Mapping of *Journal of Service Research* Themes: A 22-Year Review

Naveen Donthu[1] ⓘ, Dwayne D. Gremler[2], Satish Kumar[3], and Debidutta Pattnaik[3]

Abstract

The *Journal of Service Research* (*JSR*) is one of the leading outlets in service research. It is international in scope and widely recognized among scholars, academicians, and practitioners for its original and well-executed research. In its 22 years of publishing, the journal has produced literary content considered classics in the service domain. With the application of bibliometric techniques, we examine articles published in *JSR* between 1998 and 2019. Our study explicates *JSR's* prominent topics and tracks the evolution of research themes in the journal. "Customer satisfaction," "service recovery," and "service quality" are some of the prolific themes trending in *JSR*, while "big data," "value cocreation," "customer resource integration," "service design," and "customer participation" are its hottest topics. This study contributes primarily by providing a rich retrospective of *JSR's* 22 years of publishing and proposes future research topics for the journal.

Keywords

Journal of Service Research, bibliometric analysis, co-word analysis, thematic evolution, citations

The *Journal of Service Research* (*JSR*) has rapidly evolved as one of the leading academic outlets for service research. This article provides a scientometric overview of *JSR* between 1998 and 2019. In this study, we present an in-depth analysis of the publication trends in *JSR* between 1998 and 2019. Along with *JSR's* most influential articles, we also highlight its prolific themes and furnish an overview of its influential content. This is the first attempt to objectively quantify *JSR* topics, map its thematic evolution, and summarize its broader research domain. Readers might not only appreciate the retrospective but also find many useful insights on themes ripe for future research. We begin with a brief description of our study methods followed by a discussion of the results. We then elucidate the key summaries and conclude by providing directives for future research.

Methods and Data

Scientometrics has evolved as an essential study method for the systematic assessment of management science involving a large volume of literature (Zupic and Čater 2015). Predominantly in the forms of descriptive and co-word analyses, we present a bibliometric overview of articles published in *JSR* through 2019. Our examination includes the total number of publications (TP), number of authors contributing to those publications, number of sole-authored and coauthored articles, cumulative number of affiliated authors, total citations (TC), and citations per publication (C/P).

We present the yearly influence and impact of *JSR* in the forms of *h* and *g* indices (Ding and Cronin 2011). Broadly, the *h* index (*h*) indicates *h* number of publications cited at least *h* times, the *g* index (*g*) accounts for the *g* number of highly cited publications receiving at least g^2 citations. We used VOSviewer version 1.6.12 and Gephi 0.9.2 version applications in this study to unpack the most frequently co-occurring themes in *JSR*.

Results

We accessed the Scopus database in early September 2020 for the bibliographic data of *JSR*. According to Scopus, 613 documents were published in the journal between 1998 and 2019: 590 articles, 21 editorials, and two errata. Excluding the editorials, errata statements, and three articles (special sections) without author information, our analysis consists of 587 *JSR* articles. In our subsequent discussion, we refer to these articles as publications, works, or simply articles, given that the

[1] Georgia State University, Atlanta, GA, USA
[2] Bowling Green State University, OH, USA
[3] Malaviya National Institute of Technology, Jaipur, Rajasthan, India

Corresponding Author:
Naveen Donthu, Department of Marketing, J. Mack Robinson College of Business, Georgia State University, P.O. Box 3991, Atlanta, GA 30302, USA.
Email: ndonthu@gsu.edu

Table 1. Publication Trend, Authorship Pattern, and Citation Structure in *JSR* Between 1998 and 2019.

