

implementacion de TRH?

Cite incidentes criticos.

Follow-up

<u>Economico</u>

1. Entrevistador – defina que son factores

economicos.

* Hemos discutido algunos factores politicos,

que afectan la implementacion de TRH. Por

supuesto que tambien hay consideraciones

economicas que tomar en cuenta como infla-

cion, tasa de interes, la inseguridad del

mercado, el estado financiero de la Cia. o

del pais. Estos factores pueden limitar o

avanzar la implementacion de TRH.

Factores adicionales que hay que considerar

son costos laborales o el costo de implemen-

tacion de los TRH.

2. Follow-Up

3. Hubieron factores economicos que <u>facilitaron</u> el

proceso de implementacion?

Cualquier otro factor economico definido

por Ud. el cual facilitan el uso de estas

tecnicas?

Cite incidentes criticos.

4. De estos incidentes criticos que me acaba de

describir, me los podria poner en order de

importancia?

Que valor les pondria Ud. en una escala de 0-5?

Porque? Porque evalua Ud. este incidente critico

como el de mayor valor?

5. Hubieron factores economicos que <u>impidieron</u> la

implementacion de TRH?

Cite incidentes criticos.

Follow-Up

<u>Socio-Cultural</u>

1. Entrevistador - defina que son factores socio-

culturales:

* En la implementacion de estos TRH que son

mayormente diseñados/desarrollados en

paises industrializados, existen factores

socio-culturales en este ambiente que

pueden facilitar o impedir la implemen-

tacion exitosa de TRH. Factores socio-
culturales como las relaciones de gerencia
con los sindicatos, estabilidad de la
organizacion, la infraestructura local para
soporter el uso de las TRH, los valores
sociales y tradicionales del Peru y, la
educacion de los trabajadores. 2. Follow-Up

3. Hubieron factores socio-culturales que _facilitaron_
el proceso de implementacion?

Cualquier otro factor socio-cultural definido
por Ud. el cual facilitaron la implementacion de
estas tecnicas.

Cite incidentes criticos.

4. De estos incidentes criticos que me acaba de
describir, me los podria poner en order de
importancia?

Que valor les pondria Ud. en una escala de 0-5?

Porque? Porque evalua Ud. este incidente critico
como el de mayor valor?

5. Hubieron factores socio-culturales que _impidieron_
la implementacion de TRH?

Cite incidentes criticos.

Follow-Up

FACTORES ORGANIZACIONALES

1. *   Hemos discutido factores externos de su Cia.
que afectan el proceso de implementacion.

Aun asi, hay factores organizacionales que

afectan tal proceso. O sea, caracteristicas
o cualidades dentro de la Cia. que facilitan
o impiden el uso de las TRH.
Consecuentemente, es importante saber que son
estos factores. Esos factores son cosas
como tamaño, de la organizacion, su
estructura, el estilo de gerencia, la edad de
la Cia., los recursos gerenciales,
la utilidad de los TRH percibidos por la
gerencia y el tipo de industria.

2. Follow-Up

3. Hubieron factores organizacionales que <u>facilitaron</u>
el proceso de implementacion?
Cualquier otro factor organizacional definido
por Ud. el cual facilita la implementacion de
estas tecnicas?
Cite incidentes criticos.

4. Hubieron factores organizacionales que
impidieron la implementacion de TRH?
Existen factores adicionales que no hemos
nombrado y que sean unicos en esta organizacion
que puedan impedir este proceso?
Cite incidentes criticos.

5. Que valor/importancia le asignaria Ud. a estos
incidentes.
Follow-Up

<u>Otros Factores</u>

1. Existen otros factores de los cuales no hemos

    discutido que piense Ud. sean importantes en

    que faciliten o impidan el proceso.

    Cite incidentes criticos.

    Como clasificaria Ud. estos incidentes.

2. Que valor asignaria Ud. a estos incidentes

    con relacion a los otros mencionados.

CARACTERISTICAS ORGANIZACIONALES

Discutamos ahora caracteristicas especificas de su Cia.

1. Aproximadamente cuantos empleados hay en toda la

    Cia.?

2. Cuales son las funciones mas importantes de su

    departamento/unidad por la cual es directamente

    responsable?

3. Cuales son los niveles de gerencia y supervision

    en su Cia.

    A que nivel esta Ud.

    Debajo de Ud. esta....

    Arriba de Ud. esta....

4. Es empleado de linea o de la plana mayor?

    Cuantas personas se reportan a Ud. directamente?

5. Su organizacion es propiedad de?

6. Nombre de la organizacion?

    Multinacional o Peruana?

    Si es multinacional, de que pais?

CARACTERISTICAS INDIVIDUALES

1. Sexo

   Edad

   Cual es el ultimo nivel de educacion que tiene Ud.?

   Grado?

   Fue a colegio/universidad fuera del pais?

   Donde?

   A que nivel?

   Grado?

   Areas de especializacion?

2. Cantidad de años trabajando para esta Cia?

3. Su titulo de trabajo?

APPENDIX D

Originial English Questionnaire

HUMAN RESOURCES TECHNOLOGY (HRT) SURVEY

DEVELOPED BY:

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1983

This project deals with the management and development of
human resources in organizations. Illustrations of some of the
technologies of interest in this project are: selection programs
(such as aptitude and personality tests, assessment centers and
interviews); training programs (such as to improve attitudes and
motivations, or for better supervision and communication, or to
learn a new technical skill); organizational development efforts
(such as profit-sharing programs, group decision-making systems,
redesign of jobs, or management by objectives), and performance
management systems (such as performance appraisals).

The general goal of the project is to learn more about how
people are selected and trained, how they are supervised and
motivated, how their performance is evaluated, and how their
problems are dealt with. More specifically, we want to find out
what factors have an effect upon how managers make plans,
formulate policies and make decisions that affect the people with
whom they work. To do this, we ask questions about what are the
political, economic, psychological, social, cultural and
organizational factors that help, and the factors that hinder,
efforts to make human resources management more useful and
effective. We are asking such questions of managers in many of
the leading business and industrial organizations in the country.
You are one of those people.

We would like you to help identify the factors that affect
the implementation or use of methods of human resources
management, by telling us about the experiences of your
organization, and by giving us the benefit of your personal
judgement.

This research project will be reported as part of the
dissertation for my Ph.D. degree in Industrial/Organizational
Psychology at Old Dominion University (U.S.A.).

ALL THE INFORMATION PROVIDED BY YOU WILL BE KEPT
CONFIDENTIAL. NO COMPANY OR INDIVIDUAL WILL BE IDENTIFIED.
ONLY COLLECTIVE ANALYSES WILL BE REPORTED.

All participants will receive a summary of the results that
will permit them to compare the data for their companies with the
general findings. (It will serve as an organizational diagnosis.)

The time and cooperation that you are giving to this project
and your contribution to better understanding of human resources
management are most sincerely appreciated.

Eduardo Salas

On the following pages, please complete the three parts of the questionnaire. DO NOT BE FOOLED BY THE THICKNESS OF THE QUESTIONNAIRE. ALL THREE PARTS WILL REQUIRE ABOUT ONE HOUR.

PART I, consists of a brief summary of your personal background and your organization's characteristics. PART II asks several questions regarding the factors that, in your organization, influence the implementation or use of human resources technologies. In PART III, 30 different situations are described, and you are asked to make judgements regarding the likelihood that certain human resource technologies could be implemented in your organization, given the factors described in each situation.

Some items may be easier for you to answer than others. DO NOT SPEND A LOT OF TIME ON ANY SINGLE ITEM. Use your best judgment and continue, but please answer ALL the items.

THANK YOU!

The following definitions are provided so that everybody can
interpret the terms used in the questionnaire in the same way.
PLEASE TEAR OUT THESE TWO SHEETS SO THAT YOU CAN REFER TO THEM WHILE
ANSWERING QUESTIONS. THESE DEFINITIONS PROVIDE ANCHORS FOR THE
LEVELS PRESENTED IN PART III.

1. LAW OF LABOR STABILITY.- Applies means that the law exists and
regulates organizational practices in Peru. Not applicable means
law does not exist and therefore, does not affect organizational
practices in Peru.

2. UNION.- The organization of workers. Applies means that the
company has a union. Not applicable means the company has no union.

3. INFLATION.- The rise in cost of goods and services. To provide
a common standard we will define high inflation as above 150%,
moderate as 50-90%, low as less than 20%.

4. NUMBER OF EMPLOYEES UNDER LAW OF INDEMNIFICATION.- High means
the organization has a large pool of employees under the law (pre-
'62). Low means organizations have a very low number of employees
regulated under such law (post '62).

5. QUALITY OF THE BLUE-COLLAR WORKERS.- Refers to the overall
quality of the worker in terms of their educational level, technical
skills, cultural background, socio-economic status, responsibility,
productivity, attitude, independence of action, ambitions and
political tendencies. High level means the organization has one of
the best pool of workers among organizations in Peru. Low level
means workers have no education, low productivity, to political,
etc.

6. TOP MANAGEMENT COMMITMENT TO HRD.- Refers to the fact that the
higher levels of management support/encourage/require the
development of human resources in your organization. A high level
will mean strong support. Low level means that the management does
not care much about implementing/using HRTs.

7. BUDGET FOR DEVELOPMENT OF HUMAN RESOURCES.- Refers to the
company having a separate budget for the development of human
resources, that is, money specifically allocated to implement/use
these technologies. A high level will mean a relatively large sum
of money allocated to this efforts as compared to other Peruvian
organizations. Low level means that little or no resources are
allocated.

8. QUALITY OF MANAGERS.- Refers to the overall quality of managers
in your organization with respect to their supervisory skills,
adequacy of training, responsibility, decision-making, initiative,
autonomy, etc. High level means skills and resources among managers
are the best in your organization, as compared to other Peruvian
businesses. Low level means the skills and resources among managers
are deficient.

9. OPPORTUNITY FOR GROWTH AND DEVELOPMENT IN THE COMPANY.- Means that in the organization there are opportunities for individual achievement, enhancement of an employee's skills and knowledges, and upward mobility. High means the organization provides these conditions. Low means organization does not provide these conditions to employees.

10. LOCAL RESOURCES TO SUPPORT USE OF HRT.- Refers to the organization having available the assistance of universities, technical schools, consultants to aid in the implementation/use of HRTs. High level mean those resources are available. Low level means that none are available.

11. FINANCIAL CONDITION OF COMPANY.- Refers to financial/economic indicators of company's condition, such as sales, profits, payments of credits. High means that the indicators are optimal for the conduct of the company's business, and that it is unquestionably solvent. Low means the financial condition is weak, not solvent, and imposes serious constraints upon the conduct of the company's business.

12. MARKET CONDITIONS.- Refers to absence of price control, open competition, exportation and importation without restrictions. High level means the conditions are highly favorable for the autonomous conduct of the company's business. Low level means many external controls restrict the freedom of operation of the business and inhibit profits and growth.

13. EMPLOYEES COMMITMENT TO COMPANY.- The organization has employees who are loyal and identify with the organization's goals and objectives. High level means extremely strong commitment to the organization as compared to other Peruvian businesses. Low means little or no commitment.

14. DECISION-MAKING AUTONOMY FOR DEVELOPMENT OF HRT.- Manager with adequate information can make a decision to implement/use an HRT without consulting higher levels of management. Does not need prior approval. High level means a great deal of autonomy and power for decisions. Low means no autonomy or power.

15. POLITICAL UNCERTAINTY/INSTABILITY.- The organization is constantly worried about who is in power and for how long. Consequently there is little long-term planning within the company. High level means extreme uncertainty. Low level means "no problem".

16. UTILITY OF HRT.- Refers to compatability of the HRT with the organizations goals, objectives, purposes and technolgy. High level means HRT is useful/beneficial to the organization's short and long term business practice. Low level means that HRT is not useful/beneficial to the organization.

INDIVIDUAL AND ORGANIZATIONAL CHARACTERISTICS

To help in the statistical analysis of the data, please provide the following information about the company and yourself. **THIS INFORMATION WILL BE CONFIDENTIAL.**

1. Company name: _____

2. Title of your present position in your company:

   _____

3. Type of industry you work for (Check one):

   ____ a. Finance and/or   ____ f. Manufacturing
           Insurance   ____ g. Rubber-Tires
   ____ b. Chemical and/or   ____ h. Mining
           Pharmaceutical   ____ i. Wholesale and
   ____ c. Petroleum   Retail Trade
   ____ d. Textiles   ____ j. Other (specify) ____
   ____ e. Manufacturer's Rep.
           and/or Distributor   _____

                                          _____

4. Length of time in current position: _____   _____
                                          years   months
5a. How old is the company?:_____
5b. How long has it been in business in Peru?:_____

6. The ownership of the company is (Check one):
   _____   a. Multinational (foreign owner)
   _____   b. Peruvian
   _____   c. Mixed

7. Approximately how many levels of supervision are there in the company (in Peru) at which you work from the first-level supervisor to the head of the organization? (Give the number)_____

8. How many levels of supervision are there above your position? (Give the number):_____

9. How many employees report to you directly? (Give the number): _____

10. How many people (management and non-management) work in your company in Peru? (Give the number):_____

11. How would you characterize the main decision-making structure of the company? (Check one)

    ____ a. Individual/Centralized   ____ d. Family Dominance
    ____ b. Hierarchical   ____ e. Political Dominance
    ____ c. Group Participation   ____ f. Other (Please specify)

                                          _____

12. How many employees would you classify as "professionals" in the organization? (Give the number): _____

13. Your age: _____

14a. Your highest level of education: _____
14b. If college degree, indicate area of study: _____

15. What term best describes your **ORGANIZATION'S** attitudes toward new management techniques? (Check one):

    _____ a. Leader in use of new techniques of management.
    _____ b. Among the first to adopt new techniques, but not the leader.
    _____ c. Likes to adopt a new technique when it becomes more or less the general rule.
    _____ d. Usually among the last to adopt a new technique.
    _____ e. Never adopts new techniques.

16. What term would best describe the most influential **MANAGER'S** attitude toward new management techniques? (Check one):

    _____ a. Very strongly inclined to seek out and use new management techniques.
    _____ b. Moderately strong tendency to adopt new technique.
    _____ c. Some tendency to adopt a new technique.
    _____ d. Very little tendency to adopt a new technique
    _____ e. Never adopts new management techniques.

17. Is the organization affected by the Law of Labor Stability? (Circle one): Yes   No

18. Is there a union in the company? (Circle one): Yes   No

19. For the following factors indicate in the space provided to what degree each of these actually exist in the organization or country. See Definitions. Use the following scale:

Low	Moderately Low	Average	Moderately High	High
1	2	3	4	5

    _____ a. Number of people under Law of Indemnification
    _____ b. The quality of blue-collar workers
    _____ c. Top-management commitment to HRD
    _____ d. Budget for development of human resources
    _____ e. The quality of managers
    _____ f. Opportunity for growth and development in company
    _____ g. Local resources to support implement/use of HRT
    _____ h. Financial conditions of company
    _____ i. Market conditions
    _____ j. Employees commitment to company
    _____ k. Decision-making autonomy for development of HRT
    _____ l. Political instability/uncertainty
    _____ m. Utility of HRT
    _____ n. Inflation

For the following statements, decide which alternative most nearly represents the way you see things in your job and in your organization. Indicate in the space provided, the number on the scale below that shows how much you agree or disagree with each statement.

Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
1	2	3	4	5

_____ 1. This organization is open and responsive to change.

_____ 2. Management has trust in the people responsible for adopting and using human resources technologies.

_____ 3. My job requires me to work closely with other individuals in related jobs in my department.

_____ 4. In this organization decisions are made at those levels where the most adequate information is available.

_____ 5. Supervisors in my department often let us know how well they think we are performing in our jobs.

_____ 6. Managers are encouraged to take reasonable risks in their efforts to increase the development of the human resources of this organization.

_____ 7. We are often trying out new ideas to better manage our people.

_____ 8. I do not think people should be distinguished from one another in terms of their performance or productivity.

_____ 9. There is little chance to learn additional skill and information about the job while I am at work.

_____ 10. Written rules and procedures guide much of the company's activities.

_____ 11. Organizational development systems have been fully implemented in this organization.

_____ 12. Employees in this organization do not care about their growth and development.

_____ 13. Training programs to increase supervisory skills have been fully implemented in this organization.

_____ 14. My job can be done adequately by a person working alone without talking to or checking with other people.

Please continue to use the following responses for the questions below.

Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
1	2	3	4	5

_____ 15. This organization is effective in adapting to the external environment.

_____ 16. The organization allows many opportunities for me to increase my skills and knowledge of job-related information.

_____ 17. On my job I do not have the chance to carry out an entire piece of work from beginning to end.

_____ 18. The organization denies me any chance to use my personal initiative or judgement in carrying out work tasks.

_____ 19. My job is one where a lot of other people in other units can be affected by how well our work gets done.

_____ 20. Performance appraisal systems have been extensively used in this organization.

_____ 21. My job requires me to use a number of complex or high level skills.

_____ 22. The supervisors and workers of other units almost never give me any "feedback" about how well I am doing my work.

_____ 23. Just doing the work required by my job provides many chances for me to figure out how well I am doing.

_____ 24. This organization is being effective in its management of human resources.

_____ 25. My job is quite simple and repetitive.

_____ 26. This organization permits you to decide on your own how to go about doing the work.

_____ 27. The results of my work are likely to affect other individuals in my department.

_____ 28. This organization is committed to the development of human resources.

Please continue to use the following responses for the questions below.

Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
1	2	3	4	5

_____ 29. My job provides very few clues about whether or not I am performing well.

_____ 30. This organization provides opportunities for individual growth and development.

_____ 31. The organization requires you to do many different things at work, using a variety of your skills and talents.

_____ 32. Management has the ability to attract and retain high-level personnel.

_____ 33. Managers let you know how well you are doing on your job.

_____ 34. My job requires a lot of cooperative work with other units in this organization.

_____ 35. Management encourages people at all levels to give their best effort.

_____ 36. The organization allows you to learn new skills and information related to your work.

_____ 37. The talents of employees are appropriately matched to the demands of their job.

_____ 38. The organization gives me considerable opportunity for independence and freedom in how I do the work.

_____ 39. This organization can be described as flexible and continually adapting to change.

_____ 40. The organization provides me with the chance to completely finish the pieces of work I begin.

_____ 41. The organization has a real interest in the welfare and happiness of those who work here.

_____ 42. The speed of technological change creates human resources problems in this organization.

_____ 43. The decisions about using human resources technologies in this organization are based on adequate information.

Below are listed factors that may affect management decisions to implement or use a TRAINING PROGRAM to develop human resources in your organization. Assume that you are implementing (or have been doing so for the past few months) a TRAINING PROGRAM to improve the supervisory skills of managers.

For EACH factor first decide whether **AT THE PRESENT TIME** it facilitates or hinders implementation. Then circle a number on the respective scale (5 = most and 1 = least) to show how much it facilitates or hinders. If neutral or not applicable, circle the appropriate letters. Make sure you assess all factors and circle only one alternative per factor.

		FACILITATES How Much	NEUTRAL	HINDERS How Much	NOT APPLICABLE
1.	Law of Labor Stability	1 2 3 4 5	N	1 2 3 4 5	N/A
2.	Union in company	1 2 3 4 5	N	1 2 3 4 5	N/A
3.	Existing inflation	1 2 3 4 5	N	1 2 3 4 5	N/A
4.	Number of people under Law of Indemnification	1 2 3 4 5	N	1 2 3 4 5	N/A
5.	Quality of blue-collar worker	1 2 3 4 5	N	1 2 3 4 5	N/A
6.	Top management commitment to HRD	1 2 3 4 5	N	1 2 3 4 5	N/A
7.	Budget for development of HR	1 2 3 4 5	N	1 2 3 4 5	N/A
8.	Quality of Managers	1 2 3 4 5	N	1 2 3 4 5	N/A
9.	Opportunity for growth and development in company	1 2 3 4 5	N	1 2 3 4 5	N/A
10.	Local resources to support use of HRT	1 2 3 4 5	N	1 2 3 4 5	N/A
11.	Existing financial conditions of the company	1 2 3 4 5	N	1 2 3 4 5	N/A
12.	Existing market conditions	1 2 3 4 5	N	1 2 3 4 5	N/A
13.	Employees commitment to company	1 2 3 4 5	N	1 2 3 4 5	N/A
14.	Decision-making autonomy for development of HRT	1 2 3 4 5	N	1 2 3 4 5	N/A
15.	Existing political uncertainty/instability	1 2 3 4 5	N	1 2 3 4 5	N/A
16.	Utility of HRT	1 2 3 4 5	N	1 2 3 4 5	N/A
	Others (please specify)				
17.	_____	1 2 3 4 5	N	1 2 3 4 5	N/A
18.	_____	1 2 3 4 5	N	1 2 3 4 5	N/A
19.	_____	1 2 3 4 5	N	1 2 3 4 5	N/A

Below are listed factors that may affect managements decisions to implement or use a PERFORMANCE MANAGEMENT SYSTEM (such as a performance appraisal when you give merit increases) to develop the human resources in your organization. Assume that you are implementing (or have been doing so for the past few months) a PERFORMANCE APPRAISAL SYSTEM for managers in your organization.

For EACH factor first decide whether **AT THE PRESENT TIME** it facilitates or hinders implementation. Then circle a number on the respective scale (5 = most and 1 = least) to show how much. If neutral or not applicable, circle the appropriate letters. Make sure you assess all factors and circle only one alternative per factor.

		FACILITATES How Much	NEUTRAL	HINDERS How Much	NOT APPLICABLE
1.	Law of Labor Stability	1 2 3 4 5	N	1 2 3 4 5	N/A
2.	Union in company	1 2 3 4 5	N	1 2 3 4 5	N/A
3.	Existing inflation	1 2 3 4 5	N	1 2 3 4 5	N/A
4.	Number of people under Law of Indemnification	1 2 3 4 5	N	1 2 3 4 5	N/A
5.	Quality of blue-collar worker	1 2 3 4 5	N	1 2 3 4 5	N/A
6.	Top management commitment to HRD	1 2 3 4 5	N	1 2 3 4 5	N/A
7.	Budget for development of HR	1 2 3 4 5	N	1 2 3 4 5	N/A
8.	Quality of Managers	1 2 3 4 5	N	1 2 3 4 5	N/A
9.	Opportunity for growth and development in company	1 2 3 4 5	N	1 2 3 4 5	N/A
10.	Local resources to support use of HRT	1 2 3 4 5	N	1 2 3 4 5	N/A
11.	Existing financial conditions of the company	1 2 3 4 5	N	1 2 3 4 5	N/A
12.	Existing market conditions	1 2 3 4 5	N	1 2 3 4 5	N/A
13.	Employees commitment to company	1 2 3 4 5	N	1 2 3 4 5	N/A
14.	Decision-making autonomy for development of HRT	1 2 3 4 5	N	1 2 3 4 5	N/A
15.	Existing political uncertainty/instability	1 2 3 4 5	N	1 2 3 4 5	N/A
16.	Utility of HRT	1 2 3 4 5	N	1 2 3 4 5	N/A
	Others (please specify)				
17.	_____	1 2 3 4 5	N	1 2 3 4 5	N/A
18.	_____	1 2 3 4 5	N	1 2 3 4 5	N/A
19.	_____	1 2 3 4 5	N	1 2 3 4 5	N/A

Below are listed factors that may affect managements decisions to implement or use a ORGANIZATIONAL DEVELOPMENT program (such as participative or group decision-making, T-groups; transactional analysis) to improve organizational effectiveness. Assume that you are implementing (or have been doing so for the past few months) an ORGANIZATIONAL DEVELOPMENT program to improve supervisory skills among managers.

For EACH factor first decide whether **AT THE PRESENT TIME** it facilitates or hinders implementation. Then circle a number on the respective scale (5 = most and 1 = least) to show how much. If neutral or not applicable, circle the appropriate letters. Make sure you assess all factors and circle only one alternative per factor.

		FACILITATES How Much	NEUTRAL	HINDERS How Much	NOT APPLICABLE
1.	Law of Labor Stability	1 2 3 4 5	N	1 2 3 4 5	N/A
2.	Union in company	1 2 3 4 5	N	1 2 3 4 5	N/A
3.	Existing inflation	1 2 3 4 5	N	1 2 3 4 5	N/A
4.	Number of people under Law of Indemnification	1 2 3 4 5	N	1 2 3 4 5	N/A
5.	Quality of blue-collar worker	1 2 3 4 5	N	1 2 3 4 5	N/A
6.	Top management commitment to HRD	1 2 3 4 5	N	1 2 3 4 5	N/A
7.	Budget for development of HR	1 2 3 4 5	N	1 2 3 4 5	N/A
8.	Quality of Managers	1 2 3 4 5	N	1 2 3 4 5	N/A
9.	Opportunity for growth and development in company	1 2 3 4 5	N	1 2 3 4 5	N/A
10.	Local resources to support use of HRT	1 2 3 4 5	N	1 2 3 4 5	N/A
11.	Existing financial conditions of the company	1 2 3 4 5	N	1 2 3 4 5	N/A
12.	Existing market conditions	1 2 3 4 5	N	1 2 3 4 5	N/A
13.	Employees commitment to company	1 2 3 4 5	N	1 2 3 4 5	N/A
14.	Decision-making autonomy for development of HRT	1 2 3 4 5	N	1 2 3 4 5	N/A
15.	Existing political uncertainty/instability	1 2 3 4 5	N	1 2 3 4 5	N/A
16.	Utility of HRT	1 2 3 4 5	N	1 2 3 4 5	N/A
	Others (please specify)				
17.	_____	1 2 3 4 5	N	1 2 3 4 5	N/A
18.	_____	1 2 3 4 5	N	1 2 3 4 5	N/A
19.	_____	1 2 3 4 5	N	1 2 3 4 5	N/A

PART III

The purpose of this section is to obtain your judgement of the likelihood of using human resources technologies in 30 simulated situations. Various factors that might affect your determination are presented to assist your decision.

In your assessment of the hypothetical situations, please be guided by the following general instructions:

1. Place the Definitions in front of you to make the process easier.

2. Assume that you are a manager in a decision-making position in your company.

3. Some factors will carry more weight than others in your decision; they are not all equally important or influential.

4. Do not go back to check earlier decisions or situations.

5. Consider each situation as being unrelated to all other situations presented.

6. Observe that some factors are given in the form of "low", "moderately low", etc.; others in the form of "applies" or "not applicable".

7. In providing your decisions at the bottom of each page, please consider the full range of the given scale.

8. Note that you have to make THREE decisions on each page.

9. Note that some decisions are for the MANAGERIAL LEVEL and others are for the BLUE-COLLAR EMPLOYEE LEVEL.

THANK YOU FOR YOUR COOPERATION

PLEASE BEGIN

		Applies	Not Applicable
1.	Law of Labor Stability..		X
2.	Union in company..............................	X	

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation...					X
4.	Number of people under Law of Indemnification.............	X				
5.	The quality of blue-collar workers..					X
6.	Top-management commitment to HRD...			X		
7.	Budget for development of human resources..				X	
8.	The quality of managers...................		X			
9.	Opportunity for growth and development in company..					X
10.	Local resources to support use of HRT..			X		
11.	Financial conditions of company..					X
12.	Market conditions..					X
13.	Employees commitment to company....................................			X		
14.	Decision-making autonomy for development of HRT...................			X		
15.	Political uncertainty/instability..					X
16.	Utility of HRT...........................			X		

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **MANAGERIAL LEVEL** (circle one number).

	Not Likely						Very Likely
Training Programs	1	2	3	4	5	6	7
Performance Management Systems	1	2	3	4	5	6	7
Organizational Development Efforts	1	2	3	4	5	6	7

		Applies	Not Applicable
1.	Law of Labor Stability		X
2.	Union in company	X	

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation	X				
4.	Number of people under Law of Indemnification	X				
5.	The quality of blue-collar workers					X
6.	Top-management commitment to HRD					X
7.	Budget for development of human resources		X			
8.	The quality of managers					X
9.	Opportunity for growth and development in company				X	
10.	Local resources to support use of HRT					X
11.	Financial conditions of company			X		
12.	Market conditions				X	
13.	Employees commitment to company			X		
14.	Decision-making autonomy for development of HRT				X	
15.	Political uncertainty/instability	X				
16.	Utility of HRT	X				

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **MANAGERIAL LEVEL** (circle one number).

	Not Likely						Very Likely
Training Programs	1	2	3	4	5	6	7
Performance Management Systems	1	2	3	4	5	6	7
Organizational Development Efforts	1	2	3	4	5	6	7

		Applies	Not Applicable
1.	Law of Labor Stability...		X
2.	Union in company...............................	X	

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation...........................X	X				
4.	Number of people under Law of Indemnification.......................................					X
5.	The quality of blue-collar workers..				X	
6.	Top-management commitment to HRD...					X
7.	Budget for development of human resources...............................			X		
8.	The quality of managers.................................				X	
9.	Opportunity for growth and development in company..................................				X	
10.	Local resources to support use of HRT...			X		
11.	Financial conditions of company..					X
12.	Market conditions.........................	X				
13.	Employees commitment to company....................................	X				
14.	Decision-making autonomy for development of HRT.........X	X				
15.	Political uncertainty/instability........X	X				
16.	Utility of HRT................................			X		

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **MANAGERIAL LEVEL** (circle one number).

	Not Likely						Very Likely
Training Programs	1	2	3	4	5	6	7
Performance Management Systems	1	2	3	4	5	6	7
Organizational Development Efforts	1	2	3	4	5	6	7

				Applies		Not Applicable
1.	Law of Labor Stability.....................................					X
2.	Union in company..					X

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation.................................			X		
4.	Number of people under Law of Indemnification.......................			X		
5.	The quality of blue-collar workers...................................			X		
6.	Top-management commitment to HRD.......................................				X	
7.	Budget for development of human resources...........................		X			
8.	The quality of managers...................					X
9.	Opportunity for growth and development in company.........	X				
10.	Local resources to support use of HRT......................	X				
11.	Financial conditions of company......................	X				
12.	Market conditions........................		X			
13.	Employees commitment to company...................................		X			
14.	Decision-making autonomy for development of HRT.........	X				
15.	Political uncertainty/instability........................					X
16.	Utility of HRT...........................			X		

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **MANAGERIAL LEVEL** (circle one number).

	Not Likely						Very Likely
Training Programs	1	2	3	4	5	6	7
Performance Management Systems	1	2	3	4	5	6	7
Organizational Development Efforts	1	2	3	4	5	6	7

		Applies	Not Applicable
1.	Law of Labor Stability		X
2.	Union in company	X	

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation		X			
4.	Number of people under Law of Indemnification			X		
5.	The quality of blue-collar workers			X		
6.	Top-management commitment to HRD				X	
7.	Budget for development of human resources	X				
8.	The quality of managers	X				
9.	Opportunity for growth and development in company					X
10.	Local resources to support use of HRT	X				
11.	Financial conditions of company					X
12.	Market conditions					X
13.	Employees commitment to company					X
14.	Decision-making autonomy for development of HRT					X
15.	Political uncertainty/instability				X	
16.	Utility of HRT		X			

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **MANAGERIAL LEVEL** (circle one number).

	Not Likely						Very Likely
Training Programs	1	2	3	4	5	6	7
Performance Management Systems	1	2	3	4	5	6	7
Organizational Development Efforts	1	2	3	4	5	6	7

	Applies	Not Applicable
1. Law of Labor Stability	X	
2. Union in company	X	

	Low	Moderate Low	Average	Moderate High	High
3. Inflation	X				
4. Number of people under Law of Indemnification	X				
5. The quality of blue-collar workers	X				
6. Top-management commitment to HRD					X
7. Budget for development of human resources					X
8. The quality of managers					X
9. Opportunity for growth and development in company				X	
10. Local resources to support use of HRT				X	
11. Financial conditions of company					X
12. Market conditions					X
13. Employees commitment to company				X	
14. Decision-making autonomy for development of HRT		X			
15. Political uncertainty/instability				X	
16. Utility of HRT					X

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **MANAGERIAL LEVEL** (circle one number).

	Not Likely						Very Likely
Training Programs	1	2	3	4	5	6	7
Performance Management Systems	1	2	3	4	5	6	7
Organizational Development Efforts	1	2	3	4	5	6	7

		Applies	Not Applicable
1.	Law of Labor Stability	X	
2.	Union in company		X

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation					X
4.	Number of people under Law of Indemnification					X
5.	The quality of blue-collar workers				X	
6.	Top-management commitment to HRD	X				
7.	Budget for development of human resources			X		
8.	The quality of managers			X		
9.	Opportunity for growth and development in company					X
10.	Local resources to support use of HRT	X				
11.	Financial conditions of company					X
12.	Market conditions					X
13.	Employees commitment to company	X				
14.	Decision-making autonomy for development of HRT	X				
15.	Political uncertainty/instability			X		
16.	Utility of HRT					X

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **MANAGERIAL LEVEL** (circle one number).

	Not Likely						Very Likely
Training Programs	1	2	3	4	5	6	7
Performance Management Systems	1	2	3	4	5	6	7
Organizational Development Efforts	1	2	3	4	5	6	7

```
                                                                Not
                                            Applies         Applicable
1.    Law of Labor Stability.....................................X
2.    Union in company...........................X

                                  Moderate            Moderate
                          Low       Low    Average      High      High

3.    Inflation...............................X
4.    Number of people under Law
      of Indemnification...............................X
5.    The quality of blue-collar
      workers.........................X
6.    Top-management commitment to
      HRD.............................X
7.    Budget for development of
      human resources...........................................X
8.    The quality of managers....................................X
9.    Opportunity for growth and
      development in company.........................................X
10.   Local resources to support
      use of HRT.......................................X
11.   Financial conditions
      of company.......................................X
12.   Market conditions................................X
13.   Employees commitment to
      company.........................................X
14.   Decision-making autonomy
      for development of HRT...........................................X
15.   Political
      uncertainty/instability.........................X
16.   Utility of HRT.........................................................X
```

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **MANAGERIAL LEVEL** (circle one number).

```
                    Not                                  Very
                    Likely                               Likely
Training
Programs            1     2     3     4     5     6     7

Performance
Management Systems  1     2     3     4     5     6     7

Organizational
Development Efforts 1     2     3     4     5     6     7
```

			Applies		Not Applicable	
1.	Law of Labor Stability..................X					
2.	Union in company.....................................X					

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation...X					X
4.	Number of people under Law of Indemnification...................X		X			
5.	The quality of blue-collar workers.......................................X				X	
6.	Top-management commitment to HRD..X					X
7.	Budget for development of human resources....................X		X			
8.	The quality of managers.................................X				X	
9.	Opportunity for growth and development in company.........X	X				
10.	Local resources to support use of HRT.................................X				X	
11.	Financial conditions of company.....................................X				X	
12.	Market conditions.............................X			X		
13.	Employees commitment to company X					X
14.	Decision-making autonomy for development of HRT.........X	X				
15.	Political uncertainty/instability...............................X				X	
16.	Utility of HRT.........................X	X				

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **MANAGERIAL LEVEL** (circle one number).

	Not Likely						Very Likely
Training Programs	1	2	3	4	5	6	7
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Organizational Development Efforts	1	2	3	4	5	6	7

		Applies	Not Applicable
1.	Law of Labor Stability	X	
2.	Union in company	X	

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation	X				
4.	Number of people under Law of Indemnification					X
5.	The quality of blue-collar workers					X
6.	Top-management commitment to HRD	X				
7.	Budget for development of human resources					X
8.	The quality of managers					X
9.	Opportunity for growth and development in company				X	
10.	Local resources to support use of HRT	X				
11.	Financial conditions of company					X
12.	Market conditions				X	
13.	Employees commitment to company				X	
14.	Decision-making autonomy for development of HRT					X
15.	Political uncertainty/instability			X		
16.	Utility of HRT	X				

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **MANAGERIAL LEVEL** (circle one number).

