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Perspective

New Service Development: How the Field Developed, Its Current Status and Recommendations for Moving the Field Forward

Wim G. Biemans, Abbie Griffin, and Rudy K. Moenaert

New service development (NSD) is a growing innovation discipline. Despite the growth of articles about NSD, several authors have criticized the lack of attention paid to NSD, compared with new product development (NPD), and the lack of consensus across NSD findings. At the same time, others have proclaimed that NSD is a sophisticated, mature field of research. This paper tries to resolve these issues by analyzing 230 empirical articles on NSD, published over a period of 30 years. It investigates the content of NSD research articles, the authors contributing to the field, and the research methodologies employed. It finds that, despite its growing popularity, the field has not moved forward substantively. NSD is a subject specialty but lacks an “invisible college” of researchers addressing the topic. This has resulted in a body of research that fails to provide managers with consistent answers to basic questions about how to most effectively manage NSD processes.

One of the main causes for the lack of coherence in the knowledge on this topic may stem from the fact that, rather than initially approaching research in the domain without ingoing bias and using grounded theory approaches to create initial understanding, many of the early researchers applied the concepts, frameworks, and methods used to understand NPD to the NSD domain. To correct this problem, it is proposed that the field of NSD needs to move forward in a significantly different manner. This paper provides several recommendations for attracting more academics to the field, elevating the visibility and status of NSD as a research domain, and also presents a research agenda that may help reorient future research in this area so that a more complete and coherent body of knowledge is generated that both advances the field and helps practitioners manage NSD more effectively and efficiently.

Practitioner Points

- Compared with the new product development literature, the new service development literature is rather fragmented and does not provide managers with a set of generally accepted tools and guidelines for success.
- New service development differs from new product development because of the inherent characteristics of services, but it is unclear how these characteristics impact service innovation management.
- There are many different types of services, but it is not clear how the service context impacts the new service development process.

Introduction

Innovation is the driving force behind superior business performance, with innovative firms reaping the benefits of increasing growth and customer satisfaction and customers enjoying the higher value of new products and services. Firms like 3M and DSM have proven track records in innovation, launching 1000–1700 new products per year. And Apple became the most profitable firm in history through a string of successes that has changed the nature of the music, telecommunications, and consumer electronics industries. New product development (NPD) has been studied for several decades by academic researchers, resulting in a large and well-documented body of knowledge about the NPD process and its key success factors (Brown and Eisenhardt, 1995; Hauser, Tellis, and Griffin, 2006; Henard and Szymanski, 2001). However, the innovation literature is strongly biased toward products; so, what about services?

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The world's most advanced economies are dominated by services, which often generate more than 70% of their gross domestic product (Cusumano, 2010; Ostrom et al., 2010). Even goods manufacturers have come to realize that they may better differentiate themselves from competitors by adding services to their core products, transitioning from product manufacturers to service or solution providers (Gebauer, Gustafsson, and Witell, 2011; Oliva and Kallenberg, 2003). Academics use the increasing focus on intangibles and customer cocreation to emphasize that customers do not purchase products but hire products and services to get a job done (Bettencourt, 2010; Christensen, Cook, and Hall, 2005). Others go even further and question the distinction between products and services, arguing that marketing has moved to a service-dominant view, in which service provision is fundamental to economic exchange (Lusch, Vargo, and O'Brien, 2007; Vargo and Lusch, 2004).

The increasing importance of services and focus on new services for competitive advantage has fueled a growing literature on service innovation. Some authors make a distinction between service innovation and new service development. For instance, Bettencourt (2010) defines service innovation as the process of devising a

new or improved service concept that satisfies the customer's unmet needs and new service development as all subsequent activities involved in bringing that concept to market. This article follows the more common tradition and considers "service innovation" and "new service development" (NSD) as synonyms, defined as the process of devising a new or improved service, from idea or concept generation to market launch.

Service innovation has brought us a broad range of new services, such as car-sharing services (e.g., Zipcar), community-supported agriculture, Twitter, LinkedIn, Pinterest, and Dropbox, which have changed how people live and interact and how companies do business. But what is actually known about NSD? To what extent does the innovation literature offer useful tools and guidance for service innovators?

The NSD literature has evolved over the last 30 years. Early NSD studies used largely qualitative methods to explore the nature and stages of the service innovation process (Bowers, 1989; Easingwood, 1986; John and Harborne, 1985). However, these earliest studies were quickly followed by other researchers applying the quantitative research methods of NPD success/failure studies to identify key NSD success factors (De Brentani, 1989; Edgett, 1994; Storey and Easingwood, 1993). While scholars acknowledge the key differences between products and services, they are not clear on how these impact the NSD process.

The first literature review of the growing body of research about service innovation (John and Storey, 1998) concluded that more research was needed in several NSD areas that were well covered in the NPD literature, such as objective procedures for evaluating success, teamwork, NSD across different industries, and international aspects of NSD. This call for more research into NSD was answered with a plethora of studies investigating numerous aspects of NSD, ranging from organizing NSD to the role of frontline employees, customer involvement, and knowledge management.

When it comes to assessing what these three decades of NSD research have amounted to, however, opinions differ. Some scholars conclude that the field has become mature (Bryson and Monnoyer, 2004). Cainelli, Evangelista, and Savona (2004, p. 117) even conclude: "Thank [*sic*] to this new empirical evidence, we have nowadays a rather detailed picture on the relevance and nature of innovation activities in services." However, the majority of scholars emphasize that the NSD domain remains underdeveloped and that much additional research is needed (De Jong and Vermeulen, 2003; Droege, Hildebrand, and Forcada, 2009; Salunke,

BIOGRAPHICAL SKETCHES

Dr. Wim G. Biemans is associate professor of marketing and innovation at the Faculty of Economics & Business of the University of Groningen, the Netherlands. His research focuses on B2B marketing, innovation management, and service innovation. His work has been published in various marketing, management, and innovation journals, such as *JPIM*, *Industrial Marketing Management*, *Technovation*, *R&D Management*, and *Journal of Business Research*. He authored several books about marketing and innovation and taught as guest professor at universities in Europe, Asia, and the United States.

Dr. Abbie Griffin holds the Royal L. Garff Presidential Chair in Marketing at the David Eccles School of Business at the University of Utah, where she teaches business-to-business marketing and first-year core marketing classes to M.B.A. students. Professor Griffin's research investigates means for measuring and improving the process of new product development. She was the editor of *JPIM* from 1998–2003. In 2009, Prof. Griffin was named as the fourth Crawford Fellow for her contributions to the field of innovation and new product development. Prof. Griffin is an avid quilter, skier, hiker, swimmer, and scuba diver.

Dr. Rudy K. Moenaert is professor of strategic marketing in the TiasNimbas Business School at Tilburg University and part-time professor of strategic marketing at Nyenrode Business Universiteit in the Netherlands. His work has been published in *Management Science*, *JPIM*, *Journal of the Academy of Marketing Science*, *Journal of Management Studies*, *Industrial Marketing Management*, *Journal of Service Research*, and *Information and Management*, among other journals. He is a sought-after executive teacher on the subjects of strategy, marketing, and innovation management and advises business-to-business companies on their marketing strategies.

Weerawardena, and McColl-Kennedy, 2011; Toivonen and Tuominen, 2009). For example, Storey and Hull (2010, p. 140) state that “NSD remains among the least studied and understood topics in both the service management . . . and the innovation literatures.” And most recently, Kuester, Schuhmacher, Gast, and Worgul (2013, p. 533) conclude that “Although researchers have shown growing interest in NSD issues, this area is still underutilized.”

