

New Management Roles in the Communications Industry

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The communications industry has been subject to radical changes in this decade. Managers working in this branch of industry need to adapt their management style to changing conditions. This study was carried out for the branch training and education institute to provide directions for their future training and education supply. Using a variety of research instruments (literature research, interviews, survey and expert conference) a new flexible curriculum structure has been developed.

The printing industry has traditionally been a relatively stable branch of industry. It had its own structures, it was relatively independent of other industries and developed its own technology. However, recent technological developments have radically changed traditional patterns in the printing industry both in the United States and Europe (Mandel et al, 1993; PIRA International, 1994; GEA Adviesgroep, 1994). And although only a limited number of organizations have responded to those developments, it sure looks as though they are going to be permanent.

Those technological developments include digital printing, on-line publishing, short run color printing, printing on demand, CD-i, CD-rom, Internet as well as technological innovations in more traditional printing technology. Related to those are multimedia productions and information databases. Research and practice show that the most important changes for the printing industry will be the digitalization of information and the disconnection of information (text and graphics) and printed materials. From now on, information will be stored in large databases and will be distributed on demand through various kinds of information carriers, be it on-line, on CD or in print. As a result the traditional printing industry tends to merge with other branches like multimedia, publishing and advertising. Therefore we refer in this study to the communications industry, instead of solely the printing industry.

The developments, in particular the computerization and new efficient techniques, result in a declining need for low skilled workers and people on the work floor. On the other hand does ongoing computerization of existing printing technology also result in a need for higher skilled workers in informatics, computer science and telematics. At the organizational level customer relations are changing and international competition is forcing large as well as small businesses to focus on their future strategy in order to survive.

In general we distinguish three types of strategies to respond to the developments described above (GEA, 1994). Firstly the penetration strategy, which means that the organization continues to focus on a traditional market segment and adapts minimally to new technological opportunities. Secondly we see organizations that adapt gradually to the new changes. This is called the transition strategy. And lastly, only a limited number of organizations radically change their business and technology and adapt completely to new markets and innovations. This is referred to as the transformation strategy.

In this arena of changes and developments the manager plays a crucial role. Traditionally management tasks in the printing industry would include planning, organizing, staffing, controlling and leading (Koontz & Weihrich, 1988). But currently, this management approach is not sufficient anymore. Management in the printing industry needs a new dimension.

This study was aimed at exploring changing contents of managerial work in the communications industry in the light of recent developments, and moreover to develop a new training and education design for managers. The client of this study was the Dutch printing industry training and educa-

tion institute. This institute offers several education programs which lead to well known certificates for managers in the printing industry. These programs consist of related units in a fixed structure and are offered in a two or three year format. A small part of their supply consists of in-company training and consultancy. Their primary concern was to obtain data about their target group so that management profiles developed by the University of Twente could serve as a concrete and valid basis for new education and training programs aimed at managers in the communications industry.

So far we have provided a context for the study. In the remainder of this paper we will describe the following elements of the study: the research questions, the methodology used, results of the different phases related to the research questions and a discussion of the combination of methods for information collection.

Research questions

The research questions for this study were: (a) which are the most relevant developments to affect managerial work in the communications industry, (b) which management tasks will change or be needed in order to perform effectively and innovatively, and (c) which education and training programs need to be developed for managers to be prepared for the changing content of managerial work.

Methodology

In this study we have focused on the changing management requirements. These requirements are affected by developments in the printing and communications industry. Because of the breadth of the research subject, we decided to approach the matter from different angles and through a variety of research methods. This way we would be able to formulate conclusions which would be based on theory as well as practice and on the views of experts as well as practitioners. Another advantage of this strategy was that through sequential ordering of the various methods we would be able to build on earlier findings and thus adapt the research process at the same time.

Literature search. Therefore we started with an international literature search to obtain information about recent changes in this branch of industry. A recent thorough study of the Dutch Printing Federation provided a useful frame for more detailed literature search. A few conference proceedings (Mandel, 1993; PIRA, 1994) about the topic gave us valuable insight in visions and strategies for the future of the communications industry. It also appeared that in several other countries, similar studies had been carried out.

