Strategies and Communications for Innovations
An Integrative Management View for Companies and Networks

von
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Chapter 18
Innovation Communication as a Cross-Functional Dynamic Capability: Strategies for Organizations and Networks

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18.1 Dynamic Capabilities in the Innovation Economy

Information and knowledge are two contributors to innovation and change. The ubiquitous availability of information and rapid sharing of knowledge require that the enterprise has the ability to re-invent and adapt continuously to environmental dynamism, for instance, in launching innovations or communicating with vendors and customers as co-creators in value creation processes (Davenport et al. 2006). Therefore, the organizational capability to innovate (innovative capability) is one essential factor for an enterprise in the innovation economy. However, the perspective of value creation through innovation has shifted from the closed to the Open Innovation view (e.g. Chesbrough 2003; Herzog 2008) and “successful companies will be those that transform information into value-creating knowledge, and [...] use this knowledge to innovate and capture additional profit” (Davenport et al. 2006: 17).
The construct Open Innovation can be understood as “… the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation […]” (Chesbrough 2006: 1). Innovation is defined as ideas, concepts, prototypes, practices, objects, programs/initiatives, models, design, issues, etc. that are perceived as new by stakeholders (based on Rogers 2003). In the open economy multiple inventions have to be combined for market success (e.g. Teece 2007; Somaya and Teece 2007).

As a consequence, strategic management concentrates on capabilities and innovation to gain sustainable value-capturing and competitive advantages (e.g. Davenport et al. 2006; Grant 2008). From the dynamic capability approach perspective (Teece et al. 1997), dynamic capabilities influence a corporation’s value creation by the impact on the valuable resource base of a corporation which in turn represents a source of competitive advantage (Ambrosini and Bowman 2009).

“A dynamic capability is the capacity of an organization to purposefully create, extend, or modify its resource base” (Helfat et al. 2007: 4).

Besides innovation, dynamic capabilities are essential factors in the innovation economy to address environmental dynamism (Teece et al. 1997) such as new stakeholder demands or new markets. Due to knowledge-empowered customers and advanced information and communication technologies (ICT) various new business models and market entry strategies have emerged for launching new products and added-value services (Davenport et al. 2006). As a result, enterprises manage a broad spectrum of innovations in new market structures beyond product nowadays and process innovations (e.g. managerial innovations, marketing innovations, co-created targeting innovations) based on internal and external information sources and knowledge (e.g. Davenport et al. 2006; Lichenthaler and Lichtenthaler 2009; Waarts et al. 2002). In this context the question has to be posed of how communication of innovations can be understood in the innovation economy.

18.2 A Modern View of Innovation Communication From a Strategic Management Perspective

18.2.1 Communication of Innovations Throughout the Open Innovation Process

Communication of innovations is of expanding interest to business and science (e.g. Mohr et al. 2009; Zerfaß and Ernst 2008; Zerfaß and Möslein 2009); this is true nowadays in particular due to the increasing demand for innovation, the breadth of enterprises’ innovation portfolios, the ubiquitous availability of information, knowledge-empowered stakeholders and new business models in new and different markets.
Three main streams of research can be identified in the field communication of innovations:

1. Marketing of innovations in marketing research
2. Innovation communication in marketing diffusion research
3. Innovation communication in corporate communication research linked to innovation management research

First, research in marketing, consumer behaviour and psychology encompasses scientific investigations regarding the antecedents and consequences in marketing of innovations. Marketing is an essential part in the innovation process (Crosby and Johnson 2006). Communication can inform consumers about the advantages and characteristics of an innovation by using mass media and individual communication throughout the adoption process (Hofbauer et al. 2009). Theoretical findings and managerial implications provide essential information concerning strategies and mechanisms to introduce innovations successfully. Marketing of innovation includes both the commercialization of radical innovations, technologies and services (e.g. Mohr et al. 2009; Sandberg 2008; Sowter 2000) and strategic innovation marketing (e.g. Talke 2005; Trommsdorff and Steinhoff 2007). Various useful definitions are provided in the literature, for instance, “innovation marketing encompasses all market-oriented activities of innovation management – that is, all strategic and operative decisions for marketing new products” (Steinhoff and Trommsdorff 2011).

Second, “diffusion research seeks to understand the spread of innovations by modeling their entire life cycle from the perspective of communications and consumer interactions” (Peres et al. 2010: 91). Several innovation diffusion models have been introduced mainly in the marketing diffusion literature (e.g. Mahajan et al. 2000; Peres et al. 2010) related to specific industries, adopter groups or steps in the adoption process (e.g. Arndt 1967; Hesse 1987; Mahajan et al. 1990, 1995; Pae and Lehmann 2003; Rohlfs 2001). Currently research interest has shifted in its focus, for instance, from the forecasting focus to the managerial diagnostic focus in order to provide answers in marketing management (Peres et al. 2010). Regarding communication, three social influence factors are mentioned to be drivers in innovation diffusion (1) word-of-mouth communication (e.g. Martilla 1971; Mazzarol 2011), (2) network externalities (e.g. Rohlfs 2001; Tomochi et al. 2005), and (3) social signals (e.g. Van den Bulte and Stremersch 2004; Berger and Heath 2008). These social influence factors, referred to as interdependencies among consumers, “affect various market players with or without their explicit knowledge” (Peres et al. 2010: 91) and thus have to be considered in marketing of innovations. Future research in this field requires the consideration of online communities, web services and complex types of product-services categories in innovation diffusion (Peres et al. 2010).

Third, researchers have focused on innovation communication and its impact on the innovation process from idea to launch as a part of corporate communication (e.g. Fink 2009; Zerfaß 2009). Three communication fields are used in this process (1) internal communication; (2) external communication; and (3) public relations (innovation journalism: Nordfors 2009). Moreover, innovation communication is mentioned as a
new term (Zerfaß et al. 2004), and Zerfaß (2009) defines innovation communication as a systematic initiation of communication processes with internal and external stakeholders to support technical, economical and social novelties through (a) the interest-led construction, revision, and destruction of socially depend conceptional patterns and communication resources, and (b) by stimulating (or, though the stimulation of) content-related catalysts for the development, as well as through professional promotion, of novelties. The object of communication is primarily the innovation itself, but in many cases it is also the organization behind the innovation. The communication management shall plan, monitor and evaluate innovation communication based on the defined understanding of innovation communication (Zerfaß 2009: 42 translated in English; for past definitions of innovation communication see also Zerfaß et al. 2004; Mast and Zerfaß 2005; Mast et al. 2006).