In contrast to these ad hoc opinions are the more grounded findings of a recent literature review by Papastathopoulou and Hultink (2012). They analyzed 145 conceptual and empirical articles from almost three decades of NSD research and split them into three time periods containing roughly the same number of articles: 1982–1995 (“the early writings”), 1996–2001 (“advancing the literature”), and 2002–2008 (“the recent works”). Of these articles, 90 were empirical NSD studies, which they classified according to research methodology. From their analysis, Papastathopoulou and Hultink (2012) conclude that NSD research methods have matured over the years and that there is an “emergence of a sophisticated NSD discipline.” However, their conclusion is based predominantly on an analysis of the evolution over time of the research methods employed. They do not evaluate the nature and impact of researcher networks or the overall body of knowledge that has been generated.

Considering the disagreement about the current state of NSD research, what is needed is not another review of the NSD literature, but a critical in-depth assessment of the field that addresses the key question:

How has the NSD domain evolved over time and what is its current status?

Research Method

The current stock of knowledge about service innovation is assessed by examining published empirical NSD studies. The first articles focusing on service innovation were published in the mid-1980s, resulting in approximately 30 years of empirical NSD research. Empirical NSD studies were collected in several ways.

- The majority of the studies were identified through a systematic search of three decades of relevant top journals, identified as the A and A+ journals from the Australian Business Deans Council list and the 4 and 4+ journals from the Association of Business Schools list in the domains of services; technology management; marketing; management; and the specific industry domains of banking, hospitality, and tourism.

- Systematic online searches of EBSCO, ScienceDirect, and Google Scholar using key phrases such as “service innovation” and “new service development.”
- Snowballing references in published empirical studies, books, monographs, and conference papers about service innovation.

This combination of methods resulted in a total of 230 empirical NSD studies published in 50 journals between 1985 and 2012. For the journal and author analyses, all 230 articles are used to ensure completeness in understanding. When multiple articles were based on the same data set, the findings from the articles were integrated and the analysis only includes the Social Sciences Citation Index (SSCI) most highly cited study. This maintains the desired focus on the body of knowledge of service innovation and allows for the identification of contributions by individual studies and researchers. As a result, for the content and methods related analyses, the total number of empirical studies was reduced to 201 studies published in 50 journals.

The empirical studies were coded and analyzed across nine dimensions: (1) subject matter, using the Product Development and Management Association (PDMA) Body of Knowledge (BOK, <http://www.pdma.org/p/cm/ld/fid=49>) classification (alliances and codevelopment; customer and market research; intellectual property; metrics; process and execution; people, teams, and culture; portfolio management; strategy; technology; and industry context), (2) research goal, (3) industry, (4) geographic scope, (5) knowledge source, (6) sample size, (7) unit of analysis, (8) NPD focus, and (9) time horizon. Numerous experts worked together to assemble the PDMA BOK typology as a comprehensive classification scheme to structure research in the innovation management discipline. This typology was used in an earlier study of the first 20 years of *JPIM* (Biemans, Griffin, and Moenaert, 2007), which allows for a comparison between the content of the specialized field of NSD and the broader NPD discipline. The six-category typology used by Papastathopoulou and Hultink (2012) in their review is a subset of the PDMA BOK typology. Articles were classified independently by all three researchers (Aulakh and Kotabe, 1993). A limited number of classification discrepancies were resolved through discussion.

Because several journals covering NSD are not in the SSCI database—suggesting that journals publishing service innovation research may not be considered mainstream by the scientific community—Google Scholar citation data are used for the citation analysis. These data have the advantage of offering more recent and complete

citation numbers because Google Scholar does not limit references to a list of accepted journals, but also includes book, conference paper, and other references. Thus, Google Scholar citation data offer a more complete indicator of an article's true impact.

To facilitate a comparison with the findings of Papastathopoulou and Hultink (2012), the 201 articles were classified into four time periods: the three time periods used by Papastathopoulou and Hultink (2012) and a fourth time period containing the additional years included in our study. This results in the following four time periods: (1) 1985–1995 (22 articles), (2) 1996–2001 (24 articles), (3) 2002–2008 (65 articles), and (4) 2009–2012 (90 articles). This classification maintains the logic of the three periods used by Papastathopoulou and Hultink (2012), while the added fourth period provides more recent information. The increasing number of articles per period reflects the growing interest in the domain of service innovation. Thus, this study extends the Papastathopoulou and Hultink (2012) research with an additional time period and includes more than twice as many empirical studies than they analyzed. In addition, by combining information about articles' methodologies with information about authors, author networks, and citations and taking a more in-depth look at topics, this

study offers a more detailed story of the development and current status of NSD research.

Charting the Current Body of NSD Research

As can be seen in Figure 1, there is a clear difference between the first 15 years of NSD research, when only a few empirical studies were published each year, and the last 10 years, when the number of published empirical studies increases dramatically. The year 2012 alone saw a record number of 32 empirical NSD studies published.

Figure 1 also displays the average number of Google Scholar citations received by articles published each year. Obviously, older articles have had more time to acquire citations, which is evidenced by a negative relationship between publication year and the number of Google Scholar citations ($-0.48, p < .01$). The obvious exception to this downward trend is 1997, but this peak is caused by only one NSD article (Sundbo, 1997), which has received the highest number of citations of any article published ($z\text{-score} = 4.86$). This high number of citations is perhaps due to it being the first article to develop and present a general typology of service innovation organizational structures.

Figure 1. Number of Empirical New Service Development (NSD) Studies Per Year^a

^a Including the multiple articles based on the same dataset ($n = 230$).

Journals Publishing NSD Research

The 230 empirical NSD studies were published in 50 journals. Table 1 presents the 14 journals that have published more than five empirical NSD studies.

These top 14 journals account for 78.6% of the total articles published in the last 30 years, with just three journals publishing 37.4% of the studies: *The Service Industries Journal*, *Journal of Service Management* (titled *International Journal of Service Industry Management* until 2009), and *JPIM*. The leading journals publishing empirical NSD studies are two general services journals plus the leading journal in innovation management (*JPIM*). Other innovation management journals lag in publishing on NSD. For example, *JPIM* has published nearly three times as many empirical NSD articles than the next innovation journals on the list (*European Journal of Innovation Management* and *Technovation*).

In terms of trends across the eras, several changes are important to note. First, the number of articles published in *JPIM* as a percentage of the total number of articles for the era has been declining steadily. *JPIM* published over 20% of the total NSD empirical articles in the first two eras, but in the fourth era accounts for only 11% of the articles. Marketing's share of the total articles has remained constant at about 10%, while the total of the service journals has risen from about 40% in the first two eras to over 53% in the fourth. Astoundingly, however, is the rise of articles focusing on the banking industry—from about 4% in the first two eras to over 12%.

None of the so-called “A”-level domain-specific journals is included in Table 1, and none of the journals in

that table are on the *Financial Times* journal list. Indeed, none of the three A-level marketing journals (*Journal of Marketing* [JM], *Journal of Marketing Research* [JMR] and *Marketing Science* [MKS]) have published any empirical NSD articles in the last 30 years, nor have any A-level management journals. *MKS* and *JMR* have published articles about services, but these tend to focus on how to create successful dyadic service encounters and not about developing new services. *JM* has published a somewhat larger number of articles about services, but from 2010–2015 it still published fewer than three services articles per year. Many of these articles are conceptual. The ones that do present empirical data also tend to focus on specific aspects of service encounters, such as the role of frontline employees, customer participation, value creation, and customer satisfaction. *Strategic Management Journal* has published only one NSD article (Song, Di Benedetto, and Zhao, 1999).

This finding has major implications for academics pursuing NSD research. Either the review process in the A journals systematically filters out empirical NSD articles, or innovation scholars are only submitting their empirical research articles to non-A journals. Researchers at Tier 1 research institutions may be shying away from NSD research, as their institutions are focusing more and more just on A-level publications.

Analyzing the role of journals in terms of impact paints a somewhat different picture. The largest number of citations (3838, representing 20.9% of the total for all NSD articles included in this study) are collected by the 23 articles published in *JPIM*. Its average of 166.9 citations per article is the highest of all of the journals, and more than twice that of any of the services journals.