Interviews. In the second phase of the study we reflected the findings of the first phase to several businesses in the Netherlands. These organizations had been selected because of their innovative attitude and experience with new technologies. Pioneer organizations are characterized by early adoption of new media, risk taking in exploring new markets and products and strong affiliations with customers and suppliers. We found five organizations that were willing to cooperate, and they provided useful information about the pro's and con's of new developments in practice. The data were collected by means of semi-structured interviews with key-persons within the innovative organizations.

Questionnaires. The third phase consisted of two mailed questionnaires among businesses and managers in the printing industry in the Netherlands. One questionnaire (n=2400) has been sent to organizations and focused on branch developments, size of the organization, main technology, future business strategy, products, and markets. Those questionnaires were completed by top management; 460 (19%) of them were completed and returned. The other questionnaire has been sent to individual managers (n=5800) within those organizations. This second questionnaire was aimed at describing their current and future tasks and some personal characteristics, like age, sex, education, additional training and their personal experience with new technology like internet, CD-rom, etcetera. Of this second questionnaire 752 (13%) copies were returned. Although these response rates may seem rather low at first sight, this has no consequences for the representativeness of the data. In fact many more questionnaires than were necessary were sent out, to be able to perform more detailed data analysis in

case of high response rates. The amounts of 460, respectively 750 respondents represent the businesses and managers very well.

Conference. The fourth phase of the study was a Dacum conference with regard to profiles and competencies of managers. Dacum (Norton, 1985) is a relatively quick technique to obtain job profiles, competencies and curriculum aims and plans. We invited 15 printing and communications experts for a two-day meeting to discuss the findings of the previous phases of the study. To provide all participants with the same entering knowledge about the subject matter, we compiled a comprehensive summary which was mailed to the participants before the start of the conference. This summary served as a common database during the conference. From this point we proceeded by distinguishing new roles and tasks for innovative managers in the communications industry. Each of the roles, seven in total, was described by means of tasks and other role characteristics. The participants also formulated required competencies for realization of each of the roles.

Curriculum development. Lastly, the results of all four phases were synthesized to develop a new structure for training and education and to offer suggestions for improvement of the existing education and training supply of the institute. This was done by mutual deliberation of both client and University. As such practical as well as theoretical aspects and study results were considered and included in a new framework design for management training and education.

Results and conclusions

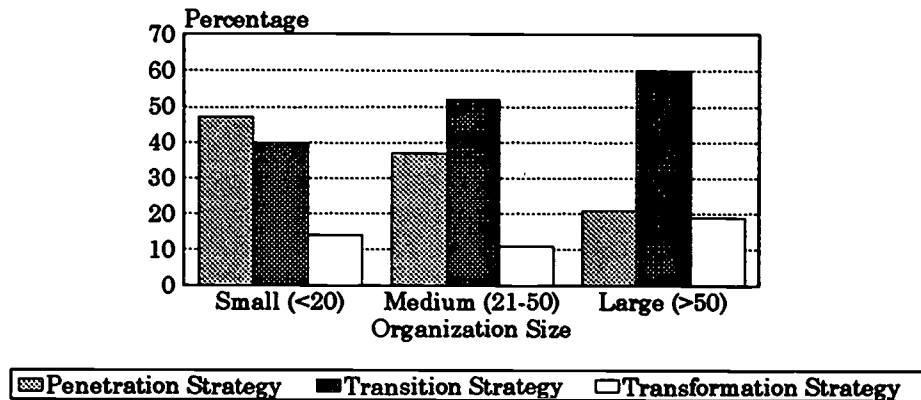
In this section the results will be described per research question. First we will discuss relevant developments that will affect future managerial work. Second we will address changing management tasks and roles, and third some remarks will be made about the new education and training structure.

