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# Promotors and champions in innovations: Develompent of a research paradigm

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# Promotors and champions in innovations - development of a research paradigm

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## Abstract

Champions or promotors are individuals who support innovations enthusiastically. They have been known in this role since the beginning of the 1960s. Research initially proved that an actively committed champion was the most important factor for success in the management of innovations. At the same time, however, a variety of other individuals were observed who were also striving to make the innovation successful. These individuals may be distinguished by their contributions and their power bases. There are now a number of explanations which support the notion that the impact of these individuals on the success of innovations is due to their skills in dealing with conflicts constructively and handling information creatively. Finally, we know that the extent and type of the division of labor among these individuals is determined by the complexity of the innovation problem and by the complexity of the organization concerned. Accordingly, the troika structure consisting of power promotor, process promotor and technology promotor in particular is the most successful structure for the management of typical innovation projects. The increase in inter-organizational innovation activity will probably shift the role of the process promotor more towards that of a relationship promotor.

Future research has to provide further details on the co-operation of promotors among each other and with all others passively affected by or actively engaged in innovation projects. A point of particular interest is likely to be whether the promotor model needs to be supplemented by a corresponding opponent model. At the same time, the relationship between the champion concept and the concept of project management has to be investigated.

# 1. Phases of development

## Phase 1: The discovery of the champion

Josef Schumpeter can be credited with being the first person to draw attention to the central role played by the **entrepreneur** in the innovation process, in a book published in 1912 (Theory of Economic Development, Leipzig). This entrepreneur creates new combinations on a discontinuous basis, in totally new forms, in an act of creative destruction. He brings forth new products, introduces new production methods, opens up new markets, conquers new sources of supply or re-organizes (Schumpeter 1931, p. 100). The "dynamic entrepreneur" was thus characterized and described. This was apparently sufficient to incorporate him into the economic models. To understand him as a real person or even to analyze him in further detail seemed superfluous.

That changed when, in 1963, Schon introduced a new term for this creative individual: the **"champion"**. The term which has dominated discussion to date was thereby established for the Anglo-Saxon countries. In contrast, in the German speaking countries this term was not accepted because of a slightly negative connotation.

Some ten years had elapsed when, almost simultaneously in three different places in the world, mutually independent studies confirmed that the activity of committed and enthusiastic individuals plays a decisive role in promoting the creation of innovations.

- In **Germany** in 1973, Witte investigated the first purchases or leasing of computers. In his survey he proved that the existence of "promotors" – as he termed the champions – led to significantly higher levels of innovation and of activity when compared to innovation processes in which such individuals were absent ("Columbus" Project).
- In the **USA** in 1974, Chakrabarti discovered that product champions could be found chiefly in successful cases in the further development of NASA innovations ("NASA Study").
- In **England** in 1974, Rothwell and his team, conducting research into innovations in chemical processes and scientific instruments,

found that the human factor was a key determinant for the success of innovation (SAPPHO Project).

The breakthrough was thus achieved: the importance of the human factor was established beyond doubt. Many research projects, particularly the study by Howell/Higgins, have confirmed over and over again that identifying the champions or promotors in the innovation processes is not a particular problem. They normally stand out clearly because of their particularly large number of especially original contributions and/or because the make quite deliberate use of their power to further the innovation process. Consequently, it is becoming increasingly easy to identify the active individuals in the innovation processes. **Champion are no longer merely literary figures, but empirically observable individuals who can be described using suitable quantification conventions and who are clearly successful.**

## Phase 2: Confusion

These three studies were not the only ones, but they were the ones which dealt most clearly with the human side of innovation. Other studies published in the early 1970s by Rogers/Shoemaker (1971), Langrish et al. (1972), Globe et al. (1973), and Havelock (1973) should also be mentioned. The common feature of all these studies is that they identified not just one single champion in an innovation process, but several outstanding individuals who were present simultaneously in innovation processes. Different terms were sought to distinguish these committed individuals from one another. The initial consequence was that a confusing **variety of terms** appeared in the literature, often colored by the language used in normal practice. The following is a small selection:

> inventor, initiator, stimulator, legitimizer, decision maker, executor, catalyst, solution giver, process helper, resource linker, technical innovator, product champion, business innovator, chief executive, technology promotor, power promotor.

