Understanding the Learning Organization:
An Avenue to Meeting Today's Business Challenge

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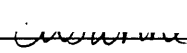in Real Estate Development
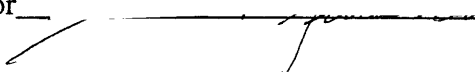
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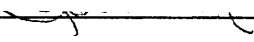Massachusetts Institute of Technology

September 1996

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Submitted to the Department of Urban Studies and Planning
&
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Submitted to the Department of Architecture

on August 1, 1996 in partial fulfillment of the requirements of the
Degree of Master of Science of Real Estate Development

Abstract:

There is a fundamental worldwide shift occurring in the economy which has been described by Peter Drucker as the movement from an industrial society to a knowledge society. This transition represents a move away from the industrial era paradigm which primarily valued physical and financial capital to one which now values human capital. In the new economic reality, the ability of an organization to accelerate and to apply learning will be critical to creating a sustainable competitive advantage. As a result, the concept of "the learning organization" has gained significant attention among managers and academics alike.

This thesis explores current literature on the concept of learning organizations and puts forth a theoretical model for organizational learning While there is a great deal of material on organizational learning, given the limited scope of this thesis, efforts were intentionally focused on material believed to be most relevant to the topic. We do not seek **the** perfect learning organization, for there is no one solution to today's corporate challenges. Instead, we believe that if organizations want to create and support an environment where learning thrives, they must first understand what learning is and the process through which it is created. To do this, a framework has been developed which synthesizes existing models of learning offered by David Kolb, March & Olsen and Daniel Kim. Fundamental to the model of organizational learning is the connection between the individual and the collective. It is a transfer process between the two which we believe holds the key to effective organizational learning.

With an understanding of the learning process, the challenge becomes moving from theoretical constructs to real-world applications. While most managers see the value of capturing and accelerating organizational learning, they are struggling with implementation. Within this context, we discussed the model and the concept of a learning organization with three leaders in the real estate industry. Our field research focused on the real estate industry as that is where our interest lies. We purposefully chose to speak with executives who were involved in management initiatives where 'learning' was a component. Their reaction to the model, the barriers they have encountered and some "first steps" to implementation are explored. We also look outside the real estate industry to examine how two companies have sought to embody the concept of a "learning organization."

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Acknowledgments

Personally, I would like to thank my entire family for their constant support and endless encouragement. Without all of you, my year would have been much more difficult. Elizabeth, thank you for awakening me with your smiles and hugs in the weee morning hours. Hali and Alexander, thank you for rising early to keep me company at breakfast and for sharing what I had missed the previous day. I enjoyed your long waves "goodbye", I was encouraged by your shouts of "get all your work done" and, I was disappointed when I missed story time and other important events, which I did frequently. Jenny, thank you for taking such good care of the kids that I knew I didn't have to worry. Mom, Dad, and Carole, thank you for your belief in me. And finally, thank you Tom for making it all possible. Your understanding and support were truly exceptional.

Thank you, I love you all.   Sue

I believe that one's 'persona' is anchored in the people and experiences which have entered one's life. For me, the people in my life have truly been significant. First, to my parents who provided me with the foundation, love and support to dream anything. Next, to my brothers and sisters and extended family who continue to make my life richer everyday. My father always said that family was the greatest gift anyone could receive, he was right. And then there were those outside the family, who, at the time, probably never realized the impact they were making on my life - Ray Norman, Steven Hurtt, Lou Ercolano, Joe Wood and Wing Chao. There are many individuals not mentioned, know that your support meant a great deal and you are always in my thoughts. Finally, to Rochelle who walked this journey with me. May we walk many more in the years ahead.

Love   Jim

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I
Introduction

With the decline of some well-established firms and the diminishing competitive power of many companies in a burgeoning world market, interest in the concept of learning organizations has increased dramatically. (Nevis, DiBella & Gould, 1993) Interest has built as a result of both the dramatic changes in the economic environment and the ever-increasing frequency at which those changes have occurred. For companies, the evolving environment has created changing sources of competitive advantage. Traditional sources of competitive advantage popularized by Michael Porter, such as proprietary technologies, market niches, and brand images, are less important today than the ability to generate new sources of competitive advantage. (Roth & Senge, 1995)

In order to survive and grow, companies must learn how to adapt faster and faster; if they do not, they will loose out to the economic evolutionary process. (Schein, 1993) Successful companies will be those that develop a sustainable competitive advantage. This advantage will be derived from their ability to learn and to apply learning to enhance organizational performance. This will require developing balanced learning skills necessary to achieve a healthy organizational learning cycle. (Kim, 1989)

Adapting to the new conditions requires managing the learning process. But in order to manage the process, managers must first gain a better understanding of what learning is and of how individuals and organizations learn. Once managers understand how learning occurs, they can create the processes and infrastructure which supports and accelerates the

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process. With a long term commitment and the support of creative leadership, learning organizations can succeed in the demanding environment ahead.

Part II of this thesis describes the concept of learning organizations and explains why the topic is popular and important today. It traces the evolution of the economic environment to better understand the driving forces in the transition from an industrial based society to an information or knowledge based society.

Part III reviews existing literature and theory on individual and organizational learning. A model of experiential learning described by David Kolb has been used as a base to develop a framework for understanding the transfer of knowledge from the individual to the collective. Integral to the transfer process is operational and conceptual learning and the role that reflection must play in balancing learning within the business environment. Dialogue and learning laboratories are suggested as tools to facilitate reflection and, therefore, the transfer process.

As companies attempt to establish learning environments, they are encountering numerous challenges. **Part IV** includes field research interviews with three executives from leading real estate service organizations. The end of this section looks outside the real estate industry to examine how two companies have successfully created environments where learning flourishes.

Part V provides analysis of the learning organization and the learning model presented in this thesis within the context of the field research and case studies.

Part VI presents conclusions. It is our hope that this thesis informs the practitioner's *know-how* (operational learning) with the *know-why* (conceptual learning) necessary to compete in the ever-changing business environment.

II

What is a Learning Organization?

Having explored vast amounts of literature on the topic of learning organizations, it is both

apparent and understandable that there is no one answer to the question, "what is a learning

organization?" In it most basic form, the term *learning organization* implies that a company

is striving to meet today's economic challenges through maximizing the collective mental

and creative abilities of its people.

Literature on the topic contains a plethora of diverse definitions (Dixon, 1994, p. 134,

135), including the following:

> Organizational learning is the intentional use of learning processes at
> the individual, group and system level to continuously transform the
> organization in a direction that is increasingly satisfying to its
> stakeholders. (Dixon, 1994)
>
> ... institutional learning, is the process whereby management teams
> change their shared mental models of their company, their markets,
> and their competitors. (DeGeus, 1988)
>
> Organizational Learning includes both the processes by which
> organizations adjust themselves defensively to reality and the
> processes by which knowledge is used offensively to improve the
> fits between organizations and their environments. (Hedberg, 1981)
>
> Organizational learning is a process in which members of an
> organization detect error or anomaly and correct it by restructuring
> organizational theory of action, embedding the results of their
> inquiry in organizational maps and images. (Argyris and Schon,
> 1978)
>
> A learning organization is one that consciously manages its learning
> processes through an inquiry-driven orientation among all its
> members. (Kim, 1989)
>
> Learning organizations are "...organizations where people
> continually expand their capacity to create the results they truly

desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together. (Senge, 1990)

While the definitions vary tremendously, there are some characteristics common to many proponents of learning organizations. They are:

- An understanding of the dynamic relationship with the external environment versus an internal focus.

- A proactive rather than a reactive approach to learning.

- A recognition that both individual and organizational learning must occur.

- A value for ideas and contributions from all members of the organization and boundaryless access to the appropriate information.

- A shared purpose and vision for the future.

- An environment where change is welcomed and mistakes are seen as learning opportunities.

- Risk taking and questioning are encouraged.

- A place where not just new ideas are formed but also new way of thinking.

The definition adapted for this thesis is that which David Garvin offers in his article, _Building a Learning Organization_ : "a learning organization is an organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights." (1993, p. 80) Garvin is careful to qualify the fact that while new ideas are essential to his definition, they provide only the potential for improvement. It is not until the new ideas are translated into new ways of working that learning occurs.

While all of the aforementioned definitions, to varying degrees, capture the spirit of the learning organization as a concept, it is David Garvin's definition, which we feel, presents

it at its simplest. This simplicity creates a common-ground interpretation between the scholar and the practitioner. In addition, it succinctly embodies Demming's idea of *profound knowledge* which is contingent upon the healthy balance of operational and conceptual learning. The importance of this balance is one of the critical conclusions drawn later in this thesis.

Why is This Topic Important?

In today's economy, "the only certainty is uncertainty." (Nonaka, 1991, p. 96) While it is difficult to predict what the successful companies of the 21st century will look like, there is agreement among many people (Senge, 1990; Argyris, 1991; Kim, 1993; Nonaka, 1991) that they will have to be adaptable to change, fast to respond, and able to learn more quickly than the competition. The concept of the learning organization is important because it may be the only way to achieve a sustainable competitive advantage in the years ahead. (Nonaka, 1991)

Although the objectives of the learning organization are embraced by many managers, there are few real world examples of the concept. Instead, most organizations today are non-adaptive and short lived. "For example, fifty year old corporations represent only two percent of those created and approximately thirty percent of those fifty year old corporations can be expected to disappear within ten years." (Kim, 1993, p.18) Between 1970 and 1993 one third of the Fortune 500 industrials had vanished. (De Geus, 1988) Why have so many companies failed? Because they have not learned how to adapt to changing conditions.

While the ability to learn may mean the difference between success and failure, "most people don't know how to learn." (Argyris, 1991, p. 99) "Organizations today face a degree of complexity that requires intelligence beyond that of any individual. To solve problems in complex systems, we must learn to tap the collective intelligence of groups of knowledgeable people." (Isaacs, 1993, p. 28) Successful companies are those that create new knowledge, disseminate it widely throughout the organization, and quickly embody it in new technologies and products. (Nonaka, 1991) The key to success, therefore, is the ability to learn more quickly than the competition.

The purpose of the learning organization is to learn how to learn, to capture and accelerate individual and organizational learning. The results, says Senge, are superior performance, improved quality, competitive advantage, and an energized work force. (Senge, 1990) By changing the individual and collective mindset, the learning organization can achieve ever increasing returns. It is not only adaptable to change, it proactively promotes change and continuous improvement. Its people think together and form a whole greater than the sum of its parts.

How Did We Get to Where We Are?

While companies have always endeavored to create a competitive advantage in order to establish and maintain success, the methods employed have changed over time. In the post World War II mass production economy, companies competed based on productivity and price. Organizations focused on simplifying and increasing the scale of activity in order to provide large quantities at the lowest cost. The American post-war era experienced abundance on an unprecedented scale. Pent-up demand for consumer goods stimulated resources and produced almost effortless growth. (Carnevale, 1991) During this period,

organizations were typically structured into hierarchies and wages were tied to jobs rather than skill or the final product.

While America was prospering, the Europeans and Japanese were struggling in an effort to duplicate the American mass production system. The competitive liability of small domestic Japanese and European markets made this extremely difficult. The American consumer market was eight times the size of the next largest domestic market. As a result, America's competitors could not emphasize a high volume of standardized products based solely on domestic sales. Consequently, the Europeans and Japanese looked to markets abroad.

With a more diverse customer base, these countries were forced to produce products tailored to different market segments. This meant being flexible and adopting more complex competitive strategies. "To compensate for the inability to match American productivity and scale economies, the Europeans and Japanese focused on quality." (Carnevale, 1991, p. 21) They emphasized effective work processes, flexible organization design and superior integration of human and machine capital. (Carnevale, 1991) In doing so, America's competitors turned weakness into strength and developed qualities which America is struggling to create today.

Since the 1890's, America set the competitive standard in productivity. Yet in the final decades of the 20th century, this began to change. America began loosing market share in many industries and competitors were threatening to outpace them on the productivity front. By the mid 1960's, the scale advantage of the American domestic market was reduced by increased global wealth, new communications technology and the dismantling of trade barriers. The inefficient market where access to capital protected those less able, was eroding. (Pfeffer, 1994)

By the 1970's, America's economic expansion slowed. The country experienced a shortage of energy and raw materials and productivity was on the decline. Over the years, post-war II productivity produced a saturated home market. Americans began to realize that while productivity was necessary for success, by itself, it was no longer sufficient. The traditional bureaucracy with which America so ably competed was good at accumulating and exploiting knowledge, but it was not good at creating new knowledge. American industries, like their competitors, began to expand globally.

The effects of globalization have been significant. By fragmenting demand and requiring the customization of goods for local markets, globalization has increased the intensity and nature of competition. "The sheer complexity of doing business globally means that, sooner or later, organizations will be competing in unfamiliar areas. Amid such pressures, an organization's capacity to leverage its knowledge resources and improve its learning capabilities might well mean the difference between its success and failure. Tomorrow's winners must have mastered the acquisition, dissemination, and assimilation of knowledge gleaned from innovations, successes, and failures within their own and within companies from around the world." (Ready, 1995, p. 67) Amid the pressures of decreased cycle time, tighter margins, improved quality and service, companies are striving for continuous improvements in productivity and responsiveness.

As the twentieth century comes to a close, the scarce resource is no longer capital, it is knowledge, information and expertise. While globalization has opened markets for American producers, the new competitive standards do not play to America's strengths. "The new standards for competition increase the importance of learning." (Carnevale, 1991, p. 97) When the economy was static, strategy could afford to be static also. Competition was a war of position in which "companies occupied competitive space like

squares on a chessboard, building and defending market share in clearly defined product or market segments. The key to competitive advantage was where a company chose to compete. How it chose to compete was also important but secondary, a matter of execution." (Howard, ed., 1993, p. 25)

If competitive advantage is now to be achieved through learning, an understanding of what constitutes learning and the process through which it is achieved is important. **Part III** of this thesis will address this topic, explore the idea of learning and develop a model for organizational learning.

III
A Model for Organizational Learning

Organizations are comprised of individuals, and while an organization can learn independent of any one member, learning ultimately must originate with, and occur through, the individual. (Kim, 1993) The development of an organization, therefore, is the direct result of the development of its people. (Senge, 1990) If organizational learning is contingent upon individual learning, then an understanding of the theories of individual learning is necessary.

Peter Senge makes an important distinction between learning and information which should be emphasized before proceeding further: "learning or knowledge is different from information." (Meen & Keough, 1992, p. 95) Western societies are prone to employ the word "learn" in the context of "taking in information," which implies a passive activity, like reading a book. In comparison, in Japan, one is considered to "learn," "when you know it in your body - literally. There you do not say "I know it" because you heard it, but because you know it is in you." (Meen & Keough, 1992, p. 95) Information is not considered knowledge until it is in your body, not just your head. Like Eastern cultures, Senge believes, "learning or knowledge has a cognitive or intellectual dimension and an action dimension, both of which are intricately intertwined and assessed relative to the needs for action." (Meen & Keough, 1992, p. 95)

Experiential Learning Theory

The dynamic between the intellectual dimension and the action dimension identified by Senge (Meen & Keough, 1992) has strong parallels with experiential learning theory. Experiential learning theory "emphasizes that learning and change result from the integration of concrete emotional experiences with cognitive processes: conceptual analysis and understanding." (Kolb & Fry, 1974, p. 3)

Experiential learning theory, however, "often appears too thoroughly pragmatic for the academic mind, dangerously associated with the disturbing anti-intellectual and vocationalist trends in American society." (Kolb, 1984, p. 3) While it has been criticized in academic circles, the relevance of experiential learning theory for organizational and individual learning rests in the fact that it offers a lifelong process and framework which views life and the workplace "as a learning environment that can enhance and supplement formal education." (Kolb, 1984, p. 4) David Kolb, a well-known scholar on experiential learning theory, writes that it "emphasizes the critical linkages that can be developed between the classroom and the 'real world'...." (Kolb, 1984, p. 4) Interestingly enough, Kolb views experiential learning theory as an integrative holistic method of learning which incorporates cognitive and behavior learning theories with experience and perception, as opposed to being an alternative to these learning theories.

