Enabling Innovation Champions in Organizations – Results of a Systematic Literature Analysis

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Abstract

Based on a systematic literature analysis, this paper takes stock of the current landscape of research on innovation champions from an individual and organizational perspective: 149 journals and conference proceedings were examined on the topic of innovation champions. 85 articles were identified as relevant and systematically categorized according to two perspectives by synthesizing enablers of innovation champions on the individual (e.g. skills) and organizational level (e.g. knowledge management). While our analysis illuminates a high variety of enablers that influence innovation champions, the descriptive findings show a stronger focus of innovation champion studies on individual level enablers. Our literature review points out the lack of research on negative individual characteristics (e.g. narcissism), on the innovation champion in the IS context and on formalized groups of innovation champions (e.g. organizational units).

1. Introduction

Innovation has been identified as the key to the success and survival of companies [1, 2]. While organizations invest a large share of their resources and effort into the development of innovations, these projects frequently fail, for example due to organizational inertia (e.g., [3]). Championing innovation has been established as an important mechanism for organizations to successfully promote innovation projects [4, 5]. In that regard, extant research shows that the presence of innovation champions is positively associated with the performance of innovation projects [6]. Innovation champions promote an organization's innovativeness by managing knowledge. By acquiring, managing and utilizing knowledge they control internal and external knowledge flows and influence organizational learning. Thus, innovation champions contribute to organizations' knowledge management [7], which has been linked to increasing organizations' innovativeness

[8]. Overall, they are therefore defined as stakeholders of the innovation process, who promote an innovation vigorously through the various stages of the development process against resistance and by taking risks [4, 9-11]. As such innovation champions can be individuals or groups of individuals [12].

A number of studies within various innovation-related disciplines have examined how individual and organizational characteristics influence innovation champions in their pursuit to promote innovations. However, literature reviews that synthesize the current state of research are scarce. Reviews, such as Jenssen and Jørgensen [10] and Elkins and Keller [13], have solely considered the concept of innovation champions through the perspective of their particular subdiscipline. In fact, more than a decade has passed since Jenssen and Jørgensen [10] published the only literature review of innovation champions. Their analysis applies the concept of the innovation champion in a narrow scope and only focuses on human and social characteristics of champions, but neglects other, complementary factors. Overall, no systematic and structured literature analysis that follows a holistic approach and focuses on both, individual and organizational enablers of innovation champions has been conducted.

Considering the issues above and responding to the call for further research on enablers of innovation champions [10, 14], this paper provides a systematic and structured analysis of the literature on innovation champions from an individual and organizational perspective. Thereby, we formulate the following research question (RQ): *What kind of individual and organizational characteristics enable an innovation champion?*

In a nutshell, this paper offers the first comprehensive literature review on innovation champions from an individual as well as organizational perspective. This allows unifying findings from different strands of the innovation literature. Furthermore, it offers the opportunity to build a more thorough understanding of the phenomena of the innovation champion.

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The remainder of the paper is structured as follows. The next section begins with an overview of various definitions in order to explain the concept of the innovation champion. In section 3, we introduce the research methodology of our systematic literature analysis. Subsequently, section 4 presents the results of the scientometric and content-based analysis of innovation champions from an individual as well as an organizational perspective. Section 5 points out limitations of our study. Finally, the results, and future research directions with implications for theory and practice are discussed.

2. Definition of the Innovation Champion

The concept of the innovation champion was first introduced by Schon [4] in his seminal work, after he observed that successful innovations involve individuals, who play a key role in the development process by promoting the innovation project inside the organization. In subsequent literature a variety of definitions for the phenomena emerged. Jenssen and Jørgensen [10, p. 65] attempted to synthesize these in their literature review by defining the innovation champion as "*an individual that is willing to take risks by enthusiastically promoting the development and/or implementation of an innovation inside a corporation through a resource acquisition process without regard to the resources currently controlled*". However, this rather narrow definition excludes parts of the innovation champion literature.