Developments. The literature research showed seven main trends that will guide the future of the communications industry: (1) the printing industry will evolve from a closed and independent branch of industry into an integrated part of the communications industry; (2) the monopoly of the press has ended; (3) reallocation and substitution of printed matter by electronic media will continually take place; (4) the volume, composition, and manufacturing of printed material will change; (5) organizations will have to deal with increasing internationalization; (6) the need for less printed material will cause an increasing capacity surplus within the traditional printing industry; (7) environmental care will emerge as a competition factor. To respond to those trends, organizations in the communications industry will have to alter their way of doing business. This includes a mind shift from press to information and communication systems; a change of corporate culture towards new ways of leadership, management and communication; a different commercial focus which aims more at serving markets and customers in stead of products; strategic Human Resource Management and Development to enhance employee flexibility and competence; project management instead of product management; systematic use of process data; and use of advanced technology in both product and process. The interviews of phase two showed that pioneer organizations endorse those trends and that some of them already have adapted to them. In addition to financial investments, companies will have to invest in people. The organizations in the study viewed an inclining need for higher educated people, who need not necessarily be educated in technical or graphic domains.

As was mentioned before, we distinguished three types of strategies to respond to new developments (GEA Adviesgroep, 1994). Firstly the penetration strategy, which means that the organization continues to focus on a traditional market segment and adapts minimally to new technological opportunities. Secondly organizations adapt gradually to the new changes. This is called the transition strategy. And lastly, some organizations radically change their business and technology and adapt completely to new markets and innovations: the transformation strategy. The results of the questionnaires supported our earlier findings. It appeared that only a small percentage of the businesses in the communications branch has adopted a transformation strategy (figure 1). The larger the organization the more likely they are supporting a transition strategy. Small organizations seem to lack the necessary means to invest in new technology or do not have faith in the opportunities that adoption of a progressive strategy can offer: almost half of them adhere to a penetration strategy.

Management Tasks and Roles. The literature search showed an incoherent spectrum of views and approaches to managerial work, due to the succeeding views and theories in this field. Roughly speaking one can distinguish two approaches: functional tasks versus occupational roles of managers. Koontz & Weihrich (1988) have summarized the views of many authors on managerial tasks. They have made a very common division of main tasks: Organizing, Staffing, Controlling, Leading and Planning.

Figure 1. Future strategy and organization size in the communications industry



Other management experts view the work of managers through the use of roles (e.g. Quinn, 1989). Quinn distinguishes eight management roles: Innovator, Broker, Producer, Director, Coordinator, Internal Monitor, Group Facilitator, and Mentor. We decided to focus on tasks for the questionnaire phase and the use of roles in a subsequent phase. The reason for focusing on tasks first was that the theoretical role concept is relatively unfamiliar to managers in this branch of industry. Thus the third phase, surveying the organizations and managers, provided a more profound insight on the views of management about current and future tasks. This phase resulted in a main profile of most important future managerial tasks and added management profiles for large, medium and small organizations. To illustrate this we have depicted the five most important future tasks per organization size in figure 2.

Figure 2. Most important tasks per organization size

Organization Size		
Small	Medium	Large
<ul style="list-style-type: none"> • Cooperation with customers • Selling products • Calculation of orders • Motivating employees to strive after quality • Quoting for new orders 	<ul style="list-style-type: none"> • Motivating employees to strive after quality • Consultation with colleagues, superiors and employees • Maintaining existing customer relationships • Cooperation with customers • Remaining up to date with technological developments 	<ul style="list-style-type: none"> • Stimulating (the will to) change • Stimulating employees to attain goals • Consultation with colleagues, superiors and employees • Motivating employees to strive after quality • Internal consultancy

The fourth phase of the study, the conference about profiles and competencies, was oriented towards a different approach of management profiles, that is management roles. The participating experts viewed a traditional approach to management tasks as being a conservative factor in the development of better qualified managers. And besides that, all functional domains like Marketing, Human Resource Management, Internal Management, and Finance are being addressed by current management training and education programs. The change of approach, which is more or less aimed at innovation management, needs to be based on a shift of mentality. Therefore the conference participants decided to focus on roles of managers and formulated seven main roles. Those are (1) Producer; (2) Innovator; (3) Motivator/Coach; (4) Controller; (5) Integrator; (6) Spokesman; and (7) Strategist. The participants generated outputs for each role, as well as tasks and competencies. See figure 3 for an overview of the main roles and their ultimate output.