	Not Likely						Very Likely
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		Applies	Not Applicable
1.	Law of Labor Stability.....................X		
2.	Union in company...........................X		

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation..X					
4.	Number of people under Law of Indemnification.............X					
5.	The quality of blue-collar workers.......................................X					
6.	Top-management commitment to HRD...X					
7.	Budget for development of human resources..............................X					
8.	The quality of managers.................................X					
9.	Opportunity for growth and development in company.........................X					
10.	Local resources to support use of HRT...................................X					
11.	Financial conditions of company...............................X					
12.	Market conditions...............X					
13.	Employees commitment to company...........................X					
14.	Decision-making autonomy for development of HRT.........................X					
15.	Political uncertainty/instability........X					
16.	Utility of HRT...................................X					

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **MANAGERIAL LEVEL** (circle one number).

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		Applies	Not Applicable
1.	Law of Labor Stability		X
2.	Union in company		X

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation		X			
4.	Number of people under Law of Indemnification		X			
5.	The quality of blue-collar workers					X
6.	Top-management commitment to HRD					X
7.	Budget for development of human resources	X				
8.	The quality of managers			X		
9.	Opportunity for growth and development in company				X	
10.	Local resources to support use of HRT					X
11.	Financial conditions of company	X				
12.	Market conditions				X	
13.	Employees commitment to company		X			
14.	Decision-making autonomy for development of HRT	X				
15.	Political uncertainty/instability				X	
16.	Utility of HRT				X	

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **MANAGERIAL LEVEL** (circle one number).

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Organizational Development Efforts	1	2	3	4	5	6	7

		Applies	Not Applicable
1.	Law of Labor Stability..		X
2.	Union in company..................................	X	

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation..................................		X			
4.	Number of people under Law of Indemnification..............................					X
5.	The quality of blue-collar workers.....................................				X	
6.	Top-management commitment to HRD....................................	X				
7.	Budget for development of human resources...................	X				
8.	The quality of managers...................................					X
9.	Opportunity for growth and development in company.........................					X
10.	Local resources to support use of HRT......................	X				
11.	Financial conditions of company....................................			X		
12.	Market conditions.........................			X		
13.	Employees commitment to company.....................................			X		
14.	Decision-making autonomy for development of HRT.............................					X
15.	Political uncertainty/instability....................		X			
16.	Utility of HRT.................	X				

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **MANAGERIAL LEVEL** (circle one number).

	Not Likely						Very Likely
Training Programs	1	2	3	4	5	6	7
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		Applies	Not Applicable
1.	Law of Labor Stability	X	
2.	Union in company		X

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation		X			
4.	Number of people under Law of Indemnification		X			
5.	The quality of blue-collar workers	X				
6.	Top-management commitment to HRD		X			
7.	Budget for development of human resources			X		
8.	The quality of managers	X				
9.	Opportunity for growth and development in company	X				
10.	Local resources to support use of HRT		X			
11.	Financial conditions of company	X				
12.	Market conditions		X			
13.	Employees commitment to company	X				
14.	Decision-making autonomy for development of HRT				X	
15.	Political uncertainty/instability		X			
16.	Utility of HRT	X				

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **MANAGERIAL LEVEL** (circle one number).

	Not Likely						Very Likely
Training Programs	1	2	3	4	5	6	7
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Organizational Development Efforts	1	2	3	4	5	6	7

		Applies	Not Applicable
1.	Law of Labor Stability.....................X		
2.	Union in company..........................		X

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation.......................................					X
4.	Number of people under Law of Indemnification........................			X		
5.	The quality of blue-collar workers.......................................				X	
6.	Top-management commitment to HRD.......................................			X		
7.	Budget for development of human resources............................				X	
8.	The quality of managers........................					X
9.	Opportunity for growth and development in company..........	X				
10.	Local resources to support use of HRT..				X	
11.	Financial conditions of company....................................					X
12.	Market conditions...............................				X	
13.	Employees commitment to company..					X
14.	Decision-making autonomy for development of HRT.................X		X			
15.	Political uncertainty/instability.................X		X			
16.	Utility of HRT..............................X		X			

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **MANAGERIAL LEVEL** (circle one number).

	Not Likely						Very Likely
Training Programs	1	2	3	4	5	6	7
Performance Management Systems	1	2	3	4	5	6	7
Organizational Development Efforts	1	2	3	4	5	6	7

		Applies	Not Applicable
1.	Law of Labor Stability.....................X		
2.	Union in company...........................X		

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation.........................X	X				
4.	Number of people under Law of Indemnification.............X	X				
5.	The quality of blue-collar workers X	X				
6.	Top-management commitment to HRD...X					X
7.	Budget for development of human resources...X					X
8.	The quality of managers..X					X
9.	Opportunity for growth and development in company...........................X				X	
10.	Local resources to support use of HRT.....................................X				X	
11.	Financial conditions of company...X				X	
12.	Market conditions...X				X	
13.	Employees commitment to company..X				X	
14.	Decision-making autonomy for development of HRT.........X	X				
15.	Political uncertainty/instability...........................X				X	
16.	Utility of HRT...X					X

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **BLUE-COLLAR EMPLOYEE LEVEL** (circle one number).

	Not Likely						Very Likely
Training Programs	1	2	3	4	5	6	7
Performance Management Systems	1	2	3	4	5	6	7
Organizational Development Efforts	1	2	3	4	5	6	7

		Applies	Not Applicable
1.	Law of Labor Stability.....................	X	
2.	Union in company..		X

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation...					X
4.	Number of people under Law of Indemnification.........................		X			
5.	The quality of blue-collar workers...				X	
6.	Top-management commitment to HRD...					X
7.	Budget for development of human resources...........................		X			
8.	The quality of managers.......................................				X	
9.	Opportunity for growth and development in company.........X		X			
10.	Local resources to support use of HRT..				X	
11.	Financial conditions of company...				X	
12.	Market conditions...............................			X		
13.	Employees commitment to company					X
14.	Decision-making autonomy for development of HRT.........X	X				
15.	Political uncertainty/instability................................					X
16.	Utility of HRT...........................X			X		

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **BLUE-COLLAR EMPLOYEE LEVEL** (circle one number).

	Not Likely						Very Likely
Training Programs	1	2	3	4	5	6	7
Performance Management Systems	1	2	3	4	5	6	7
Organizational Development Efforts	1	2	3	4	5	6	7

		Applies	Not Applicable
1.	Law of Labor Stability.......................	X	
2.	Union in company.............................	X	

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation.....................................					X
4.	Number of people under Law of Indemnification..............	X				
5.	The quality of blue-collar workers.......................................				X	
6.	Top-management commitment to HRD..					X
7.	Budget for development of human resources.................................			X		
8.	The quality of managers......................................			X	X	
9.	Opportunity for growth and development in company...........................			X		
10.	Local resources to support use of HRT.......................................			X		
11.	Financial conditions of company...............................			X		
12.	Market conditions...............X	X				
13.	Employees commitment to company........................X	X				
14.	Decision-making autonomy for development of HRT..........................			X		
15.	Political uncertainty/instability........X	X				
16.	Utility of HRT.....................................			X		

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **BLUE-COLLAR EMPLOYEE LEVEL** (circle one number).

	Not Likely						Very Likely
Training Programs	1	2	3	4	5	6	7
Performance Management Systems	1	2	3	4	5	6	7
Organizational Development Efforts	1	2	3	4	5	6	7

		Applies	Not Applicable
1.	Law of Labor Stability.....................................		X
2.	Union in company...............................	X	

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation..................................		X			
4.	Number of people under Law of Indemnification......................		X			
5.	The quality of blue-collar workers..					X
6.	Top-management commitment to HRD..					X
7.	Budget for development of human resources............................		X			
8.	The quality of managers..........................					X
9.	Opportunity for growth and development in company........................				X	
10.	Local resources to support use of HRT..					X
11.	Financial conditions of company..				X	
12.	Market conditions......................................					X
13.	Employees commitment to company..				X	
14.	Decision-making autonomy for development of HRT........................					X
15.	Political uncertainty/instability..................	X				
16.	Utility of HRT..........................	X				

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **BLUE-COLLAR EMPLOYEE LEVEL** (circle one number).

	Not Likely						Very Likely
Training Programs	1	2	3	4	5	6	7
Performance Management Systems	1	2	3	4	5	6	7
Organizational Development Efforts	1	2	3	4	5	6	7

		Applies	Not Applicable
1.	Law of Labor Stability....................................		X
2.	Union in company...........................	X	

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation..................................		X			
4.	Number of people under Law of Indemnification..............................			X		
5.	The quality of blue-collar workers.....................................			X		
6.	Top-management commitment to HRD......................................				X	
7.	Budget for development of human resources..................	X				
8.	The quality of managers........	X				
9.	Opportunity for growth and development in company......................					X
10.	Local resources to support use of HRT......................	X				
11.	Financial conditions of company......................................				X	
12.	Market conditions......................................				X	
13.	Employees commitment to company.......................................				X	
14.	Decision-making autonomy for development of HRT..................................				X	
15.	Political uncertainty/instability.........................			X		
16.	Utility of HRT.............................			X		

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **BLUE-COLLAR EMPLOYEE LEVEL** (circle one number).

	Not Likely						Very Likely
Training Programs	1	2	3	4	5	6	7
Performance Management Systems	1	2	3	4	5	6	7
Organizational Development Efforts	1	2	3	4	5	6	7

		Applies	Not Applicable
1.	Law of Labor Stability......................	X	
2.	Union in company..		X

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation.................................	X				
4.	Number of people under Law of Indemnification.......................	X				
5.	The quality of blue-collar workers...........................		X			
6.	Top-management commitment to HRD.......................................	X				
7.	Budget for development of human resources.................................			X		
8.	The quality of managers........		X			
9.	Opportunity for growth and development in company.........		X			
10.	Local resources to support use of HRT................................	X				
11.	Financial conditions of company.....................		X			
12.	Market conditions............................			X		
13.	Employees commitment to company..........................		X			
14.	Decision-making autonomy for development of HRT..................................			X		
15.	Political uncertainty/instability.........................			X		
16.	Utility of HRT........................		X			

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **BLUE-COLLAR EMPLOYEE LEVEL** (circle one number).

	Not Likely						Very Likely
Training Programs	1	2	3	4	5	6	7
Performance Management Systems	1	2	3	4	5	6	7
Organizational Development Efforts	1	2	3	4	5	6	7

		Applies	Not Applicable
1.	Law of Labor Stability	X	
2.	Union in company		X

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation					X
4.	Number of people under Law of Indemnification			X		
5.	The quality of blue-collar workers				X	
6.	Top-management commitment to HRD			X		
7.	Budget for development of human resources				X	
8.	The quality of managers					X
9.	Opportunity for growth and development in company	X				
10.	Local resources to support use of HRT				X	
11.	Financial conditions of company					X
12.	Market conditions				X	
13.	Employees commitment to company					X
14.	Decision-making autonomy for development of HRT	X				
15.	Political uncertainty/instability	X				
16.	Utility of HRT	X				

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **BLUE-COLLAR EMPLOYEE LEVEL** (circle one number).

	Not Likely						Very Likely
Training Programs	1	2	3	4	5	6	7
Performance Management Systems	1	2	3	4	5	6	7
Organizational Development Efforts	1	2	3	4	5	6	7

		Applies	Not Applicable
1.	Law of Labor Stability		X
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		Low	Moderate Low	Average	Moderate High	High
3.	Inflation		X			
4.	Number of people under Law of Indemnification					X
5.	The quality of blue-collar workers				X	
6.	Top-management commitment to HRD	X				
7.	Budget for development of human resources	X				
8.	The quality of managers				X	
9.	Opportunity for growth and development in company					X
10.	Local resources to support use of HRT	X				
11.	Financial conditions of company		X			
12.	Market conditions		X			
13.	Employees commitment to company		X			
14.	Decision-making autonomy for development of HRT					X
15.	Political uncertainty/instability		X			
16.	Utility of HRT	X				

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **BLUE-COLLAR EMPLOYEE LEVEL** (circle one number).

	Not Likely						Very Likely
Training Programs	1	2	3	4	5	6	7
Performance Management Systems	1	2	3	4	5	6	7
Organizational Development Efforts	1	2	3	4	5	6	7

		Applies	Not Applicable
1.	Law of Labor Stability		X
2.	Union in company		X

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation			X		
4.	Number of people under Law of Indemnification			X		
5.	The quality of blue-collar workers			X		
6.	Top-management commitment to HRD				X	
7.	Budget for development of human resources		X			
8.	The quality of managers					X
9.	Opportunity for growth and development in company	X				
10.	Local resources to support use of HRT	X				
11.	Financial conditions of company	X				
12.	Market conditions		X			
13.	Employees commitment to company		X			
14.	Decision-making autonomy for development of HRT	X				
15.	Political uncertainty/instability					X
16.	Utility of HRT		X			

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **BLUE-COLLAR EMPLOYEE LEVEL** (circle one number).

	Not Likely						Very Likely
Training Programs	1	2	3	4	5	6	7
Performance Management Systems	1	2	3	4	5	6	7
Organizational Development Efforts	1	2	3	4	5	6	7

	Applies	Not Applicable
1. Law of Labor Stability........................	X	
2. Union in company..............................	X	

	Low	Moderate Low	Average	Moderate High	High
3. Inflation.....................................		X			
4. Number of people under Law of Indemnification....................				X	
5. The quality of blue-collar workers........................					X
6. Top-management commitment to HRD..............................		X			
7. Budget for development of human resources.......................					X
8. The quality of managers.................					X
9. Opportunity for growth and development in company...............				X	
10. Local resources to support use of HRT........................	X				
11. Financial conditions of company.....................					X
12. Market conditions......................				X	
13. Employees commitment to company.....................				X	
14. Decision-making autonomy for development of HRT..............					X
15. Political uncertainty/instability...........		X			
16. Utility of HRT...............	X				

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the BLUE-COLLAR EMPLOYEE LEVEL (circle one number).

	Not Likely						Very Likely
Training Programs	1	2	3	4	5	6	7
Performance Management Systems	1	2	3	4	5	6	7
Organizational Development Efforts	1	2	3	4	5	6	7

		Applies	Not Applicable
1.	Law of Labor Stability.....................	X	
2.	Union in company...		X

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation..					X
4.	Number of people under Law of Indemnification.....................................					X
5.	The quality of blue-collar workers...				X	
6.	Top-management commitment to HRD..............................	X				
7.	Budget for development of human resources.............................			X		
8.	The quality of managers...................			X		
9.	Opportunity for growth and development in company......................................					X
10.	Local resources to support use of HRT.......................	X				
11.	Financial conditions of company..					X
12.	Market conditions...					X
13.	Employees commitment to company..........................	X				
14.	Decision-making autonomy for development of HRT.........	X				
15.	Political uncertainty/instability...................			X		
16.	Utility of HRT..					X

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the BLUE-COLLAR EMPLOYEE LEVEL (circle one number).

	Not Likely						Very Likely
Training Programs	1	2	3	4	5	6	7
Performance Management Systems	1	2	3	4	5	6	7
Organizational Development Efforts	1	2	3	4	5	6	7

		Applies	Not Applicable
1.	Law of Labor Stability		X
2.	Union in company		X

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation		X			
4.	Number of people under Law of Indemnification		X			
5.	The quality of blue-collar workers					X
6.	Top-management commitment to HRD					X
7.	Budget for development of human resources		X			
8.	The quality of managers			X		
9.	Opportunity for growth and development in company				X	
10.	Local resources to support use of HRT					X
11.	Financial conditions of company	X				
12.	Market conditions				X	
13.	Employees commitment to company			X		
14.	Decision-making autonomy for development of HRT	X				
15.	Political uncertainty/instability				X	
16.	Utility of HRT				X	

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **BLUE-COLLAR EMPLOYEE LEVEL** (circle one number).

	Not Likely						Very Likely
Training Programs	1	2	3	4	5	6	7
Performance Management Systems	1	2	3	4	5	6	7
Organizational Development Efforts	1	2	3	4	5	6	7

		Applies	Not Applicable
1.	Law of Labor Stability.................................		X
2.	Union in company............................	X	

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation..					X
4.	Number of people under Law of Indemnification..............	X				
5.	The quality of blue-collar workers......................................					X
6.	Top-management commitment to HRD..			X		
7.	Budget for development of human resources...........................				X	
8.	The quality of managers...................	X				
9.	Opportunity for growth and development in company........................					X
10.	Local resources to support use of HRT..			X		
11.	Financial conditions of company..					X
12.	Market conditions......................................					X
13.	Employees commitment to company......................................	X				
14.	Decision-making autonomy for development of HRT...................	X				
15.	Political uncertainty/instability........................					X
16.	Utility of HRT...........................	X				

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **BLUE-COLLAR EMPLOYEE LEVEL** (circle one number).

	Not Likely						Very Likely
Training Programs	1	2	3	4	5	6	7
Performance Management Systems	1	2	3	4	5	6	7
Organizational Development Efforts	1	2	3	4	5	6	7

		Applies	Not Applicable
1.	Law of Labor Stability........................		X
2.	Union in company..............................	X	

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation.............................		X			
4.	Number of people under Law of Indemnification.........................			X		
5.	The quality of blue-collar workers...........................	X				
6.	Top-management commitment to HRD.................................	X				
7.	Budget for development of human resources..........................					X
8.	The quality of managers.......................					X
9.	Opportunity for growth and development in company.....................					X
10.	Local resources to support use of HRT.............................				X	
11.	Financial conditions of company...........................				X	
12.	Market conditions.............................				X	
13.	Employees commitment to company............................				X	
14.	Decision-making autonomy for development of HRT.....................					X
15.	Political uncertainty/instability........................		X			
16.	Utility of HRT................................					X

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **BLUE-COLLAR EMPLOYEE LEVEL** (circle one number).