The first and second research streams primarily focus on market-related activities, first, to attract consumer’s attention and, second, to facilitate an innovation’s adoption process by driven social influences; including all involved market players or actors in innovation management from a strategic and operational view. On the other hand, the third research area conceives communicating innovations from idea to launch as a constitutive element in innovation management (Zerfaß 2009) and as a part of corporate communication management (Zerfaß et al. 2004).

Based on the current approach in innovation management, the following diagram (Fig. 18.1) shows an Open Innovation process and the dialog level with several dialog situations between an organization and its stakeholders throughout an Open Innovation process (based on Daschkovska et al. 2010). However, in the long-run enterprises have to manage several Open Innovation processes at the same time and over a period of time. Thus, they have to coordinate various communication processes, tools and activities related to different innovations to address knowledge-empowered stakeholders at their own markets, other firm’s markets and new markets. Therefore, it is assumed that over a period of time the coordination and integration of innovation communication in organizational communication can result in a modern view from a strategic management perspective.

18.2.2 Innovation Communication as a Dynamic Capability

A literature review shows some examples for investigations in the field of organizational communication competence and marketing capability, as shown in Table in Appendix. However, the table indicates that research in innovation communication as an organizational capability or dynamic capability is still deficient.

The characteristics of the innovation economy lead to a broad spectrum of innovations in a rapidly changing environment and, on the other hand, to the necessity of focusing on dynamic capabilities to improve the valuable resource base of an enterprise in order to gain sustainable competitive advantages under new circumstances. In this context and based on the literature review in Sect. 18.2.1, innovation communication might be able to intentionally:
1. Create ideas and re-configure innovations and the whole innovation portfolio, as an enterprise’s valuable resource, from idea to launch due to several systematic planned, future-oriented dialog situations between an organization and its stakeholders throughout Open Innovation processes (see Sect. 18.2.1; Daschkovska et al. 2010)

2. Re-shape collaborative innovation networks through communication, as a resource base in the innovation economy to invent and introduce successfully innovations (Prandelli et al. 2008)

3. Create or extend the innovation reputation asset of a company because communication can influence positively corporate reputation on the organizational communication level (van Riel and Fombrun 2008)

4. Re-shape markets (for marketing see Golfetto and Rinallo 2008), incl. new business models, as an enterprise’s resource, because communication of innovations can create new valuable issues on communication markets through the strategically oriented communication tools issues management and agenda setting (e.g. Cornelissen 2008; Goodman and Hirsch 2010; Ingenhoff and Röttger 2008)

5. Activate new knowledge schemata and extend knowledge schemata of internal stakeholders, i.e. re-fresh the human resource of an enterprise regarding future-oriented imagination (mental application) and mindsets (e.g. Rogers 2003; Jones and Tollin 2008; and for schemata theory see also Bruhn 2009; Koolman 2006; Miller 2005) and

6. Extend other related organizational capabilities such as knowledge management, as well as innovation management to seize opportunities in the entrepreneurial view (Teece 2007)
Thus, innovation communication can fulfill the specific requirements of being understood as a dynamic capability because innovation communication can reconfigure, create and extend the valuable resource base of an enterprise. For instance, the changing organizational processes might have an impact on the enterprise’s innovative capability leading to the understanding that the dynamic capability innovation communication is a higher level dynamic capability that can operate on zero level capabilities (operating and managerial resources) and first level capabilities (e.g. innovative capability) (see also Ambrosini and Bowman 2009). Further, internal factors and environmental factors are enablers for the successful deployment of dynamic capabilities (e.g. Teece et al. 1997; Schreyögg and Kliesch-Eberl 2007). For instance, as contingency factors different system structures can affect the dynamic capability innovation communication.

Nowadays one factor is the increase of worldwide communication networks within own international corporations, as well as with corporation’s stakeholders such as suppliers, communication agencies, consulting services, customers, government agencies and other external constituencies (e.g. Ayoko et al. 2004; Babcock and Babcock 2001). Hence, corporations need to develop cross-functional capabilities such as new product development capability (Grant 2008). In this context, innovation communication might represent a cross-functional dynamic capability because the processes of innovation communication needs to relate many internal departments (idea management, R&D, marketing, corporate communication, patent management, and controlling) and external constituencies in worldwide cross-functional communication networks. For instance, the Open Innovation project “ParcelRobot” required several communication activities in the innovation network (Rohde et al. 2011).

In research empirical data of dynamic capabilities appears relatively seldom, which may be the cause of poorly specified dynamic capabilities (e.g. Ambrosini and Bowman 2009; Pablo et al. 2007). Due to this fact of seldom empirical studies caused by poorly specified dynamic capabilities, this book chapter aims at presenting first a conceptual definition and a classification system for the dynamic capability innovation communication, based on a literature review, as a fundamental basis on which future research might build on, for instance, with empirical research studies.

18.2.3 Definition of Innovation Communication as a Dynamic Capability

“Organizational communication is a theoretical based, comprehensive approach to studying the sending and receiving of messages in a complex systemic environment” (Zaremba 2006: 34). More precisely, it is the study of why and how managers communicate to meet their responsibilities, which employee communication skill sets are needed and how to improve them, as well as “why and how organizations need to interact with their internal and external audiences” (Zaremba 2006: 34). Thus, communication is a process in which messages are sent by a sender
to receiver(s) through channels and its receiver(s) decode/s information using individual’s senses and give/s feedback (e.g. Argenti 2009; Zaremba 2003) in a “constant mutual influence of communication participants” (Miller 2005: 6; see also Bittner 1985; Burgoon and Ruffner 1978; DeVito 1997). In this transactional conceptualization of communication related to complex systemic environments, an “...organization as an entity [...] must link internal departments and be linked to its environment” (Zaremba 2006: 60). Based on the literature background and firmly anchored in systems theory in organizational communication (e.g. Conrad and Poole 2004; Papa et al. 2008; Zaremba 2006), a useful *conceptual definition* (Pozzi 2001) of innovation communication is the following:

*Innovation communication*, as one of a company’s cross-functional dynamic capabilities, is defined as transactional procedures of transmitting information between an organization and its stakeholders in terms of:

1. Introducing ideas, concepts, prototypes, practices, objects, programs/initiatives, models, design, issues, etc., or a combination of them, referred to as an innovation cluster, that are perceived as new by a stakeholder
2. Generating and highlighting context-issue(s) for the innovation or the innovation cluster
3. Presenting the organizational innovative capability and
4. Considering the interrelated, time-related and open transaction used to increase an enterprise’s value by building up new stakeholder schemata (knowledge domains), modifying existing ones, intensifying the organization’s innovation reputation, and improving the management of strategic assets such as information, innovation, and reputation (based on Pfeffermann et al. 2008)

This definition is also useful for innovation networks in the Open Innovation view, i.e. the dynamic innovation communication capability encompasses transactional procedures of transmitting information between many organizations in collaborative arrangements (collaborative networks) and their stakeholders, which leads to a higher complexity of the network’s dynamic capability *innovation communication* in open systems. From a strategic management perspective, collaborative arrangements, such as research consortium, cross-border joint ventures, market information sharing agreements, co-development contracts, are commonly used to provide flexibility and motivation in an entrepreneurial perspective of risk-taking, innovation and change (de Wit and Meyer 2005).