There exists consensus that the innovation champion promotes an innovation vigorously through the various stages of the development process against potential resistance by taking risks (e.g., [5, 9, 11]). Nevertheless, other aspects are less clear-cut and vary across literature. For instance, Jenssen and Jørgensen [10] rule out individuals that occupy management positions in their definition of the innovation champion. Conversely, other researchers consider the innovation champion to be found at a high hierarchical level (e.g., [15]). Additionally, some researchers incorporate both, individuals with and without a managerial position in the innovation project, in their definition of the innovation champion [9].

Similarly, the actions innovation champions employ in order to support innovation projects fluctuate sharply across research articles. Hence, some researchers remain vague and for instance state that innovation champions "bring ideas to life" [16] or make "a decisive contribution to the innovation by actively and enthusiastically promoting its progress through critical stages" [9], without further specifying what a "decisive contribution" and "promoting" entails. More concrete descriptions of innovation champions' behaviors and means cover a wide spectrum in literature. Contrary to the definition of Jenssen and Jørgensen [10], these are not only limited to a resource acquisition process. Thus, innovation champions have been described to select promising creative ideas and sell them to other actors in the organization (e.g., [17]), to motivate their innovation team by building up confidence in their capabilities and the innovation's success (e.g.,[18]), to inspire others with their vision (e.g., [17]), to transfer information and knowledge (e.g., [19]), to connect with others and build networks (e.g., [18]), to bring different actors in the organization together (e.g., [20]) and to gain management support (e.g., [11]). Overall, no uniform definition of the innovation champion and the components of the concept exists.

Besides the innovation champion, the innovation literature defines other important actors of innovation processes that have been shown to overlap with the innovation champion concept [19], such as promoters [19, 21], sponsors [16, 22], knowledge brokers [23], gatekeepers [23], boundary spanners [24], leaders of innovation [25] and corporate entrepreneurs [26]. As a consequence, our analysis encompasses a broad range of innovation stakeholders. Thus, we will use a broader definition in this paper, which pays regard to a wider scope of stakeholders and the high variety of different definitions. Accordingly from our perspective, *an innovation champion is an individual or a group of individuals who is willing to take risks to enthusiastically promote innovations through the various stages of the development process*.

3. Research Methodology

Methodologically, a structured literature analysis was conducted on the basis of Webster and Watson [27], Van Brocke et al. [28] and Denyer and Tranfield [29]. In order to ensure the meaningfulness of the results, we established a three-step procedure consisting of the search process, the selection of relevant articles and the categorization.

Within the search process, we selected high-quality journals in the fields of business administration, information systems, organization and human resources as well as technology, innovation and entrepreneurship to take care of the interdisciplinarity of the research topic. The publication outlets were assessed using a meta-ranking (Journal Quality List), which integrates 17 different journal rankings (see [30]). The chosen outlets were categorized as leading journals in the majority of these rankings.

The time frame of the literature search was limited to the period 1995 to 2016. The year 1995 was chosen because it marks the beginning of the commercialization of the Internet, as the last restrictions on the commercial use were lifted by the

American National Science Foundation [31]. This pays tribute to the high importance of innovation champions in the development of digital innovations and the central role of digital tools in the creation of innovations [32, 33].

Within these outlets, we applied two different Boolean expressions as search strings for the individual and the organizational level. The search terms were derived based on keywords in the research questions (innovation, individual, organization, champion and characteristics). To broaden the search, verbs and adjectives corresponding to these keywords as well as synonyms and related terms were also included as search terms (see Table 1 as an example for the search terms on the organizational level). For literature to be regarded as relevant, a search term related to each keyword needed to be present either in the title, the abstract or the subject terms. As a result a complete search string was developed. The literature search was then conducted by utilizing the search string and a meta-search engine (based on 202 different databases, such as EBSCO Business Source Complete), which consisted of the 149 journals identified as relevant to the research field.