	Not Likely						Very Likely
Training Programs	1	2	3	4	5	6	7
Performance Management Systems	1	2	3	4	5	6	7
Organizational Development Efforts	1	2	3	4	5	6	7

		Applies	Not Applicable
1.	Law of Labor Stability		X
2.	Union in company	X	

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation	X				
4.	Number of people under Law of Indemnification					X
5.	The quality of blue-collar workers				X	
6.	Top-management commitment to HRD					X
7.	Budget for development of human resources			X		
8.	The quality of managers				X	
9.	Opportunity for growth and development in company				X	
10.	Local resources to support use of HRT			X		
11.	Financial conditions of company					X
12.	Market conditions	X				
13.	Employees commitment to company	X				
14.	Decision-making autonomy for development of HRT	X				
15.	Political uncertainty/instability	X				
16.	Utility of HRT			X		

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **BLUE-COLLAR EMPLOYEE LEVEL** (circle one number).

	Not Likely						Very Likely
Training Programs	1	2	3	4	5	6	7
Performance Management Systems	1	2	3	4	5	6	7
Organizational Development Efforts	1	2	3	4	5	6	7

APPENDIX E

Spanish Questionnaire Distributed to Managers

OLD DOMINION UNIVERSITY

Old Dominion University • (804) 440-3000 • Norfolk, VA 23508

July 26, 1983

Dear Sir:

The success of any company in any country is heavily dependent upon how well the company manages and develops its people--its human resources. Of course, to some extent, situations differ in each country and each company. Therefore, techniques of human resources management must be adapted to the requirements of each situation.

At the Center for Applied Psychological Studies of Old Dominion University, a program for research has begun that can help companies in Latin America adopt improved methods of human resources management to their special needs, so that they can compete more effectively and operate more profitably.

The first country to be involved in this research is Peru. That is because Eduardo Salas, who is conducting this research, comes from Peru. He has already had discussions with managers in 18 companies in Peru. These discussions have helped to shape the methods and to determine the questions to be asked now, in order to obtain the information needed.

We need to find out what factors have an effect upon how managers and executives in Peru make plans, policies and decisions that affect the people with whom they work--the factors that help and the factors that hinder efforts to make human resources management more useful and effective. And so, we need to ask questions about how people are being selected and trained, how they are being supervised and motivated, how their performance is being evaluated, and how their problems are being deal with.

The problems are not simple, as you are well aware. Consequently, to provide results that can be used in Peru, and in other countries later on, we need to ask a lot of questions. For the answers to these questions to be useful, they must come directly from the managers who have the most complete picture of the situation; the people who really make the decisions, people like you in many of the leading business and industrial organizations in Peru.

Old Dominion University is an affirmative action/equal opportunity institution.

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Because political, economic, psychological, social, cultural and organizational factors are involved, these questions are not always easy to answer--reflecting the actual difficulty of decisions you have to make. We know that the time it will take (about an hour) for you to respond to the questionnaires that Mr. Salas will be giving to you is time that is precious to your organization. But we cannot get the quality of information required from others, second hand. We hope that you can see this time as part of an investment that will eventually benefit your company specifically, and the national economy in general.

To this end, we will provide you with a summary of the results of the research in a form that will permit you to compare the data from your company with the overall findings. However, be assured that all of the information provided by you, will kept confidential and that the responses of no single company or individual, will be able to be identified, except for the company summary already mentioned. In all reports, only collective analyses will be reported.

On our part, we see this work as a type of research program that has not been done before--truly a pioneering effort, that not only promises benefit to the companies and countries involved, but that also will be an unique contribution to the science of industrial-organizational psychology. It will constitute part of the Ph.D. dissertation of Eduardo Salas. He will be able to answer questions you may have about the questionnaires or the project when he meets with you.

Please accept my personal thanks for your time and cooperation, and your valued contribution to better understanding of human resources management.

Sincerely,

Albert S. Glickman, Ph.D.
Eminent Professor of Psychology.
Head, Organizational Effectiveness
Laboratory

Old Dominion University • (804) 440-3000 • Norfolk, VA 23508

OLD DOMINION
UNIVERSITY

CUESTIONARIO
DE TECNOLOGIAS PARA EL DESARROLLO
DE RECURSOS HUMANOS (TDRH)

DESARROLLADO POR:

EDUARDO SALAS

AUSPICIADO POR:
ORGANIZATION EFFECTIVENESS LABORATORY
Y EL
CENTER FOR APPLIED PSYCHOLOGICAL STUDIES
OLD DOMINION UNIVERSITY
NORFOLK, VIRGINIA
U.S.A.

1983

En las páginas que siguen, por favor, conteste las dos partes del cuestionario. NO SE IMPRESIONE POR EL VOLUMEN DEL MISMO. LAS DOS PARTES LE TOMARA CONTESTARLAS ALREDEDOR DE UNA HORA.

La Parte I contiene varias preguntas relacionadas con factores que, en su empresa, influyen en la implementación o en el uso de las tecnologías de los recursos humanos. Tambien contiene 15 situaciónes hipotéticas y se le hacen preguntas para que Ud. decida sobre las probabilidades de que ciertas técnicas para el DRH podrían ser implementadas en su organización, teniendo en cuenta los factores descritos en cada situación.

La Parte II consiste en un sumario breve sobre sus antecedentes personales y sobre las características de su organización.

Algunos items serán más fáciles de contestar que otros. NO LE DEDIQUE MUCHO TIEMPO A UN SOLO ITEM. Use su mejor juicio y conteste todas las preguntas.

MUCHAS GRACIAS POR SU INTERES

PARTE I

En los siguientes conceptos determine cual es la alternativa que mejor representa la manera en que Ud. ve las cosas en su trabajo y en su empresa. Indique en el espacio disponible, el número en la escala que aparece a continuación, y que muestra, hasta qué punto Ud. está o no de acuerdo con cada afirmación.

Completamente En Desacuerdo	En Desacuerdo	No Estoy Seguro	De Acuerdo	Completamente De Acuerdo
1	2	3	4	5

____ 1. Esta empresa está abierta y dispuesta a cambios.

____ 2. La gerencia confía en las personas responsables y encargadas de adoptar y de usar nuevas técnicas para los recursos humanos.

____ 3. En mi departamento, mi cargo requiere trabajar estrechamente con otras personas.

____ 4. En esta empresa, las decisiones son tomadas a niveles donde la información más adecuada está disponible.

____ 5. En mi departamento, los supervisores a menudo no dan a conocer su conformidad con el resultado de nuestra labor.

____ 6. Los gerentes son estimulados a tomar riesgos razonables en sus esfuerzos por aumentar el desarrollo de los recursos humanos en la empresa.

____ 7. Muy a menudo ensayamos nuevas ideas para la mejor dirección de nuestro personal.

____ 8. No pienso que las personas deben ser diferenciadas o destacadas de acuerdo con el resultado de su trabajo o productividad.

____ 9. Hay poca oportunidad de aprender habilidades e información adicional acerca del trabajo, mientras la persona permanece en el centro laboral.

____ 10. Muchas de las actividades de la empresa se guian por reglas y procedimientos escritos.

____ 11. Programas de desarrollo organizacional han sido implementados en esta organización.

____ 12. A los empleados de esta empresa no les importa su progreso y desarrollo.

____ 13. Los programas de entrenamiento para incrementar las habilidades de los supervisores han sido totalmente implementados en esta empresa.

____ 14. Mi trabajo puede ser realizado por una persona trabajando sóla, sin hablar o consultar con otras personas.

____ 15. Esta empresa es efectiva en adaptarse al medio ambiente exterior.

Por favor continue usando el mismo tipo de respuestas para la siguientes preguntas:

Completamente En Desacuerdo.	En Desacuerdo	No Estoy Seguro	De Acuerdo	Completamente De Acuerdo
1	2	3	4	5

____16. La empresa me concede muchas oportunidades para aumentar mis habilidades y conocimientos en relación a mi trabajo.

____17. En mi trabajo, yo no tengo oportunidad para completar las tareas desde el principio hasta el fin.

____18. La empresa me niega cualquier oportunidad de usar mi iniciativa o juicio personal en llevar a cabo o en cumplir las obligaciones de mi trabajo.

____19. Mi trabajo es de tal particularidad que una gran cantidad de personas de otros departamentos pueden ser afectadas por el resultado de mi gestion.

____20. Los sistemas de evaluación de personal han sido ampliamente usados en esta organización.

____21. Mi trabajo requiere usar un número de técnicas o de habilidades complejas y de alto nivel.

____22. Los supervisores y empleados de otros departamentos casi nunca me dan información sobre la forma como estoy llevando a cabo mi trabajo.

____23. El solo hecho de hacer mi trabajo, me da oportunidades para darme cuenta si esta bien hecho.

____24. Esta empresa ha sido efectiva en administrar los recursos humanos.

____25. Mi trabajo es sencillo y repetitivo.

____26. La empresa me permite decidir por mi mismo como hacer mi propio trabajo.

____27. El resultado de mi trabajo puede afectar el de otros empleados en mi departamento.

____28. Esta empresa está comprometida al desarrollo de los recursos humanos.

____29. Mi trabajo no me da indicios sobre si estoy o no actuando bien en el desempeño de mi cargo.

____30. La empresa exige que trabaje en diferentes actividades que requieren el uso de multiples habilidades y talentos.

____31. La empresa proporciona oportunidades para el mejoramiento o superación y desarrollo individual.

____32. La empresa logra atraer y retener personal de alto nivel de preparación.

____33. Los gerentes le indican a uno lo bien que está desempeñando su trabajo.

____34. Mi trabajo requiere gran cantidad de cooperación con otros departamentos de esta empresa.

Por favor continue usando las mismas respuestas para las siguientes preguntas:

Completamente En Desacuerdo	En Desacuerdo	No Estoy Seguro	De Acuerdo	Completamente De Acuerdo
1	2	3	4	5

____35. La gerencia estimula a su personal de todos los niveles a dar lo mejor de sus esfuerzos.

____36. La empresa le facilita aprender nuevos conocimientos y adquirir nuevas tecnicas relacionadas con su trabajo.

____37. Las habilidades de los empleados están compatibilizadas con las necesidades del trabajo.

____38. La empresa me concede considerables oportunidades de independencia y libertad para hacer mi trabajo.

____39. Esta empresa puede ser definida como flexible y continuamente se adapta a nuevos cambios.

____40. La empresa da la oportunidad de terminar completamente el trabajo que inicio.

____41. La empresa tiene real interés en el bienestar de los que trabajan en ella.

____42. La rapidez de los cambios tecnológicos crean problemas en el mejor uso de los recursos humanos en esta empresa.

____43. Las decisiones sobre el uso de las tecnologías de los recursos humanos en la empresa se basan en información adecuada.

A continuación se mencionan varios factores que pueden afectar las decisiones ejecutivas al implementar o usar PROGRAMAS DE CAPACITACION para desarrollar los recursos humanos, en su empresa. Supóngase que Ud. esta implementando (o ha estado haciéndolo durante los meses pasados) un PROGRAMA DE CAPACITACION para mejorar el nivel de supervisión de los gerentes.

Por cada factor, decida primero si ACTUALMENTE facilita o impide la implementación de su labor como gerente. Luego haga un círculo en el número de la respectiva columna (5 = más, 1 = menos) para ver por cuánto lo facilita o impide. Si es neutral o no aplicable circule las letras apropiadas. Esté seguro de contestar todos los factores y sólo un circulo por factor.

5 = MAXIMO   1 = MINIMO

		FACILITAN Cuanto	NEUTRAL	IMPIDEN Cuanto	NO APLICABLE
1.	Ley de Estabilidad Laboral	1 2 3 4 5	N	1 2 3 4 5	N/A
2.	Sindicato en la empresa	1 2 3 4 5	N	1 2 3 4 5	N/A
3.	Inflación actual	1 2 3 4 5	N	1 2 3 4 5	N/A
4.	Número de empleados bajo los beneficios de la Ley de Indemnización Pre-'62	1 2 3 4 5	N	1 2 3 4 5	N/A
5.	Calidad de los obreros	1 2 3 4 5	N	1 2 3 4 5	N/A
6.	Compromiso de la gerencia hacia el DRH	1 2 3 4 5	N	1 2 3 4 5	N/A
7.	Presupuesto para DRH	1 2 3 4 5	N	1 2 3 4 5	N/A
8.	Calidad de gerentes	1 2 3 4 5	N	1 2 3 4 5	N/A
9.	Oportunidad de progreso y desarrollo en la empresa	1 2 3 4 5	N	1 2 3 4 5	N/A
10.	Disponibilidad de recursos locales para la TDRH	1 2 3 4 5	N	1 2 3 4 5	N/A
11.	Actual condición financiera de la empresa	1 2 3 4 5	N	1 2 3 4 5	N/A
12.	Condiciones de mercado actual	1 2 3 4 5	N	1 2 3 4 5	N/A
13.	Compromiso de los empleados hacia la empresa	1 2 3 4 5	N	1 2 3 4 5	N/A
14.	Autonomía en tomar decisiones para TDRH	1 2 3 4 5	N	1 2 3 4 5	N/A
15.	Incertidumbre-inestabilidad política	1 2 3 4 5	N	1 2 3 4 5	N/A
16.	Utilidad de TDRH	1 2 3 4 5	N	1 2 3 4 5	N/A
	Otros (especifique)				
17.	_____	1 2 3 4 5	N	1 2 3 4 5	N/A
18.	_____	1 2 3 4 5	N	1 2 3 4 5	N/A
19.	_____	1 2 3 4 5	N	1 2 3 4 5	N/A

A continuación estan mencionados varios factores que pueden afectar las decisiones ejecutivas al implementar o usar TECNICAS DE DESARROLLO ORGANIZACIONAL para desarrollar los recursos humanos en su empresa. Supóngase que Ud. esta implementando (o ha estado haciendolo durante los meses pasados) una TECNICA DE DESARROLLO ORGANIZACIONAL para mejorar las habilidades de supervisión de los gerentes.

Por cada factor primero decida si ellos ACTUALMENTE facilitan o impiden la implementación de su labor como gerente. Luego haga un círculo en el número de la respectiva columna (5 = más, 1 - menos) para ver por cuánto lo facilita o impide. Si es neutral o no aplicable circule las letras apropiadas. Esté seguro de contestar todos los factores y sólo un circulo por factor.

5 = MAXIMO   1 = MINIMO

		FACILITAN Cuanto	NEUTRAL	IMPIDEN Cuanto	NO APLICABLE
1.	Ley de Estabilidad Laboral	1 2 3 4 5	N	1 2 3 4 5	N/A
2.	Sindicato en la empresa	1 2 3 4 5	N	1 2 3 4 5	N/A
3.	Inflación actual	1 2 3 4 5	N	1 2 3 4 5	N/A
4.	Número de empleados bajo los beneficios de la Ley de Indemnización Pre-'62	1 2 3 4 5	N	1 2 3 4 5	N/A
5.	Calidad de los obreros	1 2 3 4 5	N	1 2 3 4 5	N/A
6.	Compromiso de la gerencia hacia el DRH	1 2 3 4 5	N	1 2 3 4 5	N/A
7.	Presupuesto para DRH	1 2 3 4 5	N	1 2 3 4 5	N/A
8.	Calidad de gerentes	1 2 3 4 5	N	1 2 3 4 5	N/A
9.	Oportunidad de progreso y desarrollo en la empresa	1 2 3 4 5	N	1 2 3 4 5	N/A
10.	Disponibilidad de recursos locales para la TDRH	1 2 3 4 5	N	1 2 3 4 5	N/A
11.	Actual condición financiera de la empresa	1 2 3 4 5	N	1 2 3 4 5	N/A
12.	Condiciones de mercado actual	1 2 3 4 5	N	1 2 3 4 5	N/A
13.	Compromiso de los empleados hacia la empresa	1 2 3 4 5	N	1 2 3 4 5	N/A
14.	Autonomía en tomar decisiones para TDRH	1 2 3 4 5	N	1 2 3 4 5	N/A
15.	Incertidumbre-inestabilidad política	1 2 3 4 5	N	1 2 3 4 5	N/A
16.	Utilidad de TDRH	1 2 3 4 5	N	1 2 3 4 5	N/A

Otros (especifique)

17.	_____	1 2 3 4 5	N	1 2 3 4 5	N/A
18.	_____	1 2 3 4 5	N	1 2 3 4 5	N/A
19.	_____	1 2 3 4 5	N	1 2 3 4 5	N/A

A continuación estan mencionados varios factores que pueden afectar las decisiones ejecutivas al implementar o usar SISTEMAS DE EVALUACION DE PERSONAL para desarrollar los recuros humanos en su empresa. Supóngase que Ud. esta implementando (o ha estado haciéndolo durante los meses pasados) un SISTEMAS DE EVALUACION DE PERSONAL para mejorar las habilidades de supervisión de los grentes.

Por cada factor primero decida si ellos ACTUALMENTE facilitan o impiden la implementación de su labor como gerente. Luego haga un círculo en el número de la respectiva columna (5 = más, 1 = menos) para ver por cuánto lo facilita o impide. Si es neutral o no aplicable circule las letras apropriadas. Esté seguro de contestar todos los factores y sólo un circulo por factor.