Regarding the management of innovation communication as a modern communication field in organizational communication,

*The management of innovation* communication represents all strategic, tactical and operational activities to plan, coordinate, execute, monitor and evaluate transactional procedures of information transmission in an organizational process-related and information-related view considering

1. Three types of external markets (resource markets, communication markets, and sales markets)
2. Internal management incl. resources, capabilities and structures and
3. Interrelated network structures
Linked to the theoretical discussion of uniqueness of dynamic capabilities, the provided conceptual definition of innovation communication is the abstract description and the provided management definition of innovation communication including its strategies and tools (see also Sect. 18.3) and represents the dynamic capability *in practice*, i.e. the performative aspects, which tends to “display subtle but important differences between firms” (Ambrosini and Bowman 2009: 44; Feldman and Pentland 2003).

Besides internal communication, finance communication, and marketing/branding communication, the communication field *innovation communication* can be integrated into organizational communication. Consequently, this cross-functional communication field also tends to facilitate stakeholder relationship management (public relations, community relations, media relations, shareholder relations, employee relations, customer/consumer relations or basically stakeholder communication), to enable establishing innovative brands (corporate brands, product brands and network brands) and to strengthen corporate reputation; mainly related to the communication objects *innovations, context-issue(s) of innovations, and innovative capability on a company or innovation network level*.

All words in the conceptual definition of innovation communication have a specific meaning and the following figure (Fig. 18.2) illustrates these words/dimensions, which can be derived from the conceptual definition *innovation communication* and understood as the constitutive elements of the dynamic innovation communication capability. These eight dimensions are all involved in innovation communication; however they vary in its intensity depending on the functional management view. Furthermore, the elements of innovation communication are interrelated and influence each other.

1. *Information transmission*: This dimension addresses the ability to plan, coordinate, execute, monitor and evaluate transactional procedures of information transmissions related to the following three communication objects:
   (a) The organization’s innovation/s and/or innovation cluster/s
   (b) The context-issue(s) of the organization’s innovation/s and/or innovation cluster/s and
   (c) The innovative capability of a company or network

*First*, innovation is defined as ideas, concepts, prototypes, practices, objects, programs/initiatives, models, design, issues, etc. that are perceived as new by stakeholders (based on Rogers 2003). Information management and transactional procedures of information transmission regarding innovation/s and/or innovation cluster/s of an organization’s innovation portfolio have to be coordinated constantly for communication purposes, in particular in the Open Innovation economy with globally spread resources and sources incl. multiple inventions for market success (e.g. Teece 2007; Somaya and Teece 2007). Thus, a broad range of innovation types and information resources have to be analyzed and planned because the type of innovation can influence both information transmission and knowledge creation. For instance, continuous and discontinuous innovations might produce dissimilar effects on consumer adoption (Moreau et al. 2001).
Second, information management and information transmission concerning context-issue(s) of an innovation or innovation cluster have to be coordinated constantly for communication purposes. The term context-issue represents a frame of an innovation or innovation cluster that can integrate the innovation or innovation cluster into a topic of concern and activate or modify an individual’s schema for a better understanding of certain aspects of the innovation or innovation cluster based on framing theory and concepts related to innovation communication (e.g. Dahinden 2006; Huck 2009; Pfeffermann et al. 2008; Scheufele 1999, 2003), as well as schema theory (e.g. Bartlett 1932; Brewer and Nakamura 1984; Rumelhart and Ortony 1977; Rumelhart and Norman 1988; Waldmann 1990) in communication context (e.g. Bruhn 2009; Esch 2006; Kroeber-Riel 1993). A schema is understood as “a large unit of organized information used for representing concepts, situations, events, and actions in memory” (Galotti 2003: 232; Rumelhart and Ortony 1977; Rumelhart and Norman 1988) and individuals “constantly assessing and evaluating the fit between their current situation and a number of relevant schema and sub-schemata” (Galotti 2003: 233). Thus, schemata can support to interpret current information and facilitate decision-making, such as in case of innovation
adoption. Framing can be understood as a method in innovation communication to provide a “frame of reference” (Huck 2009; Pfeffermann et al. 2008; for framing see Orlikowski and Gash 1994; Putman and Fairhurst 2004). From a management view, all specific innovation-related frames can be managed by using the strategic tool framing and specific innovation-related topics can be coordinated in issues management to systematically and purposefully create stakeholder’s knowledge domains. Both tools have to be closely linked to the innovation or innovation cluster throughout an innovation process and managed on a strategic innovation communication level linked to other frames in corporate communication.

Third, information management and information transmission relating to an enterprise’s or innovation network’s capacity to be innovative have to be coordinated constantly for communication purposes. Innovative capability can be defined as “the comprehensive set of characteristics of an organization that facilitate and support innovation strategies”, in which innovative strategies “... can be characterized in terms of timing of market entry, technological leadership or followership, scope of innovativeness and rate of innovativeness” (Burgelman et al. 2009: 9). For instance, information related to the innovative capability has to be monitored in order to coordinate information transmission in innovation communication.