Table 1. Journals Publishing New Service Development Research^a

Journal	Number of Articles	Percentage of Articles	Number of Citations	Average Number of Citations Per Article
<i>The Service Industries Journal</i>	32	13.9%	1812	56.63
<i>Journal of Service Management</i>	31	13.5%	2479	79.97
<i>JPIM</i>	23	10.0%	3838	166.87
<i>Journal of Service Research</i>	15	6.5%	1248	83.2
<i>International Journal of Bank Marketing</i>	14	6.1%	663	47.36
<i>Journal of Services Marketing</i>	12	5.2%	981	81.75
<i>Managing Service Quality</i>	10	4.3%	243	24.30
<i>European Journal of Innovation Management</i>	8	3.5%	320	40.00
<i>Industrial Marketing Management</i>	7	3.0%	749	107.00
<i>European Journal of Marketing</i>	6	2.6%	659	109.83
<i>Journal of Business Research</i>	6	2.6%	650	108.00
<i>Research Policy</i>	6	2.6%	673	112.00
<i>Technovation</i>	6	2.6%	147	30.60
<i>Journal of Marketing Management</i>	5	2.2%	153	24.5

^a Including the multiple articles based on the same data set ($n = 230$). The citation data are based on Google Scholar (collected on May 19, 2014).

Interestingly, the average number of citations per article is relatively low (56.6/article) for the most prolific journal in this area. NSD authors who wish to maximize their article's potential for impact may want to target *JPIM*.

NSD Topics Investigated

The 201 articles were classified according to the *PDMA Body of Knowledge* taxonomy.

As Table 2 shows, 56.2% of the articles are about the NSD process and its execution, although this topic is declining over time. During the first time period more than four out of five articles focused on this topic. As Papastathopoulou and Hultink (2012) also find, the NSD topics investigated in this early era were rather narrowly focused. Several prominent researchers in the field at that time (e.g., De Brentani, Storey, and Edgett) published numerous articles applying the methods used in the early NPD success/failure studies to the new discipline of NSD. Just over 20% of the articles cover NSD strategy, a topic that has become more popular in recent years: in 2009–2012, 30% of the articles investigate strategic issues. Almost 20% of the articles are about customer and market research, typically investigating information quality (for example, assessing the quality of user-generated ideas for new services) and how service companies collect customer information to design new services. In view of important contemporary trends in this field (such as “big data” and social media), this domain is expected to gain momentum in the future. Another topic garnering increasing attention is codevelopment and alliances, which includes several studies about how firms collaborate with customers in developing new services.

The increasing focus on strategy and codevelopment is accompanied by a declining interest in issues revolving around people, teams, and culture: from 14 articles in period 3 to just 1 article in period 4. This sudden drop is especially alarming considering that the management of employees and customers generally is seen as critical for successful service development and delivery (Frei and Morris, 2012).

Another still-neglected area is the role and impact of industry context; articles that investigate the development of new services across multiple industry contexts are very scarce (Kuester et al., 2013). However, services are highly contextual and several authors emphasize the need for more insight into how contextual factors influence the development and delivery of new services. For instance, Storey and Hull (2010, pp. 140–41) conclude that “It is widely recognized that all services are not the same. . . . However, to date there has been little attempt to

Table 2. New Service Development Topics Investigated^a

Topic	1985–1995 (n = 22)		1996–2001 (n = 24)		2002–2008 (n = 65)		2009–2012 (n = 90)		1995–2012 (n = 201)	
	Number of Articles	Percentage of Articles	Number of Articles	Percentage of Articles	Number of Articles	Percentage of Articles	Number of Articles	Percentage of Articles	Number of Articles	Percentage of Articles
Process and execution	18	81.8%	13	54.2%	36	55.4%	45	50.0%	113	56.2%
Strategy	1	4.5%	5	20.8%	8	12.3%	27	30.0%	43	21.4%
Customer and market research	3	13.6%	4	16.7%	15	23.1%	18	20.0%	39	19.4%
People, teams, and culture	4	18.2%	4	16.7%	14	21.5%	1	1.1%	24	11.9%
Codevelopment and alliances	0	0.0%	0	0.0%	2	3.1%	16	17.8%	18	9.0%
Industry context	1	4.5%	2	8.3%	3	4.6%	5	5.6%	11	5.5%
Intellectual property	0	0%	0	0.0%	0	0.0%	2	2.2%	2	1.0%
Technology	1	4.5%	0	0.0%	0	0.0%	1	1.1%	2	1.0%
Portfolio management	0	0.0%	0	0.0%	0	0.0%	1	1.1%	1	0.5%
Metrics	0	0.0%	0	0.0%	1	1.5%	0	0.0%	1	0.5%

^a Because articles can be classified into multiple categories, the column sum of the percentages exceeds 100%.

Table 3. New Service Development Topics Per Type of Journal^a

NSD topics	Articles in Service Journals (<i>n</i> = 101)	Articles in Innovation Journals (<i>n</i> = 48)	Articles in Marketing Journals (<i>n</i> = 27)	Articles in Management Journals (<i>n</i> = 23)	Articles in Domain-Specific Journals (<i>n</i> = 25)
Process and execution	48 (47.5%)	23 (47.9%)	13 (48.1%)	11 (47.8%)	14 (56.0%)
Strategy	22 (21.8%)	8 (16.7%)	6 (22.2%)	4 (17.4%)	1 (4.0%)
Customer and market research	22 (21.8%)	8 (16.7%)	4 (14.8%)	1 (4.3%)	5 (20.0%)
People, teams, and culture	12 (11.9%)	5 (10.4%)	3 (11.1%)	4 (17.4%)	
Codevelopment and alliances	11 (10.9%)	3 (6.3%)	2 (7.4%)	2 (8.7%)	
Industry context	3 (3.0%)	1 (2.1%)			(4.0%)
Intellectual property	1 (1.0%)				
Technology		1 (2.1%)	1 (3.7%)		
Portfolio management	1 (1.0%)				
Metrics		1 (2.1%)			

^a Including the multiple articles based on the same dataset (*n* = 230). Because articles can be classified into multiple categories, the column sum of the percentages exceeds 100%.

investigate differences in development approaches among types of services.”

When the NSD topics are linked with the type of journals—distinguishing among service, innovation, marketing, management, and domain-specific journals—it is noteworthy that in all journal types about half of the articles are about process and execution (Table 3). It is remarkable that articles about customer and market research are more common in service journals than in marketing journals, signaling marketing journals’ apparent lack of interest in NSD studies. Articles about people, teams, and culture are logically more prevalent in management journals than in service journals. Finally, the topic of codevelopment and alliances is relatively popular in service journals, but much less so in innovation journals.

Authors Publishing NSD Research

A relatively large number of authors have published empirical studies about NSD, but only a few researchers have contributed significantly to this field by publishing multiple empirical studies about specific key NSD issues. Table 4 lists the 20 authors who have (co)authored four or more NSD articles. The nine bolded names are the only researchers who have published in the last 5 years and can thus be thought of as still active in this field. More than half of the 20 researchers from Table 4 no longer publish in the NSD domain. While two of these researchers have retired, the other eight are still publishing, but have moved on to other research topics.

Identifying the key NSD researchers can be approached from several perspectives. In terms of the number of articles published, Chris Storey is the most

prolific, with 12. He is closely followed by Christopher Easingwood and Annouk Lievens, with 10 articles each. However, of these three, only Storey has published an NSD article in the last 5 years.