Table 1. Search terms

Keyword	Search terms
Innovation	("innovat*")
Organization	("organi?ation*" OR "network*")
Champion	("champion*" OR "promot*" OR "boundary spann*" OR "broke*" OR "recombin*" OR "cataly*")
Characteristics	("characteristic*" OR "behav*" OR "attribute*" OR "trait*" OR "propert*" OR "qualit*" OR "capabilit*" OR "structure*" OR "culture*" OR "factor*" OR "requirement*" OR "variable*" OR "element*" OR "competence*")

The search process returned 896 potentially relevant research articles. Subsequently, a filtering process based on four criteria was conducted to identify the relevant literature: (1) research needed to address aspects of the *innovation process*, (2) an *innovation champion* needed to be mentioned explicitly and (3) literature needed to take an *individual or organizational perspective* on innovation champions. (4) Finally, literature which examined differences between innovation champions on the country or regional level, and was consequently positioned on the *macro-level*, was excluded from the analysis in order to contain the scope of the relevant literature.

To exhaust all literature sources on the phenomenon of innovation champions, a backward and forward search based on the procedure of Webster and Watson [27] was conducted. After the backward (i.e., reviewing older literature cited in the articles yielded from the keyword search) and forward search (i.e., reviewing additional sources that have cited the paper) [27], 85 relevant research articles out of 33 publication outlets were identified as the final sample.

4. Analysis of Results

This section takes a closer look at the structure, substance, and subjects of theoretical and empirical innovation champion research. After presenting the findings of the scientometric analysis, the current knowledge on enablers of innovation champions is categorized and reviewed by systematically analyzing the research topic from an individual and organizational perspective.

4.1. Scientometrics

While 149 journals were included in the search process, only 33 journals offer relevant literature regarding the research topic. Solely 19 journals, which are depicted in table 2, published more than one research article each. The largest share, 9.4% of the 85 innovation-related articles selected was published in the Journal of Product Innovation Management. The second and third most significant outlets are the International Journal of Innovation Management and Journal of Business Venturing, with each representing 5.8% of the relevant literature. A practitioner-oriented outlet, the Harvard Business Review and the journal R&D Management represent the fourth and fifth largest share with 4.7 percent each. In the first period from 1995-2004, 22 relevant articles on innovation champions were published, followed by 43 publications in the period from 2005-2014. The number gradually grew over time. Given that 20 relevant papers were published in the timeframe 2015-2016, a further increase in the future can be extrapolated.

Table 2. Outlets publishing at least two relevant research articles

Journal	Absolute Frequency
JPIM	8
IJIM, JBV	5
R&D Management, HBR	4
RP, Technovation, JMS	3
ASQ, CMR, JSIS, EJWOP, J. Appl. Psychol., JOM, JOOP, Leadership Quarterly, ET&P, JBR, Technology Analysis & Strategic Management	2

As described in section 3, four primary subdisciplines dealing with innovation champions were selected. Table 3 summarizes the distribution of the selected articles across the four subdisciplines. A plurality (40) of articles was published in the subdiscipline technology, innovation and entrepreneurship, followed by the subdiscipline human resources and organization (21). In the subdiscipline business administration 16 articles were published, while only eight articles were included in the subdiscipline information systems.

Table 3. Subdisciplines of innovation-related research by number of publications

Subdiscipline of innovation-related research	Count
Technology, innovation and entrepreneurship	40
Human resources and organization	21
Business administration	16
Information systems	8

Note: Some journals are assigned to more than one subdiscipline.

Furthermore, if applicable, we categorized the research articles according to the type of organization in which the respective study was conducted. Here, we differentiated between private organizations, representing the majority with 72.0%, public institutions (1.3%), universities and research institutes (1.3%) as well as NGOs (1.3%). 9.3% of papers studied a mix of different organization types. Regarding industries we found 38.7% cross-sectional studies and 22.7% focusing on manufacturing.

