



Cultural Differences in Product Champions Characteristics A comparison of France and Germany

L. Roure
Cahier n°268
Mars 1999

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Abstract

This paper examines in France and in Germany two crucial characteristics of product champions: the hierarchical level and the level of seniority. The study is based on 82 French champions and 101 German champions. The study shows that the cultural value of power distance is significantly associated with these characteristics. This study suggests that the crucial characteristics of product champions may vary across cultures.

Key words: product champions, innovation, top management, intercultural management.

Acknowledgments: we would like to thank Prof. Reinhard Angelmar (INSEAD) and Richard Matheron for their useful comments and assistance on this paper.

Introduction

Schon (1963) was the first to point out the importance of product champions for the success of technological innovation. Product champions help in the innovation process to overcome organizational barriers and resistance. According to Schon (1963, p. 84), "The new idea either finds a champion or dies". Since then, a multitude of studies identify the presence of a product champion as a factor of innovation success (Chakrabarti 1974; Rothwell et al. 1974; Bachalandra, 1996; Lee and Na, 1994; Markham et al., 1991; Markham & Griffin, 1998). Despite this important contribution, rigorous empirical investigation of champions has often been lacking (Howell and Higgins, 1990) and there is only limited empirical evidence of their role (Markham et al., 1991). Particularly, very few studies integrate the characteristics of product champions: are all product champions able to fulfill their mission with the same efficiency ?

Today, the need for innovative activity across subsidiaries of multinational corporations (Ghoshal, 1987) has increased. The selection of the best location of innovative activity is a strategic issue for top managers. This has raised the question of the cultural contingency in the new product development. Researchers have shown that national cultural values can explain the tendency of a country to innovate (Shane 1992, Shane 1993, Kedia et al., 1992). Unfortunately, in such studies, the influence of culture on the innovation process is seen as a black box (Shane, 1995). Shane (1995) has begun to open this black box showing that the championing process could vary across different cultural environments. This cultural contingency of the championing process raises a question: do product champions possess the same characteristics in all countries ?

In this study, we will try to merge two streams of social science literature : the literature on innovation and the literature on intercultural management. Thus, we will focus on two countries which exhibit strong cultural differences: France and Germany. These two countries were chosen for two reasons:

- both countries are roughly comparable in terms of economic development level,
- both countries have intensive economic exchanges with each other (and this level will probably grow in the future with the diffusion of the new European currency, the "euro").

In this paper, our main objective is to examine the cultural contingency of some crucial characteristics of product champions. We will proceed in four parts. First, we propose a theoretical model of the link between the cultural value of power distance and some important characteristics of product champions. Second, we present the methodology used to test this model. Third, we expose our results. Fourth, conclusions will be drawn from the analysis.

THEORETICAL PERSPECTIVE

Concept of Product Champion

Product champions represent a category of key persons (or key roles) identified in the literature of innovation (Schon, 1963; Rothwell et al., 1974). Although the term "product champion" is widely used in research articles, champions are often studied without a clear definition and rigorous identification process (Howell et Higgins, 1990a; Fischer et al., 1986). Moreover, definitions of a champion found in the literature reveal wide variations among

researchers (table 1). It seems therefore important to delimit the scope of this concept before examining its cultural contingency.

Table 1: Definitions of a Product Champion Found in the Literature

Researchers	Definitions of Champions
Ettlie & Bridges et O'Keefe (1984, p.687)	"A person advocating" for the project
Markham & Green & Basu (1991, p. 219)	"A role where individuals are strong advocates for a project and generate positive behavioral support for an innovation during its development or work on behalf of the project in the face of organizational neutrality or opposition"
Maidique (1980, p. 64)	"A member of an organization who creates, defines or adopts an idea for a new technological innovation and who is willing to risk his or her position and prestige to make possible the innovation's successful implementation"
Day (1994, p.149)	"The agent who helps the venture navigate the socio-political environment inside the corporation"
Shane (1994a, p. 29)	"An advocate whose goal is to promote the innovation".
Chakrabarti & Hauschildt (1989, p. 166)	The Champion (process promoter) acts as a linkage. He has the knowledge of the organization and knows who should be concerned with the innovation, thus connecting the sponsor with the expert. His strength is the ability to translate the technical language of the innovation into one which is commonly used in the organization. By becoming a salesman of the new idea , the champion is able to develop a plan of action. His diplomatic talents provide access to different people within the organization"
Rothwell et al. (1974, p. 291)	"Any individual who made a decisive contribution to the innovation by actively and enthusiastically promoting its progress through critical stages".
Schon (1963, p. 84)	"Essentially the champion must be a man willing to put himself on the line for an idea of doubtful success. He is willing to fail. But he is capable of using any and every means of informal sales and pressure in order to succeed".
Smith et al. (1984, p. 25)	"Sells idea to obtain resources. The major salesman to management for accelerating progress toward commercialization".
Chakrabarti	"The importance of the role of the key individual or