Another way of assessing the relative merit of individual researchers is to evaluate the impact of their articles on the academic community. The citation numbers for the top three scholars, the ones with more than 1000 citations are in bold. The articles (co)authored by Ulrike De Brentani have received the highest number of citations (averaging 274.4 per article). Other researchers publishing high-impact research are Jonas Matthing (196.0) and Aleda Roth (155.0), but all of their NSD articles were published more than 5 years ago. A closer look at the content of their articles reveals that the most prolific researchers benefit from a clear focus on specific NSD issues. For instance, De Brentani wrote extensively about success factors and Matthing focused on involving users in NSD. The list of key researchers from Table 4 also shows a strong representation of European researchers, with significant contributions from researchers in Scandinavia and the United Kingdom. Of the five North American authors on the list, only one has published an NSD article in the last 5 years.

Overall, the list of authors in Table 4 exhibits two worrisome trends. First, a number of previously productive researchers have not published NSD articles recently. Christopher Easingwood, who (co)authored 10 articles between 1986 and 1999, is the most prominent example, having not published on NSD since 1999. Ulrike De Brentani, Scott Edgett, and Axel Johné also have not recently published in this domain, decimating the formerly British and Canadian NSD research networks. Second, only two of the academics from Table 4 have

Table 4. Key Researchers Publishing New Service Development Research^a

Author	Total Number of Articles	Lead Author Articles	Sole Author Articles	Number of Citations	Average Number of Citations Per Article	Year of First Publication	Year of Last Publication
Chris Storey	12	7	0	1392	116.0	1991	2010
Christopher Easingwood	10	3	1	1351	135.1	1986	1999
Annouk Lievens	10	6	0	673	67.3	1999	2008
Michael Ottenbacher	8	8	1	253	31.6	2006	2010
Ulrike De Brentani	8	7	5	2195	274.4	1989	2001
Bo Edvardsson	8	2	0	694	86.8	1995	2012
Heiko Gebauer	7	4	0	169	24.1	2008	2012
Ian Alam	7	7	6	854	122.0	2002	2012
Per Kristensson	7	2	0	744	106.3	2002	2012
Scott Edgett	6	4	2	813	135.5	1991	1996
Axel Johné	5	4	0	114	22.80	1985	2004
Jonas Matthing	5	2	0	980	196.0	2004	2008
Rudy Moenaert	5	0	0	341	68.2	1999	2001
Robert J. Harrington	5	0	0	115	23.0	2006	2009
Patrick Gottfridsson	4	4	4	22	5.5	2010	2012
Peter Magnusson	4	2	1	509	127.3	2002	2009
Anders Gustafsson	4	2	0	278	69.5	1999	2012
Hung Tsou	4	1	1	103	25.8	2009	2012
Aleda Roth	4	0	0	610	155.0	2000	2008
Anthony Di Benedetto	4	0	0	296	74.0	1993	2009

^a Including the multiple articles based on the same dataset ($n = 230$). Citation data are based on Google Scholar (collected on May 19, 2014). Names in bold have published in the last 5 years.

started publishing on NSD in the last 5 years. The earlier key academics are leaving the field for other research domains, or retiring altogether, faster than new academics are joining the domain!

Research Networks

Additional insight is gained by shifting the focus from individual researchers to their research networks. Like most management research, NSD research is often a collaborative effort. There are only four coauthor networks that consist of at least five researchers. Three of the most prolific active NSD researchers (Alam, Ottenbacher, and Gottfridsson) reside outside of these four coauthor networks. These researchers are essentially sole contributors. Although well published in the NSD domain, these scholars have not generated an active network of NSD coauthors.

The largest and most complex network, and the only one still active, consists of 33 Swedish (darkest boxes), Swiss (medium dark boxes), U.K. (medium light boxes), and Italian (lightest box) researchers who have published a total of 25 articles (Figure 2). Gebauer, Edvardsson, and Paiola (Italian) have published three articles together since 2010 on NSD in small and medium equipment makers, gluing the previously stand-alone Swedish and

Swiss networks together. Although this network connects a large number of researchers, more than half of them are peripheral players, who have coauthored one NSD article and then moved on to other topics. All of the still-active members of this network publish NSD research as just one topic among several domains in which they participate. Their contributions to the NSD field are sporadic in nature.

A smaller, more concentrated Canadian/U.S./U.K. author network of 14 researchers and 27 articles revolves around Storey, Easingwood, Edgett, and De Brentani. Each of these central researchers has published with several other academics. Storey in particular has created a diverse research network by collaborating with several coauthors. Indeed, of the four researchers noted above, he and his coauthors are the only ongoing active part of this network. All others have stopped publishing in this domain or retired. A third network consists of nine Dutch/Belgian researchers, who published 11 articles, with Annouk Lievens being the driver of this network. The fourth network connects six researchers from the United Kingdom and United States, who have published five articles together.

The Swedish/Swiss network makes sporadic contributions to the NSD literature, one or two articles per year, but no one in the network publishes exclusively in the

Figure 2. The Swedish/Swiss Researcher Network (33 Coauthors, 25 Articles)

The size of the boxes (nodes) indicates how many articles each author has in the network. The Swedish network is Edvardsson and everyone to his left. The Swiss network is Gebauer and everyone to his right, except Lightfoot. Lightfoot, Perks, and Syson are from the United Kingdom, and Paiola is Italian.

NSD domain. Annouk Lievens is still an active researcher, but has changed topics and no longer publishes in the NSD field, and thus, the Dutch/Belgian network has fallen apart. None of the six U.S./U.K. network members have published in the NSD domain since 2011, so this, also, has become an inactive network.

Thus, in the NSD domain, Chris Storey is the only dedicated, ongoing researcher who has collaborated with various other researchers and had built a strong research network—and one that reaches internationally. Unfortunately, many of his collaborators have now moved on to other research domains, which has effectively dissolved the research network. While Chris has found people to work with him on NSD, he has not been able to convert any of them into researchers dedicated to the NSD domain.

When the articles are coded for content, it becomes clear that the four research networks focus on different topics (Figure 3). Both the Canadian/U.S./U.K. network and the small U.S./U.K. network focus strongly on process and execution, including numerous early success/failure studies of NSD. In contrast, the Dutch researchers looked primarily at people, teams, and culture, while the Scandinavian researchers focus on the relationship with customers, either as providers of market information or as active collaborators in the development of new services (consistent with the Scandinavian emphasis in the management and business-to-business [B2B] marketing literature). However, this focus may be restricting. For

instance, the Scandinavian articles investigate the quality of user-generated ideas for new SMS-based services, but do not identify specific customer contributions during the various stages of the NSD process, methods for identifying innovative customers, and effective strategies for customer involvement.

Taken together, all but one of the NSD research networks have disintegrated in recent years, while the younger, still productive scholars have not created new coauthor networks. This suggests that there is, presently, not a strong “invisible college” of NSD scholars collaborating to build a solid body of knowledge. The NSD community is more aptly viewed as a loosely connected conglomerate of individuals pursuing disparate investigations, mostly sporadically while also pursuing other topics.

Figure 3. Different Content across Researcher Networks

High-Impact Articles

In identifying high impact articles, older articles obviously have an advantage. Therefore, for each of the four time periods, the five articles with the highest number of citations were identified (Table 5).

The article with the highest number of citations is Sundbo's (1997) article on organizing innovation activities in Danish firms. Interestingly, Sundbo (1997) draws most of its attention from literatures outside of NSD. Other highly cited articles, such as De Brentani (2001) and Pinto and Pinto (1990) also draw large numbers of citations from other literatures.

Comparing the four eras, several shifts can be noted. First, although *JPIM* published four of the five high-impact articles from the first era and three of the high-impact articles from the second era, none of the high-impact articles from the third and only one from the fourth era were published in *JPIM*. Particularly in the last four years, publishing NSD research in service journals garners higher citations than in the innovation literature.