This flood of titles for those people who actively promote innovation processes has by no means died to a trickle since then. More terms can also be found in new publications of the '90s:

Political coordinator, information coordinator, resource coordinator, market coordinator, management champion, decider, planner, user, doer, expert, person affected, process promotor, relationship promotor.

Roberts and Fusfeld (1981) did not just describe this variety of terms, they also had them caricatured in a particularly impressive manner.

But what was the outcome?

On the **negative side**, complaints included confusion, lack of clarity, redundancy of terms and encouragement of different schools of thought. Researchers are not exempt from the ambition to establish "their" terms and to provide evidence that the distinctions they have selected are particularly useful either for further research or even for direct application.

On the **positive side**, variety became apparent. The fact that a different number of individuals with different functions would be found in different innovation processes was established as a certainty. As a result, the question of the cause and effect of these differences could be raised.

## Phase 3: Order

When Alok Chakrabarti joined the Institute for Research in Innovation Management in Kiel in 1987, we both stood amazed before this bewildering variety. We saw it as our first task to establish order so that further research could follow a systematic concept. This concept had to take into account the two functions of an organization : first, to efficiently regulate the **work** to be done, second, to effectively regulate the **power** relationships between the incumbents. We took the terms for the people engaged in innovation processes to express certain **activities** performed by them during the process, or certain **power bases** from which they derived their influence on these innovation processes. This produced the following two-fold distinction by contributions and power bases:

| Activities and roles in innovation management | |
|---|---|
| **Activities** | **Roles in innovation management** |
| 1. Initiation of innovative process | initiator, catalyst, stimulator |
| 2. Development of a solution | solution finder, solution giver, idea generator, information source |
| 3. Process management | process helper, connector, resource linker, idea facilitator, orchestrator |
| 4. Decision making | decision maker, legitimizer |
| 5. Implementation | realizer, executor |

Source: Hauschildt/Chakrabarti (1988, p. 383)

| Power bases and roles in innovation management | |
|---|---|
| **Power bases** | **Roles in innovation management** |
| 1. Knowledge specialty | technology promotor, technical innovator, technologist, inventor |
| 2. Hierarchical potential | power promotor, chief executive, executive champion |
| 3. Control of physical resources | business innovator, investor, entrepreneur, sponsor |
| 4. Organizational know-how and communication potential | process promotor, product champion, project champion |
| 5. Network know-how and potential for interaction | relationship promotor |

Source: Hauschildt/Chakrabarti 1988, p. 383; Gemünden/Walter 1995, pp. 973 ff.

Table 1: Roles in innovation management

## Phase 4: Explanation of success

(1) The first studies on the champions in the Anglo-Saxon countries differed from the German promotor studies in one very significant point: in the publications of Rothwell et al. and Chakrabarti, the **paired comparison approach** was used. Successful companies or projects were compared with companies and projects which produced little or no success. Attempts were made to identify the characteristics which distinguished successful cases from unsuccessful ones. This approach was undoubtedly focused, drawing on the basis of everyday experience and academic topologies, but was not driven by concise theory and did not test a theory in the strict sense.

This is the most prominent difference from the German research conducted under Witte. He first of all developed an original **theoretical concept**, which explains why the presence of promotors improves the success of the innovation process. Witte worked with the hypothetical construct of **barriers**: resistance to the innovation due to the barrier of **ignorance** and due to the barrier of **unwillingness**. Promotors commit enthusiastically to the innovation and help to overcome these barriers. The promotor model contains three core theorems:

1. Each type of resistance has to be overcome by a specific type of energy. The barrier of unwillingness is overcome by **hierarchical potential**, the barrier of ignorance is overcome by the use of **specific knowledge in a certain technical field** (correspondency theorem).
2. These types of energy are provided by different people. The **power promotor** ("Machtpromotor") contributes resources and hierarchical potential and the **technology promotor** ("Fachpromotor") contributes specific technical knowledge to the innovation process (theorem of division of labor).
3. The innovation process is successful when the power promotor and technology promotor form a **coalition** and are **well coordinated**, i.e. when they really co-operate (theorem of interaction).