Year	TP	CNAA	NCA	SA	CA	TC	C/P	h	g
1998	13	24	24	5	8	2,706	208.2	11	13
1999	27	71	55	8	19	1,894	70.1	22	27
2000	23	105	49	4	19	5,467	237.7	22	23
2001	27	148	56	7	20	3,097	114.7	21	27
2002	25	199	68	8	17	3,427	137.1	20	24
2003	27	241	68	2	25	3,727	138.0	24	27
2004	24	272	55	6	18	3,030	126.3	21	24
2005	24	312	63	3	21	3,909	126.3	21	24
2006	26	378	93	1	25	3,929	162.9	25	26
2007	23	419	60	3	20	2,874	125.0	21	23
2008	25	459	58	5	20	2,228	89.1	22	25
2009	27	518	85	1	26	1,538	57.0	22	27
2010	29	592	115	1	28	6,049	208.6	24	29
2011	30	647	85	4	26	2,776	92.5	21	30
2012	29	696	77	6	23	1,897	65.4	21	29
2013	36	772	112	0	36	1,345	37.4	22	36
2014	30	823	85	3	27	1,906	63.5	21	30
2015	29	880	96	1	28	1,913	66.0	22	29
2016	28	928	91	0	28	631	22.5	17	24
2017	28	984	110	0	28	765	27.5	18	27
2018	27	1,035	84	0	27	486	18.0	9	21
2019	30	1,096	103	1	29	249	8.3	9	14
Overall	587	1,096	1,692	69	518	55,843	95.1	120	214

Note: JSR = Journal of Service Research; TP = total number of publications; CNAA = cumulative number of affiliated authors (excludes authors' repetitions); NCA = number of contributing authors; SA = sole-authored articles; CA = coauthored articles; TC = total citations; C/P = citations per publication; h = h index; g = g index.

overwhelming number of them are articles. Table 1 presents an overview of *JSR*'s annual publications and citations.

Publication and Citation Trends in JSR

Academic contributions in *JSR* grew from 13 articles in 1998 to 587 by 2019 and were contributed by 1,096 different authors. Simultaneously, the academic influence of the journal compounded at 14.8%, rising from 2,706 citations to 55,843 citations by the end of 2019. From 1998 to 2019, the *h* index of the journal grew 11.5%, from 11 to 120, suggesting that 120 *JSR* articles were cited at least 120 times, while its *g* index grew at 13.6%, indicating that the academic impact of *JSR* is increasing, with its 214 top-cited articles receiving at least 45,796 citations in Scopus, which is 214^2.

Themes Found in the Most Cited JSR Articles

To better understand the most influential research within *JSR*, we narrowed the investigation to citations, as they indicate influence (Ding and Cronin 2011). Table 2 lists the most cited publications in *JSR* between 1998 and 2019; each article was cited at least 600 times on the search date in Scopus. Many of the top-cited articles have emerged as classics in service research literature. Per Table 1, articles published in *JSR* in 2010 are the most influential (6,049) with respect to TC. This

Table 2. The Most Cited Articles Published in *JSR* Between 1998 and 2019.

TC	Title	Author(s)	C/Y
1,793	"E-S-Qual. A Multiple-Item Scale for Assessing Electronic Service Quality"	Parasuraman, Zeithaml, and Malhotra (2005)	119.53
1,206	"Understanding Relationship Marketing Outcomes: An Integration of Relational Benefits and Relationship Quality"	Hennig-Thurau, Gwinner, and Gremler (2002)	67.00
1,161	"Customer Engagement Behavior: Theoretical Foundations and Research Directions"	van Doorn et al. (2010)	116.10
1,102	"Customer Engagement: Conceptual Domain, Fundamental Propositions, and Implications for Research"	Brodie et al. (2011)	122.44
1,098	"Technology Readiness Index (Tri): A Multiple-Item Scale to Measure Readiness to Embrace New Technologies"	Parasuraman (2000)	54.90
960	"Customer Satisfaction and Word of Mouth"	Anderson (1998)	43.64
823	"Moving Forward and Making a Difference: Research Priorities for the Science of Service"	Ostrom et al. (2010)	82.30
748	"Strengthening the Satisfaction-Profit Chain"	Anderson and Mittal (2000)	37.40
736	"The Measurement of Word-of-Mouth Communication and an Investigation of Service Quality and Customer Commitment as Potential Antecedents"	Harrison-Walker (2001)	38.78
618	"Word-of-Mouth Processes Within a Services Purchase Decision Context"	Bansal and Voyer (2000)	30.90
603	"The Four Service Marketing Myths: Remnants of a Goods-Based, Manufacturing Model"	Vargo and Lusch (2004)	37.69