Second, there is a shift in the content of the high-impact articles. In era 1, the high impact articles focused on uncovering the recipes of new service success. In doing so, the authors used the methods that had proven

Table 5. High-Impact Articles for Three Time Periods^a

Authors	Title	Journal	Number of cites
<i>Era 1: 1985–1995</i>			
Pinto and Pinto (1990)	Project team communication and cross-functional cooperation in new program development	<i>JPIM</i>	436
Scheuing and Johnson (1989)	A proposed model for new service development	<i>Journal of Services Marketing</i>	378
Cooper and De Brentani (1991)	New industrial financial services: What distinguishes the winners	<i>JPIM</i>	319
Easingwood (1986)	New product development for service companies	<i>JPIM</i>	310
Cooper, Easingwood, Edgett, Kleinschmidt, and Storey (1994)	What distinguishes the top performing new products in financial services	<i>JPIM</i>	256
<i>Era 2: 1996–2001</i>			
Sundbo (1997)	Management of innovation in services	<i>The Service Industries Journal</i>	576
De Brentani (2001)	Innovative versus incremental new business services: different keys for achieving success	<i>JPIM</i>	499
Avlonitis, Papastathopoulou, and Gounaris (2001)	An empirically-based typology of product innovativeness for new financial services: success and failure scenarios	<i>JPIM</i>	379
Atuahene-Gima (1996)	Differential potency of factors affecting innovation performance in manufacturing and service firms in Australia	<i>JPIM</i>	300
Kelly and Storey (2000)	New service development: Initiation strategies	<i>International Journal of Service Industry Management</i>	233
<i>Era 3: 2002–2008</i>			
Hipp and Grupp (2005)	Innovation in the service sector: The demand for service-specific innovation measurement concepts and typologies	<i>Research Policy</i>	458
Bell (2005)	Clusters, networks, and firm innovativeness	<i>Strategic Management Journal</i>	423
Alam and Perry (2002)	A customer-oriented new service development process	<i>Journal of Services Marketing</i>	397
Matthing, Sandén, and Edvardsson (2004)	New service development: Learning from and with customers	<i>International Journal of Service Industry Management</i>	322
Berry, Shankar, Parish, Cadwallader, and Dotzel (2006)	Creating new markets for service innovation	<i>MIT Sloan Management Review</i>	252
<i>Era 4: 2009–2012</i>			
Toivonen and Tuominen (2009)	Emergence of innovations in services	<i>The Service Industries Journal</i>	145
Zomerdijk and Voss (2010)	Service design for experience-centric services	<i>Journal of Service Research</i>	133
Carbonell, Rodríguez-Escudero, and Pujari (2009)	Customer involvement in new service development: An examination of antecedents and outcomes	<i>JPIM</i>	129
Agarwal and Selen (2009)	Dynamic capability building in service value networks for achieving service innovation	<i>Decision Sciences</i>	107
Kindström and Kowalkowski (2009)	Development of industrial service offerings: A process framework	<i>Journal of Service Management</i>	96

^a Including the multiple articles based on the same data set ($n = 230$); The citation data are based on Google Scholar (collected on May 19, 2014).

effective in NPD research. Over the years, researchers have developed a finer grained interest in NSD. Thus, the focus has shifted toward internal competences (e.g., dynamic capabilities), customer understanding (e.g., experience-centric services), and the service innovation context (e.g., clusters and networks). The focus in highly cited articles is no longer on the project team and the ins and outs of success but on a fundamental understanding of service innovation *in situ*. As Papastathopoulou and Hultink (2012) found, over the last 30 years, NSD research has gone from being narrowly focused to covering a much broader set of topics.

Third, the most telling observation is uncovered when NSD citation results are compared with NPD article citation results. The most frequently cited empirical NPD articles published in *JPIM* between 1985 and 2002 (Biemans, Griffin, and Moenaert, 2010) have been Google Scholar cited over 1000 times. For instance, Cooper and Kleinschmidt (1987) has received 1293 cita-

tions, and Griffin (1997) has collected 1284 citations. The most cited NPD articles have two to three times more citations than the most cited NSD articles from the same time period. Is the NSD field unrewarding for its ambassadors? It seems so. To date, NSD articles are not as impactful as those by “pure” NPD researchers.

Research Methodology of NSD Articles

Another way to assess the accumulated body of knowledge about NSD is to look at the research methodologies used to investigate it. Each article was classified according to its research goal, industry, geographic scope, knowledge source, time horizon, number of respondents, unit of analysis, analysis technique, and NPD focus (Table 6).

The majority of articles (55.7%) are conclusive articles that empirically test specified hypotheses about

Table 6. Research Methodology^a

Methodological dimension		Era 1 1985–1995 (n = 22)	Era 2 1996–2001 (n = 24)	Era 3 2002–2008 (n = 65)	Era 4 2009–2012 (n = 90)
Research goal (NS)	Conclusive	13 (59.1%)	16 (66.7%)	31 (47.7%)	52 (57.8%)
	Exploratory	9 (40.9%)	5 (20.8%)	28 (43.1%)	32 (35.6%)
Industry ($p < .001$)	Financial	13 (59.1%)	10 (41.7%)	17 (26.2%)	9 (10.0%)
	Telecom/ICT	1 (4.5%)	1 (4.2%)	14 (21.5%)	9 (10.0%)
	Hospitality/tourism	1 (4.5%)	1 (4.2%)	5 (7.7%)	11 (12.2%)
	Multiple industries	4 (18.2%)	9 (37.5%)	18 (27.7%)	32 (35.6%)
Geographic scope ($p < .001$)	Europe	12 (54.5%)	11 (45.8%)	41 (63.1%)	39 (43.3%)
	Americas	7 (31.8)	5 (20.8%)	7 (10.8%)	10 (11.1%)
	Australasia	0 (0.0%)	3 (12.5%)	2 (3.1%)	21 (23.3%)
Knowledge source ($p < .1$)	Survey	10 (45.5%)	15 (62.5%)	20 (30.8%)	42 (46.7%)
	Case research	4 (18.2%)	7 (29.2%)	20 (30.8%)	23 (25.6%)
	Multiple methods	7 (31.8%)	1 (4.2%)	8 (12.3%)	9 (10.0%)
Time horizon ($p < .1$)	Cross-sectional	22 (100.0%)	24 (100.0%)	59 (90.8%)	76 (84.4%)
	Longitudinal	0 (0.0%)	0 (0.0%)	6 (9.2%)	12 (13.3%)
Number of respondents ($p < .05$)	Single respondent	17 (77.3%)	14 (58.3%)	27 (41.5%)	50 (55.6%)
	Multiple respondents	4 (18.2%)	6 (25.0%)	23 (35.4%)	16 (17.8%)
	Not specified	1 (4.5%)	4 (16.7%)	15 (23.1%)	24 (26.7%)
Unit of analysis (ns)	Project	10 (45.5%)	13 (54.2%)	29 (44.6%)	31 (34.4%)
	Firm	11 (50.0%)	9 (37.5%)	31 (47.7%)	50 (55.6%)
Analysis technique ($p < .001$)	Qualitative	5 (22.7%)	8 (33.3%)	37 (56.9%)	34 (37.8%)
	Bivariate (rho, χ^2)	9 (40.9%)	2 (8.3%)	6 (9.2%)	6 (6.7%)
	ANOVA, <i>t</i> -test	6 (27.3%)	5 (20.8%)	8 (12.3%)	9 (10.0%)
	Multiple regression	2 (9.1%)	7 (29.2%)	9 (13.8%)	14 (15.6%)
	CFA/SEM	0 (0.0%)	1 (4.2%)	3 (4.6%)	24 (26.7%)
NSD focus ($p < .01$)	Single process stage	0 (0.0%)	4 (16.7%)	10 (15.4%)	6 (6.7%)
	Process	21 (95.5%)	13 (54.2%)	45 (69.2%)	58 (64.4%)
	Strategy	0 (0.0%)	4 (16.7%)	3 (4.6%)	18 (20.0%)

^a The table cross-classifies the 201 studies into four eras and a diversity of methodological dimensions. In testing the association between the four eras on methodological dimensions (indicated in column 1), categories containing cells with expected frequencies too low for a valid χ^2 test are not included in the table. The significances indicated in this table involve the four eras. In the discussion, we have also conducted χ^2 test on eras 1–3 versus era 4. ANOVA, analysis of variance.

