Organisational champions of IT innovation

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Abstract

This paper reports on an investigation of the characteristics of 10 organisational champions of information technology (IT) innovation in The Netherlands. The institutions at which they work are in the financial, transport, government and software sectors. Much of the research in this area has focused considerable attention on the individual personality traits of champions. This research project was positioned to contribute to the literature by broadening the focus of attention beyond individual-level characteristics. Since IT innovations occur within an organisational context, there is also a need to explore the role of organisation-level characteristics. This study explored both the individual- and the organisation-level characteristics exhibited by those promoting IT innovations in their firms. The results of this study show that these organisational champions fall somewhere in between the classic IT champion and the project manager. While personal leadership characteristics are not as much in evidence, organisational characteristics are emphasised more. They use their political skills to obtain resources and organisational acceptance of the IT innovations as they are shepherding the innovation through the organisational bureaucracy. However, these champions seem to place as much emphasis on creativity as classic IT champions. When necessary, they break rules, give veiled threats and find ways to get around the organisational bureaucracy. They seek creative outlets for themselves and those they manage. These findings suggest that a promising way to reduce the rate of information system (IS) project failures is to learn not only from IS projects undertaken by IT champions but also from innovation undertaken by other champions — business champions and champions of other technologies. © 1999 Elsevier Science Ltd. All rights reserved.

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1. Introduction

That information systems based on information technology (IT) are important to organisational activities is evidenced by the growing literature which demonstrates how IT can be leveraged to 'improve business performance and even transform the business. This recognition has generated a number of methods and frameworks promising to lend commerce and industry a hand. Celebrated methods and frameworks spanning almost two decades of research efforts are Strategic Planning for MIS (McLean & Soden, 1977), Business Systems Planning (IBM Corporation, 1981), the Strategic Grid (McFarland & McKenney, 1983) and the Strategic Alignment Model of the MIT90s Research Program (Henderson & Venkatraman, 1993). Attractive and useful though these methods and frameworks have been to both theorists and practitioners, they still have certain limitations with respect to predicting the success of IT projects (Farbey, Land & Target, 1995; Ciborra, 1997). Research into the success factors of IT projects has revealed a list of factors such as users' participation and commitment of top management.

This study takes another line of inquiry by following up on an important result in the study of technological innovation: the role of influential individuals associated with the success of a technological innovation. These individuals are often referred to as champions (Schon, 1963; Rothwell, Freeman, Horsley, Jervis, Robertson & Townsend, 1974; Kanter, 1983). In general, a champion is an individual who makes a decisive contribution to the innovation by actively and enthusiastically promoting its progress through the critical organisational stages (Achilladelis, Jervis & Robertson, 1971). By simple extension we can assume that since IT is a technology, IT-based innovation should also depend on the part played by such champions. This point is confirmed by information systems (IS) researchers such as Curley and Gremillion (1983) and Runge and Earl (1988), who also provided us with some leadership traits and psychological features of these champions. A subsequent line of inquiry was taken up by Beath (1991) who examined the ways an organisation could support the work of an IT champion.

Schon's (1963) study of the critical role of champions may be considered the seminal work that has stimulated other research in this same direction. Schon points out that a champion is crucial to the promotion of a technological innovation.

Essentially, the champion must be...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. No ordinary involvement with a new idea provides the energy required for coping with the indifference and resistance that major technical change provokes. It is characteristics of champions of new developments that they identify with the idea as their own, and with
its promotion as a cause, to a degree that goes far beyond the requirements of their job (p. 84).

Perhaps the most well known research project which supports Schon’s findings was the SAPPHO (Scientific Activity Predictor from Patterns with Heuristic Origins) Project in Great Britain (Parker, 1974; Rothwell et al., 1974). The main aim of this project, which was carried out in great detail between 1968 and 1971, was to confirm generalisations about technical innovation by comparing pairs of successful and unsuccessful innovation attempts. Of the 200 measurements analysed, only five factors clearly differentiated successes and failures. One of these five factors was the role of key managers and technologists in the innovation process. These key individuals play the following roles:

*Technical Innovator* — the person who makes the major contribution on the technical side to the development and/or design of the innovation;

*Business Innovator* — the person who is actually responsible with the management for the overall progress of the innovation project;

*Chief Executive* — the formal head of the innovating organisation; and

*Product Champion* — the person who makes a decisive contribution to the innovation by actively and enthusiastically promoting its progress through critical stages.

These key individuals in the successful innovation efforts are usually more senior and have greater power, respectability and experience than their unsuccessful counterparts. One noteworthy finding of this study was that the role of the product champion notwithstanding, the *business innovator* was the principal factor in cases of successful innovations. While SAPPHO makes a distinction among kinds of champions — technical innovator, business innovator and product champion — others discuss champions more generally and do not always use that term. Kanter's (1983) ‘change masters’ perform many of the activities that would be considered the domain of champions in Schon’s framework, while traditional or independent entrepreneurs operate like product champions (Collins & Moore, 1970; quoted in Maidique, 1980). Since the seminal paper by Schon there have been many papers reporting on the roles of champions in innovation. For example, in Peters and Waterman’s (1982) investigation of the features of successful companies, the roles of these champions are again identified as an important factor.

The literature on champions generally reports on the leadership qualities of the subjects studied (for example, Schon, 1963; Howell & Higgins, 1990; Kanter, 1983). It incorporates a range of qualities from charisma, drive and persistence to intelligence, communication and integrity (Northouse, 1997). Bass (1985) developed the theory of transformational leadership which identifies four leadership traits: charisma, inspiration, and intellectual and individualised consideration. These four characteristics are displayed by the population of champions investigated by Howell and Higgins (1990). Further, champions do not operate in the realm of abstract ideas; they are often identified with a product or a project to which they stake their prestige
It is as if they are out to promote a cause actively and vigorously, using an informal network. They often work unconventionally to overcome indifference and resistance in the bureaucratic structure, and are prepared to risk prestige and position to ensure the success of the innovation. A number of field and case studies have confirmed Schon’s basic findings (see, for example, Roberts, 1968; Ettlie, Bridges & O’Keefe, 1984).

The role of champion is that of venturesome innovator. Champions are knowledgeable and creative, and eager to try out new ideas (Frost & Egri, 1991). They are willing to take risks (Schon, 1963; Maidique, 1980), are quite prepared to break rules (Kidder, 1981), and show a healthy irreverence for the status quo (Frost & Egri, 1991). They are generally more experienced, more bohemian than their colleagues in the firm and are highly motivated (Amabile, 1988; Galbraith, 1982; Rogers, 1983). They come across as self-confident, persuasive and able to cope with ambiguity and uncertainty which are inherent in innovation (Howell & Higgins, 1990; Frost & Egri, 1991). They display astute social and political skills in team building (Kidder, 1981), in getting resources (Beath, 1991), and in working with others (Keller & Holland, 1983). They are known to use their imaginations to visualise new possibilities and proactively guide the innovation idea to its realisation (Kingston, 1977). They devote time and energy to cultivating coalitions and consensus in other areas of their organisations (Nayak & Ketteringham, 1986; Beath, 1991). Such a strategy of developing lateral support has often proved to be critical to innovation success (Frost & Egri, 1991).