2. Interrelation: This element of the dynamic innovation communication capability embraces the subordinate concept of interrelation, which means the ability to plan, coordinate, execute, monitor and evaluate several interrelated managerial tasks, communication processes, communication tools, and communication activities of innovation communication on four different levels:

(a) The interrelation among tasks, processes, tools, and activities of innovation communication taking place at the same time and over a period of time for a company and/or its collaborative networks
(b) The interrelation among tasks, processes, tools, and activities of innovation communication and innovation management processes, tools, and activities taking place at the same time and over a period of time for a company and/or its collaborative networks
(c) The interrelation among tasks, processes, tools, and activities of innovation communication and other managerial tasks, communication processes, communication tools, and communication activities in organizational communication (primarily in corporate communication and marketing) taking place at the same time and over a period of time for a company and/or its collaborative networks
(d) The interrelation among communication processes, communication tools, and communication activities of innovation communication considering three types of markets and its interdependencies – resource markets, sales markets, and communication markets

First, companies can primarily have different types of innovations at the same time and over time (e.g. Burgelman et al. 2009; Drejer 2002; Schilling 2008). Regarding the three introduced communication objects of innovation communication, the interrelations of communication processes, communication tools, and communication
activities have to be coordinated at the same time and over a period of time. Besides the coordination of the communication processes, tools, and activities on a strategic and operational level, this also includes the cooperation between people and other resources (McGee et al. 2005). As a result, coordination and cooperation should lead to a consistent appearance of an enterprise at the same time and over a period of time based on the concept of integrated communication (e.g. Bruhn 2003, 2005, 2008, 2009; Bruhn and Ahlers 2011).

Second, communication processes, communication tools, and communication activities of innovation communication have to be simultaneously adapted to several innovation processes pertaining to innovation management processes, tool and activities. For instance, the definition of standards for processes and policies with proposed communication tools and activities for several dialog situations in Open Innovation projects can facilitate the interrelations between innovation communication and innovation management.

Third, corporate communication consists of several fields of communication which include processes, tools, and activities (e.g. internal communication, public relations, investor relations, government relations, marketing communication) (van Riel and Fombrun 2008), as well as marketing of innovations processes, tools, and activities (e.g. Trommsdorff and Steinhoff 2007). Therefore, processes, tools, and activities of innovation communication and processes, tools, and activities of other fields in corporate communication and marketing have to be linked to each other. All activities have to be interrelated and integrated in a communication concept at the same time and over a period of time, in accordance with the integrated view of communication (e.g. Bruhn 2003, 2005, 2008, 2009).

Fourth, the subordinate concept of interrelation concentrates on the interrelation among innovation communication and three types of markets to consider the supply and demand at work in the essential markets of an enterprise or collaborative network: resource markets, sales markets and communication markets.

3. Time-related connectivity: This dimension encompasses the ability to plan, coordinate, execute, monitor and evaluate time-related information considering the subordinate concept of time-related connectivity. The time-related connectivity represents the ability to link and unit past-related, present-related and future-related information of the three communication objects. For instance, this subordinate concept of time-related connectivity can facilitate knowledge creation and the construct mental application in innovation-decision making. According to the diffusion theory, knowledge supports an individual’s decision-making process by reducing uncertainty about the advantage or disadvantage of an innovation (Rogers 2003). The time-related connectivity may support the decision-making process regarding the innovation’s compatibility, meaning that the innovation is consistent with existing values and past experiences (e.g. Kima and Nam 2004; Moreau et al. 2001). Rogers (2003) additionally mentions the importance of an individual’s mental application to an innovation in the persuasion phase of the innovation–decision process. Before making a decision, an individual mentally applies an innovation to
his or her present or future situation (Rogers 2003). For instance, an innovation communication tool for this element could be the method storytelling (e.g. Denning 2005; Fog et al. 2005; Frenzel et al. 2006; Simmons 2007) and the method scenario planning (e.g. Lindgren and Bandhold 2009; Ringland 2006).

Storytelling supports an individual’s imagination and creates trust by telling authentic stories about an innovation or innovation cluster from the idea to the finished product. The results of the German empirical study INNOVATE 2004 support this reasoning given that “... by telling an amusing story about its origin, its adoption in a company or its concrete meaning for the individual consultant illustrates well an innovation to the audience” (Mast et al. 2005: 11). Moreover, stories can create new opportunities and highlight the context (Frenzel et al. 2006) of an innovation or innovation cluster. As scenario planning is concerned, individuals and also organizations need a feedback system to learn from the past but also to gather information about the future. Uncovering and exploring future (business) environments, including potential risks and opportunities, is useful in preparing for many possible future situations (Lindgren and Bandhold 2009), for instance, innovation adoption possibilities or opportunities in new market structures.

4. Openness: As a third subordinate concept of innovation communication, open communication includes the ability to plan, coordinate, execute, monitor and evaluate communication processes, tools and activities in the open communication view. Based on the Open Innovation construct and openness in systemic environments, open communication encompasses the following seven functions of innovation communication:

(a) Upholding constant communication with known and unknown stakeholders (based on Open Innovation; e.g. Davenport et al. 2006)
(b) Using network communication (Zerfaß 2007)
(c) Exploiting knowledge from inside and outside a company or collaborative network (Teece 2007)
(d) Applying issues management to prevent crises and injury to reputation (e.g. Cornelissen 2008; Grensing-Pophal 2006)
(e) Making best use of internal and external communication situations/networks such as exchanging information and know-how (e.g. Ayoko et al. 2004; Babcock and Babcock 2001; Zander and Kogut 1995)
(f) Acting in accordance with moral legitimacy (e.g. Zerfaß 2007) and
(g) Using value communication (Pfannenberg and Zerfaß 2005; Pfeffermann 2011) such as the method storytelling (Frenzel et al. 2006)

5. Knowledge creation: This dimension refers to the learning by revising existing knowledge and building new schemata (Miller 2005). A schema, interrelated with other schemata, will be activated and developed if, for instance, stakeholders have made their first experiences with a new product or received information about it that they perceive as a new situation. New information or experiences change and develop existing knowledge domains into a complex schemata system (e.g. Bruhn 2009; Miller 2005). Therefore, the element
knowledge creation implies the ability to plan, coordinate, execute, monitor and evaluate communication processes, tools and activities of innovation communication to build up knowledge domains and extend complex knowledge schemata of stakeholder groups. Generally, knowledge application supports new product development (Song et al. 2005) and also an innovation’s adoption process (Rogers 2003). In fact, knowledge acts as a resource that can be re-shaped by innovation communication and opportunities can be seized to invent and build up knowledge management. Innovation communication can strengthen existing knowledge and build up new knowledge, which can have a positive impact on innovation diffusion.