NSD. About one third of the articles (36.8%) were exploratory, and the remaining articles (7.5%) contribute to theory development.

In terms of industry, financial services are the most popular single industry investigated (24.4%). Although the focus on financial services declines over time, this is accompanied by an increasing use of multiple industries (31.3%), which frequently includes financial services. There is a sharp increase of studies using data from the tourism and hospitality industries (9.0%). Looking at geographic scope, studies using data from North America (51.2%) have sharply decreased over time. As the earlier highly active North Americans have moved out of NSD research, this decline is not surprising. The number of studies based on data from the Australia/Asia region (12.9%) has recently increased significantly.

The majority of studies use a survey (43.3%) or case research (26.9%) to collect data, and rely decreasingly on multiple methods (12.4%). Most articles collect cross-sectional data (90.0%) from single respondents (53.7%), analyze the data at the firm (50.2%) or project level (41.3%) using qualitative research techniques (41.8%) or one of a variety of quantitative research techniques, with bivariate techniques (11.4%) giving way to more sophisticated methods such as structural equation modeling (13.9%). The focus of the empirical studies is typically on the NSD process (68.2%).

The Current State of NSD Research

This is not the first study to assess the current state of NSD research. Papastathopoulou and Hultink (2012) analyzed 90 empirical NSD articles across three publication eras (1982–1995, 1996–2001, and 2002–2008). Our data set substantially expands and updates their data, containing 21 additional articles for the same three eras and 90 more for the new and highly prolific era of 2009–2012. Indeed, the additional era 2009–2012 in itself holds the same number of empirical observations as the entire study by Papastathopoulou and Hultink over the years 1982–2008.

Whether NSD has matured as a research discipline, as Papastathopoulou and Hultink posit, can be determined by analyzing the trends over the four eras. For sure, NSD research taps into more industries as the salience of financial services has declined ($p < .001$). Moreover, the surge of advanced techniques of analysis continues ($p < .001$). However, while survey research seemed to lose ground in the time span 1985–2008, this research design becomes again by far the dominant research method in era 4 ($p < .10$). Most likely, this also explains why the use of

single respondents has risen significantly in era 4 ($p < .05$). While Europe still dominates the production of NSD research, it lost ground during era 4 to Australasia, which has truly become an important contributor ($p < .001$).

When the research methods deployed in empirical NSD publications between 1985 and 2008 (eras 1–3; $n = 111$) are contrasted with those published between 2009 and 2012 (era 4; $n = 90$), the analysis reveals only one statistically insignificant result (“knowledge source”). Otherwise stated, era 4 is not only characterized by a major acceleration in publications, but the research methods used differ strongly from those used in the previous decades. This suggests that NSD research remains a young discipline, scripting its own paradigm as it proceeds. In doing so, it continues to oscillate between exploratory and conclusive studies.

The Underlying Story: NSD Research Networks, Impact and Knowledge

As shown above, the analyses of the research methodologies employed in empirical NSD studies paint a limited picture that, by itself, is insufficient to draw a clear conclusion about the status of NSD research. More in-depth information is uncovered by a closer look at the NSD research networks, their impact, and the resulting accumulated body of knowledge.

Disintegrating mature research networks, isolated new researchers. The field of NSD is shaped by a few researcher networks consisting of loosely connected researchers focusing on their own topics and failing to build a consistent body of NSD knowledge. Typically, researcher networks have focused on a narrow field of interest within the overall domain, resulting in more limited, isolated contributions. For instance, the Swedish/Swiss research subnetwork has produced numerous articles on user involvement in NSD (Figure 2). However, rather than exploring the complexities of when, where, and how to involve which users in developing new services, their articles repeatedly investigate the quality of user-generated ideas for new mobile phone services (Kristensson, Magnusson, and Matthing, 2002; Kristensson, Matthing, and Johansson, 2008; Magnusson, Matthing, and Kristensson, 2003; Matthing, Sandén, and Edvardsson, 2004). While this strategy results in valuable insights, it does not build an overall body of knowledge.

As shown in Table 4, just 14 authors have published 5 or more empirical NSD studies, and only 3 have

published 10 or more. This is in sharp contrast to the overall field of innovation, where 50 scholars have published 5 or more articles in the top 10 journals in the 20 years between 1991 and 2010 (Yang and Tao, 2012). Furthermore, 18 scholars published 10 or more articles during that time frame, with the most productive one publishing 53 articles. NSD scholars are nowhere near as productive as NPD scholars.

Three of the four NSD research networks have disintegrated, mostly because researchers moved to other fields of interest, left for industry, or have retired. Even worse: no new network has taken their place. Many formerly productive researchers have not produced an NSD publication in the last 5 years. Indeed, 9 of the top 20 NSD researchers have not published any NSD article in the last 5 years. Again, this is in stark contrast to the NPD literature (Yang and Tao, 2012), where all of the top five authors are still productive in the field, and only 2 of the top 18 are no longer publishing in the field—both due to retirement. New researchers entering the NSD field have as yet not built substantial research networks. While a couple of recent NSD scholars have focused the majority of their research agenda on the topic, none has taken a leadership position or built a new research network around themselves in doing so. In short, there is no consistent, cohesive group of NSD scholars, and no one has stepped up to become its dean and drive the field.

Lack of impact. Although the number of NSD publications has accelerated over time, their impact on the academic community remains limited. In contrast to NPD, empirical NSD research is not published by A-level journals. While modern economies are service driven, the body of innovation knowledge being produced and consumed by the scholarly community remains product driven.

The journal that provides the best exposure and impact for publishing empirical NSD research is *JPIM* (166.87 citations/article). While *JPIM* is considered an A-level journal in much of Europe (Harzing, 2013), many U.S. schools do not consider it so. Articles published in the other top outlets for NSD research average approximately 30–40% of the citation rate of *JPIM*. Only *The Journal of Service Management* and *Journal of Service Research* are considered A-level journals in some European countries (but not in the United States). None of the 14 top journals publishing NSD research is included in the *Financial Times* rank of business journals.

Because it is difficult, if not impossible, to publish NSD articles in prestigious A-level journals, it may be that the field is unable to attract high-powered new schol-

ars to the domain and produce research that builds on previous research. This lack of scholars who dedicate their research to NSD keeps the body of knowledge from developing comprehensively or consistently. The lack of an NSD paradigm in turn makes it difficult to create research that has A-level potential.

Absence of a generally accepted body of knowledge. In sharp contrast to the field of NPD, the increased level of NSD publications has not resulted in an integrated, holistic body of knowledge. NSD researchers have not yet succeeded in building a true school of thought. Academic scholars make a distinction between a “subject specialty” and an “invisible college” (Zuccala, 2006). A subject specialty consists of a set of scientists who engage in research along similar lines. But a subject specialty is not necessarily an invisible college. Zuccala (2006) defines an invisible college as “a set of interacting scholars or scientists who share similar research interests concerning a subject specialty, who often produce publications relevant to this subject and who communicate both formally and informally with one another to work towards important goals in the subject, even though they may belong to geographically distant research affiliates.” Teixeira (2011) suggests that for a subject specialty to be an invisible college, it needs to be cohesive, have a few top-cited authors that perform gatekeeper and bridging roles to help the community become more visible and cohesive, and have a reasonably dense network of informal relations that is evident among highly cited authors and key schools.