While there are numerous and related streams of thought and research in the field of experiential learning theory, a long tradition of work by three key intellectuals should be considered when examining the topic. They include John Dewey, Jean Piaget and Kurt Lewin.

Experiential Learning Theory - Historical Perspective

The experiential education movement is often attributed to Dewey, who is considered by many, as the most influential educational theorist of the twentieth century. Dewey defines learning as a four stage "continual process of discovering insights, inventing new possibilities for action, producing the actions, and observing the consequences leading to insights." (Meen & Keough, 1992, p. 60) This cycle, of learning from experience, is not viewed so much as a theoretical construct, as much as it is "a statement of fact: People _do learn_ from their experiences." (Kolb, 1984, p. 5, 6) Addressing learning from a didactic perspective Dewey acknowledges the link between the action and intellectual dimensions in his book, _Experience and Education_ . He writes, "there is an intimate and necessary relation between the processes of actual experience and education." (Kolb, 1984, p. 5)

From a philosophical standpoint, both the views of Dewey and Kurt Lewin, the founder of American social psychology, are considered rationalist. Where Dewey's work is considered pragmatic, however, promoting "traditional" experiential learning methods such as apprenticeships, internships and work/study programs, Lewin's work is seen as extending into the discipline of Gestalt psychology.

In fact, Lewin's work is considered to have had a significant influence on the development of social psychology and on the related branch of organizational behavior. Through his research a theme resonates, the integration and balance of theory and practice. A theme which is captured succinctly within his famous quote, "There is nothing so practical as a good theory." (Kolb, 1984, p. 9) Lewin concludes that "learning is best facilitated in an environment where there is dialectic tension and conflict between immediate, concrete

experience and analytic detachment." (Kolb, 1984, p. 9) Similar to Dewey, Lewin views

learning as a four-stage cycle:

> Immediate concrete experience is the basis for observation and reflection.
> These observations are assimilated into a "theory" from which new
> implications for action can be deduced. These implications or hypotheses
> then serve as guides in acting to create new experiences. (Kolb, 1984, p.
> 21)

Lewin's work also illuminates the importance of the value of subjective personal experience

in learning and challenges the idea held by Dewey, and others, that views the acquisition of

knowledge as an impersonal, logical process. For Lewin, individuals reconcile concrete

experience with abstract concepts through a continual process of feedback grounded in

"subjective personal meaning." Ineffectiveness in learning is attributed to insufficient

feedback processes, or an imbalance, between action and observation.

The work of the French developmental psychologist and genetic epistomologist, Jean

Piaget, emphasizes this dimension, the subjective personal experience in learning, by

focusing on cognitive-development processes - "on the nature of intelligence and how it

develops." (Kolb, 1984, p. 12) In working with children, he became more interested in

why children gave certain answers to questions, as opposed to whether the answers were

correct. He concludes; "Intelligence is not an innate internal characteristic of the individual

but arises as a product of the interaction between the person and his or her environment."

(Kolb, 1984, p. 12) For Piaget, learning is dependent upon "the mutual interaction of the

process of *accommodation* (adapting our mental concepts based on experience in the world)

and the process of *assimilation* (integrating our experience into existing mental concepts)."

(Kim, 1993, p. 4)

It is an individual's mental concepts, or as Senge calls them, "mental models," which

significantly determine how, or what, one person learns versus another, despite the fact

that they might be exposed to similar experiences. Senge and Kofman note:

> Our mental models are not like pieces of clothing that we can put on or take
> off. They are basic constitutive structures of our personality. For all intents
> and purposes, most of the time, we are our mental models." (Kofman &
> Senge, 1993, p. 19)

Senge adds that it is through mental models that,

> We understand the world and take action in it based on notions and
> assumptions that may reside deeply in the psyche. We may not be aware of
> the effect these models have on our perception and behavior, yet they have
> the power to move us forward or hold us back. (Senge, 1991, p. 2)

The fifteenth century European view of the world as flat is analogous to a mental model in

which effective learning is restricted. Until this view was upended and proven wrong, all

experiences were explained and understood within the context of this mental model. For

Piaget, if learning is to occur, it requires an individual discipline to turn inward and to

question the basis of a mental model.

Lewin sees learning as being contingent upon a balanced feedback process of action and

observation. Piaget sees learning, or "intelligent adaptation" as he calls it, as a balanced

tension between accommodation and assimilation. In both cases, learning is on-going

process anchored in experience and interpreted within the context of an individual's mental

models, or schemas, which in turn, are subject to modification. Thus, learning can be

viewed as a process of relearning or adopting mental models to capture and explain our

experiences.

Kolb's Experiential Learning Model

Given the theoretical work of Dewey, Lewin and Piaget, it is relatively easy to make the

extension to the experiential learning model developed by David Kolb. Kolb says:

> This perspective on learning is called "experiential" for two reasons.
> The first is to tie it clearly to its intellectual origins in the work of
> Dewey, Lewin, and Piaget. The second reason is to emphasize the
> central role that experience plays in the learning process. This
> differentiates experiential learning theory from rationalist and other
> cognitive theories of learning that tend to give primary emphasis to
> acquisition, manipulation, and recall of abstract symbols, and from
> behavioral learning theories that deny any role for consciousness
> and subjective experience in the learning process. (Kolb, 1984, p.
> 20)

As Kolb describes the model (ref. FIGURE 1), the connection, especially to Dewey and

Lewin, is evident:

> Immediate concrete experience is the basis for observation and
> reflection. These observations are assimilated into a "theory" from
> which new implications for action can be deduced. These
> implications or hypotheses then serve as guides in acting to create
> new experiences. (Kolb, 1973, p. 2)

The description of the model offered by Daniel Kim, however, may more clearly convey

the idea of the continual feedback process or balanced tension which exists between action

and observation and assimilation and accommodation:

> The diagram traces the process through which the brain assimilates
> some new data (environmental response), takes into account the
> memories of past experiences, comes to some conclusion about the
> new piece of information (individual learning), and then stores it
> away (individual mental models). After processing the new
> learning, one may choose to act or simply do nothing (individual
> action). (Chawla & Renesch, ed., 1995, p. 44)
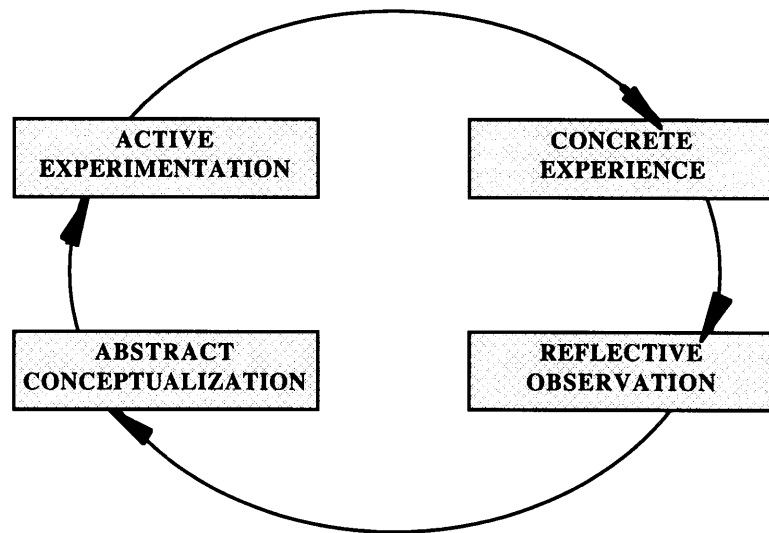
FIGURE 1 - KOLB'S EXPERIENTIAL LEARNING MODEL

While the terms may vary between the two descriptions, the work of both Kim and Kolb is

grounded in experiential learning theory and denote the same dynamics. The term,

"environmental response," used by Kim, equates to, "concrete experience," used

previously by Kolb. Correspondingly, where Kim uses: 1) "individual learning," 2)

"individual mental models," and 3) "individual action," Kolb uses: 1) "reflective

observation," 2) "abstract conceptualization," and 3) "active experimentation." This

situation, the use of different terms for the same dynamic, is not unique when discussing

this topic. For simplicity, throughout this thesis, the four stages of the experiential learning

model will be identified as: 1) *Experience*, 2) *Reflection*, 3) *Theory*, and 4) *Action* (ref.

FIGURE 2).

What is evident within this model is the polarity between "action" and "reflection" and

between "experience" and "theory". This is viewed by Kolb as establishing primary

dimensions, the *concrete* versus the *abstract*, and the *active* versus the *reflective* (ref.

FIGURE 3). It is through the interaction or balanced feedback of these dimensions, as

noted by Piaget and Lewin, that *real learning* takes place.
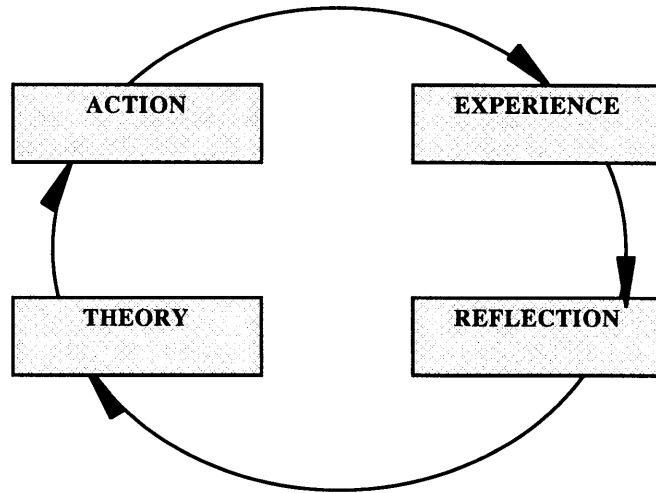
FIGURE 2 - EXPERIENTIAL LEARNING MODEL
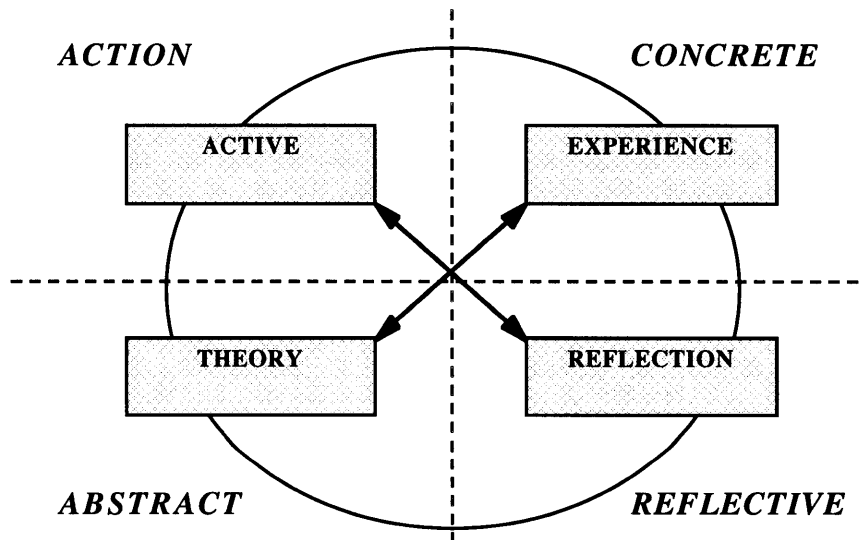
FIGURE 3 - POLARITIES W/I EXPERIENTIAL LEARNING MODEL

As a result of these primary dimensions (*concrete* vs. *abstract*, *active* vs. *reflective*), learning is considered a "tension-filled process." Charles Handy calls the experiential learning model, a "wheel of learning". As he says, "The wheel has four quadrants that, ideally, rotate in sequence as the wheel moves." (Chawla & Renesch, ed., 1995, p. 48)

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The analogy of learning to a wheel is appropriate, for it requires, by its very nature, that the wheel rotate for progress to be made. For learning to occur, each dimension must be given equal weight and engaged in sequential order. Thus, an individual cannot think abstractly and concretely, or act and reflect, at the same time. But as Kolb argues, is this even possible? "How can one act and reflect at the same time? How can one be concrete and immediate and still be theoretical?" (Kolb, 1973, p. 3) It is for this reason that conflict and tension develop - the body is physically unable to act (action quadrant) and reflect (reflection quadrant), or conceptualize (theory quadrant) and experience (experience quadrant) simultaneously.

Like the rotating wheel, learning, or *real learning* as Handy distinguishes, is most effective and efficient when it is balanced and symmetrical. This means that for an individual to be a *real learner*, (s)he needs four different abilities, or learning modes, directly related to the four quadrants of the experiential learning model: 1) Concrete Experience abilities (CE), 2) Reflective Observation abilities (RO), 3) Abstract Conceptualization abilities (AC), and 4) Active Experimentation abilities (AE). As David Kolb and Ronald Fry write, the learner,

> ...must be able to involve himself fully, openly, and without bias in new experiences (CE), he must be able to reflect on and observe these experiences from many perspectives (RO), he must be able to create concepts that integrate his observations into logically sound theories (AC) and he must be able to use these theories to make decisions and solve problems (AE). (Kolb & Fry, 1974, p. 5)

The tension occurs because the learning abilities are polar opposites which means that "the learner, as a result, must continually choose which set of learning abilities he will bring to bear in any specific learning situation." (Kolb & Fry, 1974, p. 5)

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Within the context of this tension, two levels of learning have been identified at which an

individual must be equally adept: operational learning and conceptual learning. (Kim,

1989, p. 5) Kim writes:

> Learning at the *operational* level entails changing behaviors or
> methods of doing things in order to improve performance of a
> particular system. It can involve physical changes in a machine
> setting, procedural changes in a production step, or a psychological
> change in a worker's attitude about his/her job. Learning at the
> *conceptual* level means changing one's mental models about how the
> world works. It includes changes in the way one thinks about a
> problem by reframing it in a different context and exploring the
> implications. (Kim, 1989, p. 5)

Kim describes the fundamental differences between operational learning and conceptual

learning:

> In plain terms, *operational learning* has to do with the actual *doing*
> of things. It represents learning at the procedural level where one
> learns the steps that one must follow to complete a particular task.
> Examples of such learning include filling out entry forms, operating
> a piece of machinery, handling a switchboard, re-tooling a machine,
> etc. Operational learning emphasizes the *how* of doing things.
>
> *Conceptual learning*, on the other hand, emphasizes the *why* of
> doing things - that is, it has to do with the thinking behind the doing
> of things. Conceptual learning deals with issues that challenge the
> very nature or existence of prevailing conditions, procedures, or
> conceptions. The perspective of conceptual learning is not limited
> by the current framing of the issue; it is possible to go beyond and
> reframe the issue in a totally different way. (Kim, 1989, p. 6)

Operational learning can be viewed as the acquisition of a skill, or "know-how," that is, the

ability to perform a task. It is reactive learning; an individual's theory (mental models) are

only altered in response to an exogenous variable. An individual *knows-how* to react to a

situation, but does not *know-why*. "Operational learning produces new or revised routines

that replace old or outworn ones." (Wardman, ed., 1994, p.47) The experiential learning

model is short-circuited; learning takes place without reflection (ref. FIGURE 4).
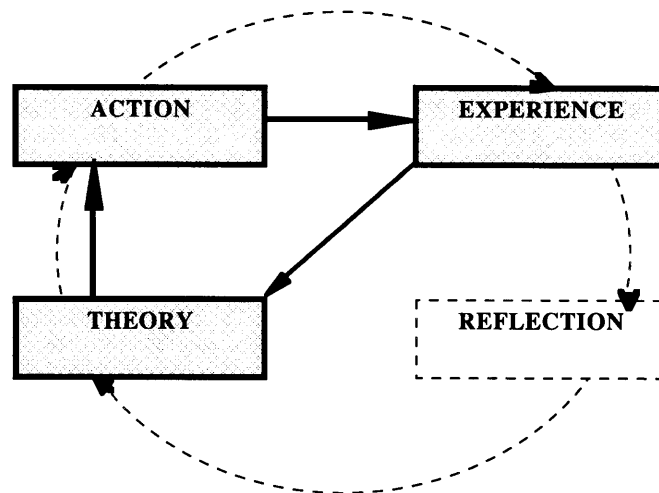
FIGURE 4 - OPERATIONAL LEARNING _(KNOW-HOW)_

For example, the Micro Company which has developed and is selling software which

protects computers from being contaminated by computer viruses. It is the only company

offering such a product. While the software is 100% effective, a drawback develops. The

longer it is in use, processing time becomes progressively slower. Sales are brisk,

exceeding current supply. Consumers, however, would prefer a product which does not

slow the speed of computers. Both the Macro and Mean Companies are working on

products to address the consumers' concerns. When successful, they will realize a

competitive advantage over the Micro Company and be able to control the market. The

Micro Company, based on brisk sales and increased demand, assumes it is supplying the

right product to meet consumers' needs, and maintains its current strategy. It increases

production and realizes increased profits over the short-term. They _know-how_ to react, but

do not explore the fundamental _know-why_. Operational learning takes place, but reflection

is short-circuited.