Researchers	Definitions of Champions
(1974, p. 58)	"product champion" lies in getting the management sufficiently interested in the project"
Beath (1991, p. 355)	"Information technology champions are managers who actively and vigorously promote their personal vision for using information technology, pushing the project over or around approval and implementation hurdles."
Fischer et al. (1986, p. 13)	"The key characteristic of the product champion is the tension between the individual and what the organization wants".
Higgins & Howell (1990a, p. 40)	Champions "make a decisive contribution to the innovation process by actively and enthusiastically promoting the innovation, building support, overcoming resistance and ensuring that the innovation is implemented".
Markham & Griffin (1998, p.437)	"A person who takes an inordinate interest in seeing that a particular process or product is fully developed and marketed".
Roberts & Fusfeld (1981, p. 186)	Championing role : "Recognizing, proposing, pushing and demonstrating a new (his or her own or someone else's) technical idea, approach or procedure for formal management approval".

Thus, the role of a champion lies essentially in an activity of promotion and selling of a project in order to obtain resources and organizational support. Moreover, champions are individuals who take personal risks (Schon, 1963; Maidique, 1980). In his promotional activity, the champion has often to demonstrate the feasibility of a project to a reluctant top-management.(Burgelman, 1983). In the present study, we have decided to use the definition of Rothwell et al. (1974) but to slightly modify it for the sake of consistency with the perspectives of other researchers. Thus, a champion will be *"any individual who made a decisive contribution to the innovation by actively and enthusiastically promoting its progress through critical stages in order to obtain resources and/or active support from top-management"*. This definition seems to be broad enough to define any champion's actions (the decisive contribution can take multiple forms) while containing the principal activity of a champion (promotion) and its aim (to obtain resource and/or top management support). Risk taking is also covered by this definition, since the activity of promotion is linked to critical stages.

Characteristics of product champions

Which characteristics should product champions possess in order to fulfill their roles successfully ? Which characteristics will help champions gain organizational support ?

According to Schon (1963, p.85), "the champion must have considerable power and prestige in the organization; otherwise he will not have the freedom to play his role. He must know how to use the company's informal system of relationships". Witte (1977) considers that product champions need two characteristics to accomplish their roles: power and technical expertise.

Chakrabarti (1974) lays stress on the necessity for the champion to know well his organization and the market for the new product. According to Day (1994, p. 150) "Champions use their power and influence to help the venture navigate the complex socio-political maze inside their corporations". Champions must have the knowledge of the organization and must know who should be concerned with the innovation (Chakrabarti and Hauschildt, 1989).

Thus, two important characteristics for the championing activity seem to emerge : the hierarchical level and the level of seniority (number of years of internal service). The hierarchical level gives to the champion the position of power he needs to carry out his promotional task. Seniority gives to the champion the necessary understanding of the organization, its internal structure, its informal system of relationships and of the products being marketed. These two characteristics appear to be very important for the champion to fulfill his/her role.

No study examined, to our knowledge, the cultural contingency of these two crucial characteristics of product champions. The personality (Howell & Higgins, 1990b) and the behaviour in the innovation process (Shane, 1994b ; Howell & Higgins, 1990a) of product champions differ strongly from non-champions. Are champions under the same influence of national culture as other managers ? Particularly, are the two crucial characteristics of product champions under the influence of national culture ?

HYPOTHESES

Hofstede (1980) in an huge empirical investigation (120,000 employees of a multinational corporation) shows that cultural differences between different countries can be synthesized around four dimensions :

- **power distance**: tolerance of social inequality
- **masculinity**: degree to which a society is characterized by assertiveness (masculinity) versus nurturance (femininity)
- **individualism**: relationship between the individual and the collectivity in a given society
- **uncertainty avoidance**: degree of tolerance for ambiguity and uncertainty

Most researchers have used Hofstede's values to assume links between national cultures and innovation. (Herbig and Mc Carty, 1993; Herbig and Miller, 1992, Nakata and Sivakumar, 1996). Some researchers have already found tangible results. Shane (1993) showed that power distance, uncertainty avoidance and individualism can explain the rate of innovation of the 33 countries studied. In Kedia et al. (1992), cultures with low power distance and high masculinity display higher research and development productivity.