Since innovations exist within an organisational context, another line of research has considered how these champions operate in organisations. Kanter (1983, 1989) shows us that organisations that are ‘integrationist’ (successful at stimulating the innovative capacity of their people) rather than ‘segmentalist’ (so rigidly structured as to stifle innovation) are able to stay ahead of changing technologies and markets. She also shows that while organisational characteristics tend to stimulate or inhibit innovations, it is the skills of the ‘change masters’ that to a large extent influence the outcome of a successful project. Even in segmentalist organisations, people can actually accomplish these innovations, although in the more stimulating organisations, the number of innovations is much larger. The culture, decision-making processes, reward systems and communication of an integrationist company stimulate people to accomplish innovations. Nevertheless, even in the integrationist company the champions need to have skill at clearing the investment with their managers, preselling the proposals, ‘horse trading’, coalition building, handling opposition and blocking interference, maintaining momentum and team building, rule changing, bending and breaking, and managing ‘the press’ (Kanter, 1983).

Because innovation is an information-intensive activity, much of what these champions do involves communication with colleagues, stakeholders and suppliers. Champions devote time and energy to what Gardner and Avolio (1998) call vision promotion. This trait was found by Howell and Higgins (1990) in their sample. Technological innovators appeal to larger principles or unassailable values about the potential of the innovation for fulfilling the organisation’s dream of what it can be and, by so doing, capture the attention of others. By providing emotional meaning
and energy to the idea, they induce the commitment of others to the innovation. In doing so they address a key management issue. They suggest how one can trigger the action thresholds of individuals so that they pay attention to new ideas and opportunities. In the process of such a promotion exercise, they provide intellectual stimulation to encourage the team members to think for themselves, to develop new ideas and to raise questions. Moreover, champions also express their confidence that others will participate effectively in the initiative and will display innovative actions directed at goal achievement. Besides communicating with their teams, champions keep in close contact with consultants and vendors who act as sources of new ideas (Beath, 1991). Close customer or user contact as an important source of innovation has been reported by Marquis and Myers (1969), von Hippel (1982) and Quinn (1979).

2. The research study

As the previous review has shown, much of the research in this area has focused considerable attention on the individual personality traits of these champions. This research project was positioned to contribute to the literature by broadening the focus of attention beyond individual-level characteristics. Since IT innovations occur within an organisational context, there is also a need to explore the role of organisation-level characteristics. For that reason, this study endeavoured to explore both the individual- and the organisation-level characteristics exhibited by those promoting IT innovations in their firms. This research project had the objective of developing an understanding of the characteristics of those IT innovators who work at both the individual and the organisational level. While some of the traits may overlap with those of classic IT champions, the expanded focus to include organisational characteristics causes the champions in this study to be referred to as organisational champions of IT innovation.

In this study, 10 Dutch organisational champions were studied in order to learn about the organisation-level characteristics that have led to successful IT innovations. Four senior Dutch IT consultants agreed to participate in the study by identifying candidate organisational champions in The Netherlands. These consultants were provided with the definition of IT champions as given in Beath (1991) to inform their recommendations.¹ This method of peer nomination has been found to be a reliable and valid approach (Kane & Lawler, 1978; Love, 1981). These consultants were able to provide names without much difficulty, something that is consistent with the observation of Frost and Egri (1991). This is particularly the case in a small country such as The Netherlands. Those who are active in the IT world often meet each

¹ Beath (1991) describes IT champions as “managers who actively and vigorously promote their personal vision for using information technology, pushing the project over or around approval and implementation hurdles. They often risk their reputations in order to ensure the innovation’s success” (p. 355). This is consistent with the findings of innovation research cited earlier.
other in business functions, conferences and IT-related activities. They all generally know each other well.

These four consultants independently proposed a composite list of 12 names. In order to ensure that all of the subjects in this study would be successful IT innovators, the consultants were then asked to use this criterion to critically review candidates for inclusion in the study. One consultant expressed reservations about two candidates whom he did not think possessed a long enough track record of important successes to qualify for inclusion in the study. These two individuals were, subsequently, dropped from the list.

Initial contact was established with the 10 potential subjects through a telephone call and follow-up letter explaining the purpose of the research. Strict confidentiality regarding both the individual and his company was assured so that respondents would feel comfortable in giving accounts of their work habits. Critical incident methodology was employed to elicit comments about a recent and representative IT innovation. Subjects were asked to think about one particular successful IT innovation. Using that particular ‘incident’ they were then asked to discuss how they go about successfully introducing IT innovation into their organisations. This research approach enabled contextualism (Pettigrew, 1990) to be incorporated into the examination of the process of organisational change accompanying technological introduction.

Data were collected by means of unstructured interviews of two to four hours in duration, which were taped and then transcribed. The transcripts of these interviews were then analysed twice. The first analysis, which occurred in two phases, was directed towards understanding the way in which organisational champions did or did not possess the same characteristics as classic IT champions. To do this, the transcripts were content-analysed by all three authors. The initial set of categories came from the established IT champion literature, in particular Schon (1963), Howell and Higgins (1990) and Kanter (1983). But in discussion among the authors as the coding was carried out, additional categories emerged in grounded fashion from the interpretation of the transcripts. This method of interpretation whereby categories or schemas are adjusted during the interpretative process is characterised by Agar (1986) as breakdown analysis. That is, when characteristics were encountered that did not fit the existing set of categories, the framework was revised to include new categories. The authors would, then, go back to earlier coded material and revise the coding based upon the new schema. The final set of coding categories, which resulted from this combination of top-down and bottom-up analyses, is shown in Table 2. Reliability of interpretation was, thus, ensured by employing the methods of multiple coding and breakdown analysis.

The purpose of the second interpretation of the transcripts was to understand the defining theme, which characterised each of the champions. Following the first analysis of the transcripts of the interviews, a draft of the results was sent to the parti-

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2 All 10 of the champions who were selected for the study are men.
3 The letter and the interview protocol are shown in the Appendices.
icipants. They were asked to identify interpretations or conclusions that appeared to be untrue, or which might be deemed a breach of the research agreement. This member checking was conducted in order to ensure the validity of the results. Member checking is a method of establishing the credibility of the findings in which the researchers check their interpretations with representatives of the people being studied (Creswell, 1998; Ely, Anzul, Friedman, Garner & Steinmetz, 1991; Lincoln & Guba, 1985; Miles & Huberman, 1994; Silverman, 1993; Trauth, 1997). Member checking revealed that all of the subjects concurred with the analyses.

3. Results

At the beginning of each interview, background information on respondents and their companies was also collected. Table 1 shows information about the respondents’ backgrounds, the type of work they do, and the organisations for which they work. For purposes of both convenience and anonymity, these organisational champions are identified with the labels S1 to S10.

The four consultants had revealed that that all of the subjects worked their way up to their current positions, which ranged from middle to top management. Only one of them had formal education in computer science; the rest had formal education in subjects such as economics, law and physics. However, the non-technical backgrounds of the nine champions did not prevent them from perceiving the capability of IT to serve the goals and activities of their organisations. This type of background is consistent with Howell and Higgins’ (1990) observation that technological champions informally emerged in their organisations and were seen as champions due to their decisive contributions.