Correspondingly, conceptual learning can be viewed as the understanding of a skill, or

know-why, the ability to understand both the reason for a given situation and the

implications of any action taken. It is proactive learning; an individual's theories (mental

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models) are altered in response to an endogenous variable. An individual *knows-why*

things should happen and is constantly questioning the reason behind the theory, but has

no experience because they do not *know-how* . Conceptual learning leads to changes in

framework which allows for new ways of looking at the world. (Wardman, ed., 1994, p.

47) The experiential learning model is again short-circuited; this time learning takes place

without (testing theory through) action (ref. FIGURE 5).
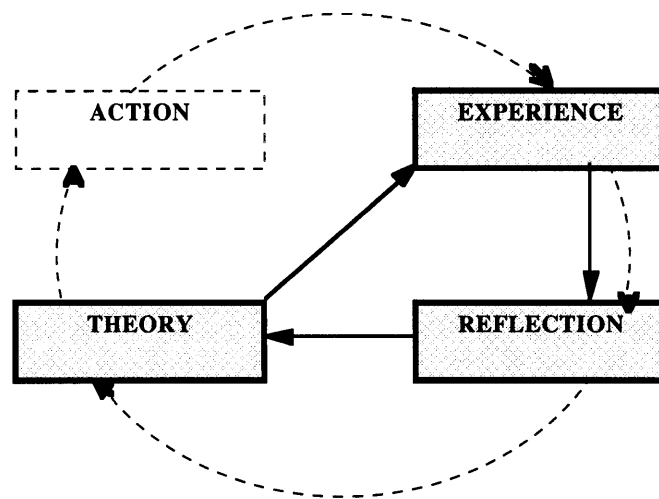
FIGURE 5 - CONCEPTUAL LEARNING *(KNOW-WHY)*

Unlike the Micro Company, the Macro Company is constantly seeking to understand the

know-why. It is considered a research and development organization, which, similar to the

Micro Company, was established to develop software for computers. It has yet to deliver a

product to the marketplace. On paper it has perfected software which will not only

eliminate viruses in computers, but will not slow down the computer. It has been proactive

in understanding the needs of the marketplace and the reason behind each situation. The

market is theirs if they can deliver a product. Unfortunately, in their efforts to perfect the

know-why, they neglect the *know-how*. Conceptual learning takes place, but action is

short-circuited. The software never makes it to the marketplace, let alone the development

of a prototype. It remains, in its essence, an academic exercise.

Organizational and conceptual learning, as independent events, and as a single integrated event, are strongly related to what Chris Argyris has called single loop learning and double loop learning. In the article, _Double Loop Learning in Organizations_, (1977) Argyris describes single loop learning with an analogy to a thermostat. The thermostat is set at 68 degrees. When the temperature is too hot or too cold, the thermostat learns that it should turn itself off or on. The thermostat is able to receive information and to take action. This is analogous to operational learning - it strictly reacts in response to an environmental stimuli, the temperature either increasing or decreasing.

If, instead, the thermostat were capable of asking whether it should be set at 68 degrees, it would be capable of not only detecting error, but could also understand why it was set at that particular temperature and, if necessary, change its course of action. In this case, the thermostat is capable of "double loop" learning. The thermostat is able to both "challenge the very nature or existence of prevailing conditions, procedures or conception" (_know-why_), and once it has developed an appropriate theory, or mental model, to carry-out the necessary action (_know-how_). Thus, double loop learning integrates both conceptual and operational learning. This is its key characteristic; the equitable integration of polar opposites: reflection and action.

Operational learning, however, is not necessarily bad and conceptual learning necessary good - they both have a unique to role to play in the effective learning process. As Kim notes: "... learning must advance on both the operational and conceptual level. One without the other is like trying to run a marathon with one foot nailed to the starting line." (Kim, 1989, p. 3) The requisite symbiotic relationship between reflection (_know-why_) and action (_know-how_) means that the wheel of learning must be symmetrical, balanced and rotating.

The Mean Company, unlike the Micro Company and the Macro Company, seeks both the *know-how* and the *know-why*. In their effort to develop computer software they allow reflection and action to inform learning, maintaining a balanced wheel of learning. In the process they deliver software which meets the demands of the consumers.

Experiential Learning Model and the Organization

Similar to individuals, organizations learn through experience. But, while individuals can learn independent of organizations, organizations cannot learn independent of individuals. Organizations, therefore, learn through the experiences of their members. In its simplest sense, individual learning informs and acts as the building block of organizational learning. Thus, the experiential learning cycle of each individual of the organization is imbedded within the experiential learning cycle of the organization (ref. FIGURE 6). As Kim (1989) notes, the extent to which both are in balance, the individual and organization, determines the degree to which an organization, and its members, will "learn to relearn." A Catch 22 situation, however, becomes apparent. Within the context of the workplace environment, the health of organizational learning is contingent upon the health of individual learning which is contingent upon organizational learning. This implies an importance in the connections between the individual and the organization.

If the experiential learning cycle of the individual is imbedded in the experiential learning cycle of the organization, then the operational and conceptual learning loops of the individual should also be imbedded in the operational and conceptual learning loops of the organization. As Kim recognizes, a model for making this connection between the
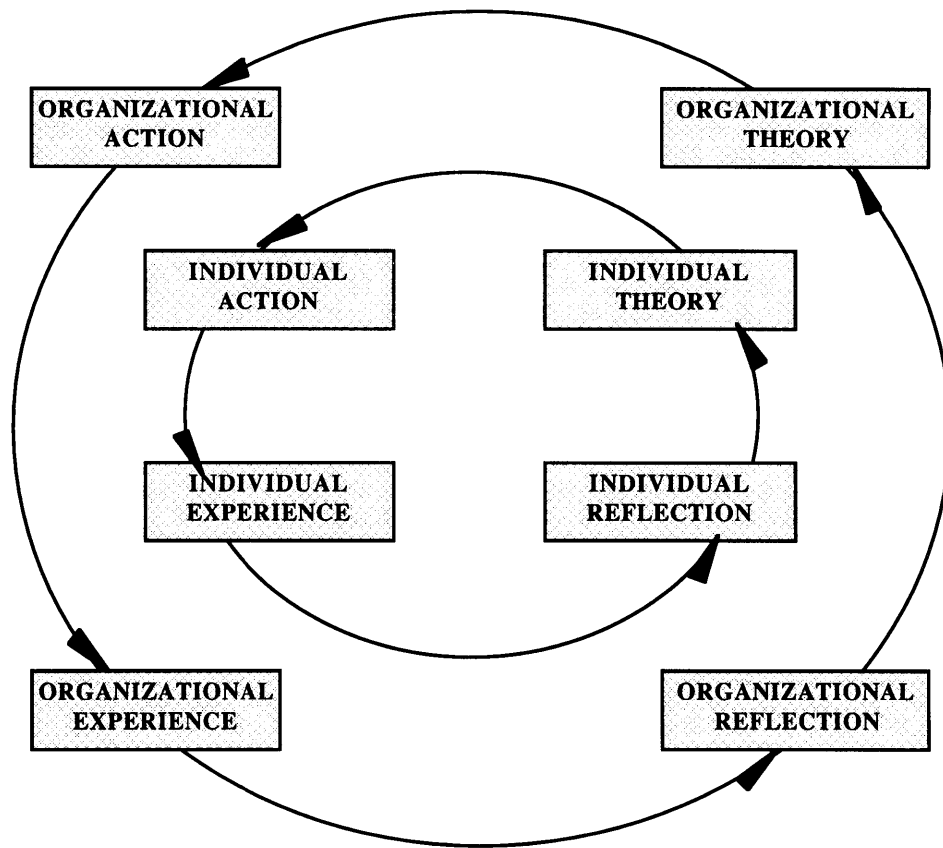
FIGURE 6 - ORGANIZATION - EXPERIENTIAL LEARNING MODEL

individual and the organization is identified by March and Olsen (1975), in what they call

"The Complete Cycle of Organizational Choice." (Kim, 1989, p. 15, 16) March and Olsen

indicate, that similar to the experiential learning model, organizations, like individuals,

learn through experience. The March and Olsen model, however, makes the connection

that organizational action is a derivative of individual action. Thus, within their model,

collective individual action completed on behalf of the organization is organizational action

(ref. FIGURE 7).

In this model, "individual action" is affected by the "theory" or mental models of the

individual. The factor affecting the formulation of this "theory," is environmental
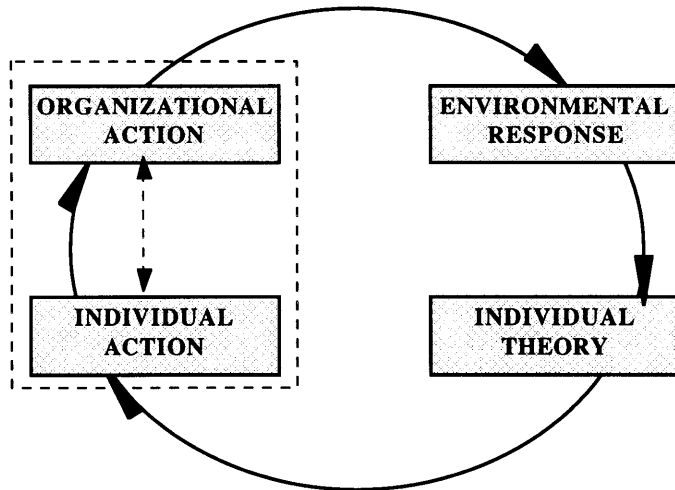
FIGURE 7 - THE COMPLETE CYCLE OF ORGANIZATIONAL CHOICE

responses (an exogenous variable). These environmental responses can extend to

"routines" which an organization imparts to an individual.

Collective individual behavior then leads to organizational behavior. At this point,

individual action is subject to significant organizational influences. "Moving from the

individual human level to the organizational level adds at the least an order of magnitude

increase in complexity.... Issues such as motivation and reward, which are an integral part

of human learning become doubly complicated because the meaning of each depends, in

part, on the type of organization as well as the individual." (Kim, 1989, p. 12)

At this point, a distinction must be made between individual action and collective action.

The logical question arises, "If individual action is, in fact, organizational action, what is

the difference?" The answer lies in two factors: first, although individual actions make up

"organizational action," the action is experienced as not being the conscious acts of specific

individuals, but of the organization. In other words, it is how the act is experienced by

others. Although Federal Express's reputation for on-time package delivery is the result of

the actions of specific individuals each time a package is delivered, it is the reputation of the

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company, in the customer's eyes, which is impacted each time service is provided. Second, many organizational actions are only possible through the collective effort of many employees. Although customer's receiving a package from Federal Express only see the delivery person, they know that the service they have received is the result of the collective effort of many individuals.

In the experiential learning model, however, individual action and organizational action are simply an action. As such, they can be viewed as residing in the same quadrant of the model. As a result, both have been enclosed by a box in FIGURE 7 to convey this characteristic.

Organizational action stimulates an environmental response in the next stage of the model. If environmental responses are static, the entire model becomes static. If changes occur in the environment, individual theory may react and change, thereby creating new individual and organizational action. In this scenario, a new cycle of learning occurs.

In reality, the cycle is fluid because organizations do not operate in a closed system. There are always significant exogenous factors which influence environmental responses. These exogenous factors are part of a dynamic give and take process. Organizations experience exogenous factors; but their actions, at the same time, become exogenous factors which other organizations must address.

The cycle is completed when the environmental response reshapes individual theory. This is where individual learning occurs. The question then arises, "what type of learning has occurred in this situation?"

Upon examination, the March and Olsen model is simply a proxy for operational learning within the organizational experiential learning model. The March and Olsen model includes the three quadrants of the experiential learning model related to operational learning: action (both individual and organizational), theory and experience. For this reason, the individual experiential learning model has been reoriented to rotate in a clockwise direction (ref. FIGURE 8). This has been done to graphically represent the operational learning cycle. It should be noted that both individual and organizational reflection are missing. This is consistent with the polarity characteristic previously identified between *action* and *reflection*.. By incorporating March and Olsen's model into the organizational experiential learning model, the first link between the individual and the organization becomes apparent. The left side of the organizational learning model is where the operational learning loop resides.

With the left side of the model identified as operational learning, it becomes clear that the right side of the model can be identified as conceptual learning. The right side of the model holds the three distinct dynamics: experience, theory and reflection (individual and organizational). While individual reflection and organizational reflection are identified separately, they can simply be treated (as action was in the operational learning loop) as reflection. In this case, it is the aggregation of individual reflection which constitutes collective organizational reflection.

In the conceptual learning loop of the organization, it is the quantity and quality of individual reflection which determines the effectiveness of organizational reflection. Organizational reflection then informs an organizations theory; its strategy, its culture, its routines. These routines are imparted to the individual as experiences, starting the cycle over again. (ref. FIGURE 9).

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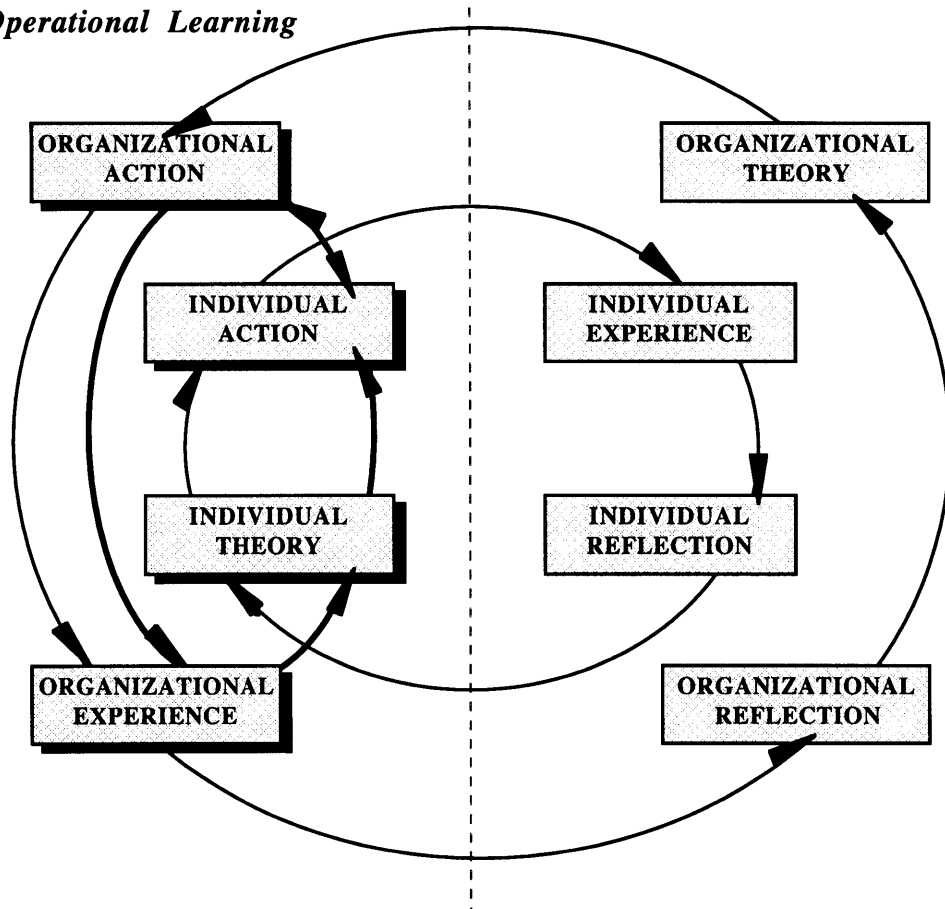
FIGURE 8 - ORGANIZATION - EXPERIENTIAL LEARNING MODEL
(Operational Learning Loop Highlighted; left side of model)
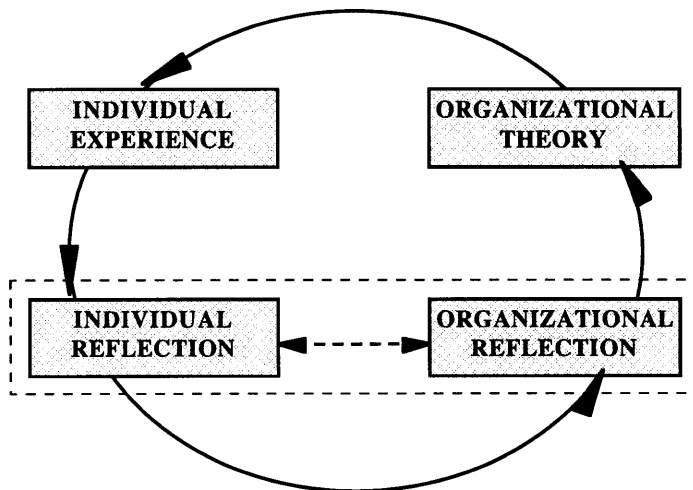
FIGURE 9 - ORGANIZATIONAL CONCEPTUAL LEARNING LOOP

Where reflection was missing in the operational learning loop of the organization, action (both individual and organizational) is missing in the conceptual learning loop of the organization. This is again consistent with the polarity characteristic identified between action and reflection. Incorporating the conceptual learning loop into the organizational experiential learning model completes the link between the individual and the organization (ref. FIGURE 10).