Note: JSR = Journal of Service Research; TC = total citations; C/Y = citations per year.

result is not too surprising as 2010 marked the first year *JSR* publishing its service research priorities (i.e., Ostrom et al. 2010), which have had a strong impact on the field. Simultaneously, Table 2 also suggests that theme such as customer engagement behavior (van Doorn et al. 2010) has attracted major scholarly attention. However, among the other indicators measuring influence in Table 1, such as C/P (237.7), articles published in 2000 are the most influential. Table 2 suggests that the work by Parasuraman (2000) is the most cited of the articles published that year. In addition to that article, three of the most

influential papers of *JSR*'s first 22 years were published in 2000, suggesting the relative influence that may have been carried by these "home run" papers.

Furthermore, the most influential articles in *JSR* address issues related to multi-item scale development to measure service quality, the essence and impact of word of mouth (WOM) in services, service failure and recovery, customer satisfaction, customer engagement behavior, service quality, and so on. Such a diverse set of discussions in service research not only positions *JSR* among the most trusted and widely followed sources in the discipline but may also offer insights on the kind of research trending in the service domain. The most cited works in *JSR* suggest a trend moving from customer satisfaction and WOM communication to customer cocreation and customer engagement in service discovery.

A quick review of the papers highlighted suggests that five conceptual papers and six empirical papers proved to be particularly impactful. These papers examine core service research constructs like WOM, customer satisfaction, service quality, service failure and recovery, customer engagement, service research priorities, and service-dominant logic. Drawing on such a historical trend, it can be expected that other conceptual and scale development papers concerning core service constructs may prove to be among the more impactful publications in the journal.

Major Themes Across All *JSR* Publications

Table 3 narrows down the most frequent themes discussed in at least five *JSR* articles between 1998 and 2019. In addition to the total number of articles (TP), which quantifies *JSR*'s state-of-the-art academic contributions to the respective topics, the table features the aura of academic influence of *JSR* topics presented in the forms of TC and C/P. The table also highlights the degree of hotness and coldness of the topics as indicated in the form of the average publication year (APY). The topic with the highest APY is the hottest, while the one with the lowest is matured in *JSR* (Byington, Felps, and Baruch 2019).

"Customer satisfaction" tops the table for being featured in most *JSR* works (TP: 66), followed by "customer loyalty" (TP: 35), "service recovery" (TP: 35), "service quality" (TP: 28), and "service failure" (TP: 20). It is nearly double the number of its immediately following theme. Such finding not only emphasizes the pressing importance of the topic in *JSR* but it may also relate to its continuing prominence in the broader academic domain. However, on the basis of APY, the hottest topic trending in *JSR* is "big data" followed by "value cocreation," "customer resource integration," that is, the resources customers have or are able to employ into the service process (see Ng, Sweeney, and Plewa 2019), "service design," and "customer participation."

Figures 1 and 2 graphically portray the prominence and influence of *JSR* topics by APY for 1998–2008 and 2009–2019, respectively. Topics appearing in Figure 1 (APY 1998–2008) can be considered maturing themes, while those featured in Figure 2 (APY 2009–2019) are trending in the journal. The

Table 3. The Most Frequent Themes in *JSR* Articles Between 1998 and 2019.