Their contributions to the use of IT in their own organisations had been recognised both within and outside their own organisations. An example of outside recognition is that they have often been invited to give guest lectures at Dutch universities. Recognition within their organisations is reflected in the various roles they play: as opinion leaders, gatekeepers and team players.

From their own accounts of how they went about introducing specific IT innovations in specific firms, the subjects in this study exemplify the characteristics associated with two of SAPPHO’s champions: product champion and business innovator. Day (1994) calls these individuals ‘dual role champions’. As product champions they involve themselves directly in developing and introducing the IT. As sponsors or business innovators, they obtain the resources for the project, act as coach or mentor in key decisions or actually take these decisions themselves. A dual role champion may provide the right mix of knowledge and information as well as hierarchical power to foster certain kinds of highly innovative venture.

In examining how these organisational champions combined the characteristics played out in their dual role, three types of organisational champion emerged. These types derive from the dominant theme which emerged from each interview. The results are presented in the following way. First, each characteristic across all subjects is considered individually. Then, each champion is considered in terms of the
<table>
<thead>
<tr>
<th></th>
<th>Subject 1</th>
<th>Subject 2</th>
<th>Subject 3</th>
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<th>Subject 7</th>
<th>Subject 8</th>
<th>Subject 9</th>
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<tbody>
<tr>
<td><strong>Profile of IT champion</strong></td>
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<td>University</td>
<td>Higher technical school</td>
<td>University</td>
<td>Ph.D.</td>
<td>University</td>
<td>Ph.D.</td>
<td>University</td>
<td>Ph.D.</td>
<td>High school</td>
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<td>Courses, in the course of work</td>
<td>Courses, in the course of work</td>
<td>Courses, in the course of work</td>
<td>Courses, in the course of work</td>
<td>In the course of work</td>
<td>Formal training</td>
<td>In the course of work</td>
<td>In the course of work</td>
<td>In the course of work</td>
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<tr>
<td><strong>Experience in IT field (years)</strong></td>
<td>20</td>
<td>9</td>
<td>17</td>
<td>5</td>
<td>21</td>
<td>N/A</td>
<td>8</td>
<td>25</td>
<td>25</td>
<td>25</td>
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<tr>
<td><strong>Position</strong></td>
<td>Research Director</td>
<td>Project Coordinator</td>
<td>MIS Manager</td>
<td>Project Manager</td>
<td>Director of Automation</td>
<td>Director Corporate Planning and Development</td>
<td>Board of Directors</td>
<td>Director of Information</td>
<td>Chief Information Officer</td>
<td>Member of the board</td>
</tr>
<tr>
<td><strong>Report to</strong></td>
<td>CEO</td>
<td>Depends on job</td>
<td>Board of Directors</td>
<td>MIS management</td>
<td>Board of Directors Direct 5, indirect 125</td>
<td>Board of Directors</td>
<td>IS Manager</td>
<td>Board of Directors</td>
<td>Board of Directors</td>
<td>Board of Directors</td>
</tr>
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<td><strong>Number of people to manage</strong></td>
<td>5 to 15</td>
<td>5 to 15 per project</td>
<td>55</td>
<td>6 to 10</td>
<td>3</td>
<td>10</td>
<td>20</td>
<td>3</td>
<td>25</td>
<td>More than 20</td>
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<tr>
<td><strong>Number of projects managed</strong></td>
<td>3</td>
<td>3</td>
<td>20</td>
<td>3</td>
<td>10</td>
<td>20</td>
<td>3</td>
<td>8</td>
<td>Many</td>
<td>4</td>
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<td><strong>Company profile</strong></td>
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<tr>
<td><strong>Branch</strong></td>
<td>IT consultancy</td>
<td>Transport</td>
<td>Banking</td>
<td>Non-profit</td>
<td>Service</td>
<td>Retail</td>
<td>Government</td>
<td>Transport</td>
<td>Banking</td>
<td>Transport</td>
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<tr>
<td><strong>Size (people)</strong></td>
<td>3500</td>
<td>27,500</td>
<td>465</td>
<td>1000</td>
<td>1500</td>
<td>3200</td>
<td>120</td>
<td>27,500</td>
<td>1600</td>
<td>27,500</td>
</tr>
<tr>
<td><strong>Size (turnover)</strong></td>
<td>3250 million</td>
<td>3 billion</td>
<td>4 billion</td>
<td>7.5 billion</td>
<td>42 million</td>
<td>99 million</td>
<td>N/A</td>
<td>3 billion</td>
<td>24 billion</td>
<td>3 billion</td>
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<tr>
<td><strong>Importance of IT to company</strong></td>
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<td>Strategic</td>
<td>Strategic</td>
<td>Strategic</td>
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<tr>
<td><strong>Organisational experience in IT (years)</strong></td>
<td>15</td>
<td>10</td>
<td>20</td>
<td>30</td>
<td>28</td>
<td>15</td>
<td>11</td>
<td>10</td>
<td>20-35</td>
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particular theme that characterises his champion behaviour. Table 2 shows the characteristics of the organisational champions organised around these three themes which emerged from the interpretative analysis of the interview transcripts.

3.1. Characteristics of organisational champions

3.1.1. Leadership

The first set of characteristics is organised around the theme of leadership. With these characteristics organisational champions endeavour to use their experience and track record to establish personal credibility. The objective is to transfer this personal credibility from the champion to the IT project. In this way, trust in the project is established and maintained. This trust is used to respond to the risk associated with the innovation. The willingness to take risks in pursuing their pet projects is a feature of champions highlighted by Schon (1963) and reiterated by Beath (1991).

3.1.1.1. Take personal responsibility, share credit

While discussing their experiences, the champions were very open about the mistakes they have made and the failed projects with which they have been actively involved. However, instead of explaining away the mistakes or identifying others to share the blame, they prefer to shoulder the responsibility themselves.

Every manager makes mistakes. If you are high in the [organisational] tree, very near the board of directors, and you are starting such things, you have to take responsibility and you have to protect everybody else [S3].

The champions were not, however, willing to describe themselves as the linchpin in the success of a project, especially to the public. For example, when pressed to be absolutely frank about how much of the success of his department could be attributed to his personality or leadership style, one respondent reluctantly stated that it is about 50 to 60%. This comment is consistent with those made by the other respondents. Although they are quite forthcoming in owning up to failures, they like to share credit for successes.

You have to find some people in the organisation whom you can combine your interests with. You have to meet some guys in the organisation, who will say: “I would like to have that”. Make them owner of the problem. Give the problem away, give the solution away. They like to have a test in their own situation in their own area. I said, “Well make them project leader, project owner, we are just supporters”. A success has many parents. Quite often they want also to claim extra credit. Give them extra credit. Then there is success in the procedure [S8].

\[S3\] here indicates that the quote is from Subject 3. Henceforth, the source of the quotes will be indicated in this way.
Table 2
Characteristics of organisational champions according to key themes

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<td><strong>Leadership</strong></td>
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<td>Take personal responsibility, share credit</td>
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<td>Display human relations skills</td>
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<td>Keep participants informed</td>
<td>x</td>
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<td>Obtain support</td>
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<td><strong>Creativity</strong></td>
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<td>Employ non-bureaucratic methods</td>
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<td>Listen to the marketplace</td>
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<td>Maintain a pragmatic vision</td>
<td>x</td>
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<td>Conduct prototyping</td>
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<td>Engage in creative problem solving</td>
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<td><strong>Acceptance</strong></td>
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<td>Use political skills</td>
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<td>Secure resources</td>
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Echoing the view that ‘success has many parents’, another champion told of his experience:

I was in charge of a project but it was just me that was fighting everybody around me. I couldn’t get it done on my own, that is why I believe you have to have at least two other people who are also enthusiastic [S5].