In this study, we will focus on the influence of power distance on the hierarchical level and seniority of champions. Conceptually, the other three dimensions of Hofstede's conceptualization of national culture (masculinity, uncertainty avoidance and individualism) seem to be irrelevant to our issue.

The influence of power distance on the characteristics of product champions

The main objective of product champions is to gain organizational support. In the literature of innovation, researchers have underlined the importance of the involvement of top management in new product development (Maidique and Hayes, 1984; Green, 1995; Cooper and Kleinschmidt, 1987; Cooper and Kleinschmidt, 1996) and of the support of top management (Maidique and Zirger, 1984; Pinto and Slevin, 1988). Top management indeed plays a crucial

role in the process of resource allocation (Bower, 1970). Moreover, it has the authority to remove resistance and organizational barriers (Green, 1995). Top management can favor cooperation among team members of an innovation project (Song et al., 1997) and foster the development of innovation (Block et al., 1986).

Hofstede (1980) found a much higher power distance index in France than in Germany : France's index reaches 68 points while Germany 's reaches only 35 points. Shane (1994) confirmed this strong difference. Bommensath (1991) and Pateau (1998), two specialists in French and German cultures, also consider that power distance is higher in France than in Germany. A lot of empirical studies, based on qualitative or quantitative data, confirm the point of view of these two specialists (Roure (1999) proposed a thoroughly review of the literature on this aspect). People in high power distance cultures adhere more rigidly to organizational hierarchy and tend to centralize decision making. Shane et al. (1995, p.946) found that "the more power distant a society is, the more people in it prefer champions to make those in authority the locus of support for efforts to overcome resistance to innovative ideas".

In this part, we shall focus on the champion's ability to gain the involvement and the support of top management. We think that the hierarchical level of the champion can play an important role. Indeed, the higher the champion's hierarchical level, the lower will be the power distance between him and the top of the corporation. Thus, the champion's hierarchical level should be associated positively with the involvement and the support of top management in the innovation development.

This argument leads to our first hypothesis:

H1: The higher the champion's hierarchical level, the greater will be the involvement and the support of top management

But, in low power distance cultures, one can easily approach top management: it is not so necessary to have a high hierarchical level to access the top. In cultures where power distance is low, employees feel that they are closer to their superiors. This argument leads to the following hypothesis:

H2: The link between the champion's hierarchical level and the involvement and the support of top management will be stronger in France than in Germany.

Power distance level and power distance origins

For Pateau (1991), history explains the existence of the higher power distance in France than in Germany: France was built gradually as a centralized unity (under the influence of the Romans, the laws of Jules Ferry and Napoleon Bonaparte) whereas Germany has always had a federal decentralized organization. In the field of business, it is possible to attribute the differences in power distance to the differences in the way of accession to the top. Bauer and Berthin-Mourot (1992) studied the Chief Executive Officer (CEO) of the 100 biggest firms in both countries. They found important differences in the business experiences of the CEOs during their careers. They contrasted German Montagnards who climbed gradually in their firms to the French "Parachuters" who were brought from outside in the firms. Thus, German CEOs theoretically know the firms they manage much better, and they maintain closer links with their employees. In Germany, upward social mobility is much higher than in France

(Maurice et al., 1982). According to Gauthey et al. (1988), an elitist education system in France, but not in Germany, tends to block greater social mobility.

Are champions the mirror of these differences ? If German champions climb in their firms and if French champions use their diplomas like parachutes to land on firms, then seniority should explain the hierarchical level of champions in Germany but not in France.

This argument leads to two hypotheses:

H3 : German champions' seniority (years of internal service) will be positively correlated with their hierarchical level

H4 : French champions' seniority will not be correlated with their hierarchical level.

Control Variables

Firm size was used first as a control variable. Maidique (1980) showed indeed that the larger the firm the lower is the involvement of top management and the lower is the hierarchical level of the product champion. Second, some **characteristics of the innovation projects** were also used as control variables. Green (1995) showed that four project characteristics influence the involvement and the support of top management in the innovation development : the radicalness of the innovation, the size of the investment for the project, the origin of the project and the expected contribution of the project. **Seniority** is expected to explain the champion's hierarchical level in Germany, but not in France: to be rigorous, we will also include seniority as a control variable.

Thus, hypotheses H1 and H2 will be controlled with six variables : firm size, the radicalness of the innovation, the size of the investment for the project, the origin of the project, the expected contribution of the project, and the champion's seniority.