Conceptual Learning

ORGANIZATIONAL
ACTION

ORGANIZATIONAL
THEORY

INDIVIDUAL
ACTION

INDIVIDUAL
EXPERIENCE

INDIVIDUAL
THEORY

INDIVIDUAL
REFLECTION

ORGANIZATIONAL
EXPERIENCE

ORGANIZATIONAL
REFLECTION
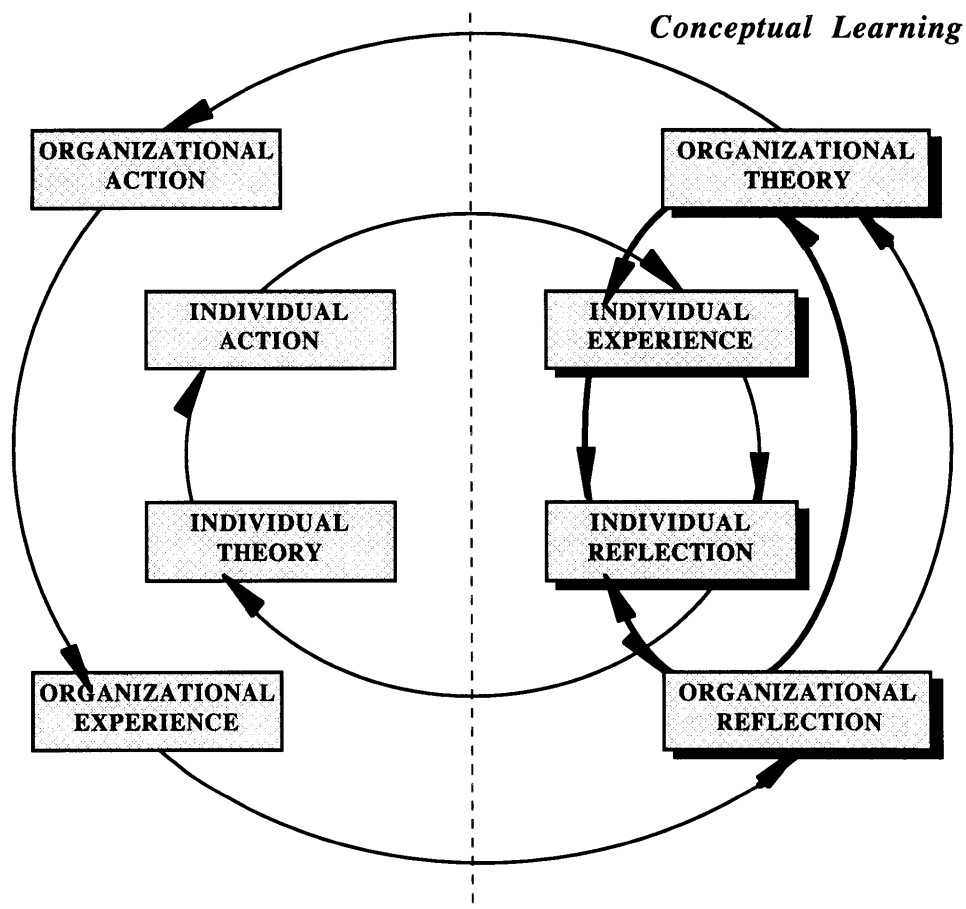
FIGURE 10 - ORGANIZATION - EXPERIENTIAL LEARNING MODEL
(Conceptual Learning Loop Highlighted; right side of model)

The conceptual learning loop for the organization, together with the operational loop for the organization, the individual experiential learning model and the organizational experiential

learning model constitute the building blocks for, what has been titled within this thesis, a "Model for Organizational Learning."

This is not, however, a closed loop system. Environmental influences profoundly affect the behavior of both the organization and individuals. In addition, the actions of the organization can profoundly affect the behavior of the surrounding environment outside of the organization. In this model, this external dynamic occurs at both the "organizational experience" quadrant and "individual experience" quadrant. The importance of this dynamic, the environment, is indicated in FIGURE 11. This represents the completed "Model for Organizational Learning."
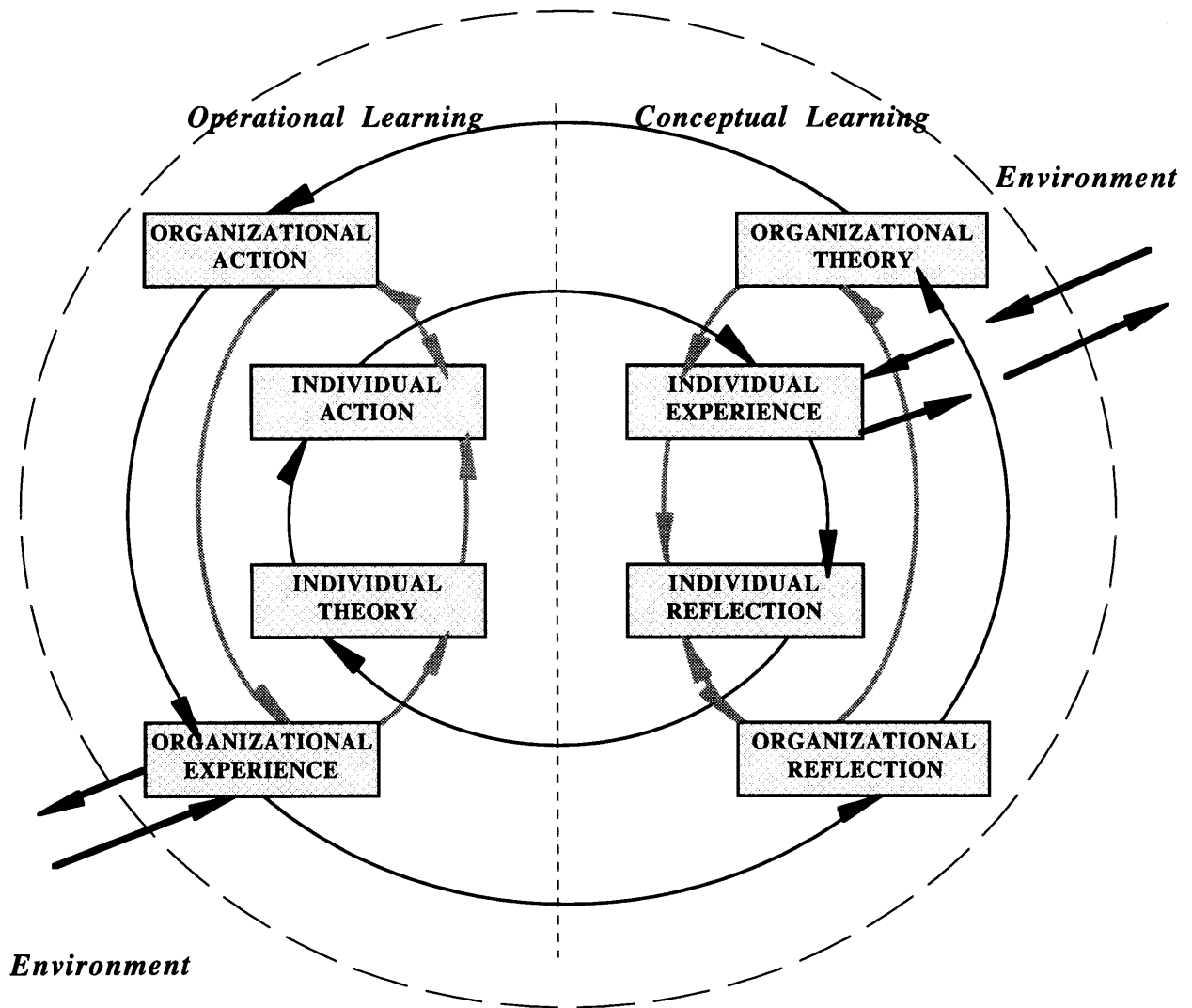
FIGURE 11 - MODEL FOR ORGANIZATIONAL LEARNING

For Daniel Kim, the relationship between the organization and the individual is the crucial link for a learning organization. (Kim, 1989) Within the organizational learning model developed in this thesis, this link occurs through the operational and conceptual learning loops of the organization; they allow the interaction between the experiential learning model of the individual and the organization. To be effective, this link must manifest itself as a dynamic "transfer process" where "individual learning and knowledge (mental models) become embedded in an organization's memory and structure as shared mental models." (Wardman, ed., 1994, p. 44) Accordingly, the operational and conceptual learning loops of the organization serve to inform and stimulate the experiential learning models of both the individual and the organization, and their respective mental models, which in turn stimulate the operational and conceptual learning loops of the organization. Ideally, this creates a dynamic "transfer process" within the model, where all cycles are in motion and in balance, which promotes the healthy development of learning within each respective learning cycle.

When active, this transfer process creates what Demming has termed "profound knowledge." Profound knowledge emphasizes the relationship of the individual to the organization as the crucial link in any learning organization:

> ...profound knowledge involves the acquisition of new knowledge
> and competence, as well as the ability to transfer that understanding
> to others so that they come to have the same level of knowledge
> together with the ability to pass it on to others. This is the essential
> ingredient in moving from individual learning to organizational
> learning, the process of transferring knowledge across the
> organization in an on-going stream. (Chawla and Renesch, ed.,
> 1995, p. 95)

Understanding organizational learning, however, is not as simple as directly transferring the experiential learning model of the individual. The organization is composed of many

individuals, which means that organizational learning is not just a magnification of individual learning; it is far more complex and dynamic. (Kim, 1993) Kim cautions:

> If a distinction between organization and individual is not made explicit, however, a model of organizational learning will either obscure the actual learning process by ignoring the role of the individual (and anthropomorphize organizations) or become a simplistic extension of individual learning by glossing over organizational complexities. (Kim, 1993, p. 42, 43)

The organization, therefore, must deal with and accommodate the multiple mental models which each individual brings to the organization. In addition to personal mental models, organizations must also accommodate and reconcile the individual learning styles which each individual brings to a learning organization. It is within the realm of learning styles that the critical link often breaks down.

Learning Styles

Through Kolb's work on experiential learning, he determined that people develop particular learning styles as a result of hereditary infrastructure, past experiences in life and the present environment. (Kolb, 1973) The study of learning styles has been titled experiential learning typology. Four styles or abilities have been identified: 1) Concrete Experience abilities, 2) Reflective Observation abilities, 3) Abstract Conceptualization abilities, and 4) Active Experimentation abilities. Each of this abilities can be simplified to relate to the experiential learning model: Experience, Reflection, Theory and Action. Describing and distinguishing the differences in the learning styles is not important for this thesis. What is important, is the conclusion drawn by Kolb from his work on experiential learning typology:

> First, the experiential learning typology seems to provide a useful grid for mapping individual differences in learning style and for

mapping corresponding differences in the environmental demands of different career paths. As such it is a potentially powerful tool for describing the differentiated paths of adult development. Secondly, the above data present enticing if not definitive evidence that early career choices tend to follow a path toward accentuation of one's learning style. Learning experiences congruent with learning styles tend to positively influence the choice of future learning and work experiences that reinforce that particular learning style. On the other hand, those students who find a learning environment incongruent with their learning style tend to move away from that kind of environment in future learning and work choices. The research to date suggests that accentuation is the most powerful force in early adult development. The primary reason for the strength of the accentuation forces in early career seems to stem from identity pressures to choose a job and a career. (Kolb, 1974, p. 24)

"Thus it seems that learning experiences that reinforce learning style dispositions tend to produce greater commitment in career choices than those learning experiences that do not reinforce learning style dispositions." (Kolb, 1974, p. 24) Argyris calls these learning style dispositions, theory of action. He adds,

everyone develops a theory of action - a set of rules that individuals use to design and implement their own behavior as well as to understand the behavior of others. Usually, these theories of actions become so taken for granted that people don't realize they are using them. (Argyris, 1991, p. 103)

Empirical evidence has shown that by and large, managers are distinguished by very strong experimentation, action-based skills and are very weak on reflective observation skills. Simply put, managers have a learning style disposition which favors operational learning (the *know-how*) over conceptual learning (the *know-why*). Correspondingly, the academic is distinguished by attributes which are just the opposite. The academic is prone to reflective observation and, therefore, conceptual learning. Within this context, effective learning, analogous to Handy's four-spoked wheel in equilibrium, might be seen as the balance between the "scholar" and the "practitioner," the ability to act, balanced against the ability to reflect. Kolb describes an insightful scenario which illuminates this dynamic:

The manager who comes to the university for mid-career education experiences something of a "culture shock." Fresh from a world of

time deadlines and concrete specific problems that he must solve, he is suddenly immersed in a strange slow-paced world of generalities where the elegant solution to problems is sought even when workable solutions have been found. One gets rewarded here for reflection and analysis rather than concrete goal-directed action. The manager who "acts before he thinks -- if he ever thinks" meets the scientist who "thinks before he acts -- if he ever acts."

The same empirical evidence found to exist with managers, also exists in competitive-business organizations as a whole. (Kolb, 1973) These organizations are prone to "act" as opposed to "reflect." This makes sense, if, as previously noted, individual action (which is prone to action and operational learning), informs group action. In fact, organizations even develop learning styles similar to individuals. This occurs primarily from the dominant learning style existing within an organization. It is the dynamic of integrating the individual, and individual learning styles, into the collective, and the collective learning styles, which an organization is challenged to address. With regard to this, Kolb notes:

This necessitates resolving in some way the conflicts inherent in these different learning styles. In actual practice this conflict gets resolved in many ways. Sometimes it is resolved through confrontation and integration of the different learning styles. More often, however, it is resolved through dominance by one unit over the other units resulting in an unbalanced organizational learning style. (Kolb, 1973, p. 23)

To bridge these two dispositions, management "must somehow respond to pragmatic demands for relevance and the application of knowledge while encouraging the reflective examination of experience that is necessary to refine old theories and to build new ones." (Kolb, 1973, p. 12) The extent to which they are integrated, defines the health of the experiential learning model for the individual and the organization. (Kolb, 1973) But, as Kolb writes, "When one perspective comes to dominate others, in the long run learning effectiveness is reduced. From this we can conclude that the most effective learning systems are those that can tolerate differences in perspective." (Kolb, 1973, p. 23)

The transfer process, that crucial link between individual and organizational learning, manifests itself via the operational and conceptual learning loops of the organization. When both sides are active there is a vitality and energy which supports and reinforces the other. Referring to FIGURE 11, the reader can trace the multiple exchanges which occur when all four learning loops are engaged. Learning becomes, literally, a chain reaction.