5 = MAXIMO   1 = MINIMO

		FACILITAN Cuanto	NEUTRAL	IMPIDEN Cuanto	NO APLICABLE
1.	Ley de Estabilidad Laboral	1 2 3 4 5	N	1 2 3 4 5	N/A
2.	Sindicato en la empresa	1 2 3 4 5	N	1 2 3 4 5	N/A
3.	Inflación actual	1 2 3 4 5	N	1 2 3 4 5	N/A
4.	Número de empleados bajo los beneficios de la Ley de Indemnización Pre-'62	1 2 3 4 5	N	1 2 3 4 5	N/A
5.	Calidad de los obreros	1 2 3 4 5	N	1 2 3 4 5	N/A
6.	Compromiso de la gerencia hacia el DRH	1 2 3 4 5	N	1 2 3 4 5	N/A
7.	Presupuesto para DRH	1 2 3 4 5	N	1 2 3 4 5	N/A
8.	Calidad de gerentes	1 2 3 4 5	N	1 2 3 4 5	N/A
9.	Oportunidad de progreso y desarrollo en la empresa	1 2 3 4 5	N	1 2 3 4 5	N/A
10.	Disponibilidad de recursos locales para la TDRH	1 2 3 4 5	N	1 2 3 4 5	N/A
11.	Actual condición financiera de la empresa	1 2 3 4 5	N	1 2 3 4 5	N/A
12.	Condiciones de mercado actual	1 2 3 4 5	N	1 2 3 4 5	N/A
13.	Compromiso de los empleados hacia la empresa	1 2 3 4 5	N	1 2 3 4 5	N/A
14.	Autonomía en tomar decisiones para TDRH	1 2 3 4 5	N	1 2 3 4 5	N/A
15.	Incertidumbre-inestabilidad política	1 2 3 4 5	N	1 2 3 4 5	N/A
16.	Utilidad de TDRH	1 2 3 4 5	N	1 2 3 4 5	N/A
	Otros (especifique)				
17.	_____	1 2 3 4 5	N	1 2 3 4 5	N/A
18.	_____	1 2 3 4 5	N	1 2 3 4 5	N/A
19.	_____	1 2 3 4 5	N	1 2 3 4 5	N/A

Las siguientes definiciones están destinadas a que todos puedan interpretar los términos usados en este cuestionario de la misma manera. POR FAVOR, SEPARE ESTAS TRES PAGINAS DE MANERA QUE UD. SE PUEDA' REFERIR A ELLAS MIENTRAS CONTESTA EL CUESTIONARIO. ESTAS DEFINICIONES PROVEEN PUNTOS DE REFERENCIA PARA LOS DIFERENTES NIVELES PRESENTADOS EN LAS SITUACIONES HIPOTETICAS.

DRH = Desarrollo de Recursos Humanos

TDRH = Tecnologias para el Desarrollo de los Recursos Humanos

1. LEY DE ESTABILIDAD LABORAL

Existente - significa que la Ley existe y regula la política laboral de las empresas en el Perú.

No Existente - significa que la Ley no existe y por consiguiente, no afecta la política laboral de las empresas en el Perú.

2. SINDICATO - Es la organización de los obreros.

Existente - significa que la empresa tiene sindicato

No Existente - significa que la empresa no tiene sindicato.

3. INFLACION - El aumento del costo en los productos y servicios.

Alta - significa sobre el 150%

Moderada - significa entre el 50% - 90%

Baja - significa menos del 20%

4. NUMERO DE EMPLEADOS BAJO LA LEY DE INDEMNIZACION

Alto nivel - significa que la empresa tiene un número grande de empleados (mas del 50%) bajo la Ley (Pre-'62).

Bajo nivel - significa que la empresa tiene un bajo nivel de empleados (menos del 50%) bajo esa Ley (Post-'62).

5. CALIDAD DE LOS OBREROS - Se refiere a la calidad general de los trabajadores en términos de su educación (nivel de educación), pericia o habilidades técnicas, antecedentes culturales, nivel socio-económico, responsabilidad, productividad, actitudes, independencia de acción, ambiciones y afiliación política.

Alto nivel - significa que la empresa tiene uno de los grupos de obreros de los mas calificados entre todas las organizaciones en el Perú.

Bajo nivel - significa que los obreros no son de los mas calificados.

6. COMPROMISO DE LA GERENCIA HACIA TDRH - Se refiere al hecho de que los niveles altos de la administración o de la gerencia sostienen y/o estimulan y/o exigen el desarrollo de los recursos humanos en su empresa.

Alto nivel - significará aprobación de TDRH

Bajo nivel - significará que la gerencia no tiene mucho interés en implementar y/o usar TDRH.

7. PRESUPUESTO PARA TDRH - Se refiere a que la empresa tiene un presupuesto separado para el desarrollo de los recursos humanos, esto es, dinero especialmente disponible para el uso de estas tecnologías.

   Alto nivel - significará una relativa gran cantidad de dinero disponible para este uso, en comparación con otras empresas en el Perú.

   Bajo nivel - significará que muy pocos o ningún recurso económico es disponible.

8. CALIDAD DE LA GERENCIA - Se refiere a la calidad general de los Gerentes en su empresa en relación con sus habilidades para supervisar, preparación adecuada, responsabilidad, saber tomar decisiones, iniciativas, autonomía, etc.

   Alto nivel - significa que las pericias, habilidades y recursos entre gerentes son de lo mejor en su empresa comparado con otras en el Perú.

   Bajo nivel - significa que las habilidades y recursos en general entre Gerentes son deficientes.

9. OPORTUNIDAD PARA PROGRESO Y DESARROLLO EN LA COMPAÑIA - Se refiere a que en la organización hay oportunidad para logros individuales, para mejoramiento de las habilidades de los trabajadores y para promoción de puestos.

   Alto nivel - significa que estas condiciones están presentes en la compañía.

   Bajo nivel - significa que la organización no provee estas condiciones.

10. DISPONIBILIDAD DE RECURSOS LOCALES PARA TDRH - Se refiere a que las empresas pueden recurrir a las universidades, a las escuelas técnicas, y/o a consultores para ayudar en la implementación y/o uso de TDRH.

    Alto nivel - significa que esos recursos están disponibles.

    Bajo nivel - significa que no se dispone de ninguno de ellos adecuadamente.

11. CONDICIONES FINANCIERAS DE LA COMPAÑIA - Se refiere a los indicadores económicos y/o financieros de la empresa tales como ventas, utilidades o pagos.

    Alto nivel - significa que estos indicadores son óptimos para la operación de la empresa y son incuestionablemente solventes.

    Bajo nivel - significa que las condiciones financieras son pobres, no solventes y obligan a restricciones en la operación de la empresa.

12. CONDICIONES DEL MERCADO - Se refiere a la ausencia de control en los precios, que están abiertos a la competencia y que la exportación e importación no tienen mayores restricciones.

    Alto nivel - significa que las condiciones son altamente favorables a la conducción de los negocios de la empresa.

    Bajo nivel - significa muchos controles externos que restringen la libertad de operación de los negocios y limita las utilidades y el crecimiento de la empresa.

13. COMPROMISO DE LOS EMPLEADOS CON LA EMPRESA - La empresa tiene empleados que son leales y están identificados con los objetivos de la empresa.

Alto nivel - significa que existe un gran respaldo a la empresa por sus empleados comparado con otras empresas en el Perú.

Bajo nivel - significa que no existe identificación con los objetivos de la empresa.

14. AUTONOMIA EN TOMAR DECISIONES - Un gerente con adecuada información puede tomar una decisión para implementar una TDRH sin consultar niveles superiores de la gerencia; no necesita aprobación previa.

Alto nivel - significa gran independencia o autonomía para tomar las decisiones.

Bajo nivel - significa que no hay autonomía.

15. INCERTIDUMBRE Y/O INESTABILIDAD POLITICA - La empresa está constantemente preocupada sobre quién está en el gobierno y por cuánto tiempo. Consequentemente, hay muy pocos planes a largo plazo dentro de la empresa.

Alto nivel - significa que hay mucha incertidumbre.

Bajo nivel - significa que "No hay problema".

16. UTILIDAD DE TDRH - Se refiere a que la TDRH es compatible con los objetivos, propósitos y tecnología de la empresa.

Alto nivel - significa que TDRH es útil y beneficioso para planes de corto y largo plazo en los negocios de la empresa.

Bajo nivel - de la TDRH significa que no es útil y beneficioso a la empresa.

El propósito de esta sección es obtener su opinion sobre la probabilidad de usar una TDRH en 15 situaciones hipotéticas. Para asistirlo en su decision, se señalan varios factores que pueden afectar su determinación. Por favor lea las instrucciones detenidamente.

En su apreciación de las situaciones hipotéticas, por favor guíese por las siguientes instrucciones generales:

1. Coloque las definiciones (ver paginas adjuntas) frente a Ud. para hacer el proceso más fácil.

2. Suponga que Ud. es un gerente en una posición en la que puede tomar decisiones dentro de su empresa.

3. ALGUNOS FACTORES TENDRAN MAS PESO QUE OTROS EN SU DECISION, NO TODOS SON IGUALMENTE IMPORTANTES E INFLUYENTES.

4. Una vez tomada su decision, no la revise ni la rectifique.

5. Considere cada situación como independiente, no relacionada con otras situaciones ya presentadas.

6. No hay respuestas correctas u incorrectas.

7. Observe que los factores son dados en la forma de "bajo", "moderadamente bajo", etc. asi como "existente", o "no existente".

8. Al tomar sus decisiones al final de cada página, por favor considere el total alcance de la escala dada.

9. Observe que Ud. solo tiene que hacer SEIS decisiones en cada página y que la primera parte es solo información.

10. Observe que tres decisiones se aplican al NIVEL GERENCIAL y tres se aplican solo para NIVEL OBRERO.

GRACIAS POR SU COOPERACION

POR FAVOR, EMPIECE.

Información

	Existente	No Existente
1. Ley de Estabilidad Laboral		X
2. Sindicato en la Empresa	X	

	Bajo	Moderada-mente Bajo	Promedio	Moderada-mente Alto	Alto
3. Inflación				X	
4. Número de empleados bajo la Ley de Indemnización (Pre-'62)	X				
5. La calidad de los obreros					X
6. Compromiso de la Gerencia hacia DRH				X	
7. Presupuesto para DRH				X	
8. La calidad de los gerentes		X			
9. Oportunidad para progresar y desarrollar					X
10. Disponibilidad de recursos locales			X		
11. Condiciones financieras de la empresa					X
12. Condiciones del mercado					X
13. Compromiso de los empleados hacia la empresa		X			
14. Autonomía en tomar decisiones para el DRH			X		
15. Incertidumbre y/o inestabilidad política					X
16. Utilidad de TDRH		X			

Decisiones

En base a la información arriba detallada y en base a su experiencia y conocimientos, diga cuál es la probabilidad de que cada una de las tres tecnologias de los recursos humanos podrian implementarse y tener exito en su empresa para ser aplicadas a NIVEL GERENCIAL Y NIVEL OBRERO (solo un circulo para cada tecnología).

	No Hay Probabilidad De Exito					Muy Probable De Exito	
1. Programas de Capacitación							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7
2. Sistemas para evaluar el personal							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7
3. Técnicas de desarrollo organizacional							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7

Información

	Existente	No Existente
1. Ley de Estabilidad Laboral		X
2. Sindicato en la Empresa	X	

	Bajo	Moderada-mente Bajo	Promedio	Moderada-mente Alto	Alto
3. Inflación		X			
4. Número de empleados bajo la Ley de Indemnización (Pre-'62)		X			
5. La calidad de los obreros				X	
6. Compromiso de la Gerencia hacia DRH					X
7. Presupuesto para DRH				X	
8. La calidad de los gerentes					X
9. Oportunidad para progresar y desarrollar				X	
10. Disponibilidad de recursos locales					X
11. Condiciones financieras de la empresa		X			
12. Condiciones del mercado			X		
13. Compromiso de los empleados hacia la empresa		X			
14. Autonomía en tomar decisiones para el DRH					X
15. Incertidumbre y/o inestabilidad política		X			
16. Utilidad de TDRH		X			

Decisiones

En base a la información arriba detallada y en base a su experiencia y conocimientos, diga cuál es la probabilidad de que cada una de las tres tecnologias de los recursos humanos podrian implementarse y tener exito en su empresa para ser aplicadas a NIVEL GERENCIAL Y NIVEL OBRERO (solo un circulo para cada tecnología).

	No Hay Probabilidad De Exito						Muy Probable De Exito
1. Programas de Capacitación							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7
2. Sistemas para evaluar el personal							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7
3. Técnicas de desarrollo organizacional							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7

SITUACION HIPOTETICA 03

Información

	Existente	No Existente
1. Ley de Estabilidad Laboral..X		X
2. Sindicato en la Empresa.........................X	X	

	Bajo	Moderadamente Bajo	Promedio	Moderadamente Alto	Alto
3. Inflación...........................X	X				
4. Número de empleados bajo la Ley de Indemnización (Pre-'62) X					X
5. La calidad de los obreros...................................X			X		
6. Compromiso de la Gerencia hacia DRH X					X
7. Presupuesto para DRH X			X		
8. La calidad de los gerentes...X				X	
9. Oportunidad para progresar y desarrollar X				X	
10. Disponibilidad de recursos locales X			X		
11. Condiciones financieras de la empresa X					X
12. Condiciones del mercado X	X				
13. Compromiso de los empleados hacia la empresa X	X				
14. Autonomía en tomar decisiones para el DRH X	X				
15. Incertidumbre y/o inestabilidad política.............................X	X				
16. Utilidad de TDRH X			X		

Decisiones

En base a la información arriba detallada y en base a su experiencia y conocimientos, diga cuál es la probabilidad de que cada una de las tres tecnologias de los recursos humanos podrian implementarse y tener exito en su empresa para ser aplicadas a NIVEL GERENCIAL Y NIVEL OBRERO (solo un circulo para cada tecnología).

	No Hay Probabilidad De Exito						Muy Probable De Exito
1. Programas de Capacitación							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7
2. Sistemas para evaluar el personal							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7
3. Técnicas de desarrollo organizacional							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7

Información

	Existente	No Existente
1. Ley de Estabilidad Laboral		X
2. Sindicato en la Empresa		X

	Bajo	Moderadamente Bajo	Promedio	Moderadamente Alto	Alto
3. Inflación			X		
4. Número de empleados bajo la Ley de Indemnización (Pre-'62)			X		
5. La calidad de los obreros			X		
6. Compromiso de la Gerencia hacia DRH				X	
7. Presupuesto para DRH		X			
8. La calidad de los gerentes					X
9. Oportunidad para progresar y desarrollar	X				
10. Disponibilidad de recursos locales	X				
11. Condiciones financieras de la empresa	X				
12. Condiciones del mercado		X			
13. Compromiso de los empleados hacia la empresa		X			
14. Autonomía en tomar decisiones para el DRH		X			
15. Incertidumbre y/o inestabilidad política					X
16. Utilidad de TDRH			X		

Decisiones

En base a la información arriba detallada y en base a su experiencia y conocimientos, diga cuál es la probabilidad de que cada una de las tres tecnologias de los recursos humanos podrian implementarse y tener exito en su empresa para ser aplicadas a NIVEL GERENCIAL Y NIVEL OBRERO (solo un circulo para cada tecnología).

	No Hay Probabilidad De Exito						Muy Probable De Exito

1. Programas de Capacitación

Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7

2. Sistemas para evaluar el personal

Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7

3. Técnicas de desarrollo organizacional

Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7

SITUACION HIPOTETICA 05

Información

	Existente	No Existente
1. Ley de Estabilidad Laboral		X
2. Sindicato en la Empresa	X	

	Bajo	Moderadamente Bajo	Promedio	Moderadamente Alto	Alto
3. Inflación		X			
4. Número de empleados bajo la Ley de Indemnización (Pre-'62)			X		
5. La calidad de los obreros			X		
6. Compromiso de la Gerencia hacia DRH				X	
7. Presupuesto para DRH	X				
8. La calidad de los gerentes	X				
9. Oportunidad para progresar y desarrollar					X
10. Disponibilidad de recursos locales	X				
11. Condiciones financieras de la empresa				X	
12. Condiciones del mercado				X	
13. Compromiso de los empleados hacia la empresa				X	
14. Autonomía en tomar decisiones para el DRH				X	
15. Incertidumbre y/o inestabilidad política			X		
16. Utilidad de TDRH		X			

Decisiones

En base a la información arriba detallada y en base a su experiencia y conocimientos, diga cuál es la probabilidad de que cada una de las tres tecnologias de los recursos humanos podrian implementarse y tener exito en su empresa para ser aplicadas a NIVEL GERENCIAL Y NIVEL OBRERO (solo un circulo para cada tecnología).

	No Hay Probabilidad De Exito					Muy Probable De Exito	
1. Programas de Capacitación							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7
2. Sistemas para evaluar el personal							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7
3. Técnicas de desarrollo organizacional							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7

Información

		Existente		No Existente
1.	Ley de Estabilidad Laboral ....X·			
2.	Sindicato en la Empresa X			

		Bajo	Moderadamente Bajo	Promedio	Moderadamente Alto	Alto
3.	Inflación X					
4.	Número de empleados bajo la Ley de Indemnización (Pre-'62) X					
5.	La calidad de los obreros X					
6.	Compromiso de la Gerencia hacia DRH.......					X
7.	Presupuesto para DRH......					X
8.	La calidad de los gerentes					X
9.	Oportunidad para progresar y desarrollar......			X		
10.	Disponibilidad de recursos locales			X		
11.	Condiciones financieras de la empresa				X	
12.	Condiciones del mercado......				X	
13.	Compromiso de los empleados hacia la empresa......			X		
14.	Autonomía en tomar decisiones para el DRH X					
15.	Incertidumbre y/o inestabilidad política......			X		
16.	Utilidad de TDRH					X

Decisiones

En base a la información arriba detallada y en base a su experiencia y conocimientos, diga cuál es la probabilidad de que cada una de las tres tecnologias de los recursos humanos podrian implementarse y tener exito en su empresa para ser aplicadas a NIVEL GERENCIAL Y NIVEL OBRERO (solo un circulo para cada tecnología).