Day (1994) showed that the radicalness of the innovation project influences the champion's hierarchical level : radical innovations require champions close to the technical aspects, i.e. low-ranking champions. Moreover, Day (1994) finds that within corporate headquarters, the higher the level of the principal champion, the greater is the innovativeness of the innovation project. Her interpretation of this result: innovation projects examined within corporate headquarters often represent major and costly strategic changes for the firm, and thus need top management's power to achieve their innovative results.

Hypotheses H3 and H4 will be controlled with three variables: firm size, project radicalness and investment size of the project.

METHOD

Sample and Procedure

The sample consisted of the 500 largest national firms in France and in Germany. The sample includes exclusively French national firms established in France and German national firms established in Germany. Thus, we make sure that the selected firms are really representative of both national cultures. Some researchers found that firms in foreign countries were under double influence: the influence of their country of origin and the influence of the host country (Maguire and Tanner, 1978; Soeters and Schreuder, 1988). There is no single shared industrial

sector in France and Germany including a sufficient number of national firms. The quantitative study will be based on many industrial sectors, but with emphasis on the chemistry, pharmacy, electronics and automobile manufacturing (sectors well represented in France and in Germany).

In this study, the unit of analysis is the innovation project. All questions about the innovation development refer to a single innovation project. In each firm, our contact was the Director of R&D. Issues in the questionnaire concern R&D much more than any other functional divisions (marketing, finance, etc.). The surveys were administered to the contact between May and November 1997. The role of our contact was to identify four innovations recently marketed and to designate the best informant to answer the questionnaire for each project. All survey items were then answered by this informant. All questions regarding the organization focused on the division as the unit of analysis.

Identification of champions

Howell and Higgins (1990a) denounced the lack of precision in the identification of champions: of the 14 studies reviewed, 10 did not discuss how the champion was identified. Finally, Howell and Higgins (1990a) are the only ones who used a rigorous methodology, and we will draw our inspiration largely from them. Our process of identification is based on the description of five key roles identified in the literature of innovation (Roberts, 1988; Rothwell et al., 1974): the inventor, the business innovator (or project leader), the gatekeeper, the sponsor and, of course, the product champion. Respondents indicate the person or persons who fit each of these roles. The same person can appear several times if he/she has assumed several roles. To encourage respondents to name these persons with spontaneity and without restraint, respondents were told to write the person's initials and not the whole name. This respect for anonymity can reassure hesitant and anxious respondents. The respondents were told to write "not pertinent" if no one fit the role and to write "NSP" (Do Not Know) if they could not find an answer.

Like Higgins and Howell (1990a), we tried to minimize attributional bias in identifying champions. First, the explicit purpose of the research was disguised: we indicated to respondents that the purpose of the study was to identify necessary roles and functions for implementing a technological innovation. Second, we did not explicitly label the roles: instead of "Technical Innovators" we wrote "role D", instead of "Business Innovator" we wrote "role B", and so on. Role definitions are derived from the literature of innovation. The definition of the inventor and of the business sponsor (or project leader) are adapted (to be usable in a questionnaire) from Roberts and Fusfeld (1981). The definition of gatekeeper is drawn from Allen. As already stated, the definition of a product champion is adapted from Rothwell et al. (1974).

Measures

Scales, items and reliability for each variable are to be found in the Appendix. Following the data collection, measures were subjected to a purification process involving unidimensionality and reliability assessments.

1) National Culture

National culture was not measured directly. There is a lot of comparative studies on French and German cultural values (Roure, 1999). Concerning the cultural value "power distance", the results of past research are highly convergent (Roure, 1999).

We used a dummy variable: French projects were given a code of 0 and German projects a code of 1.

2) Characteristics of a champion

Two characteristics of a champion were used in this work: the hierarchical level of the champion and the champion's seniority (years of internal service).

The champion's hierarchical level operationalization was drawn from Day (1994): the champion's hierarchical level was measured for five levels, from CEO, scored a 5, to four levels down (scored a 1). The champion's seniority was asked directly of the respondent.

3) Top management involvement

Top management involvement is measured at two phases of development (initiation and implementation). Rubenstein and Rafael (1984) found indeed that the top management support was not identical during these two phases of innovation development. To operationalize the phases of innovation development, we used Johnes' (1984) conceptualization. The definition of top management is drawn from Green (1995, p.227): "Top management was defined as the CEO and his/her direct subordinates". Unfortunately, to operationalize the involvement of top management in the innovation project, we must note that the literature is very poor. Most researchers used very short scales and sometimes single-item measures. To our knowledge, Green's (1995) scale is the only one which covers a variety of behaviors of involvement. We purified this scale (two items were redundant in our opinion) and we added eight new items. Thus, in the questionnaire, the scale contained 19 items altogether. Unfortunately, some items showed scores with a high number of missing values and we, therefore, decided to remove these items. The final scales used in this work contained 14 items for the initiation phase and 13 items for the implementation phase.