In today's business culture, however, operational learning is predominately engaged while conceptual learning is commonly restricted. While an organization *knows-how*, it does not typically understand the *know-why*. Within the conceptual learning loop of the organization, it is 'reflection' which is the critical element that determines whether conceptual learning transpires. Between individual and organizational reflection, it is 'organizational reflection' which is the key.

Referring to the conceptual learning loop (ref. FIGURE 12), it is apparent that two of the four dimensions are passive; - Individual Experience and Organizational Theory. Passive in nature, these two dimensions simply exist within the learning experience. One does not ask whether an individual is experiencing - it is a given. The only variable is the depth and specifics of those experiences. Individual Experience requires no conscious intent. Much the same can be said for Organizational Theory. Theory, which is synonymous with our mental models, or as Piaget (Kolb, 1984) says, our persona, exists whether it is conscious (a defined strategy) or unconscious (a laissez-faire disposition).

Thus, conceptual learning within the organization is contingent upon reflection, and more specifically organizational reflection. If, however, organizational reflection is dependent upon individual reflection, then one might reason that it is individual reflection which is the critical element. While individual reflection is required, unless it is promoted through
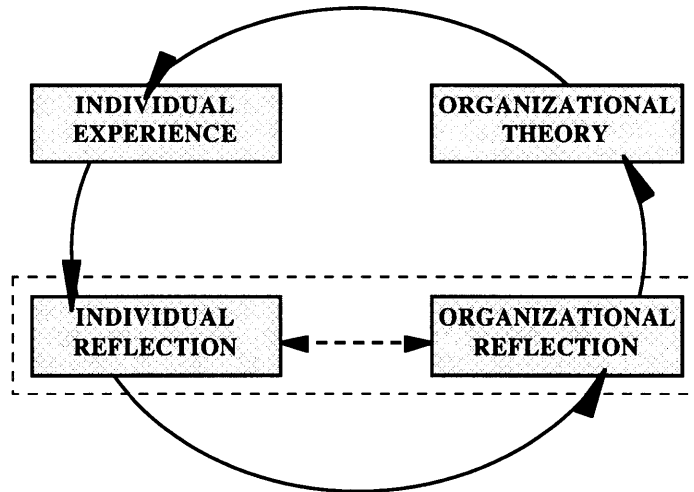
FIGURE 12 - ORGANIZATIONAL CONCEPTUAL LEARNING LOOP

organizational reflection, it remains unfulfilled. This is analogous to thinking of individual reflection as water in an underground well and organizational reflection as a pump and spigot. Unless the pump is primed and the spigot open, the well will never yield any water, regardless whether it is at the high-water mark or dry. Organizational reflection, therefore, only has relevance if it can facilitate and leverage individual reflection.

Demming maintains that all individuals "are born with 'intrinsic motivation': an inner drive to learn, to take pride in their work, to experiment, and to improve". (Senge, 1990, p. 37) For him, all individuals are capable, to some degree, of learning through action and reflection. It is relatively easy to identify a specific passion which drives any one individual, whether fixing up cars or designing computers. Within this passion, it is not difficult to imagine activating their operational learning loop (*know-how*), and their conceptual learning loop (*know-why*).

The 'intrinsic motivation' of each individual in the organization must be activated and nurtured by the organization for effective learning within the organization to take place. Demming cautions, however, that "if people feel that they must pursue learning only 'on

their own time' then they lose faith not just in the organization, but in the idea of learning."
(Senge, 1990, p. 37) It becomes incumbent upon organizations, therefore, to create an
environment which taps the desire and ability of the individual to learn within the context of
the organization.

Senge and Kofman write, "Learning organizations are spaces for generative conversations
and concerted action. In them, language functions as a device for connection, invention,
and coordination." (Kofman & Senge, 1993, p. 16) Without this, the ability to learn is
hampered.

According to Argyris, most people narrowly define learning to mean mere problem
solving. As a result, they focus on identifying and correcting errors without understanding
the root cause of the problem. This is the case with highly skilled professionals. They are
very good operational learners, or as Argyris says, good single loop learners. But when
operational learning strategies fail, "they become defensive, screen out criticism, and put
the 'blame' on anyone and everyone but themselves. In short, their ability to learn shuts
down precisely at the moment they need it most." (Argyris, 1991, p. 100) Consequently,
they are unable to activate conceptual learning.

Put simply, since most professionals are 'almost always successful,' they rarely fail.
Without experiencing failure, professionals cannot learn how to learn from failure.
(Argyris, 1991) Argyris describes the resulting organizational environment,

> What they do not do is get people to reflect on their work and
> behavior. They do not encourage individual accountability. And
> they do not surface the kinds of deep and potentially threatening or
> embarrassing information that can motivate learning and provide real
> change. (Argyris, 1991, p. 78)

"Because the attributions that go into defensive reasoning are never really tested, it is a
closed loop, remarkably impervious to conflicting points of view." (Argyris, 1991, p. 103)

As a result, this creates an organization where norms become "embedded within norms,"

reinforcing each other. "Eventually they form a tight system that inhibits individual and

organizational learning." (Argyris, 1991, p. 116)

Senge and Kofman note, "The resulting fear of not looking good is one of the greatest

enemies of learning. To learn, we need to acknowledge that there is something we don't

know and to perform activities that we're not good at." (Kofman and Senge, 1993, p. 9)

This requires that the individuals within the organization collectively and consciously seek

to *know-why*. The goal is to balance conceptual learning with the inherent ability to learn

operationally. To reach this balance, requires an open system which embraces and

leverages differences in perspective. A key to developing such a system is through

uninhibited and open dialogue.

Dialogue:
A Vehicle for Moving From the Individual to the Collective

> The journey of creating a learning organization begins on the inside.
> It begins with a commitment among individuals in an organization to
> reexamine their ways of thinking about the world. And it necessitates a
> shift from the traditional external focus on the environment, the
> economy, and the competition, to an internal focus on the organizational
> systems and structures that inhibit the results we want. (Wardman, ed.,
> 1994, p.11)

Dialogue is a vehicle espoused by many, through which communication and

change can be realized. Dialogue

> ...opens the path to change and clears space for organizational
> transformation by changing the inner landscape. We change the
> world by changing the way we perceive the world, the way we think
> about cause and effect, the way we conceptualize the relationships
> among things, and the meaning we ascribe to events in that external
> world.... Changes are encouraged by the openness and the reflective
> and collective process of dialogue. Dialogue opens pathways for
> change - within us and among us. From that opening comes space

for organizational and social change. (Chawla and Renesch, ed., 1995, p.157)

The intellectual roots of dialogue are found in the works of British Physicist David Bohm. Dialogue, according to Bohm, focuses on surfacing and altering tacit mental models. The purpose of dialogue is to create a setting where conscious collective mindfulness can be maintained. (Dixon, 1991) It is a discipline of collective learning and inquiry where people "can allow a free flow of meaning and vigorous exploration of the collective background of their thought, their personal predispositions, the nature of their shared attention, and the rigid features of their individual and collective assumptions." (Isaacs, 1993, p. 25) Rather than trying to understand an issue by breaking it into parts, dialogue examines the whole. It is a way of communicating that is not often represented in Western culture. (Chawla and Renesch, ed., 1995)

In his article, *The Knowledge Creating Company*, Ikujiro Nonaka (1991) agrees that the key to creating new organizational knowledge often lies in converting the vast body of employees tacit knowledge so that it may be used organizationally. In order to achieve this, employees must possess certain skills says Nancy Dixon. Participants must have the skills to:

- provide others with accurate and complete information that bears upon the issue

- confirm others' personal competence when disagreeing with their ideas

- make the reasoning that supports their position explicit

- voice the perspective of others

- change position when others offer convincing data and rationale

- regard assertion, their own and others, as hypotheses to be tested

- challenge errors in others' reasoning or data (Dixon, 1994, p. 83)

Dixon points out, that while these skills may seem self evident, they are rarely used. She thus questions whether there is a skill issue or whether organizations create routines which inhibit the appropriate behavior. She believes the latter.

> We have so often withheld our reasoning, refrained from saying what we know others do not want to hear, and held on to our position long after the evidence has proved us wrong, that it is those behaviors that have become automatic. That implies that if we want to employ these skills of dialogue, we may first have to 'unlearn' the tacit ones that are preventing effective dialogue. (Dixon, 1994, p. 84)

Clearly, if an organization wants to create a learning environment, it must support the essential elements of operational and conceptual learning. It must give employees time to reflect, provide the appropriate information as needed, and create systems that reward the desired behavior. If people are expected to act responsibly, they must be empowered to make changes. If we believe Demming, people are intrinsically motivated to learn. Then the role of the company should be to remove obstacles and to truly value that which they desire.

> If people can be brought into a setting where they, at their choice, can become conscious of the very process by which they form tacit assumptions and solidify beliefs, and be rewarded by each other for doing so, then they can develop a common strength and capability for working and creating things together. This free flow of inquiry and meaning allows new possibilities to emerge. This capability exists in every community, but in most organizations it is dormant. Dialogue allows it to be awakened. (Isaacs, 1993, p. 26)

Although dialogue cannot be forced, it can be nurtured by creating conditions under which it can occur. To foster the skills of dialogue, some companies are using learning laboratories.

Learning laboratories represent what Donald Schon (Kim, 1989, p. 13) calls a "virtual world," a "constructed representation of the real world." The benefit of a learning lab is that it reduces constraints. "Actions that are irreversible in the real world become reversible. Changes in the environment can be eliminated. Complexity can be simplified." (Kim, 1989, p. 13) In this environment, it is easier to break down defensiveness and to test new methods. Employees who learn the skills of dialogue can bring those skills back to work in the real world. George Roth and Peter Senge believe that learning laboratories will become essential elements of organizational infrastructure. "Just as it is unimaginable that sports teams or theater troops never practice, so too will it be unimaginable that managers never practice." (Roth & Senge, 1995, p.16) The goal is to link practice and performance.

Other tools being used in learning laboratories include: management flight simulators and systems archetypes. For example, there is a commercial real estate management flight simulator which allows participants to manage a real estate portfolio in the volatile office market, a system where numerous delays and unintended consequences abound. The computer gives you thirty buildings to start; you can buy, sell or build. Revenue is derived from sales and rentals. Decisions are made based on the market, your financial position, and construction and leasing activity. Different scenarios can be run and results may be analyzed to determine where things went wrong. Management flight simulators can also be specifically designed for individual organizations.

The value of learning laboratories is in the ability of organizations to design an environment which promotes and supports all four steps of the organizational learning process: action, reflection, theory, and experience. It is reported (Dixon, 1994), that many organizations,

such as GE and Wal-Mart, have successfully implemented learning environments. Others, however, who have tried to duplicate these solutions in their own organizations, have often failed to achieve the desired results. (Dixon, 1994) What they do not understand is that success is contingent upon understanding the unique characteristics of each organization and the diversity of its people. "In building learning organizations, there is no 'there,' no ultimate destination, only a lifelong journey." (Senge, 1990, p. xv)

Part IV of this thesis explores the first steps of this journey with three real estate practitioners.

IV
Field Research

The work presented in this thesis and the conclusions drawn thus far are didactic in nature, existing within the realm of the 'classroom.' The relevance of this theory, however, will only be realized when it is applied in the real world and becomes part of an organization's very existence, part of its lifelong journey. For this to occur, professionals must first understand learning, see it as important, and nurture and promote its existence. Most important, they must embrace it as paramount to their survival - it must be viewed as a vehicle to competitive advantage.

The goal of this section is to explore these issues and questions with leading real estate professionals, focusing specifically on the learning model developed in this thesis and the specific role of dialogue. To our knowledge, of the material published on the learning organization, little addresses the topic of the learning organization in the context of the real estate services industry. Exceptions include Liam Thornton's MIT thesis of 1992, titled, "Real Estate Development Firms as Learning Organizations: Systems Thinking as a Methodology for Strategic Planning." The focus of Thornton's thesis, however, is learning as it relates to Systems Thinking, a discipline championed by Peter Senge to solve problems through modeling scenarios. We believe our thesis focuses on a topic which could be considered more fundamental to learning and could be considered a building block for appreciating the work of people like Thornton.

The next section describes: the individuals interviewed, their criteria for selection, a summary of their respective firms, the specific focus of the interviews and the interview parameters. Following this section, is a brief history of the real estate industry. This is important because it conveys the upheaval which has transpired in the industry from the 1980's to the present; an industry which has been characterized as having experienced a 'feast' to 'famine' rollercoaster ride. Knowing this will aide the reader in understanding the perspective of the interviewees' responses. The interviews and field research are then presented. Finally, two case studies of working organizations are discussed; Johnsonville Foods and Chaparral Steel.

This thesis can be viewed as establishing a continuum, 'theory' on one end, and 'practice' on the other. The work presented thus far is clearly anchored in the theoretical side. Given the infancy of the learning organization as a topic, especially in the real estate industry, the field data falls somewhere between 'practice' and 'theory'; it is part 'fact', and by the very nature of the questions posed, part 'supposition'. While not related to the real estate industry, the case studies provide concrete experiences from which reflection can occur and, thus, serve to bracket the other end of continuum.

Three firms were selected for research and from these, a member of upper management was interviewed. All participants agreed that they could be identified by name. They include:

1) Colliers International - Stuart Forbes, President

2) Whittier Partners - Michael Sherman, President and Managing Partner

3) LaSalle Partners - Robert Best, Project Manager

While not statistically significant, we, nevertheless, believe that valuable insights can be drawn from this group which might prompt reflection today and serve to inform further research tomorrow.

The selection of the firms and individuals was based on the following criteria:

(1) The organizations selected are highly respected and considered to be leaders in the field of real estate.

(2) The individuals interviewed are executives within their organizations and each has been engaged in addressing a critical management issue which is of strategic significance to its organization. We felt this was a needed point of departure and would provide the common ground required to support a healthy conversation on the learning organization. Specifically, Forbes has been exploring the idea of knowledge sharing and the learning organization, Sherman has been focusing on the idea of 'branding' in order to foster customer awareness and competitive advantage, Best orchestrated LaSalle's recent pursuit of the Malcolm Baldridge Award.

(3) All the firms are short-cycle service providers in the real estate industry. That is, they provide services on an on-going basis, i.e. property management, and the cycle time of these services is relatively short. This is in contrasts with the

development of a building, such as a hotel, which might take five years from feasibility studies to project opening, and where project specific activities are performed. In this case, the time between action and feedback could be lengthy. We felt this distinction was important because short-cycle real estate service providers more closely resemble the type of businesses which have received significant focus with regard to organizational learning. We believe this link provides the logical bridge for the discussion of the learning organization within the real estate industry.

The interviews were conducted one-on-one, with the Colliers and Whittier interviews conducted in person at the respective offices, and the LaSalle interview conducted over the phone. A prepared format of questions was used for consistency, but the interview often departed from this structure. This departure was important to better understand the interviewee's perspective on the topic and to support candid responses. As a result, the length of the interviews varied from one hour to three hours. In addition, to promote an uninhibited forum, the interviews were not recorded. Direct quotes, therefore, are used sparingly in the presentation of the data.

The interview was divided into three parts.

- Part I - Explored the current meaning and relevance of the learning organization to each individual and their organization. In addition, it addressed how learning currently takes place individually and collectively and what roadblocks to learning may exist.

- Part II - Presented the learning model developed in this thesis.

- Part III - Sought a reaction to the learning model, its relevance within the business environment and suggestions for implementation; specifically regarding conceptual learning. The importance of reflection was discussed, as well as the role of dialogue, and the use of learning laboratories.