	No Hay Probabilidad De Exito					Muy Probable De Exito	
1. Programas de Capacitación							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7
2. Sistemas para evaluar el personal							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7
3. Técnicas de desarrollo organizacional							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7

Información

	Existente	No Existente
Ley de Estabilidad Laboral.....................X		
Sindicato en la Empresa...X		

	Bajo	Moderada-mente Bajo	Promedio	Moderada-mente Alto	Alto
ι. Inflación...X					
ι. Número de empleados bajo la Ley de Indemnización (Pre-'62)...X					
ι. La calidad de los obreros.....................................X					
ι. Compromiso de la Gerencia hacia DRH X					
ι. Presupuesto para DRH X					
ι. La calidad de los gerentes......................X					
ι. Oportunidad para progresar y desarrollar...X					
10. Disponibilidad de recursos locales X					
11. Condiciones financieras de la empresa..					
12. Condiciones del mercado					
13. Compromiso de los empleados hacia la empresa....................X					
14. Autonomía en tomar decisiones para el DRH........................X					
15. Incertidumbre y/o inestabilidad política X					
16. Utilidad de TDRH X					

Decisiones

En base a la información arriba detallada y en base a su experiencia y conocimientos, liga cuál es la probabilidad de que cada una de las tres tecnologias de los recursos humanos podrian implementarse y tener exito en su empresa para ser aplicadas a NIVEL GERENCIAL Y NIVEL OBRERO (solo un circulo para cada tecnología).

	No Hay Probabilidad De Exito					Muy Probable De Exito	
1. Programas de Capacitación							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7
2. Sistemas para evaluar el personal							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7
3. Técnicas de desarrollo organizacional							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4.	5	6	7

Información

	Existente				No Existente
1. Ley de Estabilidad Laboral					X
2. Sindicato en la Empresa	X				

	Bajo	Moderada-mente Bajo	Promedio	Moderada-mente Alto	Alto
3. Inflación		X			
4. Número de empleados bajo la Ley de Indemnización (Pre-'62)			X		
5. La calidad de los obreros	X				
6. Compromiso de la Gerencia hacia DRH		X			
7. Presupuesto para DRH				X	
8. La calidad de los gerentes				X	
9. Oportunidad para progresar y desarrollar					X
10. Disponibilidad de recursos locales			X		
11. Condiciones financieras de la empresa			X		
12. Condiciones del mercado			X		
13. Compromiso de los empleados hacia la empresa			X		
14. Autonomía en tomar decisiones para el DRH					X
15. Incertidumbre y/o inestabilidad política			X		
16. Utilidad de TDRH					X

Decisiones

En base a la información arriba detallada y en base a su experiencia y conocimientos, diga cuál es la probabilidad de que cada una de las tres tecnologias de los recursos humanos podrian implementarse y tener exito en su empresa para ser aplicadas a NIVEL GERENCIAL Y NIVEL OBRERO (solo un circulo para cada tecnología).

	No Hay Probabilidad De Exito					Muy Probable De Exito	
1. Programas de Capacitación							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7
2. Sistemas para evaluar el personal							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7
3. Técnicas de desarrollo organizacional							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7

Información

	Existente	No Existente
1. Ley de Estabilidad Laboral ....:....X		
2. Sindicato en la Empresa...X		

	Bajo	Moderada-mente Bajo	Promedio	Moderada-mente Alto	Alto
3. Inflación X					
4. Número de empleados bajo la Ley de Indemnización (Pre-'62) X					
5. La calidad de los obreros...X					
6. Compromiso de la Gerencia hacia DRH X					
7. Presupuesto para DRH X					
8. La calidad de los gerentes X					
9. Oportunidad para progresar y desarrollar X					
10. Disponibilidad de recursos locales X					
11. Condiciones financieras de la empresa X					
12. Condiciones del mercado X					
13. Compromiso de los empleados hacia la empresa X					
14. Autonomía en tomar decisiones para el DRH X					
15. Incertidumbre y/o inestabilidad política X					
16. Utilidad de TDRH X					

Decisiones

En base a la información arriba detallada y en base a su experiencia y conocimientos, diga cuál es la probabilidad de que cada una de las tres tecnologias de los recursos humanos podrian implementarse y tener exito en su empresa para ser aplicadas a NIVEL GERENCIAL Y NIVEL OBRERO (solo un circulo para cada tecnología).

	No Hay Probabilidad De Exito					Muy Probable De Exito	
1. Programas de Capacitación							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7
2. Sistemas para evaluar el personal							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7
3. Técnicas de desarrollo organizacional							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7

Información

	Existente	No Existente
1. Ley de Estabilidad Laboral X		
2. Sindicato en la Empresa _ X		

	Bajo	Moderada-mente Bajo	Promedio	Moderada-mente Alto	Alto
3. Inflación X					
4. Número de empleados bajo la Ley de Indemnización (Pre-'62).......................................X					
5. La calidad de los obreros..X					
6. Compromiso de la Gerencia hacia DRH X					
7. Presupuesto para DRH X					
8. La calidad de los gerentes X					
9. Oportunidad para progresar y desarrollar X					
10. Disponibilidad de recursos locales X					
11. Condiciones financieras de la empresa X					
12. Condiciones del mercado X					
13. Compromiso de los empleados hacia la empresa X					
14. Autonomía en tomar decisiones para el DRH X					
15. Incertidumbre y/o inestabilidad política X					
16. Utilidad de TDRH X					

Decisiones

En base a la información arriba detallada y en base a su experiencia y conocimientos, diga cuál es la probabilidad de que cada una de las tres tecnologias de los recursos humanos podrian implementarse y tener exito en su empresa para ser aplicadas a NIVEL GERENCIAL Y NIVEL OBRERO (solo un circulo para cada tecnología).

	No Hay Probabilidad De Exito						Muy Probable De Exito
1. Programas de Capacitación							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7
2. Sistemas para evaluar el personal							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7
3. Técnicas de desarrollo organizacional							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7

Información

	Existente	No Existente
1. Ley de Estabilidad Laboral.........................X		
2. Sindicato en la Empresa X		

	Bajo	Moderada- mente Bajo	Promedio	Moderada- mente Alto	Alto
3. Inflación..X					
4. Número de empleados bajo la Ley de Indemnización (Pre-'62) X					
5. La calidad de los obreros......................................X					
6. Compromiso de la Gerencia hacia DRH X					
7. Presupuesto para DRH X					
8. La calidad de los gerentes X					
9. Oportunidad para progresar y desarrollar X					
10. Disponibilidad de recursos locales X					
11. Condiciones financieras de la empresa X					
12. Condiciones del mercado............X					
13. Compromiso de los empleados hacia la empresa...................X					
14. Autonomía en tomar decisiones para el DRH X					
15. Incertidumbre y/o inestabilidad política..........................X					
16. Utilidad de TDRH X					

Decisiones

En base a la información arriba detallada y en base a su experiencia y conocimientos, diga cuál es la probabilidad de que cada una de las tres tecnologias de los recursos humanos podrian implementarse y tener exito en su empresa para ser aplicadas a NIVEL GERENCIAL Y NIVEL OBRERO (solo un circulo para cada tecnología).

	No Hay Probabilidad De Exito					Muy Probable De Exito	
1. Programas de Capacitación							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7
2. Sistemas para evaluar el personal							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7
3. Técnicas de desarrollo organizacional							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7

Información

	Existente	No Existente
1. Ley de Estabilidad Laboral		X
2. Sindicato en la Empresa		X

	Bajo	Moderada- mente Bajo	Promedio	Moderada- mente Alto	Alto
3. Inflación		X			
4. Número de empleados bajo la Ley de Indemnización (Pre-'62)		X			
5. La calidad de los obreros					X
6. Compromiso de la Gerencia hacia DRH					X
7. Presupuesto para DRH	X				
8. La calidad de los gerentes			X		
9. Oportunidad para progresar y desarrollar				X	
10. Disponibilidad de recursos locales					X
11. Condiciones financieras de la empresa		X			
12. Condiciones del mercado				X	
13. Compromiso de los empleados hacia la empresa		X			
14. Autonomía en tomar decisiones para el DRH		X			
15. Incertidumbre y/o inestabilidad política				X	
16. Utilidad de TDRH				X	

Decisiones

En base a la información arriba detallada y en base a su experiencia y conocimientos, diga cuál es la probabilidad de que cada una de las tres tecnologias de los recursos humanos podrian implementarse y tener exito en su empresa para ser aplicadas a NIVEL GERENCIAL Y NIVEL OBRERO (solo un circulo para cada tecnología).

	No Hay Probabilidad De Exito					Muy Probable De Exito	
1. Programas de Capacitación							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7
2. Sistemas para evaluar el personal							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7
3. Técnicas de desarrollo organizacional							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7

Información

	Existente	No Existente
1. Ley de Estabilidad Laboral		X
2. Sindicato en la Empresa	X	

	Bajo	Moderada-mente Bajo	Promedio	Moderada-mente Alto	Alto
3. Inflación		X			
4. Número de empleados bajo la Ley de Indemnización (Pre-'62)					X
5. La calidad de los obreros			X		
6. Compromiso de la Gerencia hacia DRH	X				
7. Presupuesto para DRH	X				
8. La calidad de los gerentes				X	
9. Oportunidad para progresar y desarrollar					X
10. Disponibilidad de recursos locales	X				
11. Condiciones financieras de la empresa		X			
12. Condiciones del mercado		X			
13. Compromiso de los empleados hacia la empresa		X			
14. Autonomía en tomar decisiones para el DRH					X
15. Incertidumbre y/o inestabilidad política		X			
16. Utilidad de TDRH	X				

Decisiones

En base a la información arriba detallada y en base a su experiencia y conocimientos, diga cuál es la probabilidad de que cada una de las tres tecnologias de los recursos humanos podrian implementarse y tener exito en su empresa para ser aplicadas a NIVEL GERENCIAL Y NIVEL OBRERO (solo un circulo para cada tecnología).

	No Hay Probabilidad De Exito						Muy Probable De Exito
1. Programas de Capacitación							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7
2. Sistemas para evaluar el personal							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7
3. Técnicas de desarrollo organizacional							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7

Información

	Existente	No Existente
1. Ley de Estabilidad Laboral X		
2. Sindicato en la Empresa X		

	Bajo	Moderada-mente Bajo	Promedio	Moderada-mente Alto	Alto
3. Inflación X		X			
4. Número de empleados bajo la Ley de Indemnización (Pre-'62)..................X		X			
5. La calidad de los obreros X	X				
6. Compromiso de la Gerencia hacia DRH ··································X		X			
7. Presupuesto para DRH X			X		
8. La calidad de los gerentes X	X				
9. Oportunidad para progresar y desarrollar X		X			
10. Disponibilidad de recursos locales X		X			
11. Condiciones financieras de la empresa··························X	X				
12. Condiciones del mercado..X			X		
13. Compromiso de los empleados hacia la empresa..................X	X				
14. Autonomía en tomar decisiones para el DRH X					X
15. Incertidumbre y/o inestabilidad política X				X	
16. Utilidad de TDRH X	X				

Decisiones

En base a la información arriba detallada y en base a su experiencia y conocimientos, diga cuál es la probabilidad de que cada una de las tres tecnologias de los recursos humanos podrian implementarse y tener exito en su empresa para ser aplicadas a NIVEL GERENCIAL Y NIVEL OBRERO (solo un circulo para cada tecnología).

	No Hay Probabilidad De Exito					Muy Probable De Exito	
1. Programas de Capacitación							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7
2. Sistemas para evaluar el personal							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7
3. Técnicas de desarrollo organizacional							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7

Información

	Existente	No Existente
1. Ley de Estabilidad Laboral ····················X		
2. Sindicato en la Empresa ···X		

	Bajo	Moderada-mente Bajo	Promedio	Moderada-mente Alto	Alto
3. Inflación _·····································X					X
4. Número de empleados bajo la Ley de Indemnización (Pre-'62)····························X			X		
5. La calidad de los obreros ·······························X				X	
6. Compromiso de la Gerencia hacia DRH ·····················X			X		
7. Presupuesto para DRH·································X				X	
8. La calidad de los gerentes ·································X					X
9. Oportunidad para progresar y desarrollar·····················X	X				
10. Disponibilidad de recursos locales ···························X				X	
11. Condiciones financieras de la empresa··························X					X
12. Condiciones del mercado ·····················X	X				
13. Compromiso de los empleados hacia la empresa························X					X
14. Autonomía en tomar decisiones para el DRH ·····················X			X		
15. Incertidumbre y/o inestabilidad política ·······················X			X		
16. Utilidad de TDRH ·······················X			X		

Decisiones

En base a la información arriba detallada y en base a su experiencia y conocimientos, diga cuál es la probabilidad de que cada una de las tres tecnologias de los recursos humanos podrian implementarse y tener exito en su empresa para ser aplicadas a NIVEL GERENCIAL Y NIVEL OBRERO (solo un circulo para cada tecnología).

	No Hay Probabilidad De Exito					Muy Probable De Exito	
1. Programas de Capacitación							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7
2. Sistemas para evaluar el personal							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7
3. Técnicas de desarrollo organizacional							
Nivel Gerencial	1	2	3	4	5	6	7
Nivel Obrero	1	2	3	4	5	6	7

CARACTERISTICAS INDIVIDUALES Y ORGANIZACIONALES

Para ayudar al análisis estadístico de los datos, por favor, proporcione la siguiente información acerca de su empresa y de Ud. ESTA INFORMACION SERA CONFIDENCIAL.

1. Nombre de la empresa: _____

2. Título de su posición actual en la empresa: _____

3. Tipo de industria o actividad de su empresa (marque uno):

   ____ a. Finanzas y/o Seguros

   ____ b. Productos químicos y/o farmacéuticos

   ____ c. Petroleo

   ____ d. Textiles

   ____ e. Representante de Fábricas y/o Distribuidor

   ____ f. Llantas (neumáticos)

   ____ g. Minería

   ____ h. Ventas al por menor

   ____ i. Otras (especificar) _____

4. Tiempo que lleva en la presente posición: _____   _____
                                              años   meses

5a. Años de existencia de la compañia: _____
5b. Cuántos años ha estado operando en el Perú: _____

6. Segun los propietarios de la empresa, ésta es (marcar uno):

   ____ a. Empresa multinacional (dueños extranjeros)

   ____ b. Empresa Peruana

   ____ c. Empresa mixta

7. Aproximadamente cuántos niveles de supervisión hay en su empresa (en el Perú) contando desde el primer nivel en la empresa hasta el Presidente de la empresa (anotar el número): _____

8. Cuántos niveles de supervisión están sobre su posición (anotar el número): _____

9. Cuántos empleados subalternos se reportan a Ud. directamente (anotar el número): _____

10. Cuál es el total de personas (ejecutivos y trabajadores) que trabajan en su empresa (anotar el número): _____

11. Cómo describiría Ud. la estructura existente en su empresa para tomar las decisiones (marqué uno):

   ____ a. Individual/Centralizada
   ____ b. Jerárquica
   ____ c. Decisiones en Grupo
   ____ d. Bajo control familiar

   ____ e. Sujeta a presiones y/o consideraciones especiales
   ____ f. Otras (especificar) _____

12. Cuántos empleados en su empresa catalogaría Ud. como "profesionales" (anotar el número): _____

13. Su edad:_____

14a. Su nivel máximo de educación:_____

14b. Si tiene título universitario, indique qué carrera estudió: _____

---

15. Cuál de los siguientes conceptos describe mejor la actitud de su EMPRESA hacia nuevas técnicas en la dirección empresarial.

____ a. Pionera o avanzada en el uso de nuevas técnicas empresariales.

____ b. Entre las primeras en adoptar nuevas técnicas, pero no la primera.

____ c. Adopta nuevas técnicas, pero, solo cuando se convierten en reglas generales.

____ d. Normalmente entre las últimas en adoptar nuevas técnicas.

____ e. Nunca adopta nuevas técnicas.

16. Cuál de los siguientes conceptos mejor describiría la actitud del GERENTE más influyente, hacia la adopción de nuevas técnicas en la administración de su empresa (marcar uno):

____ a. Fuertemente inclinado a buscar y usar nuevas técnicas de admin stración.

____ b. Moderada tendencia a adoptar nuevas técnicas.

____ c. Alguna inclinación a adoptar nuevas técnicas

____ d. Muy poca inclinación a adoptar nuevas técnicas

____ e. Nunca adopta nuevas técnicas de administración de negocios.

17. La empresa es afectada por la Ley de Estabilidad Laboral (subrayar uno):

                  Si   No

18. Existe sindicato en la empresa (subrayar uno): <u>Si</u>   No

19. En los siguientes items indique en el espacio disponible hasta qué grado cada uno de estos factores <u>realmente</u> existen en su empresa o cree Ud. que existen en el país. Ver Definiciones. Use la siguiente escala y sólo use los números.

Bajo	Moderadamente bajo	Promedio	Moderadamente alto	Alto
1	2	3	4	5

____ a. Número de empleados bajo la Ley de Indemnización

____ b. La calidad de los obreros

____ c. Compromiso de la Gerencia hacia las TDRH

____ d. Presupuesto para las TDRH

____ e. La calidad de los gerentes

____ f. Oportunidad para progreso y desarrollo

____ g. Disponibilidad de recursos locales para las TDRH

____ h. Condiciones financieras de la empresa

____ i. Condiciones del mercado

____ j. Compromiso de los empleados hacia la empresa

____ k. Autonomia en tomar decisiones para el DRH

____ l. Incertidumbre y/o inestabilidad politica

____ m. Utilidad de TDRH

____ n. Inflación

APPENDIX F

Back-Translated Version of Spanish Questionnaire

Old Dominion University • (804) 440-3000 • Norfolk, VA 23508

SURVEY

HUMAN RESOURCES TECHNOLOGY (HRT)

DEVELOPED BY:

EDUARDO SALAS

SPONSORED BY:

CENTER FOR APPLIED PSYCHOLOGICAL STUDIES
OLD DOMINION UNIVERSITY
NORFOLK, VIRGINIA
U.S.A.