Those roles showed a resemblance to the roles described by Quinn (1989). The conference participants also decided to focus on the manager as an innovative entrepreneur to provide an overall role that should direct the design of new management training and education. It was felt that managers in all organizations at all levels should aim at realizing this concept within their own working context and at their own level.

Figure 3. Roles and outputs

Role	Role Output
Producer	Productivity
Innovator	Idea
Motivator/Coach	Targeted Activity
Controller	Management Information
Integrator	Synergy
Spokesman	Organization Image
Strategist	Mission, Strategy & Goals

Training and Education Structure. Through synthesizing of all previously found information a new training and education structure for management in the communications industry was developed. The results of the literature search were validated during the following phases and could therefore serve a reliable source of information about current and future development to affect the communications industry. All synthesizing activities were continuously compared to these developments. The next step in the process of curriculum structure development was the determination of core competencies that emerged from the role descriptions. Those more general competencies (valid for all managers in all kinds of organizations) provide implicit knowledge domains. The results of the questionnaires were used to obtain more specific and detailed information about those and other competencies and the knowledge domains to match. The foregoing resulted in a scheme in which all roles, outputs, competencies and knowledge domains were described. Figure 4 shows an example of the role of Innovator.

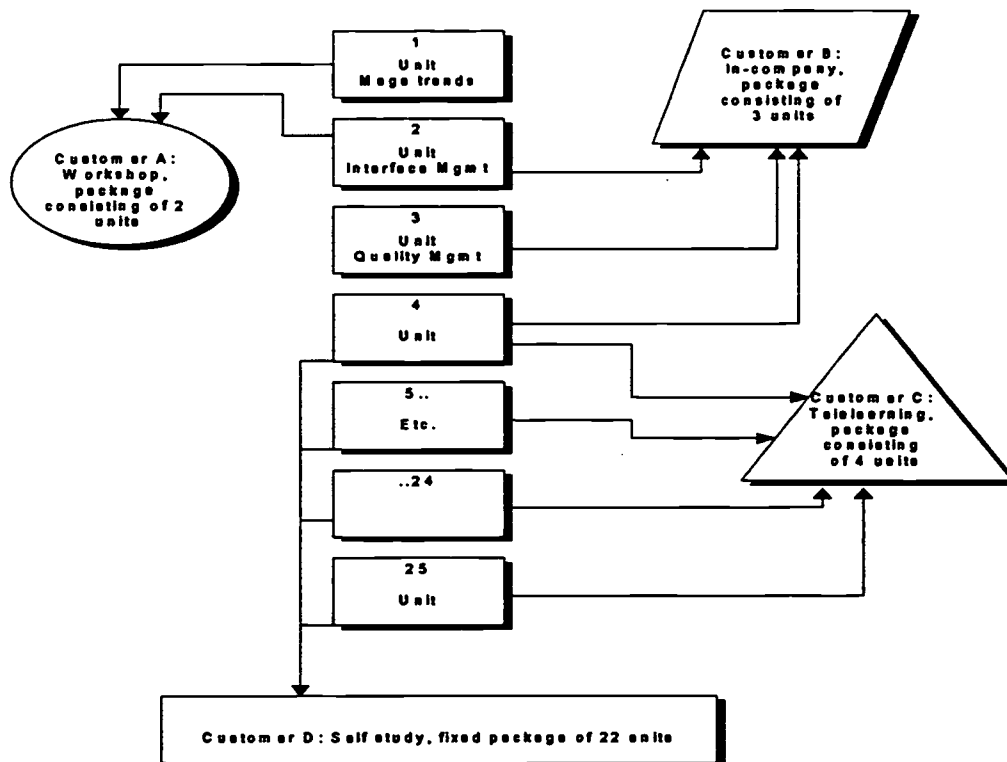
Figure 4. Role - Competencies - Knowledge Domain Scheme