Where possible the champions take their teams into confidence, sharing with them their hopes, fears and doubts. The champions are also very informal in their style of leadership, perhaps discussing matters over a glass of beer after office hours.

This characteristic of sharing credit while owning up to mistakes is consistent with the literature about coalition building (Beath, 1991; Frost & Egri, 1991; Kanter, 1983; Nayak & Ketteringham, 1986). It stands to reason that successful champions would not be able to build coalitions by claiming all the credit for themselves.

3.1.1.2. Display human relations skills

Make everybody who works with IT feel important [S8]

said a champion in trying to sum up how he looks at the issue of human relations. In one case a champion [S10] assigned a human relations expert to assist a very good technician in a responsible post in handling human-related problems. The attention given to the human factor reflects the philosophy that while hardware and software are important, it is the idea that is central. What is crucial is to have the right people; with good people a good system can be built. The champions also emphasise building a culture of trust. It is difficult to work with ease of mind if one doesn’t trust one’s colleagues, they said.

Whatever their learning experiences, they are aware of the importance of energising the innovation team and pay considerable attention to it. Because of their proximity to the top management, they encourage senior managers to show appreciation for the work of their team. Gestures such as visits by top executives to the project development room or implementation sites and attendance at progress report meetings have symbolic significance.

The group is commended when they do well. They go out for dinner once a month. If they have to work overtime, their spouses get flowers for the extra family burden they have to shoulder [S3].

That due attention is given by the champions to human issues is very much in line with other studies of innovation. For example, in their study of innovation in Australia, Carnegie and Butlin (1993) report that the first and principal conclusion of their research is that innovation in Australia in the 1990s is about people and
enterprise; and for these enterprises, innovation is primarily a matter of flexible, productive and focused employee relations in the workplace. As noted earlier, most of the champions do not have formal training in IT. Perhaps reflecting this diversity in their own backgrounds, they prefer a team with varied educational backgrounds.

3.1.1.3. Keep participants informed Our findings are consistent with those of Frost and Egri (1991) and Kanter (1983) on this point. All the champions who participated in this study are articulate, communicative and very open. In addition, they are aware that this trait is an asset in their work. They pay considerable attention to the use of various methods in communicating to all the parties concerned with their projects. In the case of a project funded partly by the government, the champion in charge of the project makes it a point to distribute popularly written press releases to the mass media. Such public relations exercises are needed to ensure continuing support from the funding bodies. The same idea is essentially used by another champion who writes short pieces for his firm’s in-house newspaper.

They take time to make presentations to top management and to the heads and staff of the various departments who are in one way or another involved in the IT project.

My boss gets many invitations. So I make it a point to report to him, to provide him with materials to support his public relations activity. And of course to back up his conviction. There is much external ‘showing off’ [S4].

3.1.1.4. Obtain support Building coalition and securing support among the stakeholders is part and parcel of the champions’ style of work. The champions expend a great deal of time and effort in obtaining approval from stakeholders. They consider this activity to be as crucial to the success of the project as gaining commitment and support from top management. Consequently, the champions make a conscious effort, from the earliest stages, to move throughout the company getting support for the idea. The stakeholders’ knowledge level about IT is directly correlated to the level of support they will provide. For this reason the champions make sure that the stakeholders understand about the IT in question. This aspect is similar to the need for coalition reported in Quinn (1979), Maidique (1980) and Kanter (1983).

But obtaining support is not limited to internal constituents. In some cases the product must also be supported by the firm’s external customer base. Moreover, they try to work out a win–win situation with their clients. One champion in a bank noted:

Don’t only look at your internal needs for information, think also about the needs of your customers. You already have the information, so you can give this information to your customers too. Along with the importance of the product or service you deliver, your knowledge and personal attention to your customers is the information you give to them [S9].
3.1.2. Creativity
This category of characteristics follows from recognising that IS activities are full of surprises: accidents, unseen obstacles and opportunities. One source of such unexpected events is the environment. Rather than being surprised when the unexpected presents itself, the champions in our study try to incorporate the unexpected into their approaches. Collins, Trauth and Beckman (1998) documented such an approach in a study of firms’ planning for electronic data interchange. One trick shared by our champions is to set aside some resources to exploit whatever opportunities can be seized. The challenge, as they see it, is to use creativity and flexibility in responding to these issues.

3.1.2.1. Employ non-bureaucratic methods One characteristic that is amply evident in our sample is their non-conformist style of work. According to previous studies (Kanter, 1983; Frost & Egri, 1991), champions feel that bureaucratic rules sometimes get in the way of the work. Consequently, they find it necessary to seek methods for getting around them. They have no qualms about ‘finding rules to break rules’ or seeking loopholes that enable them to ignore what is perceived to be a restriction to the IT innovation. One champion told the following revealing story:

My department was committed to using an imaging method based on techniques of artificial intelligence. But we had no one in our permanent staff who could do the job. And the only one around here who could be trained quickly to apply the technique was an intern from a local university; he was very keen to work with us after his internship. The problem was not so much in finding a crash course to give him the necessary skill, for there was one offered by a top class US university at that time. The problem was that our bureaucracy would not allow us to spend so much money training an intern. So I got the promise from the intern that he would join us after his internship. Subsequently I ‘played dirty’, if you might call it. I got myself registered for the course in the States, and paid the fees. When the time came, I reported sick. The bureaucratic personal department had no choice but to let our promising young software engineer go for the training program. Of course, I could be reprimanded if found out. But all my colleagues here supported me in such trick. Their remark was straightforward, “Hey, what else could you do?” [S7]

3.1.2.2. Listen to the marketplace The market, users and customers are important sources of new ideas, a point that has often been repeated in innovation and champion literature (von Hippel, 1982; Kanter, 1983; Marquis & Myers, 1969; Quinn, 1979; Tushman & Nadler, 1986). In one situation, a champion developed an IT vision in

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5 One champion gave an example of such surprises in a successful information system he introduced. Because people saw that the system was a fantastic success, the attitude of the company towards information is changed. There is also a more positive attitude towards innovation based on information technology.
response to demands placed on his organisation by the customers. In general, the customers are considered by champions to be a very significant source of ideas, especially those about possible software applications. Sometimes, the information about customer expectations comes from the marketing department.

Another champion indicated that his company does considerable marketing research. To encourage its employees to be positive towards ideas coming from customers, a third company installed an idea box for the employees and rewards good ideas. A method used by a champion for obtaining marketplace information was to conduct regular exchanges with individuals in the company who are close to the customers.

3.1.2.3. Maintain a pragmatic vision

Vision is a theme that appears frequently in champion literature (Howell & Higgins, 1990; Kingston, 1977; Schon, 1963). The champions are guided by a personal vision about the role of IT in serving their companies’ organisational goals. But they are guided by domain understanding as well. Their in-depth knowledge of the application domain, and ability to speak in that language, enables them to derive their visions from the real world of actual needs and opportunities.