Colliers International Property Consultants

Colliers International is a 'federation' of local independent commercial real estate brokerage offices popularly thought of as a 'network'. The company was formed in 1979 by the merger of two real estate firms. Today, it has over 4,000 member employees with offices in the Americas, Europe, Asia and the Pacific. Headquartered in Boston, Colliers includes Stuart Forbes, as president, along with eight other employees. It is a not-for-profit entity established to serve the needs of its members, each of whom pay dues and buy a share of the company stock. Colliers sees its competitive advantage as providing the breath of a worldwide network, while maintaining the personality of a boutique office capable of customizing services to local markets. In the recent past, the globalization trend in real estate has begun to shift members' businesses from that of being brokers to that of being advisors.

Whittier Partners

Structured as a broadly-held partnership, Whittier Partners is a full service commercial real estate firm whose services include: brokerage, appraisal, asset management, advisory, construction management, development services, consulting and marketing. The firm, with over 200 employees, has been headquartered in Boston since its founding in 1900. The organization provides services throughout New England. Sherman feels this provides the appropriate regional focus while also being large enough to address the geographic needs of its clients. The company is also an owner-member of the GVA global network, which, like Colliers, extends services to 18 countries in five continents. Whittier is strictly a service firm, avoiding the potential conflicts which could arise from equity ownership. Services are provided to two key customer blocks, owners and users.

LaSalle Partners

LaSalle Partners is, as Robert Best notes, a 'total' real estate services firm representing and advising large public and private institutions, pension funds and corporations. Founded in the early 1970's, it is an employee-owned partnership headquartered in Chicago with over 500 employees. Its services include four key areas of business: 1) land and finance, 2) advisory services - including the purchase and sale of real estate as well as portfolio management, 3) property management - including commercial properties such as industrial, office and retail, and 4) tenant representation - brokerage for national office space users. LaSalle sees its competitive advantage as service differentiation; it feels that "active management is the key to investment success." Best is responsible for new business development as well as quality control. He spearheaded LaSalle's effort to win the Malcolm Baldridge Award.

In order to understand the challenge facing these three organizations, it is important to place them in the context of the real estate industry. A brief history of the industry follows.

The Real Estate Industry Since 1980

"Since 1978, US commercial real estate markets have endured a double-dip ride on an economic roller coaster of unprecedented speed and amplitude: these markets rose sharply in the late 1970's, plunged in the recession of 1980-1982, soared throughout the 1980s until about 1989, and have since plummeted into the 'credit crunch' conditions of the early 1990s." (Downs, 1991, p. 1) During this time, three sources of significant influence on the market were: the federal tax code, the Savings and Loan industry, and pension funds.

Prior to 1980, the savings and loan industry was a sleepy industry that made mortgages

and accepted deposits. Problems eventually arose from using short term deposits to

finance long term, primarily residential, loans. This is known as borrowing short and

lending long. Thrift institutions, being regulated, had a ceiling on interest they could pay

depositors. In 1979, the ceiling was 5.25%. When interest rates rose in the late 1970's

and early 1980's, the thrift industry was caught short. Unable to receive market rates,

depositors withdrew money from the Savings and Loans and moved it to higher rate money

market funds. This disintermediation eventually led to deregulation of the thrift industry.

With deregulation, thrifts became a major financing source in the commercial real estate

market. They also had a tremendous incentive to make risky loans in the hopes of making

a profit.

In the late seventies, pension funds also became a meaningful source of commercial real

estate financing. There was a desire on the part of institutional investors to diversify and to

hedge against inflation. Using past performance as a predictor of future performance, real

estate would achieve these goals. Between 1980 and 1984, pension funds had a major

impact on real estate capital markets.

> Previously, their aggregate capital commitment had not made much
> of an impact. However, in a relatively short period of time, pension
> funds suddenly emerged as a formidable new source of funds.
> Investing upwards of $30 billion between 1980 and 1984 provided
> ample replacement capital to offset the lack of capital from traditional
> sources due to high interest rates, disintermediation, and inflation.
> (Downs, 1991, p. 19)

While rising interest rates in the late seventies and early eighties made real estate more

expensive, the industry was stimulated by federal tax law changes. In 1981, federal tax

amendments gave real estate investment an advantage over other types of investments. The

amendment shortened the depreciable life of real estate assets and created a tax shelter for

investors. The demand for real estate increased but was not based on sound real estate fundamentals.

Market equilibrium based on supply and demand became heavily unbalanced by exogenous factors. Development money was abundant and demand was boosted by tax advantages, pension funds and others. The real estate market flourished throughout the eighties. "At times it appeared capital suppliers were oblivious to the increasing evidence of too much money chasing real estate." (Hudson-Wilson and Wurtzebach, ed., 1994, p. 32) Developers continued to build, banks continued to lend and pension funds continued to invest. Yet, as early as 1984, there were indicators that the market had peaked. Vacancies were rising but construction was still increasing. The market was being over built.

In 1986, the tax code was amended once again, this time the changes erased the benefits created in 1981. There was no longer a tax advantage to real estate. Syndicators and tax shelter investors thus disappeared. But, with banks and S&L's lending on 100% of value, developers incurred no risk in continuing to build. And, because construction loans generated higher rates of interest than long term mortgages, banks, S&Ls and insurance companies expanded their lending. When loan underwriting required market studies or appraisals, the information used was based on past performance and "thus had no relevancy to current market conditions. It is doubtful that banks and savings and loans were seriously concerned with such matters. Their concern was to 'get the money out.'" (Hudson-Wilson and Wurtzebach, ed., 1994, p. 36) Between year end 1983 to 1989, the total value of commercial real estate debt outstanding more than doubled, going from $352 billion to $747 billion. (Hudson-Wilson and Wurtzebach, ed., 1994)

As the saying goes, "what goes up must come down." And down real estate came in the late 1980s and early 1990s. Banks stopped lending, numerous S&L's were taken over by

the FSLIC and later the RTC or Resolution Trust Corporation. The RTC assumed control

of hundreds of failed S&Ls and liquidated more than 250,000 properties. (White, 1991 p.

81) In some areas real estate prices declined more than 50%. The severe correction was a

natural counterpoint to the overblown optimism and largesse of the past decade. (Miller,

ed., 1992, p. 2)

With very little construction after 1990, supply finally began to balance demand around

1994. The Equitable, in their annual real estate market report, "Emerging Trends,"

describes 1995:

> Suddenly everyone wants a piece of commercial real estate. The
> asset class so recently left for dead in a flood of foreclosures,
> bankruptcies, and performance failures has come alive. Pools of red
> ink have been replaced by a steady flow of opportunistic capital,
> chasing relatively attractive yields....Investors take comfort in the
> notion that real estate has no where to go but up." (Miller, ed.,
> 1995, p. 2)

The cycle had come full circle.

Throughout this cycle, institutional investors exhibited a herd mentality. "This group think

occurs partly because institutional investors are primarily driven by short term

considerations. Because each is judged in comparison with a small group of his or her

peers, no one wants to behave much differently from those peers. So when office

buildings were in vogue, everyone bought them; when favoritism shifted to regional malls,

most investors chased after them.... Thus, when the herd stampedes in some direction,

rational thinking about individual deals becomes completely irrelevant to the behavior of

most investors." (Downs, 1991, p. 2)

This brief history gives a context with which to understand the current dilemma facing the

real estate industry. The short term focus and herd mentality of institutional clients and the

backward looking nature of the lending and appraisal industries poses unique challenges for those in the service industry.

Field Research Topics

The field research is presented under four main themes which parallel the areas of focus in this thesis. These include:

1) Relevance and Reaction to the Learning Model

2) Current Business Initiatives to Promote Learning

3) Barriers to a Learning Organization

4) Learning Labs - A First Step

'Relevance and Reaction to the Learning Model' covers the widest scope of the four. It seeks to inform the academic model from a real world perspective with an emphasis on reflection and dialogue. It also seeks to understand the relative importance of the learning organization as a topic, as well as, its future implications.

'Current Business Initiatives to Promote Learning' outlines steps the respective organizations are pursuing related to organizational learning and the strategic significance and goals of these initiatives. It addition, this section explores the process of learning as a conscious act.

'Barriers to a Learning Organization' seeks to understand the reason for the gap within the continuum between theory and practice.

Finally, the 'Learning Labs - A First Step' section outlines the practioners' reaction to using labs as a way of promoting learning.

Relevance and Reaction to the Learning Model

Relevance of Organizational Learning

All the individuals interviewed identified the relevance of the learning organization as a critical business topic, and to varying degrees, indicated that its relevance is more critical today than in the past. The primary reasons were the changing nature of their relationships with clients - clients were more demanding and were more sophisticated - and the changing nature of technology which made possible things not previously considered. The deliverable, increasingly, was being seen as 'knowledge' and the critical resource was people.

Forbes believed that organizational learning is a, "topic which will consume." The world was changing and the desire for access to knowledge had never been so great. He echoed the position of Drucker and others, that this is due to a fundamental shift in the source of competitive advantage - a shift from a tangible resource to an intangible resource, 'knowledge.' He reasoned:

> In the past, every resource, in part, was limited. As a result, people were protective because they had to get the most out of the resource before it was gone. Knowledge, however, is just the opposite - sharing knowledge you will gain. Knowledge is unlimited. It requires, however, a different mindset. People and their development are now the critical resource.

Forbes continued,

> In the real estate business, as in any service business, the value of the company is its reputation and its people. People must be thought

of as the most valuable resource. The organization is the vehicle to enhance those assets. In service businesses, you are selling your knowledge.

The market was driving organizations to flatter structures which could provide maximum flexibility and mobilize resources quickly. Within this context, Forbes felt they could do better collectively than individually.

While Sherman noted the importance of learning for any organization - without it "you cannot last, you will be crushed" - he felt this was not necessarily a new topic. For him, the real estate industry had been changing for the last thirty years, experiencing both highs and 'huge collapses.' One needed to constantly learn from it, to "measure things and understand their relevance." "As more data is available and technology changes, how can a company not learn?"

The fundamental change Sherman saw in the recent past was the relationship with the client. As a result of the real estate collapse in the late 1980's, clients were more sophisticated than ever. Clients now focused on making the 'right' decision, and their ability to understand, and their demand for, data and research had increased dramatically. They seemed committed to 'knocking out ignorance.'

The result of this was an environment of uncertainty; organizations needed maximum flexibility to respond. Like Forbes, Sherman noted the move away from a hierarchy and the necessity for flatter organizations with the ability for quick mobilization. For Whittier, this has meant that each employee must know how all the pieces go together.

Best also saw the shift in the demands of the clients increasing the need for learning within the organization. A large part of this, he felt, was due to technology, which was engulfing the industry, and how it was run. While the human element still existed, technology had

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increased the scope of individual responsibility. Property managers were handling three to four times the number of properties, "technology was changing how property managers operated."

For LaSalle, it was a question of how to run the systems and deal with the 'mountains of information.' "The management of information is becoming overwhelming." Internally, the emphasis was less on packaging, and more on training and the delivery of accurate goods - it was "less particular, less formal, and delivered with greater speed." "It's a challenge, our clients all have different technologies and want information in different formats." LaSalle viewed the relationship of information sharing and the human element as fundamental to success. Correspondingly, it was a strong advocate of employee training and sought to establish a vehicle - a user information system - for sharing.

Reaction to the Learning Model

As a theoretical construct, the interviewees agreed with the learning model presented in this thesis, but often felt it neglected the idiosyncratic forces inherent in the real world. What was particularly apparent to each was the distinction between operational and conceptual learning as it related to their specific organizations and the role of reflection. Reflection, interestingly enough, was often viewed as the responsibility of a few individuals within the organization. What was equally apparent was the void that separates these two dynamics and how it appeared difficult to bridge the gap.

For Forbes, the dynamic of learning through action and reflection, the *know-how* integrated with the *know-why*, was clear. As a concept, he concurred with the learning model presented in this thesis; specifically the importance and often lacking element of reflection.

Forbes did, however, note an impractical side to the model. The model implies an on-going balance between reflection and action. Real world competitive pressures, however, often emphasize the action feature within the model. He noted, "The act is the bottom line, you cannot always reflect." "Sometimes a client wants something done, and the *know-why* is not a factor. You must be able to distinguish those times to make efficient use of, and get the greatest return from your resources."

Still, he felt that organizations must be able to think conceptually in order to fulfill the clients' needs. He believed that businesses could stimulate the necessary reflection by asking their people to ask themselves, "How do I do it best?"; rather than just getting the job done. Making individual reflection, however, part of the Colliers culture is the challenge. Member firms display a level-of-comfort with Forbes, seeing him as the individual within the network dealing the intangible topic of learning. Within this context, Forbes acknowledged that he must proceed gradually to extend the base. He knows what he should do, but not all the members firm buy into it.

Similar to Forbes, Sherman concurred with the learning model. If experience and reflection are the critical dimensions to organizational learning, he felt that communication was the missing link. Because of the complexity of communicating on an organization-wide basis, communication often became the source of breakdown in the organization learning cycle. For individual learning, however, communication was a non issue.

Also like Forbes, he felt that the learning model emphasized academic considerations at the expense of real world pressure. For him, the inclusion of conceptual learning within the model meant the benefits of learning would only be realized long term. The real estate business, while in a state of transition, was still heavily connected to short-term transactions. Out of necessity, this meant, that operational learning took precedence over

conceptual learning. This was the situation with most of his competitors. While

paradoxical to the model, he felt the organization's short-term competitive advantage could

be lost if he totally embraced the promise of the long-term competitive advantage. Sherman

viewed his role as balancing the short-term financial constraints with the long-term benefits

of a balanced learning cycle.

Best had a similar reaction to the learning model. While he strongly supported the learning

model, its conclusions, and the promise it held for future success, he felt it was out of

context with day to day realities. Unless a short or medium-term payoff could be realized it

would be very difficult to integrate into the organization's culture. Similar to Forbes, he

felt business demanded the *know-how*, but not always the *know-why*.

Current Business Initiatives to Promote Learning

All of those interviewed, to varying degrees, viewed capturing and transferring information

as learning. Information and knowledge were seen as analogous, while communication

and interaction were viewed as paramount for success. An initiative to promote learning

was underway at each organization. While not necessarily the case with their respective

organizations, each individual felt that their position, as they defined it, required that they

balance both operational and conceptual learning.

Forbes viewed the learning organization as anchored in the documentation of resources.

He described the learning organization:

> Collectively documented resources define capabilities of people.
> The organization's role is to provide access to those resources to
> improve capacity. A learning organization addresses how to 'do it
> best.' It looks for who else might have done the same - someone
> you can learn from? It seeks proven performance and requires that
> you step back and learn from other's lessons.

Forbes put forth this vision through the question, "How do you do it best?" In this environment a company needs the ability to rapidly deploy resources without having information overload. He felt this could be accomplished by identifying specialists within the organization and, then, making these specialist available throughout the network. Technology was viewed as important for implementation. When a challenge arose, technology could be used as the vehicle to identify an in-house resource. People would become dependent on each other for assistance. "Interaction creates the reaction of interdependence which enables integration."

For Sherman, the success of the learning organization was contingent on the success of creating teams and teamwork. He believed that with teamwork, information would be shared and knowledge would be created. Team members, however, must be able to give and receive value in order for information sharing to occur. He added that the incentives of the real estate industry, typically, favored behavior which was anti-teamwork.

Sherman viewed mentoring and 'learning on the job' as key components of organizational learning. To promote communication, Whittier has created what it called the 'Rap Sheet.' Employees would document calls, leads and meetings in a computer database which every employee could access. Printouts were distributed each morning. Sherman noted one of his biggest challenges was getting each employee to input their data. This was accomplished primarily through peer pressure and management insistence. Often, the most experienced employees were the least cooperative. Since they were top producers, management had difficulty increasing their participation.

Similarly, Best viewed learning as the successful transfer of information. He felt that with this transfer would come communication. The quantity, and most importantly, the quality

of that communication (dialogue) would determine how well the organization learned.
Technology was viewed as a viable medium for creating such dialogue. Towards this goal
they were investing heavily in both technology and training. LaSalle recently hired one
full-time person committed specifically to determine what LaSalle wanted to be in the
future. Best said that this person had made some recommendations regarding enhanced
organizational learning which were both very exciting and extremely expensive.