The promotor model is thus based on the specific use of **power bases**. In addition, however, close co-operation between the promotors is also important. Witte chose the term "tandem structure" (or "dyad") for this, in the sense of two horses harnessed to a carriage in tandem.

Using a sample of 233 initial acquisitions (by purchase or lease) of computers, the empirical test showed that not only were much more innovative solutions found, but that the work also proceeded much faster and with greater diligence in those cases where such a tandem structure was present (Witte 1973).

(2) It is undoubtedly true to say that one significant contribution made by promotors lies in overcoming resistance to an innovation. However, this area is also a target of criticism of Witte's concept: the promotors do more than just handle conflicts. This is particularly true when the opposition, overall, has a loyal attitude, as the findings of Markham et al. (1991) prove. The original promotor model was in essence a conflict handling model. However, this view distracts from the informative and creative aspects of innovations. After all, innovations are particularly characterized by the fact that information is completely newly generated and/or combined in them. Furthermore, innovations are processes of problem definition, goal formation, generation and identification of new combinations. When Witte's model was developed, these **cognitive tasks** were given less consideration than the **conflict handling functions** of the promotors. The cognitive tasks could probably supply a different theoretical base for the interaction among the promotors.

In 1992, the research by Ancona/Caldwell went into this **interaction of cognitive and conflict-handling activities by the champions** in more detail. The Ancona/Caldwell study determines four characteristic areas of activity by factor analysis:

- "Ambassadorial activities": Formation of goals and blocking of opposition, above all conflict-handling activities,
- "Task coordinator activities": Coordination, negotiation and interface management, also basically conflict handling,
- "Scouting activities": Obtaining information, building expertise, seeking solutions, clearly cognitive activities,
- "Guard activities": Prevention of an undesirable wastage of ideas and information, activities which are not covered by our concept.

This seems to us to provide sufficient evidence of the cognitive contributions of the promotors. The comprehensive model explaining the human influence on the innovation process must definitely combine cognitive and conflict-handling activities.

## Phase 5: Systematic differentiation of the division of labor in contingency models

(1) The variety which emerged in the wake of the Witte, Rothwell and Chakrabarti studies raised two questions: not only: "What effect does such variety have?", but also "What determines it?". The traditional **contingency view** of organizational theory could thus also be applied to innovation management. The next question was: **How do external circumstances affect the number of process promotors and the way in which they approach the division of labor?**

(2) Witte's findings had already indicated that the division of labor between the technology promotor and the power promotor was clearly a phenomenon of **corporate size.** Rothwell and his research team proved that the **industry** is a determinant of division of labor. The **degree of innovativeness** and the **degree of diffusion** of the innovative products or processes also influence the division of labor. With the increasing diffusion of the innovation in an economy, the importance of the technology promotor declines. Maidique arrived at similar results as early as 1980 (see table 2).