One champion developed his vision about using IT to provide new services because of customer demands on his bank. Another derived his vision from an in-depth understanding of the potential of artificial intelligence for coping with information-intensive activities. Whatever the source, these visions are not technology-driven, however. The champions are not out to use state-of-the-art technology for its own sake. Rather, they talk of using technology in the service of a relevant application.

I think the technology push is not so important. The most important change has to come from new applications, given the old technology. If you have an idea, there are a lot of companies who can give us the technology to do that [S3].

Though guided by the vision about the strategic importance of IT to their companies, they are also aware of the limitations of a narrowly constructed, technology-orientated approach.

Everybody thinks that if there is technology, you can solve something. Which is crazy. I mean, go to the Buddha and sit there for a few days and you know you can solve a lot of things without technology [S5].

However, they are certainly not resistant to using leading-edge technology when it is appropriate to do so.

3.1.2.4. Conduct prototyping

To the champions speed is a very important consideration in the development of an IT product. They stress the need for flexibility, the ability to make a quick response to changes in the market or in government.
Technical elegance at times takes second place in the drive to deliver to the (internal or external) marketplace an operational product.

Moreover, a functioning prototype serves as a means to demonstrate to the stakeholders that the idea does work. This is consistent with the findings of Delbecq and Mills (1985) that the most saleable projects are likely to be demonstrated on a pilot basis. In the survey conducted by Beath (1991), half of the IT champions who worked with IS said finding ways to experiment with or prototype the target IT helped them.

3.1.2.5. Engage in creative problem solving  A noteworthy characteristic of the champions is their ability to develop creative responses to problems which confront them (Frost & Egri, 1991; Howell & Higgins, 1990; Kingston, 1977). This characteristic is confirmed by our findings. One champion in our sample related his attempt to experiment and learn from the adoption of new IT. He entrusted the job of technology adoption to a task force which was also responsible for working out informal organisational structures for using the new technology. Once it was clear that the structures worked, they were made formal and put back into the organisation. This example demonstrates how the champion combined technical prototyping with organisational prototyping as a means of dealing with the unknowns associated with a new technology.

Another champion explained how he got around the problem of introducing a new IT product to the general public. The company was reluctant to place a new system in the marketplace out of concern about legal exposures which might result from incorrect information being provided. Rather than delaying product introduction until further testing was accomplished, however, the IT champion came up with the following compromise. Why not offer the system free of charge to selected customers? In this way, the company would benefit from early introduction of the product yet protect itself against legal problems with customers. A champion in the financial sector came up with the idea of furnishing customers with an application to enable them to obtain data from the bank of their choosing. This champion’s creative attitude was that even if his company lost a customer in the banking services area, it would gain one in the information services area. Besides serving as examples of creative problem-solving skills the two examples given above also illustrate another point. They show the importance of looking beyond system development to the broader needs of users in order to ensure the successful introduction of an information system to the public.

3.1.3. Acceptance

The third category of characteristics found in our study are those which are intimately connected to organisational processes. These characteristics are related to the ways the organisational champions promote acceptance of the IT innovation. Communication is a significant part of their modus operandi. These champions understand the importance of both talking and listening. This interpersonal trait has been found to be an important characteristic of champions of innovations (Howell & Higgins, 1990; Frost & Egri, 1991; Beath, 1991).
3.1.3.1. Use political skills Our champions displayed what Runge and Earl (1988) described as the behaviour of a political animal displaying political skills. Sometimes this skill is the result of their training at school.

I went to a Jesuit school. You were trained, already at fifteen, in group processes, in discussions, or what some people would put negatively: manipulation...I sometimes 'play the Jesuit' to organise, make them enthusiastic [S5].

An example that vividly illustrates the 'political animal' inside the champions is their use of veiled threats with their superiors. When one champion failed to get the resources to fund what later turned out to be a very successful IT product, he let it be known that he might start his own company to develop the product and sell it to the market himself. In this instance the simple veiled threat proved to be much more effective than diplomacy and talking. This suggests that our subjects resort to a varied range of persuasive techniques and types of pressure. Its range is wider than that found by Kipnis, Schmidt and Wilkinson (1980) and Schilit and Locke (1982), who found that organisational members use rational discussions and informal exchange with their superiors while assertiveness and sanctions are typically used when dealing with the subordinates.

3.1.3.2. Secure resources The need to obtain resources for an IT project is too important for anyone to ignore. In an earlier stage of his career, one champion found it necessary to develop an idea on his own time in order to convince top management to give him the resources he needed. He worked after office hours to build a prototype at home, using his own resources.

Even after they have established a good record, the champions continue to pay considerable attention to this activity. One champion said he presents the case for resources in such a way that supporting him is seen to be in the manager’s best interest. Having a wide network of contacts proves useful because

...there are so many rules to [follow in] getting a budget, so many ways. You have to know the right people [S4].

Another IT champion was able to capitalise on his considerable track record in order to gain the confidence of his superiors to be able go ahead with his project, but only in an incremental way.

I got together the tea most important people in the company in one room. I had prepared a seventy minute presentation. The founder of the company was there. Everybody was enthusiastic. Then it started, but [I received] only one person, and [that one] only part-time. Later it became a team of twenty people [S1].

The behaviour of champions in our study is consistent with findings of previous studies that champions attach importance to securing resources and display various skills in doing so (Beath, 1991; Frost & Egri, 1991; Nayak & Ketteringham, 1986).
However, our champions also deviate from classic IT champions in that the champions in our study actively and energetically go about securing organisational resources for projects which they deem promising. In contrast, Beath (1991) advised that IT champions need to be provided with resources in order to do their work and she urges senior managers to heed her advice. Our results suggest that organisational champions work as a bridge between the classic IT champion and senior management in this regard.

3.1.3.3. Maintain a network of contacts  One significant aspect of the modus operandi of the champions is the wide network they have built up in the course of their careers. One champion spends time actively participating in professional bodies like the Dutch Association of Computer Scientists (Nederlandse Genootschap voor Informati). Another champion spends about two days a week doing environmental scanning in his continuing search for new solutions and new problems. He is constantly in search of IT products (both software and hardware) that can be relevant to his company. He is also active in user groups and various other kinds of networks.

These champions not only know many key people within their own companies, but those outside as well. Very often they are on friendly terms with their professional counterparts in competitor companies. These contacts are established by attending and presenting papers at conferences, by giving guest lectures, by doing community volunteer services, and by keeping in touch with colleagues from school.

Here they operate like boundary spanners who provide their organisations with intelligence about the world outside. During an R&D project, one champion would regularly scan scientific and trade journals and pass the related articles on to the team. This behaviour is quite similar to that of the gatekeeper in R&D laboratories. This behaviour of our champions supports the findings of earlier innovation studies which stress the importance of information flow within organisations and across organisational boundaries (Allen & Cohen, 1969; Robertson & Wind, 1983; Tushman 1977, 1979).

3.1.3.4. Conduct short and flexible IS planning  In the process of gaining organisational acceptance, the subjects in this study indicated that they use IT planning methods to help them plan their activities. They do spend time and effort on planning, though not so much on formal, traditional planning. One champion heading a group of 50 IS people devoted a few hours per week throughout the year to IT planning. The plan contains the vision and the list of priorities. It also includes information about slack resources — some reserve money available to support good new ideas. Thus, while the vision remains relatively stable, other aspects of the innovation project such as project duration and budget allocation undergo more frequent revision.