NSD, which originated as a spin-off from NPD and consists of scholars researching many different aspects of NSD, can clearly be characterized as a subject specialty. But it is still a far cry from being an invisible college. For instance, it lacks the annual conferences and special interest groups (SIGs) that allow a significant number of researchers to present their work, create informal networks, and build cumulative knowledge. As a result, the NSD literature lacks cohesiveness. For example, although it emphasizes the familiar characteristics of services (intangible, heterogeneous, inseparable, perishable), it fails to describe their role in and impact on NSD. And while the inseparability of services implies that service employees are key to successful service delivery (De Jong and Vermeulen, 2003), the role of service employees remains largely ignored (Table 2). Similarly, despite the documented diversity of services, NSD research strongly favors the financial services context and studies that focus on other service industries typically neglect to investigate the impact of the specific industry

context on the NSD process (Kuester et al., 2013; Storey and Hull, 2010).

Because of the failure to build a cumulative body of knowledge, key questions such as “What does the NSD process look like?” and “How can NSD be effectively managed?” remain largely unanswered. Managers who want to start or improve their service offerings will find only limited help from the available NSD literature. This may be due to early NSD researchers neglecting to build the field from the bottom up; that is, starting with unbiased qualitative research to explore the nature of NSD without preconceptions. Instead, early researchers applied well-tested research methods and frameworks from NPD success/failure studies to the NSD context.

As Table 6 shows, 59.1% of the studies published during the first era tested specific hypotheses, often about the effect of various antecedents on NSD success. This resulted in the quickly accepted conclusion that NSD is not significantly different from NPD. This early perspective is probably best portrayed in the highly influential study by Cooper and De Brentani (1991). The authors summarized their findings as follows: “In summary, factors that underlie new product success are remarkably consistent across different types of products—manufactured items versus financial services” (p. 87). A simple content analysis of the short conclusion section, which consisted of only a single paragraph, reveals that Cooper and De Brentani used the term “product” six times, and the term “service” only twice (pp. 89–90). In the article itself, they consistently referred to service innovations as “new service products.”

Concluding Discussion

Although this study does not include purely conceptual contributions to the NSD literature, it leads to several unambiguous conclusions. The analyses suggest that the NSD domain fails to present a coherent body of knowledge because it lacks a scientific community of top scholars conducting high-quality research that is published in A-level journals and widely disseminated via conferences focused on the topic. Thus, the first objective should be to encourage top-level researchers to enter the field and make it their primary research focus. Several mechanisms may be used to achieve this objective:

- A-level journals in marketing, strategy, and management can be approached with proposals for special issues on NSD, focusing on broad themes, such as developing Internet-based new services, NSD

taxonomies, and the differences and similarities between NSD and NPD.

- Organizations such as the *American Marketing Association*, the *Product Development and Management Association*, and the *Academy of Management* may be encouraged to create SIGs in NSD. This creates communities of academics and practitioners who are interested in advancing the NSD domain by sharing ideas, knowledge, and experiences with like-minded colleagues at submeetings within the association’s general conferences.
- New academics may be encouraged to enter the field through (1) a doctoral dissertation competition, organized by an organization such as the PDMA or a SIG of some other organization that is focused on NSD; (2) a Ph.D. seminar that is delivered electronically through an established channel, such as the Institute for the Study of Business Markets Ph.D. seminar series (<http://isbm.smeal.psu.edu>); (3) an international research consortium focused on NSD, comparable to the Industrial Marketing and Purchasing Group in B2B marketing or the Center for Services Leadership at Arizona State University.

A second goal should be to create a coherent research agenda for the NSD domain. Several scholars have emphasized a need for basic research in this area (Droege et al., 2009; Griffin et al., 2013), which is also suggested by the findings presented in this paper.

First, key NSD concepts must be (re)defined, including a taxonomy of services. Most of the extant literature investigates financial services or lumps all services together in an effort to obtain large samples that allow statistical analysis. But variation in the service landscape is large, with significant differences between different types of services. NSD theory will benefit from a better understanding of the service context and how this impacts the NSD process.

Second, an accepted model of the NSD process must be developed. The extant literature is quick to point out the relevance of customer participation and the role of service employees (Alam, 2011; Cadwallader, Jarvis, Bitner, and Ostrom, 2010) but does not present the equivalent of the Stage-Gate model for the development of new services. Considering the many different types of services, such a general model of the NSD process may need to be made contingent on the service context.

Last but not least, the NSD domain would benefit from a shift in research approaches from the ubiquitous quantitative, large-sample surveys to more exploratory, fine-grained qualitative research approaches, such as in-depth

cases research, action research, ethnographic research, and participant observation, preferably using a longitudinal perspective. These methods are ideally suited to gain an in-depth understanding of how firms develop new services and the factors governing that behavior.

When these new research directions are combined with an influx of academics into the NSD domain, this should both deepen and broaden our understanding of NSD, encourage cumulative knowledge building, and create the accepted school of thought that is so sorely lacking in the current NSD literature.