4.2. Individual Enablers of Innovation Champions

In order to develop an explicit understanding of the competencies of innovation champions, all individual characteristics that explicitly refer to innovation champions mentioned in the 85 articles within the research scope were extracted. The intertwined findings regarding the individual characteristics were grouped and organized into three broad categories of the underlying 1) traits, 2) skills and 3) knowledge of innovation champions. Therefore, a competency matrix [22] is used and adapted to the innovation champion research. Since a total of 56 traits, 26 skills and 11 knowledge types of innovation champions could be identified, this paper only concentrates on the most frequently mentioned characteristics (see Figure 1).

The main concept of the origin of innovation champions was contributed by Howell and Higgins [17, 34], who proposed that some individuals are predisposed to innovation champion behavior on the basis of their personality traits. In this study, the category *traits* refers to innate traits such as creativity. Furthermore, Howell and Higgins [17, 34] suggested

that innovation champions can be developed through knowledge building and training. Therefore, the category *knowledge* includes specific knowledge which is acquired through sensory input (e.g., observing, reading, listening) and which innovation champions should possess (e.g., technical knowledge). Skills refer to the ability to apply knowledge to specific situations and are developed through practice or a combination of multiple sensory inputs [35]. Consequently, the category *skills* covers all characteristics, which are not innate and can be learned (e.g., through training) and influenced (e.g., transformational leadership skills). Descriptive attributes of an innovation champion (e.g., high-ranked job) that could not be clearly assigned to one of the categories are excluded in this paper.

4.2.1. Traits of Innovation Champions. One of the most frequently stated traits within innovation champion research is *creativity*, which may facilitate an innovation champion's innovative performance (20 counts; e.g., [22, 36, 37]). Creative solutions of innovation champions are often necessary to overcome difficulties when transforming an idea into a concrete application or prototype [36]. Twenty studies emphasize innovation champions' *enthusiasm* towards new technology (e.g., [6, 18, 38]) as an important trait. This enthusiastic state leads innovation champions to promote an innovation's advantages actively [6]. Several authors state that innovation champions have great *confidence* in their own mission and capabilities (16 counts; e.g., [22, 25, 39]).

Innovation champions are also frequently associated with *risk-taking* (13 counts; e.g., [40-42]), which describes innovation champions willingness to risk project failure. Moreover, through actively asserting their opinion, often by repeating the same arguments and demonstrating *persistence*, innovation champions overcome conflicts (ten counts; e.g., [36], [43, 44]). Seven articles emphasize, that innovation champions can be distinguished from non-champions by their exhibition of high expectations for, and *optimism* about, the success of the innovation (e.g., [6], [18, 45]). Moreover, six contributions mention a *proactive personality* (e.g., [11, 44, 46]), which is characterized by greater confidence and intrinsic interest in proactively generating and implementing novel solutions at work to perform more innovatively.

4.2.2. Skills of Innovation Champions. When turning to innovation champions' skills, 19 studies highlight the potential of *supportive* innovation champions (e.g., [36, 47, 48]). For example, IT leaders in champion positions create innovative climates by supporting their subordinates and enabling participative safety (e.g., [42, 49]). 15 contributions cite the characteristic of

being *innovative* (e.g., [47, 50, 51]). This refers to champions' innovation skills and reflects the learning orientation of innovation champions that facilitates inventiveness. Furthermore, innovation champions' chance of gaining support for their arguments relies on long-lasting and emotional ties as well as trust, which can be strengthen by innovation champions' compelling *networking skills* (six counts; e.g., [39, 52, 53]).

By having *transformational leadership skills,* which denote the capability to promote a fascinating and attractive vision, encourage and motivate other individuals in the organization to larger endeavors, the innovation champion can significantly change processes, such as by implementing new technologies or practices [6]. For example, the transformational leader in a champion position transmits a sense of mission, stimulates workers' learning experiences, and inspires new and creative ways of thinking to foster innovation implementation behavior (six counts; [43, 44, 54]).