Role & Output	Competencies	Knowledge Domains
Innovator realizes renew- ing ideas	<ul style="list-style-type: none"> • Can carry out strategic explorations • Can think independently: can follow and initiate creative developments • Can make strength/weakness analyses of the organization, related to current organization developments • Can develop, implement and evaluate strategic scenarios 	<ul style="list-style-type: none"> • Innovation Theory • Intervention Theory • Systems Thinking • Creative Thinking • Network Learning • Communication Theory • Scenario Technology • Implementation theory • Evaluation Theory

Several knowledge domains apply to all roles and are therefore mentioned separately. These are: Language Skill, Communications Skills (oral, written, interpersonal), Problem Solving and Negotiation. From this scheme new curriculum units have been derived through combination of traditional and new important knowledge domains.

The new curriculum structure has been built on the existing modular structure of management programs. But the difference from the existing structure is that the new curriculum units can be used more flexible, i.e. in various contexts and for different customers and clients. Furthermore, the questionnaire results can be used to develop specific curriculum alternatives for several distinguished groups of managers like managers in large companies, managers working in small and medium-sized enterprises or for managers at different levels within the organization. The basic idea is that management in the rapidly changing communications industry will need specific training and education as they encounter skills and knowledge deficiencies. According to Thompson & Carter (1995) a program for managers should be "flexible enough to recognize that a manager's work is not regular and that such tradition features as regular weekly attendance run counter to commercial reality". Also are "organizations interested in their managers improving their performance, not in gaining theoretical knowledge which does not lead to such improvement". A relatively fixed program structure, like the one that is in place at this moment, would not suit these needs. Figure 5 shows various ways in which a reservoir of autonomous curriculum units, be it workshops, plain knowledge, discussions or computer based training, may be applied for specific customer needs.

Figure 5 Various ways of applying curriculum units for different clients



This example shows 25 curriculum units of which some can be delivered in various modes. When customer A wants to educate his people quickly about new trends, the institute has the possibility to organize a workshop, based upon two existing curriculum units. Another customer likes to study at home

in the evening for a certain certification. She can follow a course consisting of 22 units and take an examination. Elaboration of this concept could offer an unlimited number of possibilities to serve specific customers needs.

Relevance to the field

The strength of this study is that the combination of different research methods such as literature research, site visits, a survey and an expert conference leads to a thoroughly practice-based training and education supply for managers in the communications industry. In addition, two approaches of analyzing managerial work, tasks and roles, are combined to provide a broader perspective of the jobs involved.

Since the study has ended just recently, information about the usefulness and concrete content of the structure is not available yet. But since the structure has been based upon information from current practice and future expert opinions it will certainly contribute to a sound education and training program in the communications industry.

References

- GEA Adviesgroep (1994). *Informatietechnologie en de grafische industrie. [Information Technology and the Printing Industry]*. Amstelveen, KVGO.
- Koontz, H. & Weihrich, H. (1988). *Management*. New York: McGraw-Hill Book Company.
- Mandel, T.F. et.al. (1993). *Bridging to a Digital Future*. Alexandria, VA: Printing Industries of America.
- Norton, R.E. (1985) *DACUM Handbook*. Columbus, OH: National Center for Research in Vocational Education.
- PIRA International (1994). *Communications 2000 - Visions and Strategies for Printers and Publishers*. Brussels: Intergraf.
- Quinn, R.E. (1988). *Beyond Rational Management*. San Francisco: Jossey-Bass.
- Thompson, J.E. & Carter, S. (1995). The Development of Competence: National Standards for Managers. In: Mulder, M., Nijhof, W.J. & Brinkerhoff, R.O. (Eds.) *Corporate Training for Effective Performance*. Boston: Kluwer Academic Publishers.