Barriers to a Learning Organization

All three interviewees strongly agreed with the importance of the learning organization.
Yet, they were struggling to find ways to implement the concept. They cited numerous
examples of barriers to transforming their organizations. (It is important to understand that
while the industry experienced extremely difficult times during the eighties, all of these
firms are currently healthy financially. None was facing a financial crisis which would
force significant change.)

Of the three people with whom we spoke, Forbes seemed to face the greatest challenge.
As the President of Colliers, Forbes not only led his employees, but also provided the
vision and leadership for a worldwide network. The complexity of working with hundreds
of independent organizations from a variety of cultures was tremendous. For Forbes,
human nature itself created a significant barrier to the learning organization. He noted, "it
is unrealistic to expect people to be so selfless." For decades, American organizations have
built hierarchical structures which depend on control and adversarial relationships.
Managers have only recently begun to understand the difficulty with this structure and the
need for change. He felt that organizations in general have the means to achieve a learning
organization, but lack the will. As a leader, Forbes must move slowly. He needs his

organizations' support. Members are not as adamant about learning as Forbes. Gradually, he noted, he shares his passion; with time he hopes his vision will grow and become a collective vision.

Forbes also noted other barriers. Like the industry, the incentives and rewards of Collier's members tended to value and promote individual action. The result was a lack of organizational reflection and, therefore, the inhibition of significant organizational learning opportunities.

Mike Sherman described similar barriers. For him, life in the real estate service business meant not straying too far from the herd. Whittier makes its senior people partners and as such, the partners share in company profits. As a result, a balance must be struck in terms of how much money is reinvested into the company and how much is paid out. In the short term, being a partner is worth little if the majority of profits are retained. It is difficult, however, to make long term advances with such short-term concerns. Worse still, the industry is known for short lived employment terms. This meant that Whittier's best people were likely to leave if they felt the incentives were misaligned.

Like Forbes, Sherman believed human nature created a barrier. In addition, Sherman noted, "learning is expensive." As the organization's leader, Sherman must be concerned with the short-term bottom line. He cannot make a significant investment in learning if the results are very distant. His struggle then, is to find a way to enhance organizational learning in the long term, that does not disadvantage the organization in the short term.

At LaSalle, the obstacles to organizational learning were primarily a matter of time. The organization, having recently emerged from intensive downsizing, found its people stretched to the limit in fulfilling job responsibilities, leaving little, if any, time to learn new

skills. While the organization had made attempts to promote group discussion to solve problems, the quality of communication was poor and resulted in minimal progress. When solutions were determined, they frequently were not acted upon. In addition, many of LaSalle's property managers were located off site which created additional challenges in integrating the organization.

Learning Labs - A First Step

The concept of the learning laboratory was suggested as a tool to testing new methods and to developing stronger conceptual skills among managers. This topic was met with mixed reaction. For one practitioner it was too abstract, for another, it was not necessary, and for the third, it seemed promising.

Robert Best agreed with our model and supported the notion that managers are typically good operationally but weak conceptually. He believed that in order for learning to occur, conceptual skills would need fostering. The ability of a learning lab to remove people from their day to day routine and to create the ability to test new methods and learn new skills was seen as advantageous. He felt that the politics of an organization often caused inertia and that, a learning lab, by removing some elements of risk from the environment, could create tremendous potential for new ideas to evolve and develop.

In the case of Colliers, a learning laboratory was impractical at this stage. Forbes believed that before there could be any value to a practice field, that people must first build trust. Without trust, they would not be willing to share knowledge. In order for this trust to evolve, people must feel an equal benefit to giving and receiving knowledge. For Forbes,

the learning laboratory was not an appropriate tool to promote these skills. But, if these skills could be developed, the concept could have potential.

Mike Sherman felt, that by the sheer volume of work being done in the few areas in which Whittier specialized, that the organization was a learning lab. He saw little need to create an artificial environment when skills could be practiced real time:

> In our business you are constantly playing the game. The team goes on the field multiple times a day and practice comes from the real-life scrimmages. We play ten real games a day, that becomes our practice.

For Sherman, the learning lab was of no added value, learning was occurring on the job.

Case Studies

While every organization is unique, valuable learning can be gained by examining how top performing organizations have achieved their success. It is also helpful to look outside of a particular industry to understand how others are responding to similar challenges. In management literature this is often termed, benchmarking or best practices. For this reason, we have looked outside the real estate industry to two companies who have successfully operationalized the core elements of organizational learning; both the *know-how* and the *know-why*.

What was common to both companies was the belief that constant improvement was required to establish and maintain a competitive advantage. Both Johnsonville Foods and Chaparral Steel are examples of environments skilled at creating, acquiring, and transferring knowledge and at modifying behavior to incorporate the new knowledge.

Based on Garvin's definition, these two organizations embody the concept of the learning organization within their persona.

Johnsonville Foods

Johnsonville Foods began in 1945 as a small sausage business owned by the Stayer family. In 1968, the owners' son, Ralph, graduated from Yale and took over management of the 12 person company. Under Ralph Stayer's leadership, the company experienced steady annual growth of approximately 20%. Yet, in the early 1980's, Ralph , now CEO, was concerned. Employees were uninterested and careless in their work. They made mistakes that, while not deliberate, reflected a lack of responsibility. In addition to employee malaise, Stayer was worried about regional and national competition. It was time for a change; time for improvement.

On Stayer's first attempt, he developed a company goal and tried to motivate employee commitment. He quickly found that this strategy was not working; little progress was made toward his objective of improving employee and organizational performance.

Stayer came to believe that the answer could be found through making people responsible for their own performance. He made the analogy to a flock of geese. The geese all have a common goal, but each takes its turn leading and each is responsible for its own performance. Stayer realized that if anything were going to change within the company, he would have to set the example by being the first to change. This meant relinquishing control. He understood that "responsibility meant that employees needed to be the owners of the problems, which included the power to make decisions related to the problems as

well as having all of the information necessary to make decisions." (Dixon, 1994, p. 61, 62)

Gradually, change occurred. Employees were given more information and information systems were redesigned. Information was increasingly collected, generated and used by the employees with no intermediaries to control the flow. Complaint letters began to go directly to the line for evaluation and response. Employees assumed more responsibility to change and to improve performance. As this happened, attitudes and performance improved tremendously. Stayer commented, "'There is a lot of talk about making people feel important. I don't agree with that. I think we have to make people be important - and know it.'" (Dixon, 1994, p. 62)

"The changeover was accomplished by making major revisions in four pivotal and interrelated systems of the organization: performance management, information/feedback, reward and people." (Dixon, 1994, p. 62)

Performance Management:

Before the changes were made, performance was defined and evaluated by management. In the new system, workers defined and measured their own performance. The system was designed from the customers perspective. It asked employees: "'For your specific product or service, what does great performance look like to the customer?' " (Dixon, 1994, p. 62) For answers, teams of employees met with and interviewed customers. The teams wrestled to communicate customer needs in measurable ways. They found that measurement required that changes be made in the second system, information.

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Information System:

After performance standards had been identified, "Member Information Systems" helped employees find ways to generate real time measures which allowed them to determine how they were doing and where problems existed. This system became a way of achieving continuous improvement and was tied to the third system, rewards.

Reward System:

In the old system employees received bonuses twice a year. Bonuses were paid equally to all, regardless of performance. In contrast, the new system rewarded people for individual and group performance, and personal development. It was designed and administered by a volunteer team from various departments. Twice a year, members (as employees are now called) shared in company profits.

People System:

The people system included recruiting, developing and retaining the right people. The goal of the new system was to "'change the focus of the company from using people to build a great business to using the business to build great people.'" (Dixon, 1994, p. 63) New members were recruited based on their desire and ability to learn. "Line workers gradually took over most of the traditional personnel functions. Current members play a major role in the orientation and training of the new members, under the old adage that what you teach you learn twice." (Dixon, 1994, p. 64) Some of Johnsonville's creative initiatives included: allowing members to spend a day with another member to learn what they did, helping poor performers to improve by making a contract with their co-workers, and providing each member with a discretionary fund for a development activity. Teams monitored, corrected and even fired their own members.

The new system was put to the test in 1985 when the company was faced with the decision about whether or not to accept an offer from a food-processing company for large quantities of products on a regular basis. Johnsonville did not have adequate capacity to handle the order. Before the changes, a management team would have made the decision whether or not to accept the offer. Instead, Stayer called a meeting and gave the entire organization the information. Members were split into teams and asked to answer the following: What it would take to make the proposition work? How can the downside risks be reduced? And, do we want to proceed? For two weeks, the teams worked toward an answer. In the end, the decision was almost unanimous to accept the offer.

The results:

- As less management was required, the hierarchy went from six layers to two

- From 1982-1990 return on assets doubled

- Rejects were reduced from 5% to less than .5%

- Since 1982, productivity has increased close to 300%

- The company grew to 600 employees with sales of $150 million

While some of this improvement was attributed to new technology, Johnsonville Food's leaders believed the learning initiative was largely responsible. While the initial emphasis on learning was met with some resistance, over time employees began to see value in the new systems. The transition was not an easy one for leadership; "there were lots of obstacles, backsliding and numerous wrong decisions." (Dixon, 1994, p. 64)

The essence of Stayer's philosophy is summed up, "'If you issue orders, you're telling people, don't think; just do. But if you've got 1000 people, you've got 1000 minds. And

if you issue orders from the top, you're using only 3 of them, or 2, or one. That's stupid.'" (Dixon, 1994, p. 65)

Chaparral Steel

By the early 1990's, Chaparral Steel was the tenth largest US Steel producer with sales of over $400 million. The company produced steel at 1.3 hours per ton, against the industry average of ten hours. Employee absenteeism was less than 1%. In 1984, Fortune magazine listed Chaparral as one of the ten best-managed factories in the US Its profit margin was 11%, five percent over the industry average. Chaparral's goal was to lead the world in the low-cost, safe production of high-quality steel. "Much of the success of Chaparral can be attributed to a culture that is focused on learning." (Dixon, p.48)

In the 1950's, American steel producers had little to no foreign competition. The few US firms competed based on price. During this time, there was little commitment to research and development or to plant modernization. But, when US labor costs rose in the 1970's, America was forced to compete with newer, more modern plants, which the competition had rebuilt after World War II. Competition increased dramatically; to the point where many American companies were forced into bankruptcy.

In the mid 1970's, minimizes emerged in the steel industry. Minimills were technology driven, mostly nonunion organizations which focused on specialty products. In 1975, these mills held approximately 6% of the steel market. By 1990, they had captured 26%. New and creative solutions had helped American steel producers recapture their position in the industry.

When Chaparral began production in 1975, fewer than twelve minimills existed. Within ten years, there were over 60. To compete, Chaparral was designed to reduce the

traditionally intensive elements of the industry: labor, capital and energy. To do this, Chaparral had to be willing to discard the old ways of business. It had to rethink the traditions of bureaucracy and management for control. Instead, Chaparral enlisted its people in its mission.

"Chaparral considers itself a 'Learning Lab' and has some simple principles that it uses to reach its competitive goals: (1) owning the problem and solving it, (2) garnering and integrating knowledge, and (3) challenging the status quo." (Dixon, 1994, p.49) Like Johnsonville Foods, Chaparral has been able to make these principles work through creating a culture that believes in the intrinsic ability of people to invent, to create and to be trustworthy. It hires people who bring these qualities with them, often times hiring people who have never been in the steel business, for people in the business often have preconceived ways of doing things.

Owning the Problem and Solving It:

Employees were given the responsibility to discover and to solve problems independently. "The norm is: if you have a good idea act on it. This means that 90% of the problems never make it to a morning meeting but are solved on the spot, often by spontaneous meetings of those involved in the problem." (Dixon, 1994, p.49) In this, and other respects, employees were equals.

The company's egalitarianism allowed the first principle to succeed. For example, there are no time clocks at Chaparral, everyone was salaried. Operators were not assigned shifts by seniority, but rather everyone rotated the night shift. This ensured that knowledge was spread across the shifts. There was a 'no fault' policy toward sickness and absenteeism which has produced a rate of absence significantly below the industry average. Over ninety percent of the employees were stockholders and, like Johnsonville, there were only two

layers between the CEO and the operators in the mill. Bonuses were linked to company profits.

Garnering and Integrating Knowledge:

The knowledge base at Chaparral grew continually. "Employees use the steel process itself as an analogy to talk about an 'unimpeded flow of information'." (Dixon, 1994, p. 50) In support of this principle, Chaparral intentionally kept itself under 1000 employees. Its building was purposefully designed to produce frequent meetings, such as locker rooms being located in headquarters. There was also an emphasis on multi-skilling and multi-functioning. "For example, everyone is considered a salesperson and has a business card to use with customers." (Dixon, 1994, p. 50) Security guards did data entry and forklift operators did their own routine maintenance. Sales, billing, credit and shipping were located in the same building and employees were crossed-trained to be able to perform a variety of functions. "This multi-functioning not only makes the organization more flexible, it reduces territorial possessiveness over information. The pay structure rewards the accumulation of skills as well as performance." (Dixon, 1994, p. 50)

A second important element in fostering and integrating knowledge was Chaparral's union of research and development with production. In this organization, the R&D lab was the plant floor. The people who tested new technology were the same people that used it on a daily basis. This facilitated "what if" thinking that may not have otherwise occurred. This was important to line workers who were responsible for keeping their processes on the leading edge of technology.

> The focus on innovation goes beyond the factory floor. For example, on a Monday morning in Los Angeles a customer suggested to a Chaparral representative that he would buy more steel if minor modifications were made in the size and shape of a particular product. On Monday afternoon those changes were discussed in a production meeting at the plant in Midlothian Texas. A decision was made to meet the customer's specifications and by Wednesday the new product was being shipped. Within two weeks

of the initial request the product was being delivered. (Dixon, 1994,
P. 51)

It was difficult to determine where ideas originated at Chaparral. Employees were not

singled out for praise because doing so often made people territorial and protective of good

ideas. Instead, the reward for a good idea was the ability to follow it through personally.

Similarly, the same was applied when failures occurred. Mistakes were seen as necessary

learning opportunities and blame was not cast on those who were responsible.

In an environment where supervisors tended to burn out after a few years on the job,

Chaparral maintained energy and creativity through a sabbatical plan for front line

supervisors. While on sabbatical, employees visited other mills, spent time with

customers, or investigated new technology. During this time, other employees fulfilled

their duties and often broke productivity records. This created new challenges for returning

supervisors.

Challenging the Status Quo:

Experiments were a way of life at Chaparral. Line managers were authorized to spend tens

of thousands of dollars for new experiments.

> Employees scan the world for technical expertise that others have
> created. They benchmark against best of class companies, even
> from totally different industries. Believing that by the time they hear
> about an innovation at a conference it will be too late, Chaparral has
> developed an extensive network to gain early access to new ideas.
> Multi-level teams visit universities, maintain long term relationships
> with suppliers, and visit competitors. (Dixon, 1994, p. 52, 53)

Again, the people researching, networking and benchmarking were the same people who

use the information.

The practitioners we interviewed in our field research agreed that their organizations were strong operational learners. In the past, these organizations, typical of American businesses in general, had concentrated on developing and improving their operational abilities. To become learning organizations within the context of the Model for Organizational Learning, these firms must develop the conceptual skills required to balance the learning cycle. The challenge facing these leaders was how to transform their organization's culture such that it would foster and support both the *know-how* and the *know-why* of individual and organizational learning. Given the presence of operational abilities, if conceptual learning could be stimulated through collective reflection, true learning could prosper.

For Forbes, Sherman and Best, the first step toward achieving organizational learning was to be accomplished though technology. All of these companies, believing that organizational learning would occur by providing access to information, had developed and were using company-wide databases. As Senge points out, while information is a component of learning, it is different from knowledge. Information provides the potential for new knowledge, but it is not until information is processed through one's mental model (or theory) that it becomes knowledge. This implies a dynamic and conscious act of challenging the *know-why*. The mere act of providing information does not magically allow knowledge to evolve. Rather, in this environment, the ability of an individual to challenge their individual theory becomes, by default, a passive activity, left to the

determination of the individual. This seems to be the prevalent modus operandi among American organizations. In the absence of an organizational infrastructure and culture that rewards and encourages the *know-why*, the critical transfer process and the realization of profound knowledge is hampered. Information does not equal knowledge.