The plan is usually not more than 10 pages long. The IT planning document is more of a working paper, a sort of draft to stimulate and support discussion rather than an authoritative formal document or blueprint which permits only marginal deviation in the implementation. The following example points to the contrast between the official approach to IT planning and the actual way in which the successful champions in our study undertake such activities. When asked the question about
planning, one champion turned in his chair and pointed to the several metres of IT planning documentation lining the shelves behind him. He then held up the three page document on his desk, the information systems plan that he said he actually uses. The story is one of planning for public consumption with all the details, cleverly articulated justification and marketing face-lifts where complexity and rationality are valued. This is in contrast to the plan actually used where pragmatism, simplicity and reality are preferred.6

Despite the amount of formality in the planning process and documents, the champions in this study found that they had to engage in careful monitoring of the internal and external environment and had to build in adaptive responses. Such an approach to planning was taken by Trauth (1979, 1986) and Warden (1998) in developing adaptive frameworks for conceptualising and implementing information policies.

One interviewee offered what he considered to be an interesting though unexpected use of structured IT planning methods: to present an organised, ex-post account of an IT project. He described the evolution of an information system which he initiated against all odds7 and which he successfully nurtured. While the process was particularly messy, the resulting system was a smashing technical and commercial success, and won a top IT prize in the Dutch transport sector. Yet when his boss presented the story to the public, the story that was told was one of an orderly, top-down, planned, structured and step-by-step process.

On this theme some of our findings diverge from the picture presented in the research literature which suggests that classic IT champions avoid planning altogether. Runge (1988) reports that for 80% of the projects investigated, the IT planning and project selection procedures are either purposely circumvented or simply ignored. However, the perspective on planning expressed by our champions is consistent with the argument that policy making and planning need not be thought of exclusively as an explicit and top-down endeavour but can also be defined as implicit and bottom-up. In such circumstances, planning is defined as an adaptive process in which events in the environment trigger the need for responses. But as the planners move steadily amid the unknowns toward their goals they collect feedback along the way which guides and alters their behaviour.

3.1.3.5. Engage in flexible decision making Some IT champions have a decision-making style that tends to be more technology-driven while others are more market-

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6 The practice of performing such formal planning is not as irrational as it may appear, especially when one considers the norms obtaining in the wider societal context. "Organisations are driven to incorporate the practices and procedures defined by prevailing rationalized concepts of Organisational work and institutionalized in society. Organisations that do so increase their legitimacy and their survival prospects, independent of the immediate efficacy of the acquired practices and procedures" (Meyer & Rowan, 1977, p. 340).

7 Its origin was an exercise done by a university student in the context of industrial training. The aim was to explore various efficient algorithms to provide information to travellers. It was built on a personal computer which was alien to the company, let alone on an integral part of the more complex IT architecture. The champion happened to supervise the project and could sense the immense potential of the 'toy' system for the company.
driven. In either case, while they are interacting with their clients to identify specific problems to be solved by the use of information technology, the champions are also constantly on the lookout for new IT capabilities that can be relevant to their companies. An overall observation about the decision style of these champions is that it tends towards considering both problems and solutions at the same time and matching them, very much in the spirit of the 'garbage can' model of Cohen, March and Olsen (1972), as opposed to a more linear problem-solving approach. A final comment about their decision style is that they rely on flexibility in seeking a balance between stability (or control) and innovation, or what Fischer (1994) calls the paradox of IT management.

3.2. Types of organisational champions

While the previous section presented an analysis of the characteristics of organisational champions across all the participants in this study, this section considers the different themes which particularly define each of the champions in this study. This second interpretation of the interview transcripts revealed that each of the champions could be classified according to one of three overarching themes: leadership, creativity and acceptance. For each theme, one champion is highlighted and described in detail, followed by summary comments regarding the other subjects who fall into that category.

3.2.1. Leadership

Now this new system [was] very complex. [Some of the maintenance people said], “How are we going to maintain that?” We said, “Listen, we don’t want to maintain it, to organise it like we did in the past, we want to do it in a completely new organisational entity”. They said, “Okay, how then?” I said, “I do not know yet”, because we did not have any experience. We had to develop it ourselves. I said, “You must have some trust”.

During the interview S3 identified his three critical success factors for an IT project. The first is to have the IT strategy fully integrated into the business strategy. The second is to have IT viewed by senior management as an opportunity rather than a problem. Finally, and most critically, there must be a culture of trust, he said. In his view, there must be trust from both the bottom up and the top down. The technology he was championing represented a fundamental change in the IT infrastructure. It would be having significant — and unpredictable — implications not only for the organisation of information but also for the organisation of work. He pointed to the trust he had engendered which enabled him to succeed under these circumstances. He acknowledged that a significant amount of his workers’ acceptance of this change was due to his reputation. He had worked with these particular people for eight years in an open and interactive management setting. He encouraged them, challenged them; did not give them solutions but, rather, urged them to find their own. The strength of his personality fostered dedication and motivation to the change, and in some cases, task completion ahead of schedule.
But this new and unproven technology also had to be sold to top management. Again, it was personal selling based upon reputation, which enabled him to do so. Here, he relied upon both internal and external reputation. His success in past projects increased top management’s comfort level with this new project. Further, his involvement with the European board of an industry user group and his recognition among those peers for his innovative thinking strengthened his position.

It was trust that enabled him to get those above and below him in the organisational hierarchy to accept this journey into the unknown. And it was a combination of his interpersonal skills, his tight coupling of business and IT strategy, and his adaptive approach to design and development that enabled him to bring the project to a successful completion. S3 exemplifies the theme of organisational champions as leaders of their people, those who lead groups towards jointly developed outcomes. For this reason, he sees interpersonal skills as the key to his success.

...I always say to them, “Listen, it is not a matter of hardware; it is not a matter of software. The software helps, the hardware can help. It is a matter of people and organisation. With good people you can build good systems, on IBM on Unisys or whatever. I think that technology can differ a bit but it is not the one thing that counts”.

While S3 relied upon such personal characteristics as trust and reputation to achieve his personal selling, S6 relied on persistence and personality to conduct his personal selling of the IT innovation. At his firm the decision to adopt the innovation was determined at the top; his role was to skilfully move the project along and overcome pockets of resistance. This meant nudging the innovation through the automation department which believed that making decisions about technology ought to be in its domain. He conducts constant environmental scanning to find new ideas. Once he sees the need from a business perspective, S6 moves persistently to convince both the technical and the business sides of the house.