Additionally, five articles emphasize that having *social skills* is also important as innovation champions have to communicate, connect and integrate with different individuals and groups, both inside and outside the organization (e.g., [10, 39, 46]). Frequently, there is significant resistance among members of an organization in situations where major changes threaten the status quo [10]. Therefore, social skills can be helpful in convincing employees in order to achieve an innovation implementation (e.g., [52, 55]).

4.2.3. Knowledge of Innovation Champions. One of the most frequently mentioned types of knowledge in the innovation champion context is *technical knowledge*. By identifying innovations that have the most potential of commercial success, this type of knowledge forms the basis for successful innovation and R&D and may help to link promising technical problems with internal and external scientific knowledge and technical developments in the company (nine counts; e.g., [11, 40, 56]).

Moreover, six contributions consider the fact that innovation champions have considerable *knowledge of the particular trade* in which the organization operates (e.g., [22, 40, 57]). With this business and industry-specific knowledge, the innovation champion is more likely to succeed in implementing an innovation while, at the same time, catering to the attitudes and needs of the company as well as securing the competitive position of the organization [11, 57].

Finally, three studies emphasize the need for innovation champions to possess *organizational knowledge* (e.g., [22, 40]). Innovation champions who have a long tenure in the organization have often worked in various departments or different areas of the organization and therefore possess a well-grounded knowledge of the organization's structure, key stakeholders, strategic direction and competitive environment [22]. Consequently, an experienced innovation champion may often be aware of the uncertainty, risks, obstacles and resistance connected to innovations [22, 40].
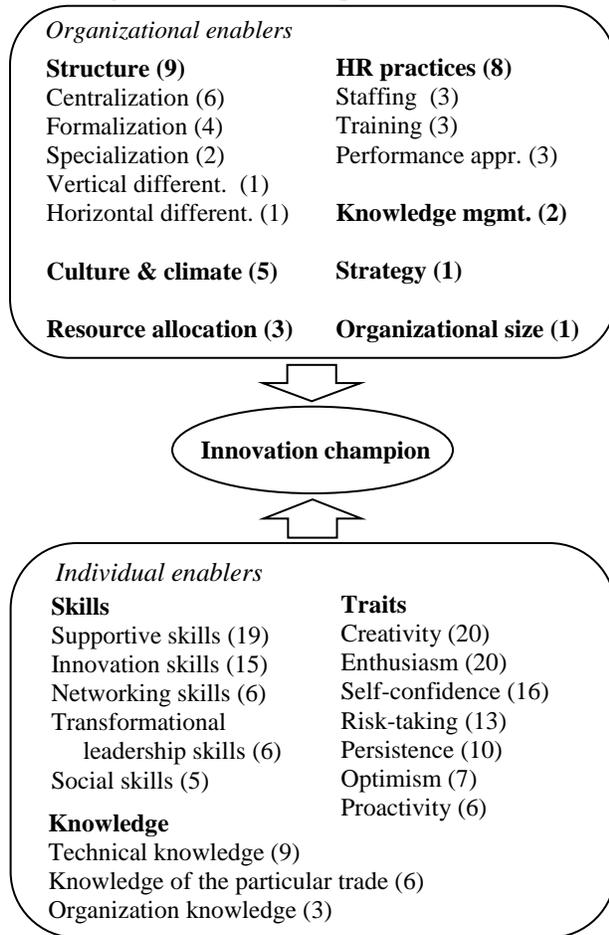
4.3. Organizational Enablers of Innovation Champions

All identified research articles were also analyzed with respect to the organizational enablers of innovation champions. Overall 17 research articles were found to analyze organizational characteristics that drive innovation champions. The organizational traits were categorized into seven categories adopted from related research [58–60]: *structure, strategy, resource allocation, knowledge management, culture and climate, organizational size* and *human resource practices*. The category *structure* was grouped into the five subcategories: c*entralization, vertical and horizontal differentiation, specialization* and *formalization*. Similarly, *human resource practices* were split into three subcategories: *staffing, training and performance appraisal*. Figure 1 depicts all organizational enablers with their corresponding frequency of occurrence in the identified literature.