1983

Old Dominion University is an affirmative action/equal opportunity institution.

QUESTIONNAIRE INSTRUCTIONS

On the following pages, please complete the two parts of the questionnaire. DO NOT BE FOOLED BY THE THICKNESS OF THE QUESTIONNAIRE. ALL TWO PARTS WILL REQUIRE ABOUT ONE HOUR.

Part I asks several questions regarding the factors that, in your organization, influence the implementation or use of human resources technologies. It also contains 30 hypothetical situations and you are asked to make judgements regarding the likelihood that certain human resource technologies could be implemented in your organization, given the factors described in each situation.

Part II consists of a brief summary of your personal background and your organizations characteristics.

Some items may be easier for you to answer than others. DO NOT SPEND A LOT OF TIME ON ANY SINGLE ITEM. Use your best judgement and continue, but please answer ALL the items.

THANK YOU

For the following statements, decide which alternative most nearly represents the way you see things in your job and in your organization. Indicate in the space provided, the number on the scale below that shows how much you agree or disagree with each statement.

Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
1	2	3	4	5

_____ 1. This organization is open and responsive to change.

_____ 2. Management has trust in the people responsible and in charge of adopting and using human resources technologies.

_____ 3. In my department, my job requires me to work closely with other individuals in related jobs

_____ 4. In this organization decisions are made at those levels where the most adequate information is available.

_____ 5. In my department, supervisors often let us know how well they think we are performing in our jobs.

_____ 6. Managers are encouraged to take reasonable risks in their efforts to increase the development of the human resources of this organization.

_____ 7. We are often trying out new ideas to better manage our people.

_____ 8. I do not think people should be distinguished from one another in terms of their performance or productivity.

_____ 9. There is little chance to learn additional skill and information about the job while being at work.

_____ 10. Much of the company's activities are guided by written rules and procedures.

_____ 11. Organizational development systems have been fully implemented in this organization.

_____ 12. Employees in this organization do not care about their growth and development.

_____ 13. Training programs to increase supervisory skills have been fully implemented in this organization.

_____ 14. My job can be done adequately by a person working alone without talking to or checking with other people.

Please continue to use the following responses for the 344 questions below.

Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
1	2	3	4	5

_____ 15. This organization is effective in adapting to the external environment.

_____ 16. The organization allows many opportunities for me to increase my skills and knowledge of job-related information.

_____ 17. On my job I do not have the chance to carry out an entire piece of work from beginning to end.

_____ 18. The organization denies me any chance to use my personal initiative or judgement in carrying out work tasks.

_____ 19. My job is one where a lot of other people in other units can be affected by how well our work gets done.

_____ 20. Performance appraisal systems have been extensively used in this organization.

_____ 21. My job requires me to use a number of complex or high level skills.

_____ 22. The supervisors and workers of other units almost never give me any "feedback" about how well I am doing my work.

_____ 23. Just doing the work required by my job provides many chances for me to figure out how well I am doing.

_____ 24. This organization has been effective in its management of human resources.

_____ 25. My job is simple and repetitive.

_____ 26. This organization permits me to decide on my own how to go about doing the work.

_____ 27. The results of my work are likely to affect other individuals in my department.

_____ 28. This organization is committed to the development of human resources.

Please continue to use the following responses for the 345 questions below.

Strongly Disagree	Disagree	Not Sure	Strongly Agree	Agree
1	2	3	4	5

_____ 29. My job provides very few clues about whether or not I am performing well.

_____ 30. The organization requires you to do many different things at work, using a variety of your skills and talents.

_____ 31. This organization provides opportunities for individual growth and development.

_____ 32. Management attracts and retain high-level personnel.

_____ 33. Managers let you know how well you are doing on your job.

_____ 34. My job requires a lot of cooperative work with other units in this organization.

_____ 35. Management encourages people at all levels to give their best effort.

_____ 36. The organization allows you to learn new skills and information related to your work.

_____ 37. The talents of employees are compatible to the demands of their job.

_____ 38. The organization gives me considerable opportunity for independence and freedom in how I do the work.

_____ 39. This organization can be described as flexible and continually adapting to change.

_____ 40. The organization provides me with the chance to completely finish the pieces of work I begin.

_____ 41. The organization has a real interest in the welfare and happiness of those who work here.

_____ 42. The speed of technological change creates human resources problems in this organization.

_____ 43. The decisions about using human resources technologies in this organization are based on adequate information.

TRAINING PROGRAM

Below are listed factors that may affect management decisions to implement or use a **TRAINING PROGRAM** to develop human resources in your organization. Assume that you are implementing (or have been doing so for the past few months) a **TRAINING PROGRAM** to improve the supervisory skills of managers.

For each factor first decide whether **AT THE PRESENT TIME** it facilitates or hinders implementation. Then circle a number on the respective scale (5 = most and 1 = least) to show how much it facilitates or hinders. If neutral or not applicable, circle the appropriate letters. Make sure you assess all factors and circle only one alternative per factor.

5 = Maximum   1 = Minimum

		FACILITATES How Much	NEUTRAL	HINDERS How Much	NOT APPLICABLE
1.	Law of Labor Stability	1 2 3 4 5	N	1 2 3 4 5	N/A
2.	Union in company	1 2 3 4 5	N	1 2 3 4 5	N/A
3.	Existing inflation	1 2 3 4 5	N	1 2 3 4 5	N/A
4.	Number of people under Law of Indemnification	1 2 3 4 5	N	1 2 3 4 5	N/A
5.	Quality of blue-collar worker	1 2 3 4 5	N	1 2 3 4 5	N/A
6.	Top management commitment to HRD	1 2 3 4 5	N	1 2 3 4 5	N/A
7.	Budget for development of HRD	1 2 3 4 5	N	1 2 3 4 5	N/A
8.	Quality of Managers	1 2 3 4 5	N	1 2 3 4 5	N/A
9.	Opportunity for growth and development in company	1 2 3 4 5	N	1 2 3 4 5	N/A
10.	Local resources to support use of HRT	1 2 3 4 5	N	1 2 3 4 5	N/A
11.	Existing financial conditions of the company	1 2 3 4 5	N	1 2 3 4 5	N/A
12.	Existing market conditions	1 2 3 4 5	N	1 2 3 4 5	N/A
13.	Employees commitment to company	1 2 3 4 5	N	1 2 3 4 5	N/A
14.	Decision-making autonomy for development of HRT	1 2 3 4 5	N	1 2 3 4 5	N/A
15.	Existing political uncertainty/instability	1 2 3 4 5	N	1 2 3 4 5	N/A
16.	Utility of HRT	1 2 3 4 5	N	1 2 3 4 5	N/A
	Others (please specify)				
17.	_____	1 2 3 4 5	N	1 2 3 4 5	N/A
18.	_____	1 2 3 4 5	N	1 2 3 4 5	N/A
19.	_____	1 2 3 4 5	N	1 2 3 4 5	N/A

Below are listed factors that may affect managements decisions to implement
or use a PERFORMANCE MANAGEMENT SYSTEM (such as a performance appraisal
when you give merit increases) to develop the human resources in your
organization. Assume that you are implementing (or have been doing so for
the past few months) a PERFORMANCE MANAGEMENT SYSTEM for managers in your
organization.

For each factor first decide whether AT THE PRESENT TIME it facilitates or
hinders implementation. Then circle a number on the respective scale (5 =
most and 1 = least) to show how much it facilitates or hinders. If neutral
or not applicable, circle the appropriate letters. Make sure you assess
all factors and circle only one alternative per factor.

5 = Maximum   1 = Minimum

		FACILITATES How Much	NEUTRAL	HINDERS How Much	NOT APPLICABLE
1.	Law of Labor Stability	1 2 3 4 5	N	1 2 3 4 5	N/A
2.	Union in company	1 2 3 4 5	N	1 2 3 4 5	N/A
3.	Existing inflation	1 2 3 4 5	N	1 2 3 4 5	N/A
4.	Number of people under Law of Indemnification	1 2 3 4 5	N	1 2 3 4 5	N/A
5.	Quality of blue-collar worker	1 2 3 4 5	N	1 2 3 4 5	N/A
6.	Top management commitment to HRD	1 2 3 4 5	N	1 2 3 4 5	N/A
7.	Budget for development of HRD	1 2 3 4 5	N	1 2 3 4 5	N/A
8.	Quality of Managers	1 2 3 4 5	N	1 2 3 4 5	N/A
9.	Opportunity for growth and development in company	1 2 3 4 5	N	1 2 3 4 5	N/A
10.	Local resources to support use of HRT	1 2 3 4 5	N	1 2 3 4 5	N/A
11.	Existing financial conditions of the company	1 2 3 4 5	N	1 2 3 4 5	N/A
12.	Existing market conditions	1 2 3 4 5	N	1 2 3 4 5	N/A
13.	Employees commitment to company	1 2 3 4 5	N	1 2 3 4 5	N/A
14.	Decision-making autonomy for development of HRT	1 2 3 4 5	N	1 2 3 4 5	N/A
15.	Existing political uncertainty/instability	1 2 3 4 5	N	1 2 3 4 5	N/A
16.	Utility of HRT	1 2 3 4 5	N	1 2 3 4 5	N/A
	Others (please specify)				
17.	_____	1 2 3 4 5	N	1 2 3 4 5	N/A
18.	_____	1 2 3 4 5	N	1 2 3 4 5	N/A
19.	_____	1 2 3 4 5	N	1 2 3 4 5	N/A

Below are listed factors that may affect managements decisions to implement
or use a ORGANIZATIONAL DEVELOPMENT program (such as participative or group
decision-making, T-groups; transactional analysis) to improve
organizational effectiveness. Assume that you are implementing (or have
been doing so for the past few months) an ORGANIZATIONAL DEVELOPMENT
program to improve supervisory skills among managers.

For each factor first decide whether AT THE PRESENT TIME it facilitates or
hinders implementation. Then circle a number on the respective scale (5 =
most and 1 = least) to show how much it facilitates or hinders. If neutral
or not applicable, circle the appropriate letters. Make sure you assess
all factors and circle only one alternative per factor.

5 = Maximum   1 = Minimum

		FACILITATES How Much	NEUTRAL	HINDERS How Much	NOT APPLICABLE
1.	Law of Labor Stability	1 2 3 4 5	N	1 2 3 4 5	N/A
2.	Union in company	1 2 3 4 5	N	1 2 3 4 5	N/A
3.	Existing inflation	1 2 3 4 5	N	1 2 3 4 5	N/A
4.	Number of people under Law of Indemnification	1 2 3 4 5	N	1 2 3 4 5	N/A
5.	Quality of blue-collar worker	1 2 3 4 5	N	1 2 3 4 5	N/A
6.	Top management commitment to HRD	1 2 3 4 5	N	1 2 3 4 5	N/A
7.	Budget for development of HRD	1 2 3 4 5	N	1 2 3 4 5	N/A
8.	Quality of Managers	1 2 3 4 5	N	1 2 3 4 5	N/A
9.	Opportunity for growth and development in company	1 2 3 4 5	N	1 2 3 4 5	N/A
10.	Local resources to support use of HRT	1 2 3 4 5	N	1 2 3 4 5	N/A
11.	Existing financial conditions of the company	1 2 3 4 5	N	1 2 3 4 5	N/A
12.	Existing market conditions	1 2 3 4 5	N	1 2 3 4 5	N/A
13.	Employees commitment to company	1 2 3 4 5	N	1 2 3 4 5	N/A
14.	Decision-making autonomy for development of HRT	1 2 3 4 5	N	1 2 3 4 5	N/A
15.	Existing political uncertainty/instability	1 2 3 4 5	N	1 2 3 4 5	N/A
16.	Utility of HRT	1 2 3 4 5	N	1 2 3 4 5	N/A
	Others (please specify)				
17.	_____	1 2 3 4 5	N	1 2 3 4 5	N/A
18.	_____	1 2 3 4 5	N	1 2 3 4 5	N/A
19.	_____	1 2 3 4 5	N	1 2 3 4 5	N/A

The following definitions are provided so that everybody can
interpret the terms used in the questionnaire in the same
way. PLEASE TEAR OUT THESE THREE SHEETS SO THAT YOU CAN
REFER TO THEM WHILE ANSWERING QUESTIONS. THESE DEFINITIONS
PROVIDE ANCHORS FOR THE LEVELS PRESENTED IN THE HYPOTHETICAL
SITUATIONS.

1. LAW OF LABOR STABILITY.-

   Applies means that the law exists and regulates
   organizational practices in Peru.
   Not applicable means law does not exist and therefore,
   does not affect organizational practices in Peru.

2. UNION.- The organization of workers.

   Applies means that the company has a union.
   Not applicable means the company has no union.

3. INFLATION.- The rise in cost of goods and services. To
   provide a common standard we will define as follows:

   High inflation as above 150%,
   Moderate as 50-90%,
   Low as less than 20%.

4. NUMBER OF EMPLOYEES UNDER LAW OF INDEMNIFICATION.-

   High means the organization has a large pool of employees
   under the law (pre-'62).
   Low means organizations have a very low number of
   employees regulated under such law (post '62).

5. QUALITY OF THE BLUE-COLLAR WORKERS.- Refers to the
   overall quality of the worker in terms of their
   educational level, technical skills, cultural background,
   socio-economic status, responsibility, productivity,
   attitude, independence of action, ambitions and political
   tendencies.

   High level means the organization has one of the best pool
   of workers among organizations in Peru.
   Low level means workers have no education, low
   productivity, to political, etc.

6. TOP MANAGEMENT COMMITMENT TO HRD.- Refers to the fact
   that the higher levels of management
   support/encourage/require the development of human
   resources in your organization.

   High level will mean strong support.
   Low level means that the management does not care much
   about implementing/using HRTs.

7. BUDGET FOR DEVELOPMENT OF HUMAN RESOURCES.- Refers to the
   company having a separate budget for the development of

human resources, that is, money specifically allocated to implement/use these technologies.

High level will mean a relatively large sum of money allocated to this efforts as compared to other Peruvian organizations.

Low level means that little or no resources are allocated.

8. QUALITY OF MANAGERS.- Refers to the overall quality of managers in your organization with respect to their supervisory skills, adequacy of training, responsibility, decision-making, initiative, autonomy, etc.

High level means skills and resources among managers are the best in your organization, as compared to other Peruvian businesses.
Low level means the skills and resources among managers are deficient.

9. OPPORTUNITY FOR GROWTH AND DEVELOPMENT IN THE COMPANY.- Means that in the organization there are opportunities for individual achievement, enhancement of an employee's skills and knowledges, and upward mobility.

High means the organization provides these conditions.
Low means organization does not provide these conditions to employees.

10. LOCAL RESOURCES TO SUPPORT USE OF HRT.- Refers to the organization having available the assistance of universities, technical schools, consultants to aid in the implementation/use of HRTs.

High level mean those resources are available.
Low level means that none are available.

11. FINANCIAL CONDITION OF COMPANY.- Refers to financial/economic indicators of company's condition, such as sales, profits, payments of credits.

High means that the indicators are optimal for the conduct of the company's business, and that it is unquestionably solvent.
Low means the financial condition is weak, not solvent, and imposes serious constraints upon the conduct of the company's business.

12. MARKET CONDITIONS.- Refers to absence of price control, open competition, exportation and importation without restrictions.

High level means the conditions are highly favorable for the autonomous conduct of the company's business.
Low level means many external controls restrict the freedom of operation of the business and inhibit profits and growth.

13. EMPLOYEES COMMITMENT TO COMPANY.- The organization has employees who are loyal and identify with the organization's goals and objectives.

High level means extremely strong commitment to the organization as compared to other Peruvian businesses. Low means little or no commitment.

14. DECISION-MAKING AUTONOMY FOR DEVELOPMENT OF HRT.- Manager with adequate information can make a decision to implement/use an HRT without consulting higher levels of management. Does not need prior approval.

High level means a great deal of autonomy and power for decisions. Low means no autonomy or power.

15. POLITICAL UNCERTAINTY/INSTABILITY.- The organization is constantly worried about who is in power and for how long. Consequently there is little long-term planning within the company.

High level means extreme uncertainty. Low level means "no problem".

16. UTILITY OF HRT.- Refers to compatability of the HRT with the organizations goals, objectives, purposes and technolgy.

High level means HRT is useful/beneficial to the organization's short and long term business practice. Low level means that HRT is not useful/beneficial to the organization.

INSTRUCTIONS FOR HYPOTHETICAL SITUATIONS

The purpose of this section is to obtain your judgement of the likelihood of using human resources technologies in 15 simulated situations. Various factors that might affect your determination are presented to assist your decision.

In your assessment of the hypothetical situations, please be guided by the following general instructions:

1. Place the Definitions (attached) in front of you to make the process easier.

2. Assume that you are a manager in a decision-making position in your company.

3. SOME FACTORS WILL CARRY MORE WEIGHT THAN OTHERS IN YOUR DECISION; THEY ARE NOT ALL EQUALLY IMPORTANT OR INFLUENTIAL.

4. Do not go back to check earlier decisions or situations.

5. Consider each situation as being unrelated to all other situations presented.

6. There are no correct or incorrect answers.

7. Observe that some factors are given in the form of "low", "moderately low", etc., others in the form of "applies" or "not applicable".