Theme	TP	TC	C/P	APY
Customer satisfaction	66	3,940	59.7	2010.4
Customer loyalty	35	3,901	111.5	2009.0
Service recovery	35	2,140	61.1	2011.4
Service quality	28	2,801	100.0	2009.1
Service failure	20	1,017	50.9	2012.7
Frontline employees	16	849	53.1	2013.9
Relationship marketing	15	1,820	121.3	2010.3
Service marketing	15	2,785	185.7	2008.9
Service innovation	14	1,146	81.9	2013.0
Cocreation	13	3,629	279.2	2013.4
Service-dominant logic	13	2,538	195.2	2012.6
Word of mouth	13	1,406	108.2	2010.3
Customer experience	12	834	69.5	2014.0
Emotion	12	1,025	85.4	2010.1
Service design	12	1,346	112.2	2014.3
Customer relationship management	10	2,451	245.1	2008.7
Service encounter	10	570	57.0	2012.0
Trust	9	610	67.8	2007.4
Value	9	1,562	173.6	2012.4
Customer resource integration	8	911	113.9	2014.4
Service climate	8	346	43.3	2013.4
Value cocreation	8	913	114.1	2015.1
Anger	7	214	30.6	2013.7
Commitment	7	264	37.7	2007.6
Customer lifetime value	7	1,472	210.3	2008.0
Customer participation	7	408	58.3	2014.0
Customer service	7	2,072	296.0	2009.7
Health care	7	1,009	144.1	2011.9
Structural equation modeling	7	745	106.4	2006.6
Coproduction	6	799	133.2	2013.0
Customer relationship	6	811	135.2	2010.3
Financial service	6	282	47.0	2010.0
Innovation	6	1,517	252.8	2011.8
Meta-analysis	6	559	93.2	2012.7
Self-service technology	6	439	73.2	2012.2
Technology adoption	6	652	108.7	2009.8
Big data	5	726	145.2	2015.6
Complaint management	5	304	60.8	2013.0
Customer equity	5	804	160.8	2006.8
Customer loyalty programs	5	291	58.2	2010.0
E-service	5	338	67.6	2008.6
Internet	5	2,244	448.8	2005.0
Job satisfaction	5	213	42.6	2011.0
Perceived justice	5	243	48.6	2010.8
Pricing	5	1,430	286.0	2006.8
Revenue management	5	340	68.0	2008.8
Scale development	5	2,442	488.4	2007.4
Share of wallet	5	281	56.2	2006.4
Switching cost	5	459	91.8	2009.4

Note: *JSR* = *Journal of Service Research*; TP = total publications; TC = total citations; C/P = citations per publication; APY = average publication year.