6. **Strengthen innovation reputation:** A company’s reputation for being innovative (innovation reputation), which is understood as the stakeholders’ collective positive judgements of a company’s innovativeness over time (based on Barnett et al. 2006), is addressed in this dimension by the ability to plan, coordinate, execute, monitor and evaluate communication processes, tools and activities of innovation communication to strengthen innovation reputation. The interrelation between innovation communication and innovation reputation leads to the construct of credibility. For instance, consumers do not only pay attention to messages, but also to the credibility of the source of the message. Higher credibility leads to higher acceptance of a new product (Maathuis et al. 2004). Moreover, the definition of corporate reputation consists of both (1) the stakeholder relationship perspective in the creation of trustful stakeholder relationships (the enterprise’s behavior towards stakeholders in the past, present and expected future) and (2) the information transmission perspective (the degree of informative transparency). Information transmission is crucial for enhancing trust/credibility and stakeholder satisfaction and, hence, corporate reputation (de la Fuente Sabate and de Quevedo Puente 2003). As far as innovation communication is concerned, information transmission of the three communication objects plays a central role in establishing trust and stakeholder satisfaction, which leads to a strengthened innovation reputation.

7. **Management of strategic assets:** This dimension implies the planning, coordination, execution, monitoring, and evaluation of managing strategic assets related to innovation communication. A company coordinates and implements its strategic assets in concert with other specific resources and capabilities, which leads to the inherent value of strategic assets (McGee et al. 2005). In fact, innovation communication has to manage other specific resources and capabilities including other strategic assets of a company. Such strategic assets might include the resource “management techniques” that might consist of information management, innovation management as well as reputation management. Other strategic assets might be the innovative capability or marketing capability. Resources and capabilities are the asset base of a company, as described in Sect. 18.2.2; these are taken into account by innovation communication. The management of strategic assets acts as a resource and is concomitantly an outcome of innovation communication because the management of strategic assets can be re-shaped and extended through innovation communication, which
might lead to value creation in terms of an organization’s competitive advantage (interrelation of dynamic capability and competitive advantage: Ambrosini and Bowman 2009; Protogerou et al. 2008).

8. **Value creation:** Constituting one of a company’s dynamic capabilities, the cross-functional dynamic innovation communication capability is unique to an enterprise or a collaborative network. In the context of the conceptual definition, this dimension *value creation* focuses on value creation, value capturing and a sustained competitive advantage resulting from the fact that innovation communication can re-configure, re-shape, re-fresh, create and extend the valuable resource base of an enterprise and seize opportunities in the entrepreneurial view. Moreover, the impact of innovation communication on a company’s value, referred to as return on investment of innovation communication, can be distinguished as having direct and indirect effects. The direct effects might result because innovation communication can build up knowledge and manage strategic assets. The indirect impact on a company’s value could result from the influence innovation communication exerts on a company’s reputation for innovation which, in turn, enhances that company’s value.

### 18.2.4 Classification System of Innovation Communication

The following classification system can be deduced based on the conceptual definition and literature review. Table 18.1 shows seven types of innovation communication with its explanation in the organizational and network context level and from a functional management perspective. The three subordinate concepts are taken into account for all types of innovation communication and vary in their scope and rate of interrelation, time-related connectivity and openness in the open communication view.

### 18.3 Innovation Communication Strategies for Organizations and Innovation Networks

From a strategic functional view, corporate communication is closely linked to corporate strategy (Cornelissen 2008). In order to be successful, a company’s communication strategy depends on how it is associated to company’s corporate strategy and, on the other hand, “... requires that communication practitioners are involved in decision-making regarding the corporate strategy” (Cornelissen 2008: 99). For instance, communication practitioners bring a stakeholder perspective into the strategic management process and also support communicating the strategic decision to stakeholders (e.g. Belasen 2008; Cornelissen 2008). In
fact, organizational communication is both a tactical and an operational activity, but is also strategic. Several authors have described patterns and key factors for strategy and strategic corporate communication/public relations (e.g. Argenti

<table>
<thead>
<tr>
<th>Type</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation communication for types of organizations</td>
<td>This class of innovation communication focuses on various types of organizations (e.g. startups, SMEs, cluster initiatives, global players)</td>
</tr>
<tr>
<td>Innovation communication for types of innovations</td>
<td>This class of innovation communication concentrates on types of innovation to consider specific characteristics of innovations in an enterprise’s or collaborative network’s innovation portfolio (e.g. radical innovation, product modification, multiple inventions, innovation cluster, marketing innovations)</td>
</tr>
<tr>
<td>Innovation communication for types of context-issues of innovations and innovation cluster</td>
<td>This class of innovation communication considers (1) different types of context-issues and (2) the status quo of different context-issues in the issues life cycle</td>
</tr>
<tr>
<td>Innovation communication for the degree of organizational innovative capability</td>
<td>This class of innovation communication takes into account the degree of innovative capability and evaluation of the innovativeness of an enterprise or collaborative network</td>
</tr>
<tr>
<td>Innovation communication for the type of knowledge creation</td>
<td>This class of innovation communication focuses on the type of knowledge creation: (1) activation or (2) modifying of knowledge domains, subdivided into the primarily and supplementary knowledge domains and types of knowledge, subdivided into information and know-how</td>
</tr>
<tr>
<td>Innovation communication for components of innovation reputation</td>
<td>This class of innovation communication considers the linkage to innovation reputation in terms of two components (1) behavioral perspective (creating trust in stakeholder relationships) and (2) the informative perspective (the degree of information transparency)</td>
</tr>
<tr>
<td>Innovation communication for strategic assets management</td>
<td>This class of innovation communication focuses on the management of strategic assets in terms of (1) scope and type of strategic assets, (2) management concepts, and (3) coordination and implementation processes</td>
</tr>
</tbody>
</table>

**Source:** author

**Note:** Based on the conceptual definition of innovation communication and literature review

Table 18.1 Illustration of the classification system of innovation communication

<table>
<thead>
<tr>
<th>A classification system/taxonomy of types of innovation communication</th>
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<tbody>
<tr>
<td>From a functional management perspective</td>
</tr>
<tr>
<td>Type</td>
</tr>
<tr>
<td>Innovation communication for types of organizations</td>
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<tr>
<td>Innovation communication for types of innovations</td>
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<tr>
<td>Innovation communication for types of context-issues of innovations and innovation cluster</td>
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<tr>
<td>Innovation communication for the degree of organizational innovative capability</td>
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<tr>
<td>Innovation communication for the type of knowledge creation</td>
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<tr>
<td>Innovation communication for components of innovation reputation</td>
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<tr>
<td>Innovation communication for strategic assets management</td>
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</tbody>
</table>
One commonly used managerial process of corporate strategy starts with defining the corporate mission and objectives, then conducts an external and internal analysis, makes the strategic choice, and finally implements the strategy (Barney 2007). Starting from the corporate strategy choice, including vision, mission, values, and objectives, corporate functional strategies for several functional units of a corporation can be derived from the corporate strategy, such as marketing strategy and human resource strategy. Thus, strategic corporate communication is integrated to achieve corporate goals. In this context, strategy represents the fundamental basis for managing communication activities inside and outside the organization (Belasen 2008). Strategy is therefore linked to corporate communication. The “sequential set of analyses and choices” serves as a basis for strategy formulation (Barney 2007: 6), as illustrated in Fig. 18.3. The grey-marked steps show the strategic functional view of innovation communication in the strategic management process. The strategic choice for the innovation communication strategy is deduced from the framework of the corporate communication strategy and only the goal choice for innovation communication is based on an external and internal analysis to consider market requirements and the internal resource base. After the specific goals of innovation communication are defined, strategic tools can be chosen and the strategy implemented (Fig. 18.3).