...my previous experience [at another firm] was that the IT people were, in fact, the decision makers. If you want to decide in a different way you had to accept a struggle for life for about three quarters of a year. I had such a struggle to introduce a VAX machine. It was UNIX in a period when everything was IBM oriented and UNIX was not introduced. They said, “Sorry no VAX”. I said, “We need it from a strategic point of view”. All the time they tried to say, “You say you need a VAX, but that is not what you need”. They asked me, “Give me a description of your needs, then we can come with the solution”. I said, “I know what you want, namely, today I say, ‘I want bread and an egg’. Today you say, ‘You don’t want bread with an egg, you are hungry, I will get a soup’. But I don’t like soup. That is your idea of coming to a solution…” After a year the chairman of the board said, “You will get your VAX”.
3.2.2. Creativity

...if...you have three or four people [who are] highly motivated, highly interested, with bright ideas...[if] you start a bureaucratic way of planning [these people]...are not interested to write out the amount of hours they spent. Because they spent them in the morning at half past seven, they spent them in the night thinking about it. They are not going to write that down for me. They are sitting together over a beer discussing what is going on. Do you want to plan that? I don't. I give those people some money, I am there to support them in the organisation to get all those political actions out...And then, when they have this 'green area' they will walk around and they...will come back with their ideas. Then you have a good discussion about it and sometimes it is a very good idea.

S5 sees his role not as one of creating the vision but rather as one of creating the context within which visionaries can work synergistically. Consequently, his two success factors are related to the people and how they work. The first is to have a critical mass of enthusiastic people to generate the ideas. The second is to have participation by people with different perspectives. Reminiscent of Kuhn's (1973) depiction of the outsider's role in paradigm shifts, he cited the crucial contribution of a technical school student intern to this innovation.

There are several dimensions to this 'green area' which fosters creativity. One is vitality, which he linked to the need for a constant flow of 'new blood' into the organisation. He also described vitality as a characteristic of the right kinds of people. There are the followers in an organisation, which he described as totally lost without someone to give them directions, and then there are the free thinkers. These people are not interested at all in procedures, he said. They are not interested in doing the right thing at the right time. They are just interested in being creative. Finally, he spoke of vitality in terms of the serendipity that can result when there is the right chemistry among the creative team members.

...you cannot work in the research phase with planning. You know a direction, you know a problem. And then, what I always find out, something happens. You suddenly find two or three people who have been thinking completely separately [but going] in the same direction.

But he also shared an example of what happens when this chemistry fails to occur. One particular project failed because he was unable to establish 'a group feeling' in the project. The two brilliant key players were doing very good work but independently; he could not get them to move in harmony in a common direction.

Another dimension of this 'green area' is that it is sheltered from organisational politics as much as possible. His people can depend on him to take personal responsibility for mistakes, not to shift the blame to one of them. He maintains an open style of management with group size small enough to enable him to have direct contact with the people on the project. He employs a dialectic style in helping his team members to find their own solutions to the problems they bring to him. And questioning leads to crossing boundaries, taking the inquisitive mind where it will in search
of the answer. S5 observed candidly, however, that this is not always accepted in organisations. For example, he ran into problems while doing some work in America once when he asked too many questions, ones that were considered outside the purview of an EDP manager. But in his view, understanding IT solutions necessarily requires that one considers problems with the firm’s processes and products. S5 exemplifies the theme of organisational champion as one who focuses on the creativity necessary for bringing about technological innovation.

The other champions who fell into this category focused on creativity in a different way. In each case, personal creativity was part of their stories about the innovations they championed. For S7 the innovation came about because he built a prototype of an artificial intelligence application on his own time. He was looking for something to do which satisfied his creative urge. The project sold because he made the business case after he proved its technical viability. S9, on the other hand, applied creativity to problem solving. He operates in a world in which he must balance the need for continual innovation — for competitive survival — with the need to fit his innovation into a corporate technology vision at his firm.

On one [foot] you wear an army boot; you are very stable. On the other you wear a ballet shoe. You skip and jump and glide. All this is guided by a vision.

The final champion who focused on creativity was the only one in this study whose innovation chosen for discussion failed. The innovation described by S1 was an artificial intelligence application to be used in conjunction with natural language processing. At its inception this project had no client and no identifiable market, only the initial conviction on the part of one man that the need would exist in the future, and the eventual agreement by management to proceed. S1 was passionate about his idea long before this firm supported the R&D effort. He had written concept papers and given presentations on the idea. Despite the initial resources he received from the firm, the project was eventually terminated due to lack of outside funding. S1’s story highlights the creative champion’s ability to take a long-term view. Although the project was a failure, he views the experience in a positive light. The developments in natural language processing have since proved his vision to be correct. Further, the experience of managing this project had a significant impact on his career.

It was the project that made my career. I never thought that I would become anything like a manager. I thought of myself as a scientist, doing good work as a professional scientist. When I got this project, after a while it became a two-person project. Then we got some success, there were about twenty people working on it. I had the drive to start it up and to lead the way. I was exhausted every Sunday, but I still liked it.

3.2.3. Acceptance

For the logistics system...there was a top-down interpreting of how we will run the [business] in the end of the century, and in the beginning of the next century. So it was an overall system from the first planning...And...the first sys-
tem will be implemented this year. Seven years from the first day of the information plan...

Do you use prototypes?

No...we are a large organisation. So we have to when we make information systems we have to do it very systematic. When you make a pilot you do it quick and dirty; we don’t do that in our systems.

In contrast with the previous champions who tended to focus their remarks on the earlier stages of technological innovation, S10 talked about the champion’s role in implementing an innovation once it had been created. His focal point is organisational acceptance. It is noteworthy to point out that S10 was not the person who originated the innovation he was championing. He assumed this responsibility four years into the life of the project.

Implementing a comprehensive, formal design under circumstances of rapid technological change is a major aspect of his role, which is played out in several ways. One is coping with the fallout from using incompletely proven state-of-the-art technology. Another aspect is reconciling the hardware plan — which was determined and standardised at the inception of the design — with innovations that have occurred since then. On the human side, he has had to contend with people’s reaction to the unknown. Those who will be required to use this system — and change their work processes as a result — have become sceptical and fearful because he cannot answer all their questions. He says people want a foolproof system, something he cannot give them. What he can do is to break the system into ever smaller parts for implementation, thereby allowing people to become acclimatised gradually. Another source of user resistance with which he must cope is fear of job loss once this automated logistics system becomes operational.

In response to these demands a planning process has evolved that is at the same time orderly and yet flexible enough to incorporate new types of technology and other unforeseen factors. Part of this comes from adapting the implementation process. Because the effects are unknown and unknowable in advance, he has come to rely on feedback collected at each step along the way.

The information plan was a holistic vision of how it should work. And now, we say, you never know how people exactly will work with the system. So you have to implement. And then when it works you have to put new versions to it, and people have to learn from the system, but the system also has to learn from the people. So it will be incrementally going to the future. That is the change we made about a year ago.

He has also looked to the lessons that can be learned from other, similar implementations. S10 has become the caretaker, if you will, of a large endeavour which he did not originate and over which he does not have complete control. His role is one of steering the project forward by relying on careful monitoring at each step along the way. He exemplifies the theme of organisational champion as one who adaptively
manages the process of technological introduction and acceptance as it moves through organisational mechanisms.

Three other subjects in this study exemplify the theme of organisational champion as one who promotes organisational acceptance. S2 engages in organisational selling. His department only does research to promote proven applications. So when he observed smart cards being used in another transport context and saw the possible application to his own he ‘sold’ the innovation internally through the middle managers whom he educated about the technology. S4 was engaged with implementing a financial management system for a government agency that was simultaneously changing its organisation structure and its culture to become more fiscally accountable. In order to obtain a budget for his system project in the midst of all this turmoil, he relied upon political skills and contacts.