figures also display the topical relationships (co-occurrence) among those themes appearing in at least five *JSR* articles. Prolific themes in *JSR* relate to the topical importance of the specific themes within the journal while influential themes of *JSR* indicate their respective impact over the broader academic
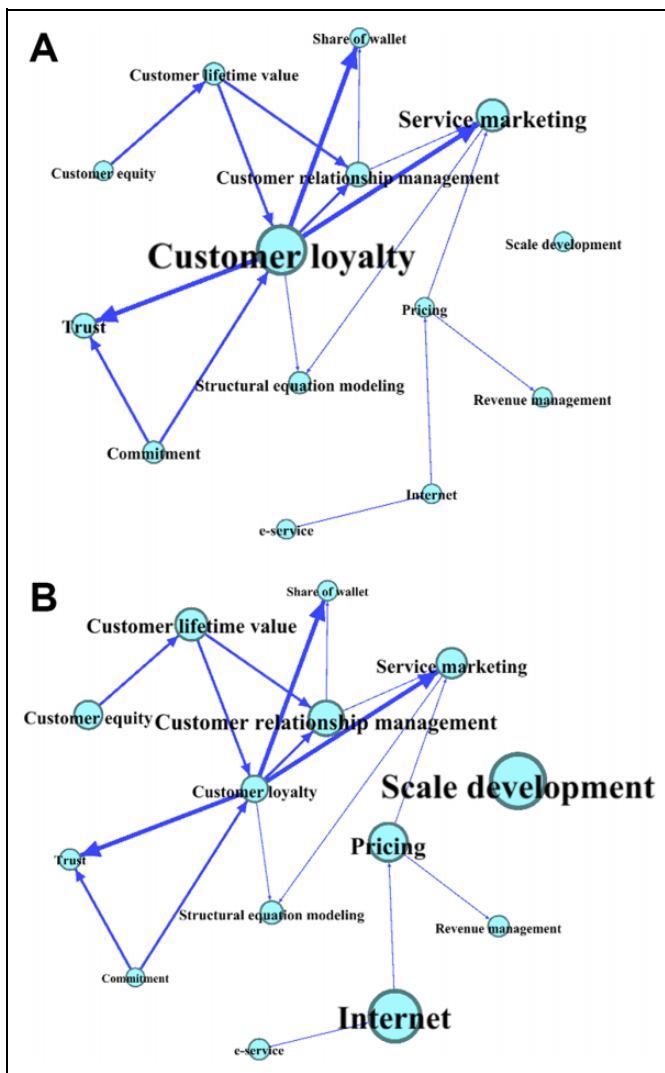
Figure 1. *Journal of Service Research* (*JSR*)'s prolific and influential themes with average publication year (APY) between 1998 and 2008. Panel A: Prolific themes in *JSR*. Panel B: Influential themes of *JSR*. *Note*: Using VOSviewer and Gephi applications, the figures present the top *JSR* themes frequently co-occurring with APY between 1998 and 2008. The nodes depict *JSR* themes. Size of the nodes depicts occurrences (A) and average citations (B). Thickness of the arrows joining the nodes is an indicator of the frequency of co-occurrence.

domain. Simultaneously, drawing from the topical co(relations), the missing links may offer some potential areas for future exploration.

Regarding the APY between 1998 and 2009, "customer loyalty" dominated in *JSR* articles, frequently coappearing with articles discussing "service marketing," "trust," and "share of wallet." However, the topics with persisting scholarly influence from the period, based on citations per publication, include "scale development," "internet," "pricing," and "customer relationship management." Among the trending topics in *JSR* (Figure 2), "customer satisfaction," "service recovery," and "service quality" attracted the highest research attention, with

"service failure" frequently coappearing with "service quality" (see Ng, Sweeney, and Plewa 2019). However, the topics with persisting research influence include "customer satisfaction," "customer service," "cocreation," "innovation," and "service-dominant logic."

Future Research

It is interesting to note that the majority of topics trending in *JSR* (Figure 2) are comparatively new and therefore offer massive potential for further exploration, as such topics interest both existing and aspiring authors who find it necessary and appealing to have several such trending themes/topics included in their research. Research in the areas of "big data," "service cocreation," and "customer resource integration" and contextual services in "health care," "financial service," and so on are some of the topics that researchers can take up to target the journal. Simultaneously, *JSR* has evolved as a multidisciplinary and global academic hub, with authors across disciplines and from around the world and an audience (and reviewers) from varied disciplines approaching topics that are beyond the "marketing" focus. With the rapid advancement of technologies, we foresee the future of service being more customer-centric with customers taking active roles in service creation and dissemination; therefore, such topics may attract academic attention.

Simultaneously, the growing number of trending themes in *JSR* also suggests the journal's openness to publishing research that explores newer and multiple dimensions of service. Perhaps singular contributions (i.e., themes) are not as valued as multiple areas of contribution (e.g., customer resource integration and value cocreation, see Ng, Sweeney, and Plewa 2019). The journal also encourages diversity among *JSR* authors and their constituents (countries, disciplines, methods, etc.), which should motivate more collaborative scholarship.