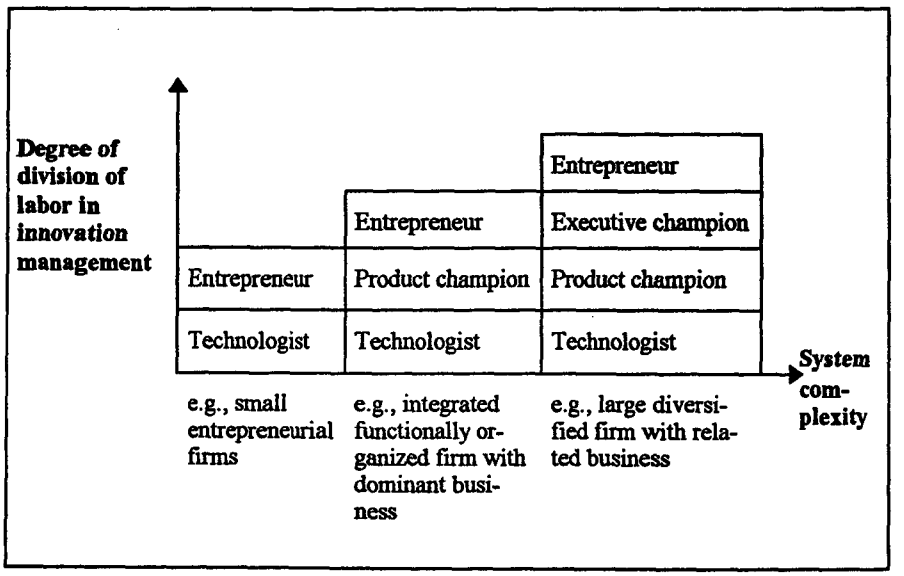


Table 2: System complexity and division of labor in innovation management (Maidique 1980)

If we take these findings together, we find **two influences superimposed** which are important for the division of labor in innovation management: **system complexity and problem complexity.** The resulting **overall complexity** has to be compared with the capability of the active individuals. If there is a considerable discrepancy between the complexity of the innovation and personal innovative capability, the basic model of division of labor has to be modified.

Maidique dealt with the type of instance where more extensive division of labor becomes an inevitable result of **high system complexity** as early as 1980. In the simplest case, in a small, entrepreneurial company, a **two-center constellation** of technology promotor and power promotor is found. According to Maidique, a **three-center constellation** is typical in medium-sized companies with a functional structure which are still limited to one product line. A **four-center constellation** is to be found in very large, diversified companies.

(3) The many and varied completed research projects which have been analyzed by Chakrabarti/Hauschildt (1988) contained many references to three-center constellations. To find an explanation we applied the complexity concept, based our work on Witte's concept and identified a third species of promotor: the **process promotor.** Process promotors are needed when innovations are complex in the sense that they affect a very large number of individuals personally in relatively large institutions, and trigger conflicts. Like the other promotors, process promotors rely on specific power bases: on system know-how, organizational and planning power, and on interactive skills. They, too, overcome characteristic forms of resistance: those of an established organization whose aim is to execute routine procedures as efficiently as possible and which rejects innovations as a disruption of its smooth running. Process promotors do not have the formal authority of the power promotor or the expertise of the technology promotor. They rely on leadership qualities and influencing tactics, and like the other two promotors they are characterized by the fact that they undertake risk and are prepared to sink or swim with the innovation. The study by Howell/Higgins demonstrated this side of the champion in particular. The Gesche Keim study confirms this view for the German-speaking countries: the successful "interactive project managers" are particularly characterized by a high level of interactive skills, co-operative leadership, above-average problem solving capabilities and constructive creativity (1997, p. 161).

Building on Witte's concept of the "tandem structure" we call the team of three the **"troika" of power, process and technology promotor**. In his study of 133 innovation projects in the mechanical engineering industry, Kirchmann (1994) proved that this troika structure achieves better technical results, but above all better economic results than any other structure. Lechler (1997) confirmed these findings in his research into 448 projects, with an interesting addition: he was able to confirm our assumption that the probability of the occurrence of a process promotor and his positive influence on a project's outcome increases with problem complexity.

Figure 1 summarizes the conflict handling and cognitive activities in the division of labor between the promotors in the troika structure.