4) Top management support

We measured on a 5 point Likert scale the degree of support that top managers displayed toward the project (1 = strongly opposed ; 5 = strongly supportive). We used four categories of top managers: General Management, Marketing, R&D, Production. As index, we used the arithmetic mean of these four evaluations.

5) Control variables

Five project characteristics were used as control variables.

The radicalness of the innovation is drawn from Gatignon and Xuereb (1997). **Investment size** is drawn from Green (1995) and Mansfield (1988). It measures the perceived size of the resource commitments of the firm to the innovation project (in comparison with other projects undertaken in the firm). We selected Green's items, whose factor loadings are the highest, and added four items from Mansfield's (1988) research not otherwise taken into account.

The origin of the Project identifies the original source of suggestion for undertaking the project : we detailed and refined the Green's (1995) original scale. Informants were allowed to indicate more than one source. For hypothesis testing, if the project was described as having been suggested by R&D alone, the origin of the project was coded 0; otherwise the origin of the project was given a code of 1 (we used the same coding as Green (1995)). **The expected contribution** scale assesses how important the project was perceived to be at the beginning of the initiation phase and at the beginning of the implementation phase in terms of how significant a contribution it was expected to make to the firm. To build this scale, we used Green's (1995) research. **The size of the firm** was assessed in terms of turnover and of the number of employees in 1996. For both categories, we used an interval measure: a total of 5 intervals were designated for both scales. Nevertheless, the two measures were highly

correlated ($r = 0.95$, $p < 0.000$ in France; $r = 0.81$, $p < 0.000$ in Germany) and we decided to keep only the financial measure because it impacted more on the dependent and independent variables. Thus, turnover in 1996 was used as the measure for the size of the firm.

Equivalence of French and German Questionnaires

Intercultural researchers lay stress on the equivalence of the instruments used in different cultures (Nasif et al., 1991). Specialists generally recommend the back-translation process (Brislin, 1970). Two bilinguals are then employed: one translates the questionnaire into the target language and the second translates back (blindly) from the target to the source. The researcher then compares the two versions and makes any necessary corrections.

In this work, we adopted a slightly different process. Bollinger and Hofstede (1987, p. 45) think that one can use a cheaper and equally effective method: they recommend translating the questionnaire into the target language and to show both versions to several bilinguals. We used that method. We conducted the translation in seven steps:

1. we translated the American scales (or items) into French with help of Americans whose native language is English.
2. we then showed both versions (French and American) to other bilinguals who knew the field of innovation and its vocabulary well.
3. we constructed the French pilot questionnaire.
4. we pretested it on 10 French economics students
5. we made the translation into German with help of native German speakers.
6. we showed both versions to two bilinguals, specialists in German and French cultures, to a bilingual German human resource manager working in Germany for a French company, and to a bilingual Professor of management from Austria working in France.
7. We pretested the French and German versions on 10 managers (five in France and five in Germany).

Moreover, following the collection of our data, we compared the German and French factor loadings for all questionnaire items and found no discrepancies.

Results

Sample

In terms of the number of firms, the response rate to the survey was 16% in France and 22% in Germany. In terms of the number of questionnaires, the response rate to the survey was 9% in France and 15% in Germany.

In France, 26 national firms sent back 56 questionnaires, whereas in Germany, 25 national firms sent back 65 questionnaires. Table 2 present an overview of the sample.

Table 2: Sample Description

	France	Germany
Companies	26	25
Company size	60% over 2000 employees	67% over 2000 employees
Innovation Projects	56	65
Radicalness	60% radical innovations 40% incremental innovations	67% radical innovations 33 % incremental innovations
Number of Champions	82	101

Testing Approach

To test our hypotheses, we have used the multiple regression method. For all the models presented here, variance inflation factors were calculated to identify potential collinearity and found to be below harmful levels. All variables were entered in block to test hypotheses. Table 3 and table 4 present a correlation matrix of all variables in France and in Germany at the project level. Table 5 and table 6 present a correlation matrix of all variables in France and Germany at the champion level.