Summary and Conclusion

The past 22 years have distinctively positioned *JSR* as a producer of classic articles in the specialized research domain of services for global scholarship. Undoubtedly, the journal is evolving as a leader in services marketing research for global scholarship. *JSR* has not only been influential in the specialized domain of service research, but it has also served the broader umbrella of general marketing sources. Its focus was primarily on marketing issues in its early years (as many of the authors, reviewers, and readers were from the service marketing field), but its trending topics suggest that in the past decade, *JSR* has published articles that serve a much broader service research community.

The publication trend in *JSR* unveils some important insights into its potential future avenues in the areas of "big data," "value cocreation," "customer resource integration," "service design," and "customer participation." However, based on our subjective assessment, we feel *JSR* should focus on publishing such topics as service ecosystems (working

Figure 2. *Journal of Service Research* (*JSR*)'s prolific and influential themes with average publication year (APY) between 2009 and 2019. Panel A: Prolific themes in *JSR*. Panel B: Influential themes of *JSR*. *Note*: Using VOSviewer and Gephi applications, the figures present the top *JSR* themes frequently co-occurring with APY between 2009 and 2019. The nodes depict *JSR* themes. Size of the nodes depicts co-occurrences (A) and average citations (B). Thickness of the arrows joining the nodes is an indicator of the frequency of co-occurrence.

relationships between/within organizations), transformative service research (creating value, customer well-being, under-served/disadvantaged populations), access-based services (e.g., car sharing), emotional regulation in services (by frontline

employees, robots), robotic/technological service delivery, artificial intelligence in service delivery (e.g., facial recognition, online chats), service in specific contexts (health care, pandemic service delivery), service brand management,

electronic WOM communication (particularly through social media), service innovation, neuroscience research, and customer engagement in services. *JSR* endorses diversity that reflected in its range of topics. Given the openness of the journal, we foresee this vital academic outlet further expanding its dimensions in the future.

Authors' Note

Author names are listed alphabetically.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

ORCID iD

Naveen Donthu https://orcid.org/0000-0002-8525-3159

References

Anderson, Eugene W. (1998), "Customer Satisfaction and Word of Mouth," *Journal of Service Research*, 1 (1), 5-17.

Anderson, Eugene W. and Vikas Mittal (2000), "Strengthening the Satisfaction-Profit Chain," *Journal of Service Research*, 3 (2), 107-120.

Bansal, Harvir S. and Peter A. Voyer (2000), "Word-of-Mouth Processes Within a Services Purchase Decision Context," *Journal of Service Research*, 3 (2), 166-177.

Brodie, Roderick J., Linda D. Hollebeek, Biljana Jurić, and Ana Ilić (2011), "Customer Engagement: Conceptual Domain, Fundamental Propositions, and Implications for Research," *Journal of Service Research*, 14 (3), 252-271.

Byington, Eliza K., Will Felps, and Yehuda Baruch (2019), "Mapping the Journal of Vocational Behavior: A 23-Year Review," *Journal of Vocational Behavior*, 110, 229-244.

Ding, Ying and Blaise Cronin (2011), "Popular and/or Prestigious? Measures of Scholarly Esteem," *Information Processing & Management*, 47 (1), 80-96.

Harrison-Walker, L. Jean (2001), "The Measurement of Word-of-Mouth Communication and an Investigation of Service Quality and Customer Commitment as Potential Antecedents," *Journal of Service Research*, 4 (1), 60-75.

Hennig-Thurau, Thorsten, Kevin P. Gwinner, and Dwayne D. Gremler (2002), "Understanding Relationship Marketing Outcomes: An Integration of Relational Benefits and Relationship Quality," *Journal of Service Research*, 4 (3), 230-247.

Ng, Sylvia C., Jillian C. Sweeney, and Carolin Plewa (2019), "Managing Customer Resource Endowments and Deficiencies for Value Cocreation: Complex Relational Services," *Journal of Service Research*, 22 (2), 156-172.