Regarding the strategic management process, innovation communication is an integral part of organizational communication and thus on a strategic level different innovation communication strategies can be defined. The planning process, which includes the formulation of a strategy of innovation communication, is orientated to the sequential steps of a strategic management process and thus strategy is derived from the corporate communication strategy to achieve a fit. It is assumed that the process can also be adapted to innovation networks from a collaborative network perspective.

Three main value-creation strategies of innovation communication can be derived from the conceptual definition and be adapted in a corporate communication context:

- **Knowledge value strategy:**
  Aims at systematically and constantly increasing stakeholder’s knowledge to seize new opportunities through a broader knowledge base of an organization or collaborative network, as well as positively affecting the adoption/diffusion of innovations, which might lead to value creation, value capturing and sustain competitive advantage in the long-run (firm performance)

- **Profile and positioning value strategy:**
  Aims at systematically and constantly strengthening stakeholders’ image and innovation reputation and positioning an organization or collaborative network as an innovator, which might lead to value creation, value capturing and sustain competitive advantage in the long-run (firm performance)
Management value strategy:
Aims at systematically and constantly managing a corporation’s strategic assets related to innovation communication, which might lead to value creation, value capturing and sustain competitive advantage in the long-run (firm performance)

As far as external analysis is concerned, the critical risks and opportunities of innovation communication in markets and relating to stakeholder groups have to be considered. Among others, one possible result of the external analysis could be that a competitor has positioned a similar context-issue in a specific communication market (communication market analysis). Another finding could show that the budget and the capacity to communicate innovations seem to be less contradictive than commonly presented by the resource markets (resource market analysis).
From an internal analysis perspective, it is crucial for a company to identify its own resources and capabilities for the dynamic capability innovation communication, such as information sources and innovation portfolio. Important are, on the one hand, physical resources (e.g. IT infrastructure) as well as human and organizational resources and capabilities on the other (e.g. new product development teams, corporate culture, reputation, constituencies, time) (e.g. Argenti 2007; Grant 2008).

After the external and internal analysis is concluded, the strategy formulation requires a more adjusted formulation in the strategic choice process and a delineation of goals and concrete objectives (e.g. Smith 2009). Based on the conceptual definition and goal definition in corporate communication/public relations, the following goals for innovation communication in organizational communication can be deduced exemplifying the goal definition phase for an enterprise or collaborative network:

1. **Relationship/Knowledge management goals:**
   - Initiate dialog situations with stakeholders to systematically build up both knowledge schemata to support decision-making in innovation adoption and an organization’s profound knowledge base for future-oriented inventions or the creation of multiple inventions
   - Enhance innovation partnership relationships and specific innovation project relationships in Open Innovation projects
   - Promote employee-driven and public dialog platforms to re-shape collaborative innovation networks and innovation portfolios

2. **Reputation management goals:**
   - Refresh the innovation reputation asset continuously
   - Strengthen the positive image as an innovator within an industry
   - Create trust for the innovative capability of an enterprise or collaborative network in changing environments

3. **Task management goals:**
   - Manage tangible and intangible assets related to innovation communication to establish an infrastructure for innovation communication and communication networks related to innovations
   - Create an entrepreneurial climate to support idea creation and seizing opportunities
   - Enable the acquisition of information (internal and external communication situation for producing ideas and knowledge) as a basis for creating innovative tools for innovation communication

The formulation of concrete objectives and key indicators can facilitate the implementation phase, which is concerned with the orchestration of strategic innovation communication tools, tactical plans, and operational activities according to the basic dimensions of the dynamic innovation communication capability.

After defining strategies and formulating goals, various strategic planning tools can be applied to plan and coordinate innovation communication on a strategic functional level, for example (see also Pfeffermann 2011):
- **Scenario planning** (e.g. Hill and Jones 2008; Lindgren and Bandhold 2009; Ringland 2006): Planning future scenarios for possible innovation adoptions and the impact on environments (e.g. PESTEL logic). For instance, “product design study 2015” demonstrates the development and future possibilities of a high-tech system (see innovation project “ParcelRobot”: Rohde et al. 2011).
- **Framing** (e.g. Dahinden 2006; Huck 2009; Pfeffermann et al. 2008): Support for understanding new aspects of an innovation. Framing needs a strategic concept in order to integrate all frames of an organization related to the organization, brands or innovation/innovation cluster. A selected example is the project “ParcelRobot”, where the frame *robotics logistics* was exerted to positively impact the market launch of the high-tech system (Rohde et al. 2011).
- **Storytelling** (e.g. Denning 2005; Fog et al. 2005; Frenzel et al. 2006; Simmons 2007): The method storytelling can be used to create trust and facilitate an individual’s imagination. Several storyboards have to be coordinated in a strategic concept of innovation communication in order to be successful and to consider synergy effects and interdependencies among stories.
- **Market research** (e.g. Trommsdorff and Steinhoff 2007): Market research encompasses both information source and output to affect markets at the same time because the research findings can provide an opportunity for exchanges related to innovations or they can be used for setting an innovation’s agenda. For instance, an online survey can highlight main findings related to the innovation (see RoboScan’07: Rohde et al. 2011).
- **Concept and portfolio mapping including issues management** (e.g. Cornelissen 2008; Goodman and Hirsch 2010; Kane and Trochim 2007): In strategic planning both methods can be used to visualize issues and innovations in terms of, for instance, an issue-importance-matrix or concept mappings.
- **Sensory communication** (e.g. Brumfield et al. 2008; Krishna 2010; Pfeffermann 2011; Rempel and Esch 2009; Scents in Arts 2010): Commonly used in marketing, scent-based communication is of increasing interest, as is also shown in current publications in this field. Sensory communication addresses multiple senses to positively influence an individual’s emotional and cognitive information processing also at the action-taking level. However, organizations need to develop a strategic concept to address stakeholders through sensory communication for innovations.