We are making a new plan every half year. We are actualising it, revising it. I try to get a budget everywhere. That is a game. How do you do it? That is to know the right people. To ask at the right moment the right questions. I personally think it depends very much on the person. If another tries to do it, it may fail. And if you do it, it works. It depends strongly on the situation.

S8, the final champion exemplifying the theme of organisational acceptance, works in a very structured and top-down corporate environment which is also extended to IT planning and innovation. His role is not to develop a technological innovation but rather to advise executives with respect to accepting it. The innovation he discussed was a scheduling system, a prototype of which was developed by a graduate student as part of a school project.

But then, how to introduce it into a company. You can show it, it is ready. You can feel it, you can look to it, but then, even then it is complicated to get it into the company. To let the people say, “That is an innovation; we are going to use it”.

S8’s challenge was to incorporate this innovation into the top-down culture of his organisation and integrate it with existing projects in the same general area. He noted that the easy part is initially introducing the innovation. However, a positive reaction to the innovation, itself, was not sufficient to ensure the project’s success. For that, he fostered a ‘chain of champions’ to move the project throughout the various stages of the organisational bureaucracy.

4. Conclusion

The findings from this research extend our understanding of champions by contributing insights about organisational champions of IT innovation. The results of this study show that these organisational champions fall somewhere in between the classic IT champion and the project manager. Like the classic IT champions we found that our champions pay attention to communication and know how to obtain support. To a lesser extent they take personal responsibility and display human relations skills. Either the champions did not choose to talk about them or the particular projects they chose to talk about did not, in their view, warrant discussion of such characteristics. In general,
the characteristics associated with the theme of leadership were the least represented in this study and leadership was the defining theme for only two of the subjects in this study. In this way, our organisational champions are different from classic IT champions.

With respect to characteristics associated with the theme of creativity, however, that was not the case. When necessary, they break rules, give veiled threats and find ways to get around the organisational bureaucracy. They seek creative outlets for themselves and those they manage. Their passionate commitment to their ideas motivates them develop technical prototypes on their own time before trying to make the business case for them. For four of the 10 champions in this study, creativity was the defining theme. In this regard, our champions are similar to classic IT champions.

The final theme, once again, highlights some of the differences between classic IT champions and the organisational champions in this study. While both kinds of champions possess certain characteristics, such as political skills to obtain resources, which help them at the organisational level, the organisational champions are also involved with IT planning and decision making. Quite often, the key challenge was fitting the innovation into the existing information plan. It was the characteristics associated with organisational acceptance that were consistently and nearly unanimously evident in the results. For four of the champions in this study, organisational acceptance is the theme which best characterises them.

Besides adding to our understanding of the particular mix of commonly accepted champion characteristics, this study also identified characteristics not typically discussed in the champion literature. These characteristics are related to IT planning. In particular, we found that organisational champions do engage in IT planning as part of the innovation process but that it is not structured and formal IT planning. Except for the IT director of a bank, the other champions stick to short and flexible information systems planning approaches. They appear to find it fruitful to use a simplified version of information systems planning rather than avoiding the approach altogether. They also acknowledge being flexible in decision making. An interesting finding was that structured IT planning techniques are sometimes employed after the fact to tell the story of the innovation as though it had been an orderly process. We offer these insights into the adaptive response to unforeseen circumstances and emphasis upon flexibility in decision making and planning as a new contribution to our understanding of the organisational champion’s behaviour.

Two observations about the context of this research suggest promising areas for future research. First, the national cultural context could exert an influence on which champion characteristics are emphasised and might account for discrepancies across samples of champions. The case in point in this study is IT planning. It is possible that IT planning is emphasised more in some cultures than in others.\(^8\) Second, all the champions in this study are men. It would be interesting to study the modes

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\(^8\) This seems to be the case in The Netherlands. In the 1980s ‘informatieplanning’ was heavily emphasized. Several Ph.D. dissertations were done on the topic (for example, Achteberg, 1988). Works such as Hopstaken and Kranendonk (1988) are today considered to be ‘classics’. Indeed, the second author, who is an American, noted heavy emphasis on IT planning in an undergraduate MIS curriculum in a Dutch university when teaching there.
operandi of women champions, to see if there are any differences and the extent to which they can be accounted for by gender.

In addition, our findings could be useful to those interested in IT project management. Our findings reinforce the commonalities between entrepreneurship and project management, such as the need to motivate team members and pay attention to broader organisational issues.

This paper contributes to our understanding of champions of technological innovation by exploring characteristics of organisation-level champions. We provided some insights into why a particular mix of known traits is manifested in a particular champion through an interpretative exploration of the champion’s critical incident account. We concur with Beath (1991) that IT champions operate much like other champions. This suggests that a promising way to reduce the rate of IS project failures is to learn not only from IS projects undertaken by IT champions but also from innovation undertaken by other champions — business champions and champions of other technologies. In this way we are echoing the remark of Boulding (1958) when invited by the editors of Administrative Science Quarterly to do a critical reading of the journal. He wrote:

Administrative science particularly needs good studies of exceptional individuals...Biography is therefore an essential part of the raw material of administrative science.

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Appendix A. Letter sent to the research participants

A.1. Project summary

Previous research has shown that a critical factor in the successful introduction of new information technology (IT) applications is the role played by what has now been called IT champions. These studies have described some personal characteristics of the IT champions and some aspects of the environment that support their activities.

Our study aims to document in detail the modus operandi of a selected number of the IT champions in The Netherlands. By examining how they work, we aim to add to the knowledge base concerning IT innovation in organisations.

We would like to thank you for participating in this research by agreeing to be interviewed. The unstructured interview will take about two hours. We would like
to discuss how you, as an IT champion, have successfully introduced some IT application into your organisation. We would like to assure you that strict confidentiality of interview responses will be maintained. When the results are published in an academic journal no individual names will be disclosed and no comments will be attributed to a specific organisation in an identifiable way unless prior, specific permission has been obtained to do so.

A.2. The interview protocol

The type of data we are looking for are indicated by the following questions:

1. What led you to identify a given IT application to be of value to your organisation?
2. How did your organisation go about planning this IT application?
3. What organisational, management, and technical issues did you face and how did you overcome them in introducing IT applications?
4. How have you ensured that the new IT application has a future, and will be integrated with the rest of IT applications?

Appendix B

B.1. Profile of the IT champion

1. Education background:
   lower technical school (LHS) ____________
   higher technical school (HTS) ____________
   university level ____________
   Ph.D. level ____________

2. Technical knowledge of computer systems and IT:
   majored in computer science/IT ____________
   took IT courses as elective ____________
   picked up IT knowledge in the course of work ____________

3. Number of years working with IT:
   ____________ years

4. Title of jobs:
   ______________________

5. To whom do you report?
   ______________________

6. How many people do you take charge of?
   ______________________

7. How many 'new IT' projects have you initiated? (New IT projects refer to projects using new IT, new relative to your company)
B.2. Profile of the company/organisation

1. Main activities:

2. Size:
   annual turnover: 
   number of employees: 
   scope — national, continental, global: 

3. How important is IT to the company?
   strategic importance 
   very much used in primary business processes 
   very much used in supporting administrative work 

4. Organisational experience is using IT, in terms of number of years:
   _______ years

References