In contrast, Johnsonville Foods and Chaparral Steel are organizations which actively pursue the conversion of information to knowledge. Activating conceptual learning at both Johnsonville and Chaparral required a distinctly different culture than the typically hierarchical structure of America. To stimulate the intrinsic motivation of each individual within the firm, the two companies reinvented the definition of work. Each employee was charged with taking ownership of problems and was given the authority and the resources to resolve them. From this was born a shared vision which each employee came to embrace. Compensation and incentive systems were also established to reinforce the shared vision as well as to promote individual development. Questioning the status quo was encouraged and welcomed. To reinforce the importance of a learning culture, both companies sought individuals with an intrinsic motivation to learn. This prompted holistic thinking and allowed each member of the organization to influence organizational theory through organizational reflection.

Holistic thinking encourages individuals to not only *know-how,* but to also *know-why.* In an environment which encourages action and reflection, the academic is allowed to coexist with the practitioner. As has been mentioned, operational learning within the business environment is healthy; empirically, it is a given. Once this is balanced with conceptual learning both individual and organizational reflection are activated. Stimulating these two dynamics, in turn, balances the individual and organizational experiential learning models (ref. FIGURE 13).
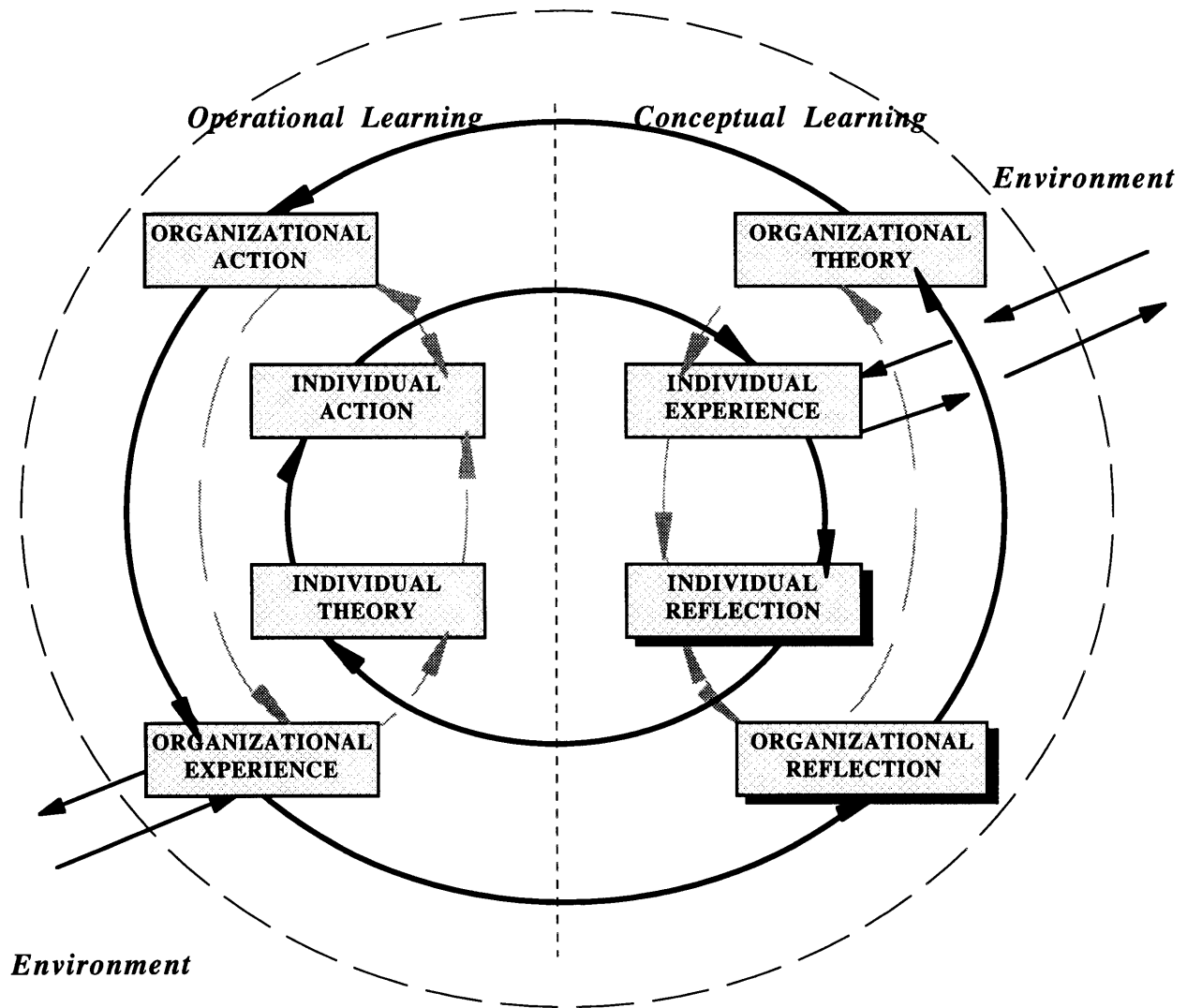
FIGURE 13 - MODEL FOR ORGANIZATIONAL LEARNING
(INDIVIDUAL AND ORGANIZATIONAL EXPERIENTIAL
LEARNING CYCLES HIGHLIGHTED)

The cultural shift evidenced by Johnsonville and Chaparral, is, for Senge (1990), a

necessity, if firms want to create environments where organizational learning flourishes.

The necessity of a cultural shift may be why firms such as Colliers, Whittier, and LaSalle

are finding it so difficult to achieve conceptual learning on an organization-wide basis. As

was evidenced by Johnsonville Foods, transformation cannot be mandated. For Stayer, change was only realized when employees were given the responsibility to engender change. When people were given some control over their destiny, dramatic change occurred. In both Chaparral and Johnsonville, organizational vision and values were established at the top and supported from within. It was important for employees to share their leaders vision and purpose as their own; this allowed the organization to grow and to learn collectively.

The three organizations with whom we spoke, were all attempting to transform existing organizations. All three leaders believed that learning should be driven by leadership. Sherman and Forbes seemed to believe that organizational change could be successfully implemented incrementally. This, they thought, would protect their short term success while moving toward their long term objective. Conceptual learning necessitated by a balanced learning cycle was perceived, by the two practitioners, to be a long term and costly objective. Their response, to incrementalize change, is prevalent today.

> Let's admit it. Corporations around the world are reaching the limits
> of incrementalism. Squeezing another penny out of costs, getting a
> product to market a few weeks earlier, responding to customers'
> inquiries a little bit faster, ratcheting quality up one more notch,
> capturing another point of market share- those are the obsessions of
> managers today. But pursuing incremental improvements while
> rivals reinvent the industry is like fiddling while Rome burns.
> (Hamel, 1996, p.69)

In a balanced wheel of learning, as with Johnsonville and Chaparral, there was no distinction between operational and conceptual learning, the two occurred simultaneously. The perception that conceptual learning could only be achieved long term may have be an idiosyncrasy of the myopic nature of the real estate industry. As Downs (1991) has noted, the industry is anchored in the context of the herd mentality, the need to fit in with the greater industry trends. This myopic focus may be due, in part, to the cyclical nature of real

estate. The industry is also known for its individualism and ego. Its compensation systems typically reward individual behavior and therefore create a protectiveness over information. These characteristics create additional challenges to transforming cultures within the real estate industry. The need to follow the herd, or the industry, prohibits significant change and inhibits opportunities for improved organizational learning. Transforming a culture requires a visionary leader; someone willing to challenge the old to invent the new.

The leaders we spoke with all had a strong desire to improve individual and organizational performance; and all recognized that learning had the potential to provide a competitive advantage. But, possibly because they were not facing a crisis, or because they believed that the benefits from short term investments would only be realized long term, there was no true commitment to learning.

When the learning laboratory was suggested as a tool to stimulate conceptual thinking, it was not enthusiastically received. For all practitioners, time was a serious issue. While a separate environment may not be practical or financially justified, Chaparral's integration of a laboratory within the plant may be a feasible alternative. Instead of creating a separate laboratory as a practice field, Chaparral integrated elements into its organization real time. The success of Chaparral's learning environment was based on its ability to allow practice "on the job." The critical elements of a learning lab, the ability to control the environment and to reduce risk were established in Chaparral's culture and infrastructure. New technology and methods were tested along side the production line. Research and development were combined with manufacturing, dialogue type methods of communicating such as analogy were used to stimulate creativity and team work, all employees were treated as equals and often shared jobs, and mistakes or failures were seen as learning opportunities. While Whittier practiced multiple times during the day, the elements of risk

remained. Thus, the ability to test new methods and to eliminate the defensiveness needed for conceptual learning were missing. If Whittier, like Chaparral, can create a culture where these elements are reduced or eliminated than valuable learning can occur "on the job." While learning may be expensive, not learning may be more expensive. Companies cannot afford to be chained to action.

The complexity of today's environment demands constant attention to the dynamics within organizational environments. The stimulation of conceptual learning is but one step in the life long journey.

VI

Conclusions

A new economic reality is upon us, yet the understanding of it far exceeds the ability to respond. Technology and globalization are leading us on a journey for which there is no map; to a place where knowledge and information hold the key to the ability to adapt and to respond. From this, competitive advantage will be determined by who can learn the fastest. The Urban Land Institute (Stewart, 1996) in their 1996 publication, ULI on the Future, Creating Tomorrow's Competitive Advantage, cited this shift; "Using new, up-to-the-minute information is integral to gaining competitive advantage...." But, is the learning organization is a fad or a trend? Does it provide an opportunity to achieve continuous improvement both individually and organizationally?

The proverbial fork in the road is ahead. To the left, is the road used for decades; it is a road of hierarchy, control and fragmentation. On the other side, is a dirt path so clouded by misty fog that visibility is lost. It is espoused that the choice of least resistance is almost certain to lead us to the cliff. The path, while clouded at the entrance, is said to provide the potential to reach a meadow of brightness, a place, where the once inconceivable, is not only achieved, but becomes a new shared mental model, a new theory. As Daniel Kim says, one may choose to act or do nothing.

A learning organization requires creative leadership willing to risk being the mapmaker. This was the case at Johnsonville Foods and Chaparral Steel. As Stayer at Johnsonville Foods reflected, "There is a lot of talk about making people feel important. I don't agree

with that. I think we have to make people be important - and know it." (Dixon, 1994, p.

62) A learning organization means balancing management's tendency to act with the

opportunity to reflect. It means creating the infrastructure and systems which truly value

people's intellectual and creative abilities. It means moving from a short-term focus on

quantifiable results to a long-term focus on hard to quantify characteristics. Such change

will indeed require a shift in America's collective mindset. Peter Senge contrasts Western

thinking with that of the Chinese:

> We in the West see a world composed of things, while you (the
> Chinese) see a world of process. We act individually, while you are
> still tied to family and community. We believe in simple causes and
> effect and continually search for the all-encompassing 'answer',
> while you tend to reason from concrete particulars, and seek more to
> understand the web of interdependencies within which effective
> action must be taken. We think in days and months, while you
> think in decades and generations. (Senge, et.al., 1994, p. 565)

And yet, by understanding the challenge, we have the ability to choose our response. If an

organization can understand the learning process and effectively balance the wheel of

learning, it can influence the change which lies ahead rather than react to the inevitable

crisis facing those who do nothing.

Creating a learning organization is not a one time solution; it is a way of life. As we learn

how to improve our learning, we continue to improve performance. As Forbes noted,

knowledge is a resource which, unlike natural resources, does not diminish with use, but

rather flourishes. "Through collective learning we have the possibility of transforming the

organizations we have created, not instantaneously nor without considerable struggle, but

in the direction that we choose. Learning is the most potent force for change that exists."

(Dixon, 1994, p.xviii)

It is here that the dilemma of the learning organization seems to occur for many of the

practitioners interviewed within this thesis. All of them acknowledged the benefit of

communication, knowledge and learning and as an idea and supported it broadly. And, balancing the wheel of learning throughout the organization was not seen as one time solution, it was perceived appropriately, by each one of them, as a way of life. This, however, implies a significant cultural transformation. In a cyclical industry like real estate, 'feast' and 'famine' shifts are typical and expected. Cultural shifts, however, are not. Businesses adapt accordingly to the business cycle and while each firm desires competitive advantage, it wants to ensure that other businesses do not distance themselves ahead. As a result, in an effort to reconcile the desire for improvement with the tendency to stay close to the herd, a strategy of incrementalization develops.

This was the case at all of the firms profiled within this thesis. By and large, they sought improvement through the use and implementation of new technologies. While technology is changing the world we live in and is acknowledged by many as a means to improve communication, it is only that, a means. Without the intrinsic motivation throughout the organization, the *know-why*, it remains information which has to be managed, but **not** knowledge.

It is clear that all companies seek competitive advantage. If the promise of the learning organization is competitive advantage, then why are companies so hesitant to embark down the dirt path? For us, the answer may lie in two areas.

First, as Kim has noted, learning is not universally understood. (Kim, 1989) As a concept it is embraced, but understanding the balanced role of the polar opposites - action vs. reflection, concrete vs. abstract - is harder to grasp. Without this insight, businesses revert to what they know best, operational learning, the *know-how*. This, predominantly, was the case with the companies reviewed in this thesis. Conceptual learning, thus, resided in the domain of a few organizations.

Second, a the clarity of the learning organization as a vehicle to competitive advantage is not apparent. Time and money were cited in the interviews as impediments to creating a learning culture. If the promise of the learning organization was evident to practitioners then time and money would not be an issue. Thus, today, while the benefit of learning is a given, the relative value of the learning organization is not.

With Johnsonville Foods and Chaparral Steel, the learning organization was born out of the necessity for survival. There was but one path for them to take when they reached the fork in the road, the dirt path. From crisis, change occurred. This may be the case with real estate service providers, but is probably less likely. While a fundamental worldwide shift is occurring in the economy, real estate remains, predominantly, a local market. As such, it may be insulated from the degree of pressure and competition which other businesses are experiencing. The greater promise for the learning organization within the real estate industry may, in fact, reside in the nature of the herd mentality. If a few leading real estate companies become living examples of learning organizations, then others will follow out of a fear of being left behind.

In theory, the learning process is relatively simple to understand. The four elements of the experiential learning model, experience, reflection, theory and action, must be balanced both individually and organizationally if true learning is to occur. One element is ineffective without the presence of the others. And while individuals may have different learning styles, the diversity of the organization can help to provide the required balance. But, as empirical evidence and our field research has shown, in reality, the conceptual elements required for balanced learning are often missing.

The difficulty in implementation is a theme that resonates throughout the literature on learning organizations. Many practitioners have criticized scholars for being "reverential and utopian, filled with near mystical terminology." (Garvin, 1993, p. 78) Practitioners like what the literature says but dislike the fact that no one can tell them exactly "how it is done." If given the "solution," managers could do what they do so well, take action. Creating the "answer", on the other hand, is much more difficult. If there were a simple cookbook for the "learning organization," it may cease to be a competitive advantage.

Scholars have not provided the all encompassing answer because there it does not exist. The journey to the learning organization is based on "reflecting on our deepest aspirations, honoring our personal visions and conversations, being more intelligent together than we can ever be separately. It is a path based on the primacy of the whole, rather than the primacy of the parts. It is a path fundamentally different from the path along which industrial development in the West has progressed." (Senge et. al., 1994, p. 566)

This thesis does not provide an answer for those struggling to find their way. We do hope that through creating a framework through which the learning process can be understood, we have helped to inform and to stimulate the operational thinkers in the real estate industry and other industries. And while practitioners tend to ignore the academics of theory, the theory is necessary for an understanding of the process. Once the process is understood, a conscious effort can be made to support learning with tools such as dialogue and learning laboratories. It is our hope, that thoughtful leaders such as Stewart Forbes, Robert Best and Mike Sherman, will dare to lead the herd in a new direction.

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