Table 3: French Correlation Matrix (project level)

	mean percent age	standar d deviatio n	1	2	3	4	5	6	7	10	11	12
Hierarchical Level mean	2.76	0.99	1									
Seniority mean	16.89	9.76	0.08	1								
Top Manag. Involvement Initiation Phase	2.53	0.79	0.35*	-0.16	1							
Top Manag. Involvement Implementation Phase	2.59	0.74	0.50* *	-0.16	0.56* *	1						
Firm Size	3.69	1.65	- 0.28*	-0.07	-0.22	-0.12	1					
Radicalness	4.04	1.52	0.31*	0.22	0.01	0.01	0.05	1				
Investment Size	4.09	1.14	0.27	0.08	0.29*	0.23	-0.04	0.01	1			
Expected Contribution Initiation Phase	4.56	1.37	0.02	-0.1	0.48* *	0.11	0.02	-0.00	0.43* *	1		
Expected Contribution Implementation Phase	5.01	1.18	0.05	0.00	0.31* *	0.17	0.06	0.20	0.38* *	0.76* *	1	
Project Origin	21.8%		0.16	-0.10	-0.06	0.20	-0.25	0.13	-0.05	-0.15	0.03	1

* p<.05; ** p<.01

Table 4: German Correlation Matrix (project level)

	mean percent age	standard deviation	1	2	3	4	5	6	9	10	11	12
Hierarchical Level mean	2.89	1.04	1									
Seniority mean	13.75	8.91	0.27*	1								
Top Manag. Involvement Initiation Phase	2.21	0.72	0.14	-0.14	1							
Top Manag. Involvement Implementation Phase	2.42	0.73	0.17	0.16	0.78*	1						
Firm Size	4.08	1.36	-0.30*	0.09	-0.21	-0.32*	1					
Radicalness	4.65	1.29	-0.08	0.28*	0.04	0.11	0.22	1				
Investment Size	4.05	1.13	0.27*	0.11	0.27*	0.34*	-0.09	0.34*	1			
Expected Contribution Initiation Phase	4.48	1.63	0.07	0.08	0.28*	0.23	0.14	0.25*	0.33*	1		
Expected Contribution Implementation Phase	5.13	1.20	0.03	0.10	0.27*	0.29*	0.19	0.18	0.28*	0.79*	1	
Project Origin	37.5%		-0.06	0.12	-0.22	-0.21	0.24	0.08	0.01	-0.07	-0.08	1

• p<.05; ** p<.01

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Table 5: French Correlation Matrix (champion level)

	mean	standard deviation	1	2	3	4
Hierarchical Level	2.68	1.06	1			
Seniority	16.01	10.14	0.13	1		
Firm Size	3.82	1.58	-0.05	-0.32**	1	
Radicalness	4.07	1.49	0.22	0.16	0.11	1

* p<.05; ** p<.01

Table 6: German Correlation Matrix (champion level)

	mean	standard deviation	1	2	3	4
Hierarchical Level	2.80	1.10	1			
Seniority	13.41	9.02	0.30**	1		
Firm Size	4.06	1.38	-0.26**	0.05	1	
Radicalness	4.65	1.36	-0.03	0.24*	0.16	1

* p<.05; ** p<.01

The impact of the hierarchical level of the champion on the involvement and support of top management

We have anticipated a positive relationship between the hierarchical level of the champion and the involvement and support of the top management in the innovation project (H1). This relationship is expected to be stronger in France than in Germany (H2). We have tested these hypotheses at the project level. In case of several champions per project, we have used the arithmetic mean of the hierarchical level of the champions.

Table 7: French Innovation Projects.

Regression of Top management involvement and support on champion hierarchical level

Independent variable	Top management involvement initiation phase n = 45	Top management involvement implementation phase n = 45	Top management support n = 36
	standardized estimates		
Champion's hierarchical level	0.32*	0.49**	0.36*
firm size	-0.17	-0.05	0.12
Innovation's radicalness	-0.03	-0.13	-0.16
Investment size of the project	0.03	0.02	0.11
Expected contribution from the project	0.52**	0.27*	0.44*
Project origin	-0.09	0.15	0.04
Champion's Seniority	-0.18	-0.20	0.14
adjusted R²	0.36	0.29	0.26
F	4.61**	3.56**	2,74*

+ p< 0.1 ; * p<.05 ; ** p<.01

Table 8: German Innovation Projects
Regression of Top management involvement and support on champion hierarchical level