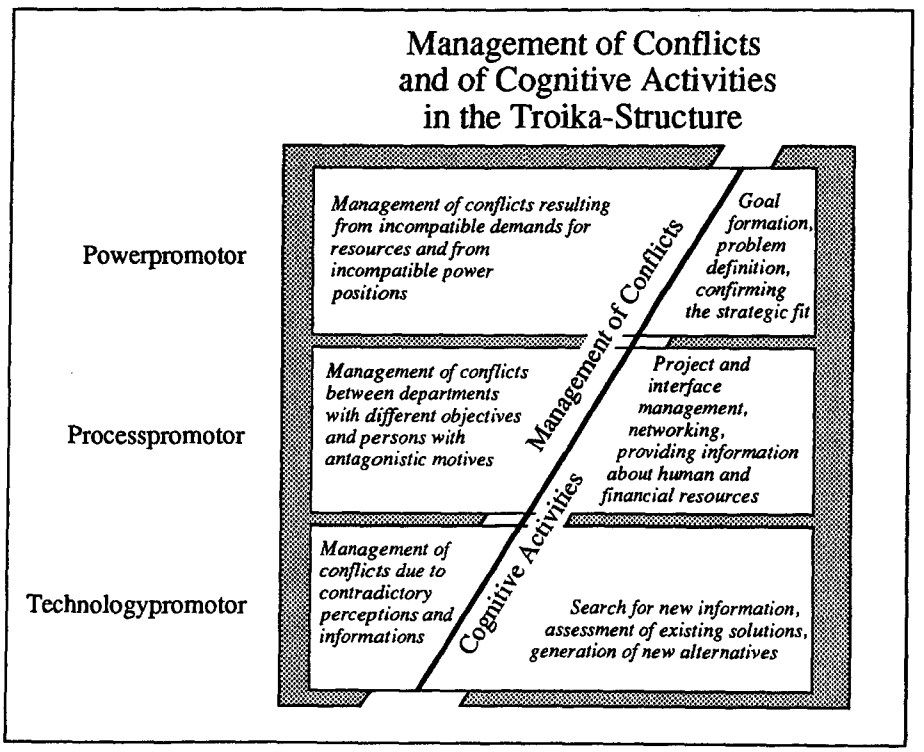


Figure 1: Management of conflictts and of cognitive activities in the troika-structure

(4) Finally, Gemünden and Walter (1998) indicate a further modification of the troika concept: they point out that more and more innovations require **co-operation with external partners** in the value chain, i.e. with customers or suppliers. There are barriers in the way of this co-operation, too. Just as promotors are needed to eliminate in-house barriers, they are also called upon to overcome extramural barriers to interaction. The barrier concept is developed similarly to Witte's theoretical approach. In place of the process promotor, who overcomes in-house barriers only, Gemünden and Walter's concept includes the **"relationship promotor"**. In a study of 94 technology transfer projects, they proved that processes are more successful if a person is present who deliberately establishes and maintains relationships with the partners. This proves their efficiency, at least for the function of the relationship promotor, although no proof of the division of labor is available as yet, such as that supplied for the troika of power, process and technology promotor.

In summary: research initially proved that an active, committed champion was the most important factor for success in the management of innovations. However, at the same time a variety of other persons were observed who were also striving to make the innovation successful. These individuals could be distinguished by their contributions and their power bases. The successful impact of these individuals is due to their skills in dealing with conflicts constructively and handling information creatively. Finally, we know that the extent and type of the division of labor among these individuals is determined by the complexity of the innovation problem to be solved and by the complexity of the organization concerned. Accordingly, the troika structure consisting of power promotor, process promotor and technology promotor in particular is the most successful structure for the in-house management of typical innovation projects. It is possible that the increase in extramural innovation activity will shift the role of the process promotor more towards that of a relationship promotor.

## 2. Possible routes for future research

As we ask ourselves "How is the research process likely to move forward?", we are entering the realms of science fiction. I see four routes in future, three of which are theoretical, addressing the problem of **explanation**. The fourth route is directed at the **application** of the promotor or champion concept in practice. Let us first of all go down the theoretical routes:

### Route 1: Further details on the promotor model

Any serious academic will have no particular difficulty in spontaneously reeling off a list of questions which the current body of research cannot answer, or cannot answer satisfactorily. It follows logically that a whole generation of academics can be occupied with identifying and proving further details of the promotor model. We see the following as the most pressing questions:

- Which **key events** stimulate individuals to act as promotors of innovations?
- **How do promotors come together**? The first phase of innovation processes is normally lost in mystic obscurity. Yet it is in this phase that the process by which promotors come together takes place, a process which can obviously only be described in social and psychological categories.
- And once these promotors do actually encounter one another - how is the **personal fit** determined and secured? A good fit is essential for the subsequent innovation project to come to a successful conclusion with all its difficulties, and to get it completed in the face of all resistance. Such teams need considerable group cohesion in order to withstand all the pressures from outside.
- We know very little about the conditions under which promotor structures are **dissolved**. Even if a promising promotor team comes on the scene at the beginning of a process, it is by no means certain that it will see the process through and complete it successfully. On what reefs might the tandem or troika founder?
- The interaction of the promotors and champions is couched in somewhat mysterious terms as **"good co-operation"**. What does that mean specifically? We know very little about whether and how the individual promotors have to take a hand during the innovation

process. Do they play changing roles? Do they always appear as a team? What contribution is absolutely essential for which key occurrences?

- Does the promotor model apply **regardless of time and space**? Organizations have changed in the last 20 years: they have become more open, more tolerant of conflict, more process-related, more project-orientated, more targeted, more risk-aware, more informative, and more co-operative. New forms of organization have developed. As a result, the types of resistance have changed. Does the promotor model have to be adapted to these organizational developments?

Let us stop here. The trend is obvious: the deeper one delves into the concepts of leadership and management, the more questions about the details and development of the structures will arise.

## Route 2: Extension of the promotor model

(1) The promotor model is based on the concept of resistance. Only vague theoretical concepts filed under "brakers and drivers" or "devil's advocates" or "loyal opposition" are currently available to describe the people who embody such resistance. The opposition model by Witte, Chakrabarti/Hauschildt and Gemünden/Walter objectivizes the resistance but does not personalize it. Should we not ask how - in accordance with the development of promotor structures - **opponent structures** are formed and behave? Is it not the case that the development of an innovative solution with a successful overall outcome can only be explained through the dialectic of promotors and opponents?

(2) A second corresponding model refers to the firm's partners in the innovation process. If we accept the premise that more and more innovations will be developed in future on an inter-organizational basis, the question of **corresponding "promotor structures"** at the individual co-operation partners arises. The promotor and champion constellation of a firm could also be envisaged in that of the co-operating partners, like a mirror image. The hypothesis would be that the success of the inter-organizational structure can only be secured by corresponding promotor or champion structures.

## Route 3: Greater observance of the supporting instruments

Research to date has been based on the tacit assumption that promotors or champions alone determine the success of innovations, without additional supporting instruments or backing. That is, of course, not the case. In actual fact, success does depend on other means, which are certainly not neglected by research. However, we know little about the reinforcing or attenuating effects with regard to the human constellation:

- Informal **information and communication** is quite certainly a major factor for success in innovation. And it is also definitely true that promotors quite clearly tend towards an informal interactive and communication style of this kind. To this extent, the two effects seem to reinforce one another. But what does informal information and communication mean in the age of electronic media? What type of informality is expected and useful? Is formal information obsolete or even disadvantageous?
- Promotors and champions are active "temporarily", for a brief period. They have the end of the innovation process in mind. What awaits them then? On the surface, this concerns the question of **incentives**, of rewards, of penalties, of all types of sanction that firms hold in reserve for successful or unsuccessful managers. The problem is so acute because promotors and champions generally do not commit themselves because of extrinsic drivers, but intrinsically. They get involved, they commit, they are not called in or appointed. How does a firm react to such self-appointed activists? How does it deal with failed or unsuccessful innovators?
- What role does the change in **organizational or corporate culture** play in the readiness to participate and the success of promotors and champions in innovation processes? Even if we no longer accept the classical dichotomy of "mechanistic" and "organic" organization culture, Burns and Stalker (1961) nevertheless show that there is a problem here: the more mechanistic an organizational culture is, the more important power promotors are. The more organic it is, the more important process and technology promotors are. The forms of organizational change mentioned above tend more to indicate that organic forms are gaining in importance. Will the role of the power promotor become obsolete?

These three routes may initially be significant more from the theoretical point of view - but we have now learnt that there is nothing so practical as a good theory which explains and forecasts reality. To this extent, the contrast between theory and practice - or in our interpretation: between explaining and doing - is much less important than is often maintained.