The four main levels show the perspective on designing an integrated management concept of innovation communication. A process-related view focuses on the design, implementation and evaluation of standard and ad-hoc processes of communication activities according to different strategic planning tools. Resources and capabilities are essential to manage innovation communication in the resource- and capabilities-related views. The information-related view encompasses information management such as internal information processes to conduct scenario planning. The dialog-related view concentrates on relationships and how tools and activities can be coordinated to initiate proactive dialog situations with stakeholders or adopter groups.
18.4 Conclusion and Outlook

The Open Innovation economy with its rapidly changing environments presents various new challenges for innovation and change, including, for instance, multiple inventions and resources and capabilities spread over global, inter-cultural and cross-functional networks. New approaches and managerial concepts are required. In this context, one field of interest is the influence factor communication of innovations and the question of how communication of innovations can be understood in the innovation economy. This book chapter emphasizes that innovation communication can be understood as a dynamic capability from a strategic management perspective. Innovation communication tends to fulfill specific requirements of being understood as a dynamic capability because innovation communication can re-configure, re-shape, re-fresh, create and extend the valuable resource base of an enterprise and thereby seize new opportunities to gain competitive advantages in the long-run. From a functional management perspective, innovation communication represents a communication field in organizational communication and can act as a catalyst innovation communication in
managing strategic assets on an enterprise or collaborative network level. Its functions include knowledge creation to positively influence innovation diffusion, as well as strengthening innovation reputation. As constitutive elements of innovation communication, eight dimensions were described to define the cross-functional dynamic capability of innovation communication in more detail: information transmission; interrelation; connectivity; open communication; knowledge creation; strengthening of innovation reputation; management of strategic assets; and value creation. Furthermore, this book chapter presented a classification system based on the conceptual definition and three main strategies and types of goals for innovation communication were provided.

To conclude, this book chapter contributes to the debate in strategic management research of how specific dynamic capabilities should be defined, exemplified by the description of the dynamic innovation communication capability. Moreover, the concept of innovation communication may represent a tool of “unbounded” thinking in strategy formulation because innovation communication can support idea generation and information exchange in different phases in a strategic management process. Thus, this book chapter may provide a basis for the future research agenda in strategic management research (see McGee et al. 2005).

Future research might build on the conceptual definition to analyze the dynamic innovation communication capability in more detail, for instance, with empirical research studies focusing on multiple case studies. A contingency approach may provide an opportunity to understand the environmental factors and system structures that can have an impact on the dynamic innovation communication capability (for dynamic capability: see Ambrosini and Bowman 2009). For instance, scholars can investigate industry patterns and changing environments for innovation networks, as well as communication networks and interdependencies that can affect the dynamic innovation communication capability. Moreover, different Open Innovation projects incl. entrepreneur projects should be observed so that qualitative and quantitative data can be analyzed, using the triangulative approach (mixed method), to reveal new aspects in this field of interest from multi-disciplinary perspectives. From a content-related view, research can be directed at new approaches to integrate innovation communication in organizational communication and to develop an integrated management concept of innovation communication on a process-oriented, information-oriented, resources-oriented, dialog-oriented or network-oriented level (see Fig. 18.4).

Finally, the research field communication of innovations can be broadened to investigate innovation communication from a strategic management perspective, for instance, with three main research issues:

- For the organizational/network perspective (sender):
  How can which an institution or a collaborative network design, integrate and apply the dynamic innovation communication capability for transactional procedures of information transmission related to their innovation portfolio and degree of innovative capability; and thus how can the dynamic innovation communication capability be established, developed and evaluated?
From the transactional procedure perspective (transaction):
How can an institution or a collaborative network use which type of information and channel at which time or period of time to communicate innovations, innovation clusters, context-issue(s) or the innovative capability pertaining to the elements of the dynamic innovation communication capability?

From the stakeholder perspective (recipient)
How do stakeholders or adopter groups perceive the dynamic innovation communication capability of institutions or collaborative networks and how can the transactional procedures of information transmission related to the type of innovation portfolio and degree of innovative capability be influenced?

Bibliography


## Appendix: Illustration of Definitions of Organizational Communication Competence and Marketing Capability (sorted in chronological and then alphabetical order and is not to be understood as a complete review)

<table>
<thead>
<tr>
<th>Type</th>
<th>Definition</th>
<th>Source</th>
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<tbody>
<tr>
<td>Marketing capabilities</td>
<td>“The marketing capabilities include product development, the process to develop and manage product and service offerings; pricing, the strategy to extract the optimal revenue from firm’s sales; channel management, the course of action to establish and maintain the channels of distribution that effectively and efficiently deliver value to end-user customers; marketing communications, the ability to manage customer value perceptions; selling, the activity to fulfill customer orders; market information management, the practice to acquire and use market knowledge; marketing planning, the ability to create marketing strategies that optimize the match between the firm’s resources and its marketplace; marketing implementation, the process to transform marketing strategy into realized resource deployments” (p. 153; based on Vorhies and Morgan 2005)</td>
<td>Akdeniz et al. (2010)</td>
</tr>
<tr>
<td>Marketing capability</td>
<td>“...marketing capability to be firm’s ability derived from two prominent components: marketing planning ability and marketing implementation ability.” (p. 850)</td>
<td>Chang et al. (2010)</td>
</tr>
<tr>
<td>Marketing capability</td>
<td>“Marketing capability is defined as the integrative process, in which a firm uses its tangible and intangible resources to understand complex consumer specific needs, achieve product differentiation relative to competition, and achieve superior brand equity” (p. 319; based on Day 1994; Dutta et al. 1999; Song et al. 2005, 2008).</td>
<td>Nath et al. (2010)</td>
</tr>
<tr>
<td>Dynamic marketing capabilities</td>
<td>“Dynamic marketing capabilities reflect human capital, social capital and the cognition of managers involved in the creation, use and integration of market knowledge and marketing resources in order to match and create market and technological change” (p. 103)</td>
<td>Bruni and Verona (2009)</td>
</tr>
</tbody>
</table>
Marketing capability model

“... we focus on capabilities that are consistent with both Day’s (1994) marketing capability model and Srivastava et al.’s (1998) framework linking market-based assets with cash-flow growth.” = market-sensing capability; CRM capabilities, and brand management capabilities (p. 285)