Organizational *structure* is the most frequently described enabler of innovation champions' emergence and effectiveness in current literature on the individual level, as it is studied in nine research articles. For instance, De Brentani and Reid [61] propose in their theoretical model that a lack of organizational structure will hinder knowledge brokers' effectiveness. When evaluating structure as an enabler on a more detailed level, with respect to several dimensions, the topic becomes more complex. Six studies describe *centralization* as a negative moderator or barrier to the emergence and effectiveness of corporate entrepreneurs, boundary spanners and knowledge brokers (e.g., [24, 62]). Centralization is defined as the degree to which decision making is centralized and actors in the innovation process cannot make decisions autonomously [59]. Moreover, four research articles show that the *formalization* of behavior through rules and procedures [59] is negatively associated with the emergence and effectiveness of corporate entrepreneurs (e.g., [63, 64]).

Moreover, one research article proposes that structuring an organization into teams and based on projects, an aspect of *horizontal differentiation* [59], constitutes an enabler of corporate entrepreneurship [22]. Additionally, a low degree of *vertical differentiation* [59], i.e. the existence of few hierarchical levels in an organization, is positively

related to the emergence of corporate entrepreneurship [22]. With respect to one other dimension of organizational structure, however, the evidence in the literature is more heterogeneous. While Hornsby et al. [63] find that a higher degree of *specialization*, i.e. the degree to which roles and positions in an organization are concentrated on a certain area [59], is positively related to entrepreneurial behavior in an organization, De Jong et al. [64] find no significant effect when examining the same relationship.

Organizational enablers

Structure (9)	**HR practices (8)**
Centralization (6)	Staffing (3)
Formalization (4)	Training (3)
Specialization (2)	Performance appr. (3)
Vertical different. (1)	
Horizontal different. (1)	**Knowledge mgmt. (2)**
Culture & climate (5)	**Strategy (1)**
Resource allocation (3)	**Organizational size (1)**

Innovation champion

Individual enablers

Skills	**Traits**
Supportive skills (19)	Creativity (20)
Innovation skills (15)	Enthusiasm (20)
Networking skills (6)	Self-confidence (16)
Transformational	Risk-taking (13)
leadership skills (6)	Persistence (10)
Social skills (5)	Optimism (7)
	Proactivity (6)
Knowledge	
Technical knowledge (9)	
Knowledge of the particular trade (6)	
Organization knowledge (3)	

Figure 1. Overview of individual and organizational determinants

Eight research articles propose that *human resource practices* can be enablers of emergence and effectiveness of innovation champions. Among these, three studies are centered on the influence of performance appraisal, i.e. the basis of performance reviews and possible consequences and outcomes such as sanctions and rewards [60]. Behavior-based performance appraisal is proposed as an enabler of the emergence of corporate entrepreneurship [22]. Additionally, literature examines the effect of rewards and sanctions as a consequence of excelling or missing performance targets, another aspect of performance appraisal. The prospect of rewards, which compensate

corporate entrepreneurs for innovation success, is positively related to the emergence of entrepreneurial behavior in firms [62, 63]. Contrary, sanctions, which are imposed as a consequence of failed innovation projects, show a slightly negative association with the emergence of corporate entrepreneurship [62].

Furthermore, staffing practices are proposed by three articles as enablers of actors championing innovation. Thus, the literature proposes hiring employees with a distinct personality [22] to spur the emergence of corporate entrepreneurs. Similarly, hiring experienced employees is positively associated with the effectiveness of innovation champions [65]. When considering a group of innovation champions that work together to advance the innovation projects of a firm, van Laere and Aggestam [12] propose that a diverse group of individuals, who possess complementary skills, knowledge and social networks should be hired to enhance innovation champions' effectiveness. Training employees, an aspect of human resource practices examined by three studies, has also been shown to be positively associated with boundary spanners' and corporate entrepreneurs' emergence and effectiveness (e.g., [24, 66]).