Independent variable	Top management involvement initiation phase n = 55	Top management involvement implementation phase n = 55	Top Management Support n = 40
	standardized estimates		
Champion's hierarchical level	0.16	-0.02	-0.01
firm size	-0.11	-0.34*	-0.07
Innovation's radicalness	0.03	0.05	0.04
Investment size of the project	0.02	0.15	0.26
Expected contribution from the project	0.26 ⁺	0.24 ⁺	0.60**
Project origin	-0.16	-0.19	0.12
Champion's Seniority	-0.14	0.16	0.06
adjusted R²	0.08	0.19	0.35
F	1.65	2.79*	3.95**

+ p< 0.1 ; * p<.05 ; ** p<.01

Results only partially support hypothesis H1: the influence of the hierarchical level of the champion on the involvement and support of top management is statistically significant only for French projects. Results strongly support hypothesis H2: the link between the hierarchical level of the champion and the top management behaviour is much stronger in France than in Germany.

The link between the champion's seniority and his/her hierarchical level.

We have anticipated a positive relationship between the champion's seniority and his/her hierarchical level in Germany (H3) but not in France (H4). We have tested these hypotheses at the individual level (at the champion level).

Table9: French and German Champions
Regression of the champion's hierarchical level on her/his seniority

Independent variables	Champion's hierarchical level Germany n = 88	Champion's hierarchical level France n = 68
	standardized coefficients	
Seniority	0.20*	0.06
Firm size	-0.26**	-0.27*
Innovation's radicalness	-0.14	0.16
Investment size of the project	0.44**	0.27*
adjusted R²	0.27	0.15
F-statistic	9.22**	3.98**

+ $p < 0.10$; * $p < .05$; ** $p < .01$

Results strongly support hypothesis H3 and hypothesis H4: the influence of the champion's seniority on his/her hierarchical level is statistically significant only for German projects.

DISCUSSION

To understand the determinants of the involvement and of the support of top management in innovation projects is an important issue, since the lack of support of the top management often involves the termination of an innovation project (Green, 1995).

We thought that the hierarchical level of the champion could explain the attitude of top management. But, the influence of power distance is much stronger than was assumed: the hierarchical level of the champion, which was expected to be very important in any cultural context, played only in France, high power distance culture, a crucial role to gain the involvement and the support of top management. Thus, to increase its probabilities of being successfully completed, an innovation project needs a champion close to the top management in France. The top-down championing process seems to be favoured in the French culture. Is the top-down championing process favoured in all high power distance cultures ? In Germany, the hierarchical level of the champion seems to be of little significance to gain the support of top management. In this country, the top-down or the bottom-up championing process seems equally conceivable (but it depends probably on the type of innovation project (Day, 1994 ; Burgelman, 1983b)).

Contrary to French champions, German champions seem to climb gradually in their firm. The elitist French education system, which tends to create a high power distance culture, blocks greater social mobility. French product champions are subjected to this high elitist culture in the same way as any French manager. According to the literature on innovation management, high ranking German champions are probably more efficient carrying out their promotional task as their French counterparts: simultaneously they have the understanding of the organization (seniority) and the position of power (hierarchical level). Is this situation the same in all low power distance cultures ? Is the proposed explanation to the different levels of power distance in France and Germany valid in other national cultures ?

Drawing on the upper-echelons framework (Hambrick & Mason, 1984), some studies found that organizational tenure of top management team members is positively associated with commitment to the status quo (Hambrick et al., 1993) and with strategic persistence and conformity (Finkelstein & Hambrick, 1990). If these findings are valid in non-American cultural contexts, high ranking French champions should be more associated with truly innovative projects than their German counterparts.

Our results seem to confirm the cultural contingency of the championing process (Shane, 1995; Shane et al., 1995). Past research established links between national culture values and preferences for championing strategies. In this paper, we have tried to go a step further. We have showed that the different levels of power distance in France and Germany affect significantly the actual characteristics of product champions.

Implications for managers

As it is difficult to change the national culture, multinational corporations should be aware of the impact of the national culture on the actual characteristics of product champions for three reasons:

- to avoid intercultural conflicts (for example, if a French and German champion have to cooperate around an innovation project),
- to optimize the innovation development in cultures with different power distances
- to identify cultural advantage to develop an innovation (Nakata & Sivakumar, 1996 ; Shane, 1995).

Most studies of innovation process are based on american samples. A lot of normative recommendations that were based on these empirical works are maybe inappropriate in other cultural contexts. For example, in this study we relativized the necessity of a high position power to get the support of top management in Germany.