References

- Agarwal, R., and W. Selen. 2009. Dynamic capability building in service value networks for achieving service innovation. *Decision Sciences* 40 (3): 431–75.
- Alam, I. 2011. Process of customer interaction during new service development in an emerging country. *The Services Industry Journal* 31 (16): 2741–56.
- Alam, I., and C. Perry. 2002. A customer-oriented new service development process. *Journal of Services Marketing* 16 (6): 515–34.
- Atuahene-Gima, K. 1996. Differential potency of factors affecting innovation performance in manufacturing and services firms in Australia. *Journal of Product Innovation Management* 13 (1): 35–52.
- Aulakh, P. S., and M. Kotabe. 1993. An assessment of theoretical and methodological development in international marketing: 1980–1990. *Journal of International Marketing* 1 (2): 5–28.
- Avlonitis, G. J., P. G. Papastathopoulou, and S. P. Gounaris. 2001. An empirically-based typology of product innovativeness for new financial services: Success and failure scenarios. *Journal of Product Innovation Management* 18 (5): 324–42.
- Bell, G. G. 2005. Clusters, networks, and firm innovativeness. *Strategic Management Journal* 26 (3): 287–95.
- Berry, L. L., V. Shankar, J. T. Parish, S. Cadwallader, and T. Dotzel. 2006. Creating new markets through service innovation. *MIT Sloan Management Review* 47 (2): 56–63.
- Bettencourt, L. 2010. *Service innovation: How to go from customer needs to breakthrough services*. New York: McGraw-Hill.
- Biemans, W., A. Griffin, and R. Moenaert. 2007. Twenty years of the *Journal of Product Innovation Management*: History, participants, and knowledge stocks and flows. *Journal of Product Innovation Management* 24 (3): 193–213.
- Biemans, W., A. Griffin, and R. Moenaert. 2010. In search of the classics: A study of the impact of JPIM papers from 1984 to 2003. *Journal of Product Innovation Management* 27 (4): 461–84.
- Bowers, M. E. 1989. Developing new services: Improving the process makes it better. *Journal of Services Marketing* 3 (1): 15–20.
- Brown, S. L., and K. M. Eisenhardt. 1995. Product development: Past research, present findings, and future directions. *The Academy of Management Review* 20 (2): 343–78.
- Bryson, J. R., and M. C. Monnoyer. 2004. Understanding the relationship between services and innovation: The RESER review of the European service literature on innovation, 2002. *The Service Industries Journal* 24 (1): 205–22.
- Cadwallader, S., C. B. Jarvis, M. J. Bitner, and A. L. Ostrom. 2010. Frontline employee motivation to participate in service innovation implementation. *Journal of the Academy of Marketing Science* 38 (2): 219–39.
- Cainelli, G., R. Evangelista, and M. Savona. 2004. The impact of innovation on economic performance in services. *The Service Industries Journal* 24 (1): 116–30.
- Carbonell, P., A. I. Rodríguez-Escudero, and D. Pujari. 2009. Customer involvement in new service development: An examination of antecedents and outcomes. *Journal of Product Innovation Management* 26 (5): 536–50.
- Christensen, C. M., S. Cook, and T. Hall. 2005. Marketing malpractice; the cause and the cure. *Harvard Business Review* 83 (12): 74–83.
- Cooper, R. G., and U. De Brentani. 1991. New industrial financial services: What distinguishes the winners. *Journal of Product Innovation Management* 8 (2): 75–90.
- Cooper, R. G., C. J. Easingwood, S. Edgett, E. J. Kleinschmidt, and C. Storey. 1994. What distinguishes the top performing new products in financial services. *Journal of Product Innovation Management* 11 (4): 281–99.
- Cooper, R. G., and E. J. Kleinschmidt. 1987. New products: What separates winners from losers? *Journal of Product Innovation Management* 4 (3): 169–84.
- Cusumano, M. A. 2010. *Staying power: Six enduring principles for managing strategy & innovation in an uncertain world*. Oxford: Oxford University Press.
- De Brentani, U. 1989. Success and failure in new industrial services. *Journal of Product Innovation Management* 6 (4): 239–58.
- De Brentani, U. 2001. Innovative versus incremental new business services: Different keys for achieving success. *Journal of Product Innovation Management* 18 (3): 169–87.
- De Jong, J. P. J., and P. A. M. Vermeulen. 2003. Organizing successful new service development: A literature review. *Management Decision* 41 (9): 844–58.
- Droege, H., D. Hildebrand, and M. A. H. Forcada. 2009. Innovation in services: Present findings and future pathways. *Journal of Service Management* 20 (2): 131–55.
- Easingwood, C. J. 1986. New product development for service companies. *Journal of Product Innovation Management* 3 (4): 264–75.
- Edgett, S. 1994. The traits of successful new service development. *Journal of Services Marketing* 8 (3): 40–49.
- Frei, F., and A. Morris. 2012. *Uncommon service: How to win by putting customers at the core at your business*. Boston: Harvard Business Review Press.
- Gebauer, H., A. Gustafsson, and L. Witell. 2011. Competitive advantage through service differentiation by manufacturing companies. *Journal of Business Research* 64 (12): 1270–80.
- Griffin, A. 1997. PDMA research on new product development practices: Updating trends and benchmarking best practices. *Journal of Product Innovation Management* 14 (6): 429–58.
- Griffin, A., B. W. Josephson, G. Lilien, F. Wiersema, B. Bayus, R. Chandy, E. Dahan, S. Gaskin, A. Kohli, C. Miller, R. Oliva, and J. Spanjol. 2013. Marketing's roles in innovation in business-to-business firms: Status, issues, and research agenda. *Marketing Letters* 24 (4): 323–37.
- Harzing, A.-W. 2013. *Journal quality list, 5th edition*. www.harzing.com.
- Hauser, J., G. J. Tellis, and A. Griffin. 2006. Research on innovation: A review and agenda for *Marketing Science*. *Marketing Science* 25 (6): 687–717.
- Henard, D. H., and D. M. Szymanski. 2001. Why some new products are more successful than others. *Journal of Marketing Research* 38 (3): 362–75.
- Hipp, C., and H. Grupp. 2005. Innovation in the service sector: The demand for service-specific innovation measurement concepts and typologies. *Research Policy* 34 (4): 517–35.
- Johne, A., and C. Storey. 1998. New service development: A review of the literature and an annotated bibliography. *European Journal of Marketing* 32 (3/4): 184–251.
- Johne, F. A., and P. Harborne. 1985. How large commercial banks manage product innovation. *International Journal of Bank Marketing* 3 (1): 54–71.

- Kelly, D., and C. Storey. 2000. New service development: Initiation strategies. *International Journal of Service Industry Management* 11 (1): 45–62.
- Kindström, D., and C. Kowalskowski. 2009. Development on industrial service offerings: A process framework. *Journal of Service Management* 20 (2): 156–72.
- Kristensson, P., P. R. Magnusson, and J. Matthing. 2002. Users as a hidden resource for creativity: Findings from an experimental study on user involvement. *Creativity and Innovation Management* 11 (1): 55–61.
- Kristensson, P., J. Matthing, and N. Johansson. 2008. Key strategies for the successful involvement of customers in the co-creation of new technology-based services. *International Journal of Service Industry Management* 19 (4): 474–91.
- Kuester, S., M. C. Schuhmacher, B. Gast, and A. Worgul. 2013. Sectoral heterogeneity in new service development: An exploratory study of service types and success factors. *Journal of Product Innovation Management* 30 (3): 533–44.
- Lusch, R. F., S. L. Vargo, and M. O'Brien. 2007. Competing through service: Insights from service-dominant logic. *Journal of Retailing* 83 (1): 5–18.
- Magnusson, P. R., J. Matthing, and P. Kristensson. 2003. Managing user involvement in service innovation; experiments with innovating end users. *Journal of Service Research* 6 (2): 111–24.
- Matthing, J., B. Sandén, and B. Edvardsson. 2004. New service development: Learning from and with customers. *International Journal of Service Industry Management* 15 (5): 479–98.
- Oliva, R., and R. Kallenberg. 2003. Managing the transition from products to services. *International Journal of Service Industry Management* 14 (2): 160–72.
- Ostrom, A. L., M. J. Bitner, S. W. Brown, K. A. Burkhard, M. Goul, V. Smith-Daniels, H. Demirkan, and E. Rabinovich. 2010. Moving forward and making a difference: Research priorities for the science of service. *Journal of Service Research* 13 (1): 4–36.
- Papastathopoulou, P., and E. J. Hultink. 2012. New service development: An analysis of 27 years of research. *Journal of Product Innovation Management* 29 (5): 705–14.
- Pinto, M. B., and J. K. Pinto. 1990. Project team communication and cross-functional cooperation in new program development. *Journal of Product Innovation Management* 7 (3): 200–12.
- Salunke, S., J. Weerawardena, and J. R. McColl-Kennedy. 2011. Towards a model of dynamic capabilities in innovation-based competitive strategy: Insights from project-oriented service firms. *Industrial Marketing Management* 40 (8): 1251–63.
- Scheuing, E. E., and E. M. Johnson. 1989. A proposed model for new service development. *Journal of Services Marketing* 3 (2): 25–34.
- Song, X. M., C. A. Di Benedetto, and Y. L. Zhao. 1999. Pioneering advantages in manufacturing and service industries: Empirical evidence from nine countries. *Strategic Management Journal* 20 (9): 811–35.
- Storey, C., and C. Easingwood. 1993. The impact of the new product development project on the success of financial services. *The Services Industry Journal* 13 (3): 40–54.
- Storey, C., and F. M. Hull. 2010. Service development success: A contingent approach by knowledge strategy. *Journal of Service Management* 21 (2): 140–61.
- Sundbo, J. 1997. Management of innovation in services. *The Services Industry Journal* 17 (3): 432–55.
- Teixeira, A. A. C. 2011. Mapping the (in)visible college(s) in the field of entrepreneurship. *Scientometrics* 89 (1): 1–36.
- Toivonen, M., and T. Tuominen. 2009. Emergence of innovations in services. *The Service Industries Journal* 29 (7): 887–902.
- Vargo, S. L., and R. F. Lusch. 2004. Evolving to a new dominant logic for marketing. *Journal of Marketing* 68 (1): 1–17.
- Yang, P., and L. Tao. 2012. Perspective: Ranking of the world's top innovation management scholars and universities. *Journal of Product Innovation Management* 29 (2): 319–31.
- Zomerdiijk, L. G., and C. A. Voss. 2010. Service design for experience-centric services. *Journal of Service Research* 13 (1): 67–82.
- Zuccala, A. 2006. Modeling the invisible college. *Journal of the American Society for Information Science and Technology* 57 (2): 152–68.