8. In providing your decisions at the bottom of each page, please consider the full range of the given scale.

9. Note that you only have to make SIX decisions on each page and the first part is only information.

10. Note that 3 decisions are for the MANAGERIAL LEVEL and 3 are for the BLUE-COLLAR EMPLOYEE LEVEL.

THANK YOU FOR YOUR COOPERATION

PLEASE BEGIN

HYPOTHETICAL SITUATION 01

Information

		Applies	Not Applicable
1.	Law of Labor Stability.....................................		X
2.	Union in company..........................	X	

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation...					X
4.	Number of people under Law of Indemnification.............	X				
5.	The quality of blue-collar workers......................................					X
6.	Top-management commitment to HRD......................................				X	
7.	Budget for development of human resources.................................					X
8.	The quality of managers...................		X			
9.	Opportunity for growth and development in company.......................					X
10.	Local resources to support use of HRT.....................................				X	
11.	Financial conditions of company.......................................					X
12.	Market conditions......................................					X
13.	Employees commitment to company....................................		X			
14.	Decision-making autonomy for development of HRT...................		X			
15.	Political uncertainty/instability...........................					X
16.	Utility of HRT...........................		X			

Decisions

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **MANAGERIAL LEVEL** and at **BLUE-COLLAR LEVEL** (circle one number for each technology).

	Not Likely to Succeed				Very Likely to Succeed		
1. Training Programs							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7
2. Performance Management Systems							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7
3. Organizational Development Efforts							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7

Information

		Applies	Not Applicable
1.	Law of Labor Stability................................		X
2.	Union in company.............................	X	

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation...................................		X			
4.	Number of people under Law of Indemnification.......................		X			
5.	The quality of blue-collar workers..				X	
6.	Top-management commitment to HRD..					X
7.	Budget for development of human resources.........................		X			
8.	The quality of managers....................................					X
9.	Opportunity for growth and development in company....................				X	
10.	Local resources to support use of HRT.....................................					X
11.	Financial conditions of company.....................................			X		
12.	Market conditions..				X	
13.	Employees commitment to company......................................			X		
14.	Decision-making autonomy for development of HRT....................................				X	
15.	Political uncertainty/instability..................		X			
16.	Utility of HRT............................		X			

Decisions

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **MANAGERIAL LEVEL** and at **BLUE-COLLAR LEVEL** (circle one number for each technology).

	Not Likely to Succeed					Very Likely to Succeed	
1. Training Programs							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7
2. Performance Management Systems							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7
3. Organizational Development Efforts							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7

Information

		Applies	Not Applicable
1.	Law of Labor Stability		X
2.	Union in company	X	

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation	X				
4.	Number of people under Law of Indemnification					X
5.	The quality of blue-collar workers				X	
6.	Top-management commitment to HRD					X
7.	Budget for development of human resources				X	
8.	The quality of managers					X
9.	Opportunity for growth and development in company					X
10.	Local resources to support use of HRT				X	
11.	Financial conditions of company					X
12.	Market conditions	X				
13.	Employees commitment to company		X			
14.	Decision-making autonomy for development of HRT	X				
15.	Political uncertainty/instability	X				
16.	Utility of HRT			X		

Decisions

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **MANAGERIAL LEVEL** and at **BLUE-COLLAR LEVEL** (circle one number for each technology).

	Not Likely to Succeed					Very Likely to Succeed	
1. Training Programs							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7
2. Performance Management Systems							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7
3. Organizational Development Efforts							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7

HYPOTHETICAL SITUATION 04

Information

		Applies	Not Applicable
1.	Law of Labor Stability		X
2.	Union in company		X

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation			X		
4.	Number of people under Law of Indemnification			X		
5.	The quality of blue-collar workers			X		
6.	Top-management commitment to HRD				X	
7.	Budget for development of human resources		X			
8.	The quality of managers					X
9.	Opportunity for growth and development in company	X				
10.	Local resources to support use of HRT	X				
11.	Financial conditions of company	X				
12.	Market conditions		X			
13.	Employees commitment to company		X			
14.	Decision-making autonomy for development of HRT	X				
15.	Political uncertainty/instability					X
16.	Utility of HRT		X			

Decisions

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **MANAGERIAL LEVEL** and at **BLUE-COLLAR LEVEL** (circle one number for each technology).

	Not Likely to Succeed					Very Likely to Succeed	
1. Training Programs							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7
2. Performance Management Systems							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7
3. Organizational Development Efforts							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7

Information

		Applies	Not Applicable
1.	Law of Labor Stability		X
2.	Union in company	X	

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation		X			
4.	Number of people under Law of Indemnification				X	
5.	The quality of blue-collar workers				X	
6.	Top-management commitment to HRD					X
7.	Budget for development of human resources	X				
8.	The quality of managers	X				
9.	Opportunity for growth and development in company					X
10.	Local resources to support use of HRT	X				
11.	Financial conditions of company					X
12.	Market conditions					X
13.	Employees commitment to company					X
14.	Decision-making autonomy for development of HRT					X
15.	Political uncertainty/instability				X	
16.	Utility of HRT		X			

Decisions

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **MANAGERIAL LEVEL** and at **BLUE-COLLAR LEVEL** (circle one number for each technology).

	Not Likely to Succeed					Very Likely to Succeed	
1. Training Programs							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7
2. Performance Management Systems							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7
3. Organizational Development Efforts							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7

HYPOTHETICAL SITUATION 06

Information

		Applies	Not Applicable
1.	Law of Labor Stability	X	
2.	Union in company	X	

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation	X				
4.	Number of people under Law of Indemnification	X				
5.	The quality of blue-collar workers	X				
6.	Top-management commitment to HRD					X
7.	Budget for development of human resources					X
8.	The quality of managers					X
9.	Opportunity for growth and development in company				X	
10.	Local resources to support use of HRT				X	
11.	Financial conditions of company					X
12.	Market conditions					X
13.	Employees commitment to company				X	
14.	Decision-making autonomy for development of HRT		X			
15.	Political uncertainty/instability				X	
16.	Utility of HRT					X

Decisions

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **MANAGERIAL LEVEL** and at **BLUE-COLLAR LEVEL** (circle one number for each technology).

	Not Likely to Succeed					Very Likely to Succeed	
1. Training Programs							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7
2. Performance Management Systems							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7
3. Organizational Development Efforts							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7

Information

		Applies	Not Applicable
1.	Law of Labor Stability.....................X		
2.	Union in company...X		

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation...X					
4.	Number of people under Law of Indemnification...............................X					
5.	The quality of blue-collar workers...X					
6.	Top-management commitment to HRD..............................X					
7.	Budget for development of human resources...........................X					
8.	The quality of managers...................X					
9.	Opportunity for growth and development in company...................................X					
10.	Local resources to support use of HRT.....................X					
11.	Financial conditions of company...X					
12.	Market conditions...X					
13.	Employees commitment to company...........................X					
14.	Decision-making autonomy for development of HRT.........X					
15.	Political uncertainty/instability...................X					
16.	Utility of HRT...X					

Decisions

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **MANAGERIAL LEVEL** and at **BLUE-COLLAR LEVEL** (circle one number for each technology).

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1. Training Programs							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7
2. Performance Management Systems							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7
3. Organizational Development Efforts							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7

Information

		Applies	Not Applicable
1.	Law of Labor Stability.............................		X
2.	Union in company............................	X	

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation.................................			X		
4.	Number of people under Law of Indemnification............................				X	
5.	The quality of blue-collar workers.........................	X				
6.	Top-management commitment to HRD.............................	X				
7.	Budget for development of human resources......................................					X
8.	The quality of managers..................................					X
9.	Opportunity for growth and development in company.......................................					X
10.	Local resources to support use of HRT.......................................				X	
11.	Financial conditions of company.......................................				X	
12.	Market conditions..............................				X	
13.	Employees commitment to company......................................				X	
14.	Decision-making autonomy for development of HRT..					X
15.	Political uncertainty/instability........................			X		
16.	Utility of HRT...					X

Decisions

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **MANAGERIAL LEVEL** and at **BLUE-COLLAR LEVEL** (circle one number for each technology).

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Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7
3. Organizational Development Efforts							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7

Information

		Applies	Not Applicable
1.	Law of Labor Stability.....................	X	
2.	Union in company...		X

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation...					X
4.	Number of people under Law of Indemnification........................		X			
5.	The quality of blue-collar workers...				X	
6.	Top-management commitment to HRD.......................................					X
7.	Budget for development of human resources...........................		X			
8.	The quality of managers.....................................				X	
9.	Opportunity for growth and development in company........	X				
10.	Local resources to support use of HRT.......................................				X	
11.	Financial conditions of company...				X	
12.	Market conditions...................................				X	
13.	Employees commitment to company					X
14.	Decision-making autonomy for development of HRT.........	X				
15.	Political uncertainty/instability................................				X	
16.	Utility of HRT.............................		X			

Decisions

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **MANAGERIAL LEVEL** and at **BLUE-COLLAR LEVEL** (circle one number for each te‑hnology).

	Not Likely to Succeed					Very Likely to Succeed	
1. Training Programs							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7
2. Performance Management Systems							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7
3. Organizational Development Efforts							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7

Information

		Applies	Not Applicable
1.	Law of Labor Stability.....................X		
2.	Union in company...........................X		

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation..................................X					
4.	Number of people under Law of Indemnification.........................X					
5.	The quality of blue-collar workers....................................X					
6.	Top-management commitment to HRD..X					
7.	Budget for development of human resources............................X					
8.	The quality of managers....................X					
9.	Opportunity for growth and development in company......................X					
10.	Local resources to support use of HRT.....................X					
11.	Financial conditions of company.....................................X					
12.	Market conditions..........................X					
13.	Employees commitment to company....................................X					
14.	Decision-making autonomy for development of HRT.......................X					
15.	Political uncertainty/instability.....................X					
16.	Utility of HRT....................X					

Decisions

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the MANAGERIAL LEVEL and at BLUE-COLLAR LEVEL (circle one number for each technology).

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2. Performance Management Systems							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7
3. Organizational Development Efforts							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7

Information

		Applies	Not Applicable
1.	Law of Labor Stability......................	X	
2.	Union in company...........................	X	

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation...					X
4.	Number of people under Law of Indemnification..............	X				
5.	The quality of blue-collar workers.......................................				X	
6.	Top-management commitment to HRD..					X
7.	Budget for development of human resources..................................			X		
8.	The quality of managers.....................................				X	
9.	Opportunity for growth and development in company...........................			X		
10.	Local resources to support use of HRT.......................................			X		
11.	Financial conditions of company...................................		X			
12.	Market conditions................	X				
13.	Employees commitment to company.........................	X				
14.	Decision-making autonomy for development of HRT.............................				X	
15.	Political uncertainty/instability........	X				
16.	Utility of HRT.....................................			X		

Decisions

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the MANAGERIAL LEVEL and at BLUE-COLLAR LEVEL (circle one number for each technology).

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Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7
2. Performance Management Systems							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7
3. Organizational Development Efforts							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7

Information

		Applies	Not Applicable
1.	Law of Labor Stability		X
2.	Union in company		X

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation			X		
4.	Number of people under Law of Indemnification			X		
5.	The quality of blue-collar workers					X
6.	Top-management commitment to HRD					X
7.	Budget for development of human resources			X		
8.	The quality of managers				X	
9.	Opportunity for growth and development in company				X	
10.	Local resources to support use of HRT					X
11.	Financial conditions of company		X			
12.	Market conditions					X
13.	Employees commitment to company			X		
14.	Decision-making autonomy for development of HRT	X				
15.	Political uncertainty/instability					X
16.	Utility of HRT					X

Decisions

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the MANAGERIAL LEVEL and at BLUE-COLLAR LEVEL (circle one number for each technology).

	Not Likely to Succeed						Very Likely to Succeed
1. Training Programs							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7
2. Performance Management Systems							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7
3. Organizational Development Efforts							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7

Information

		Applies	Not Applicable
1.	Law of Labor Stability		X
2.	Union in company	X	

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation		X			
4.	Number of people under Law of Indemnification					X
5.	The quality of blue-collar workers				X	
6.	Top-management commitment to HRD	X				
7.	Budget for development of human resources	X				
8.	The quality of managers				X	
9.	Opportunity for growth and development in company					X
10.	Local resources to support use of HRT	X				
11.	Financial conditions of company		X			
12.	Market conditions		X			
13.	Employees commitment to company		X			
14.	Decision-making autonomy for development of HRT					X
15.	Political uncertainty/instability		X			
16.	Utility of HRT	X				

Decisions

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **MANAGERIAL LEVEL** and at **BLUE-COLLAR LEVEL** (circle one number for each technology).

	Not Likely to Succeed					Very Likely to Succeed	
1. Training Programs							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7
2. Performance Management Systems							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7
3. Organizational Development Efforts							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7

Information

		Applies	Not Applicable
1.	Law of Labor Stability	X	
2.	Union in company		X

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation		X			
4.	Number of people under Law of Indemnification		X			
5.	The quality of blue-collar workers	X				
6.	Top-management commitment to HRD		X			
7.	Budget for development of human resources			X		
8.	The quality of managers	X				
9.	Opportunity for growth and development in company	X				
10.	Local resources to support use of HRT		X			
11.	Financial conditions of company	X				
12.	Market conditions			X		
13.	Employees commitment to company	X				
14.	Decision-making autonomy for development of HRT				X	
15.	Political uncertainty/instability		X			
16.	Utility of HRT	X				

Decisions

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **MANAGERIAL LEVEL** and at **BLUE-COLLAR LEVEL** (circle one number for each technology).

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Blue-Collar Level	1	2	3	4	5	6	7
2. Performance Management Systems							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7
3. Organizational Development Efforts							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7

Information

		Applies	Not Applicable
1.	Law of Labor Stability	X	
2.	Union in company		X

		Low	Moderate Low	Average	Moderate High	High
3.	Inflation					X
4.	Number of people under Law of Indemnification		X			
5.	The quality of blue-collar workers				X	
6.	Top-management commitment to HRD			X		
7.	Budget for development of human resources				X	
8.	The quality of managers					X
9.	Opportunity for growth and development in company	X				
10.	Local resources to support use of HRT				X	
11.	Financial conditions of company					X
12.	Market conditions				X	
13.	Employees commitment to company					X
14.	Decision-making autonomy for development of HRT		X			
15.	Political uncertainty/instability		X			
16.	Utility of HRT		X			

Decisions

Based upon the information presented above and upon your experience and knowledge, what is the likelihood that each of the three Human Resources Technologies mentioned will be successfully implemented in your organization at the **MANAGERIAL LEVEL** and at **BLUE-COLLAR LEVEL** (circle one number for each technology).

	Not Likely to Succeed					Very Likely to Succeed	
1. Training Programs							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7
2. Performance Management Systems							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7
3. Organizational Development Efforts							
Managerial Level	1	2	3	4	5	6	7
Blue-Collar Level	1	2	3	4	5	6	7

PART II

INDIVIDUAL AND ORGANIZATIONAL CHARACTERISTICS

To help in the statistical analysis of the data, please provide the following information about the company and yourself. THIS INFORMATION WILL BE CONFIDENTIAL.

1. Company name: _____

2. Title of your present position in your company:

_____

3. Type of industry you work for (Check one):

_____ a. Finance and/or   _____ f. Manufacturing
          Insurance   _____ g. Rubber-Tires
_____ b. Chemical and/or   _____ h. Mining
          Pharmaceutical   _____ i. Wholesale and
_____ c. Petroleum   Retail Trade
_____ d. Textiles   _____ j. Other (specify)
_____ e. Manufacturer's Rep.
          and/or Distributor   _____

                                      _____

4. Length of time in current position: _____ _____
                                        years   months

5a. How old is the company? _____
5b. How long has it been in business in Peru? _____

6. The ownership of the company is (Check one):
            _____ a. Multinational (foreign owner)
            _____ b. Peruvian
            _____ c. Mixed

7. Approximately how many levels of supervision are
    there in the company (in Peru) at which you work
    from the first-level supervisor to the head of
    the organization? (Give the number) _____

8. How many levels of supervision are there above
    your position? (Give the number): _____

9. How many employees report to you directly:
    (Give the number): _____

10. How many people (management and non-management)
    work in your company in Peru? (Give the number):

    _____

11. How would you characterize the main decision-
    making structure of the company? (Check one):

    ___ a. Individual/Centralized   ___ e. Political
    ___ b. Hierarchical   Dominance and/or
    ___ c. Group Participation   Special Considera-
    ___ d. Family Dominance   tion
    ___ c. Group Participation   ___ f. Other (Please
                                                 explain)

12. How many employees would you classify as
    "professionals" in the organization? _____

13. Your age: _____

14a. Your highest level of education: _____
14b. If you have a college degree, please indicate area
     of study: _____

15. What term best describes your ORGANIZATION'S
    attitudes toward new management techniques?
    (Check one):

    _____ a. Leader inuse of new techniques of
             management.
    _____ b. Among the first to adopt new techniques.
    _____ c. Likes to adopt a new technique when it
             becomes more or less the general rule.
    _____ d. Usually among the last to adopt a new
             technique.
    _____ e. Never adopts new techniques.

16. What term would best describe the most influential
    MANAGER'S attitude toward new management
    techniques? (Check one):

    _____ a. Very strongly inclined to seek out and
             use new management techniques.
    _____ b. Moderately strong tendency to adopt new
             techniques.
    _____ c. Some tendency to adopt a new technique.
    _____ d. Very little tendency to adopt a new
             technique.
    _____ e. Never adopts new management techniques.

17. Is the organization affected by the Law of Labor
    Stability? (Circle one)   Yes   No

18. Is there a union in the company?   (Circle one)
                                  Yes   No

19. For the following factors indicate in the space provided to what degree each of these <u>actually</u> exist in the organization or country. See Definitions. Use the following scale.

Low	Moderately Low	Average	Moderately High	High
1	2	3	4	5

____ a. Number of people under Law of Indemnification
____ b. The quality of blue-collar workers
____ c. Top-management commitment to HRD
____ d. Budget for development of human resources
____ e. The quality of managers
____ f. Opportunity for growth and development in company
____ g. Local resources to support implement/use of HRT
____ h. Financial conditions of company
____ i. Market conditions
____ j. Employees commitment to company
____ k. Decision-making autonomy for development of HRT
____ l. Political instability/uncertainty
____ m. Utility of HRT
____ n. Inflation