Conclusion

To our knowledge, it is the first time that a study has established a link between national culture and actual characteristics of product champions. This research advances, therefore, the literature on innovation and on national culture. The role of a product champion lies essentially in an activity of promotion and selling of a project in order to obtain organizational support. We have suggested here that the necessary characteristics for the product champion to fulfill successfully his / her role could depend on national culture. We have shown that one dimension of national culture -power distance- modifies the determinants of the champion's success: in France, a high power distance culture, the hierarchical level of the champion plays a crucial role in getting top management involved in the innovation development, but not in Germany, a lower power distance culture. In high power distance cultures, having a high hierarchical position is of great advantage in defending an innovation project but not in lower power distance cultures.

Moreover, we found that German and French champions differ in their paths of accession to the top: German champions tend to climb in their organization, whereas the seniority of French champions does not explain their hierarchical level. This difference could be at the origin of the different levels of power distance in both countries. We can extend these results and suppose that the closer the link between the seniority of managers and their hierarchical level, the lower the power distance value will be.

Yet, as in all studies, this one is not without its limitations. First, we did not measure the power distance value directly and we based our demonstration on Hofstede's (1980) findings.

Nevertheless, the validity of Hofstede's results has been confirmed in numerous studies, which provides a high level of confidence to his findings. Second, the size of our sample is relatively small, but the significant differences between France and Germany suggest that our results are robust. Third, we used retrospective data. Although this method is prone to potential biases, it is widely used in marketing research. We tried to limit these potential biases by including only recently marketed products in our sample. Another limitation of this work has been the focus on only one dimension of national culture: future research should seek to study the impact of other cultural values on the characteristics of champions.

An important direction for further research would also be to replicate this study for other countries. It could be very interesting to test the validity of the model presented here in other national contexts. Moreover, it could also be worthwhile to identify other crucial characteristics of champions and to examine their links to national culture.

Appendix: Summated Rating Scales and Reliabilities:

	Cronbach's Coefficient Alpha
	France Germany
<u>Top Management Involvement in the initiation phase</u> (Four-point scale, where 4 = Major Active Influence and 1 = No active influence)	0.94
<u>Top Management Involvement in the development phase</u> (Four-point scale, where 4 = Major Active Influence and 1 = No active influence)	0.93
1 Defining business objectives for this project	0.94
2 Setting of technical objectives for this project	0.91
3 Changing technical objectives for this project (<i>in the initiation phase only</i>)	
4 Decision to initiate this project	
5 Establishing initial priority of this project relative to other projects	
6 Decision to expose results of the team's work to important others in the firm when potential risks exist (<i>in the initiation phase only</i>)	
7 Monitoring / evaluating project	
8 Providing valuable information to the project	
9 Help to team in getting valuable information	
10 Selection of key individuals to work on this project	
11 Making the budget allocation to the project	
12 Changes in budget allocation to the project (<i>in the development phase only</i>)	
13 Choosing to whom the project team will report	
14 Defining the organizational structure of the project	
15 Protecting the team from outside pressure or interference	

Appendix: Summated Rating Scales and Reliabilities:

	Cronbach 's Coefficient Alpha
	France Allemagne
<u>Expected Contribution at the beginning of the initiation phase</u> (Seven-point scale, where 1 = not important and 7 = of paramount importance)	0.87
<u>Expected Contribution at the beginning of the development phase</u>	0.90

(Seven-point scale, where 1 = not important and 7 = of paramount importance)	0.84
	0.78

Same items were used for both scales:

- 1 Profitability
- 2 Turnover
- 3 Market position
- 4 Company know-how
- 5 Company image

Investment size (Seven-point scale, where 1 = much smaller and 7 = much larger)	0.81
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- | | |
|--|------|
| 1 Size of Project Budget | 0.82 |
| 2 Cost for this firm to do R&D in this scientific and technical area | |
| 3 Costs of this research in general scientific community | |
| 4 Costs of prototype or pilot plant | |
| 5 Costs of tooling and manufacturing equipment and facilities | |
| 6 Costs of manufacturing start up | |
| 7 Costs of marketing start up | |

Appendix: Summated Rating Scales and Reliabilities

	Cronbach's Coefficient Alpha
	France

Germany

Radicalness (Seven-point scale, where 1 = strongly disagree and 7 = strongly agree)	0.84
	0.80

- 1 This new product is a minor improvement in a current technology
- 2 This new product has changed the market conditions
- 3 This new product is one of the first applications of a technological breakthrough
- 4 This new product is based on a revolutionary change in technology
- 5 This new product incorporated a large new body of technological knowledge
- 6 This new product has changed the nature of competition

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