## Route 4: A greater focus on application

(1) Innovations are projects, but not all projects are innovations. How far can the practically-orientated proposals of **project management** be used in innovation processes? The following striking point emerges from an analysis of the literature on project management and on innovation management:

- The project management literature emphasizes formal organizational tools for project support, such as matrix management, project controlling, network planning, cost control, information management. In contrast, it devotes much less attention to the human aspects of project management.
- The literature on innovation is quite different. Here, considerable skepticism prevails about formal organizational tools, while at the same time the human perspective on the management of innovation processes is emphasized.

The following question thus arises: Can the domains and overlapping areas of project management and innovation management (promotor concept) be more sharply defined?

An analysis of the available research results prompts the following conclusions:

- Quite clearly, the **degree of innovativeness or the complexity of the innovation problem** is of major importance to the human management of the process. Lechler's research findings show that, in particular, "strategic" projects of high complexity with a high degree of innovativeness can be progressed successfully by a troika constellation. It is notable that the formal organizational coordination tools of participation, planning, control, information and communication play a minor role. The promotor concept can be recognized very clearly here: the troika of promotors substitutes for formal coordination.
- The **basic notion** by which the innovation is driven is not insignificant: if the **innovation is driven by its end** (demand pull), with

new technologies being sought to meet known objectives, this is the domain of the project management concept. It is otherwise with **means-driven innovation** (technology push): here, a known technology is available for which a completely new application is being sought. In this case, the innovators must free themselves of the earlier constraining ties and relationships. They are much more reliant on spontaneous ideas and ad hoc creativity. In this case, collaboration with customers or other external partners in the innovation process play a more important role. Means-driven innovation is the domain of the promotor model.

- A third influence on the application of certain process management model is undoubtedly the **stages of the innovation process**. Innovation processes generally have a relatively long, relatively fuzzy lead phase in which the problem has to be defined and the objectives set. According to all the findings available, this seems to us to be more a domain of the promotor and champion concept. Only after completion of the definition phase is it possible to think about transferring the problem into a "project", i.e. of institutionalizing it, setting a time frame on it, structuring it, giving it accountability and responsibility, a formal structure for interaction. Empirical findings advise a certain amount of caution here, however, since the leap from the "uncertain" to the more "certain" phase is not at all clearly mapped out. Nevertheless, it would be wrong to approach innovative projects from the start with the toolkit of traditional project management. It would also be wrong to continue to practice the full openness of self-management in the establishment and realization phases, which would allow many sections of the process to be repeated.

(2) A further practical question arises in the light of the frequent observation that champions or promotors occur "spontaneously" and that their emergence is not amenable to organizational intervention. At first glance, it seems that we have to inquire resignedly whether this is a question which may satisfy our intellectual interest in explanations, but not our practical interest in "doing".

**It is obvious that the co-operation of promotors and champions cannot be obtained by force. But it can be facilitated.** This calls for opportunities or nurturing conditions which improve the chances that these creative spirits will get together. Thus, we are propagating the **idea of "meeting-points"**: a firm should create opportunities for those people who show an enthusiastic interest in a

certain technological or market-specific segment to meet, to become acquainted, to evaluate and appreciate one another. We are thus putting in a plea for meeting places, for informal opportunities for communication, for regular, institutionalized, open and non-hierarchical meetings.

## 3. Conclusion

We could end our remarks here. However, the research findings induce us to leave the narrow world of the firm and innovation management and to address further-reaching **demands to society**: if achieving innovations really depends on specific people, on their readiness to give their enthusiastic commitment, then we have to demand the particular promotion of such people by our educational system. We have seen what the key features are:

- The deliberate use of hierarchical potential: the educational system can contribute little here.
- The creative use of specialist knowledge and expertise: this is the traditional track of the academic system.
- Communicative, organizational, interactive, indeed diplomatic skills on the part of process promotors: there is a broad field open to our educational system here. Champions are unfortunately not the final product of our education. Not, or not yet?

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