Ostrom, Amy L., Mary Jo Bitner, Stephen W. Brown, Kevin A. Burkhard, Michael Goul, Vicki Smith-Daniels, Haluk Demirkan, and Elliot Rabinovich (2010), "Moving Forward and Making a Difference: Research Priorities for the Science of Service," *Journal of Service Research*, 13 (1), 4-36.

Parasuraman, A. (2000) "Technology Readiness Index (Tri): A Multiple-Item Scale to Measure Readiness to Embrace New Technologies," *Journal of Service Research*, 2 (4), 307-320.

Parasuraman, A., Valarie A. Zeithaml, and Arvind Malhotra (2005), "E-S-QUAL: A Multiple-Item Scale for Assessing Electronic Service Quality," *Journal of Service Research*, 7 (3), 213-233.

van Doorn, Jenny, Katherine N. Lemon, Vikas Mittal, Stephan Nass, Doreén Pick, Peter Pirner, and Peter C. Verhoef (2010), "Customer Engagement Behavior: Theoretical Foundations and Research Directions," *Journal of Service Research*, 13 (3), 253-266.

Vargo, Stephen L. and Robert F. Lusch (2004), "The Four Service Marketing Myths: Remnants of a Goods-Based, Manufacturing Model," *Journal of Service Research*, 6 (4), 324-335.

Zupic, I. and Tomaž Čater (2015), "Bibliometric Methods in Management and Organization," *Organizational Research Methods*, 18 (3), 429-472.

Author Biographies

Naveen Donthu is Distinguished University Professor and Vachel Pennebaker Research Chair in the Marketing Department at Georgia State University. His current research are in the areas of marketing productivity and ROI, electronic commerce and word-of-Mouth, trade promotions, and outsourcing sales and marketing. He has published over 100 articles in leading marketing and advertising journals including *Marketing Science, Management Science, Journal of Marketing, Journal of Marketing Research, and Journal of Consumer Research*. He has served on the editorial review boards of prestigious journals including Journal of Marketing, Journal of the Academy of Marketing Science and Journal of Consumer Research. He is the current Editor-in-Chief of the *Journal of Business Research*. Naveen is the recipient of the Georgia State University Outstanding Faculty Achievement Award (university-wide award for extraordinary achievement in teaching, research and service).

Dwayne D. Gremler is a distinguished teaching professor in the Department of Marketing in the Schmidthorst College of Business at Bowling Green State University and a member of the research faculty of the Center for Services Leadership in the W.P. Carey School of Business at Arizona State University. His research is concerned with customer-employee interactions in service delivery, service guarantees, servicescapes, and word-of-mouth communication. He has published articles in the *Journal of Marketing, Journal of Service Research, Journal of Retailing, Journal of the Academy of Marketing Science, Journal of Service Management, and Journal of Business Research*. He is a coauthor (with Valarie Zeithaml and Mary Jo Bitner) of the textbook: *Services Marketing: Integrating Customer Focus Across the Firm*. He received the Christopher Lovelock Career Contributions Award from the American Marketing Association's Services Marketing Special Interest Group in 2014.

Satish Kumar is associate professor in the Department of Management Studies at Malaviya National Institute of Technology Jaipur, India. He has published articles in the *International Journal of*

Research in Marketing, Journal of Corporate Finance, Journal of Consumer Affairs, Financial Review, Journal of Business Research, Small Business Economics, Journal of Business & Industrial Marketing, Journal of Small Business Management, Journal of Service Theory and Practice, International Journal of Advertising European Financial Management, and European Journal of Finance. His research interest includes corporate finance, systematic literature review, scientometric analysis and small business financing issues.

Debidutta Pattnaik is a research scholar in the Department of Management Studies at Malaviya National Institute of Technology Jaipur, India. He has published articles in the *International Journal of Research in Marketing, Journal of Corporate Finance, Journal of Business Research, Financial Review, Journal of Marketing Theory and Practice, Journal of Forecasting and International Journal of Advertising*. His research interest include Trade credit, bibliometric analysis and corporate finance.