Related to human resource practices, Bammens [36] proposes in his theoretical model that the organizational-level construct of organizational care positively impacts the probability of entrepreneurial behavior among employees. Organizational care encompasses a variety of organizational characteristics, such as employee support programs and human resource practices centered on employees' development and compensation.

Another frequently studied enabler, *culture and climate*, offers a high diversity of aspects and is studied by five research articles. The reviewed research shows that a long-term outcome orientation of the business culture [22, 67] as well as a culture supportive towards innovation [63, 66] are shown to be positively related to corporate entrepreneurs and innovation champions' emergence and effectiveness. Additionally, a culture tolerant of failure [66] and uncertainties [63, 68] has been proposed as an enabler of corporate entrepreneurship. Moreover, Halme et al. [68] find evidence that an organizational culture that incorporates flexibility and tolerance towards corporate entrepreneurs by, for instance, allowing them to work underground against superior's orders and giving them free time to support projects, is positively associated with the emergence of corporate entrepreneurs.

Resource allocation is studied as an organizational enabler in three papers. Evidence is presented that the provision of financial resources and time to pursue innovation [63], as well as management legitimization to use existing resources or networks [68] is positively associated with corporate entrepreneurship. If no

formal allocation of resources towards innovation champions occurs, a lack of internal control that allows the diversion of funds and employees can benefit innovation champions' effectiveness [67].

Two studies examine *knowledge management* as an influence factor of innovation champions' effectiveness and emergence. Thus, Anthony [66] proposes a general learning-orientation in organizations as an enabler of corporate entrepreneurs' effectiveness. Moreover, a positive relation exists between organizational support towards knowledge exploitation and recombination and the emergence of innovation champions [69].

The least frequently studied enablers of innovation champions' emergence and effectiveness on the individual level are organizational strategy and size, as they are each examined by only one paper. With respect to organizational *strategy*, Badguerahanian and Abetti [70] find that the existence of related and congruent strategies of innovation champions and managers is beneficial towards innovation champions' effectiveness. In contrast to other organizational characteristics, *size* functions as an impediment to knowledge brokers' effectiveness, since it slows the process of information sharing and communication [61].

5. Limitations of the Literature Review

Although this literature review provides valuable insights into the conception of innovation champions within different research fields and points out several research gaps, some limitations need to be considered. First, the results of the analysis are restricted by the chosen research approach, as only peer-reviewed research was incorporated in the search process. Although the inclusion of selected outlets ensures a high quality of the literature base, some relevant contributions may be missing in the review due to the exclusion of non-peer-reviewed publications such as scientific books (e.g., [71]) or whitepapers. Additionally, the restriction of the search to a time frame beginning in 1995 could have led to an exclusion of relevant literature. As the concept of the innovation champion was first introduced by Schon in 1963 [4], a considerable time span is excluded from this review. However, we addressed this issue by also applying backward search in our literature review [27].

Finally, mistakes in coding and categorizing each identified contribution according to the various perspectives of innovation champion landscape, settings and background may have been made. The underlying thorough, orderly and rigorous categorization approach based on a consistent understanding and independence of two coders, how-

ever, can ensure a high reliability and validity of the vast majority of the findings [72].

6. Discussion and Areas of Future Research on Innovation champions

Our results illustrate the current state of knowledge of research in the innovation champion landscape with respect to individual and organizational enablers of innovation champions (RQ). As we apply a broadened concept of innovation champions in our literature analysis, the presented results synthesize research from different subdisciplines. Additionally, our findings point to five major shortcomings of the current innovation champion research field, which offer opportunities for future research.