Two interrelated marketing capability areas

“Two interrelated marketing capability areas have been identified: capabilities concerning individual ‘marketing mix’ processes, such as product development and management, pricing, selling, marketing communications, and channel management (e.g. Vorhies and Morgan 2005), and capabilities concerned with the processes of marketing strategy development and execution (e.g. Morgan et al. 2003). These capabilities may be rare, valuable, non-substitutable, and inimitable sources of advantage that can lead to superior firm performance (e.g. Vorhies and Morgan 2005). Further, as knowledge-based processes that become embedded over time, such capabilities may be difficult for competitors to imitate (e.g. Teece et al. 1997)” (pp. 910–911)

Architectural marketing capabilities and marketing capability integration

“... to simultaneously model the ways that product-market strategy influences specialized and architectural marketing capabilities and marketing capability integration” (p. 1321)

Marketing capabilities

Marketing capabilities are divided into inside-out capabilities, spanning capabilities, and outside-in capabilities (based on Day 1994)

“Marketing capabilities – such as skill in segmentation, Organizational Capabilities Information Technology Capabilities and Strategic Types 9 targeting, pricing, and advertising – enable the organization to take advantage of its market-sensing and technological capabilities and to implement effective marketing programs” (pp. 8).

Marketing-mix capabilities

“... the capabilities used to orchestrate marketing-mix capabilities and their resource inputs involving market information management and marketing (continued)
<table>
<thead>
<tr>
<th>Type</th>
<th>Definition</th>
<th>Source</th>
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<tbody>
<tr>
<td>Marketing planning capability</td>
<td>“... marketing planning capability, we focus on specific elements fundamental to the overall marketing planning process” (p. 372)</td>
<td>Slotegraaf and Dickson (2004)</td>
</tr>
<tr>
<td>Organizational communication competence</td>
<td>“... conceptualize organizational communication competence along three dimensions: competence assessment criteria, competence levels, and ecological systems. Such a conceptualization acknowledges the cognitive and behavioral components of communication competence, the developmental nature of communication competence, and the embeddedness of communication competence at various levels of analysis” (p. 833)</td>
<td>Jablin and Sias (2004)</td>
</tr>
<tr>
<td>Architectural marketing capabilities</td>
<td>“Architectural marketing capabilities are defined in the literature as the processes by which firms plan appropriate combinations of available knowledge and other resources to deploy into their marketplace(s) and execute these planned resource deployments, transforming them into realized value offerings for target market(s).” (p. 293)</td>
<td>Morgan et al. (2003)</td>
</tr>
<tr>
<td>Two types of marketing capabilities</td>
<td>“We identified and assessed two types of marketing capabilities: specialized capabilities regarding the specific marketing mix-based work routines used to transform available resources into valuable outputs [...] and architectural capabilities regarding the marketing strategy formulation and execution work routines used to develop and coordinate specialized capabilities and their resource inputs ...” (p. 106)</td>
<td>Vorhies and Morgan (2003)</td>
</tr>
<tr>
<td>Marketing capability</td>
<td>“... marketing capability is defined as integrative processes designed to apply the collective knowledge, skills, and resources of the firm to the market-related needs of the business, enabling the business to add value to its goods and services and meet competitive demands.” (p. 19)</td>
<td>Weerawardena (2003)</td>
</tr>
<tr>
<td>Four functional export marketing capabilities</td>
<td>“... we focus on four functional export marketing capabilities: pricing capability, product development capability, distribution capability, and communication capability” (p. 36)</td>
<td>Zou et al. (2003)</td>
</tr>
</tbody>
</table>

(continued)
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<thead>
<tr>
<th>Type</th>
<th>Definition</th>
<th>Source</th>
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<tbody>
<tr>
<td>External marketing capability and internal marketing capability</td>
<td>MAC = Marketing Capability</td>
<td>Åyväri and Möller (1999)</td>
</tr>
<tr>
<td></td>
<td>“. . . External MAC is a function of the extension of a firm’s network positions and weak ties, and of such more individual competencies like the networking ability of key managers (or the owner–manager in micro firms), and their ability to develop valid cognitive maps of interrelated nets. . . . Second MAC is labelled Strategic marketing capability. It is composed of two principal sub-capabilities, (1) market targeting and positioning capabilities, and (2) relationship developing capability.” (p. 20)</td>
<td></td>
</tr>
<tr>
<td>Marketing capability</td>
<td>“Marketing Capability. A firm with a strong marketing capability – exhibiting superiority in identifying customer’s needs and in understanding the factors that influence consumer choice behavior – will be able to achieve better targeting and positioning of its brands relative to competing brands.” (p. 8)</td>
<td>Dutta et al. (1999)</td>
</tr>
<tr>
<td>Marketing capabilities</td>
<td>“. . . marketing capabilities are the integrative processes designed to apply the collective knowledge, skills and resources of the firm to the market-related needs of the business, enabling the business to add value to its goods and services, adapt to market conditions, take advantage of market opportunities and meet competitive threats (Day 1994).” (p. 4)</td>
<td>Vorhies (1998)</td>
</tr>
<tr>
<td>Marketing capability (inside-out, outside-in, and spanning processes)</td>
<td>“. . . marketing capability represents both the upstream or outside-in processes as well as the downstream or inside-out and spanning processes in regard to business processes.” (p. 73)</td>
<td>Tuominen (1997)</td>
</tr>
<tr>
<td>Inside-out capability, outside-in capability, and spanning capabilities</td>
<td>“Capabilities can be usefully sorted into three categories, depending on the orientation and focus of the defining processes [. . .]. At one end of the spectrum are those that are deployed from the inside out and activated by market requirements, competitive challenges, and external opportunities. [. . .] At the other end of the spectrum are those capabilities whose focal point is almost exclusively outside the organization. The purpose of these outside-in capabilities is to connect the Day (1994)</td>
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<td>Type</td>
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<tr>
<td>Organizational communication competence</td>
<td>Processes that define the other organizational capabilities to the external environment and enable the business to compete by anticipating market requirements ahead of competitors and creating durable relationships with customers, channel members, and suppliers. Finally, spanning capabilities are needed to integrate the inside-out and outside-in capabilities” (p. 41)</td>
<td>Wellmon (1988)</td>
</tr>
<tr>
<td>Marketing capability</td>
<td>“The marketing capability of a firm is a multi-faceted phenomenon. It is a complex combination of the human resources or assets, market assets, and organisational assets of a firm” (p. 187)</td>
<td>Möller and Anttila (1987)</td>
</tr>
</tbody>
</table>

*Source: by the author*