First, our results demonstrate the lack of research on negative personality traits. In subsection 4.2 a variety of traits, skills and knowledge competencies were identified as individual enablers of innovation champions. Common individual characteristics of innovation champions include creativity, enthusiasm, self-confidence and innovativeness. Innovation champions tend to have a dynamic personality and are often transformational leaders with good social and networking skills. As this summary demonstrates, the reviewed studies overwhelmingly focus on positive characteristics and omit negative characteristics an innovation champion might have. Nevertheless, organizational behavior scholars have identified the positive impact of managers with dark personality characteristics, such as narcissism, on productivity and organizational performance [73, 74]. Similarly, innovation champions' negative personality traits might also influence innovation project success positively. Future research needs to investigate to what degree certain dark personality characteristics make innovation champions more innovative and effective than innovation champions who lack these characteristics.

Second, the scientometric analysis in subsection 4.1 illustrates a lack of research on innovation champions in the literature on digital innovations. While to a large extent, literature on innovation champions has been published in outlets of the innovation literature, only a small share of identified research articles belongs to information systems journals. Even though champions are in general part of the information system literature (e.g., [33]), research here has concentrated on champions as the drivers of information technology adoption. Moreover, current research has also explored digital innovations in general (e.g., [14]). However, both fields of research have not been connected so far. As a consequence, the literature provides research opportunities on digital innovation champions. Future

research should, for instance, explore whether innovation champions' individual and organizational enablers are distinctly different in digital, compared to conventional, innovation projects. Additionally, research could explore the role of information technology as an organizational enabler of innovation champions.

Third, taking a closer look at the analysis of individual and organizational enablers further research opportunities with respect to organizational characteristics that drive innovation champions become apparent. On the individual level, 19 papers mention knowledge as an important enabler of innovation champions. On the organizational level, only two papers cover knowledge management. This comparison illuminates that a low amount of research has focused on organizational enablers of innovation champions. This deficiency is especially serious with regard to knowledge management, as knowledge management has been proposed as an important tool to enhancing organizations' innovativeness [8]. Consequently, a comprehensive understanding of organizational enablers that support innovation champions in their pursuit to promote innovations is indispensable. Therefore, this area of literature should be explored further in the future.

Fourth, individual characteristics cannot always be clearly separated from organizational enablers. For instance, organizational creativity not only consists of the sum of all individual employees' level of creativity, but also interacts with organizational enablers, such as structure, to make up an organization's overall level of creativity. A stiff and highly hierarchical structure, which offers employees little freedom to pursue innovative ideas, may impair the overall innovativeness of a firm, even in organization made up of highly creative individuals. Therefore, future research needs to synthesize the perspectives and develop a collective approach, where individual enablers are applied on the organizational level. Overall, such an approach could enable firms to measure and understand their level and composition of innovation potential. Additionally, organizations could specifically target to enhance drivers and reduce barriers of innovation champions.

Finally, another interesting question arises from the definition of the innovation champion in this paper. While we only consider innovation champions personified by individuals and groups of individuals, innovation champions might exist in a wider spectrum. Organizational units can be considered to be formalized groups of individuals. As the literature has shown, that multiple champions can interact in a multifaceted innovation context (e.g., [12]), certain organizational units or departments could also personify innovation champions. Therefore, we suggest

that future research should focus more thoroughly on exploring groups of innovation champions in a formalized setting. As literature that considers innovation champions as a group is scarce so far, future research could provide a better understanding of the phenomena of the innovation champion. In more detail, future research could contribute to distinguish the various roles in groups of innovation champions, understand how innovation champions influence each other in a group and identify the individual traits and company-internal factors that promote group success. Overall this could help companies to devise strategies that leverage the groups' potentially interrelated and overlapping champion tasks best, prevent clashes among innovation champions and foster collaboration.

By considering and combining the shortcomings identified above, future research may contribute to illuminating individual and organizational enablers of innovation champions more thoroughly. These five research recommendations offer the opportunity to extend the current knowledge in digital innovation research. By building on the current status of innovation champion literature, researchers can contribute to enhancing organizational practices so that firms can benefit from the phenomenon of innovation champions in the future.

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