

Customer Service And Communication Skills: A Scientometric Study

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Abstract

The objective of this study is to analyze the contribution of scientific, academic, and business productivity disclosed on the research topic "Customer Service and Communication Skills", through the use of the Scopus database between 1978 and 2022 in all areas of knowledge because the theme is transversal to them. The methodological design used is fundamentally based on an analysis of scientific trends from scientometric tools in the development of statistics and thematic maps. The analysis allows an identification of the participation and interaction between the various authors, countries, and institutions, coupled in clusters that reveal the contexts of intellectual production. The results found indicate that of the 170 works retrieved, 84 are articles, in the average of articles cited in the study period, the year 2000 was the most relevant with

2.9, The key terms, client, service and communication were the most related to the authors Cheikh F. and Demeester P. and with the countries of Germany and France.

Keywords: Communication skills, customer service, management.

Introduction

In the contemporary business environment, the quality of customer service has become a fundamental element for the success and sustainability of organizations. (Cervantes, Muñoz & Inda, 2020; Lee, & Lee, 2020). Customer service is no longer limited to being a mere process of responding to inquiries or solving problems; Instead, it has evolved into a powerful competitive differentiator that can influence customer loyalty, retention, and ultimately company profitability. (Rahi, Ghani & Ngah, 2020).

The understanding of customer service as a means to achieve competitive advantage has become ingrained in modern business management (Herrera-González, Cantero-Cora & Leyva-Cardenosa, 2021; Pimentel-Laurens, Niebles-Núñez & Ramírez-Durán, 2023). That is why the field of knowledge of customer service is one of those that has shown the greatest growth in recent years, through the insertion of new techniques, trends and processes that seek to innovate and encourage the best ways to attract and retain customers through a good service process (Álvarez-García et al., 2019). However, an equally vital and often underestimated aspect of this process is the critical role that communication skills play (Chen, Chiang & Huang, 2023). The interaction between customer service representatives and customers not only involves the transmission of information but is also a means of forging meaningful and lasting relationships. (Vielma, Segovia-Romo & Mendoza-Gómez, 2021).

In this way, the need to understand how communication skills, in their great complexity and diversity, is recognized, can have an effect on the customer service process with a

greater emphasis on that perception of a good service process. Nowadays, business managers recognize the important role of interpersonal relationships within the process of achieving organizational goals and objectives, being key tools for the process of articulation between the organization and the external sector.

In this context, this article is developed in order to characterize the scientific production of the area of knowledge of customer service and communication skills through bibliometric tools; Innovative methodology that will allow the understanding with certainty the behaviors of the intellectual production processes associated with these study variables. Bibliometric techniques have gained great relevance in recent years based on the ability to synthesize and understand scientific production from big data, which are available in specialized databases such as Scopus, WoS, among others (Rousseau & Rousseau, 2021; Ramírez et al., 2023)

Methodology

A scientometric analysis covering four phases in its development is carried out, which was proposed by (Flórez-Martínez, Contreras-Pedraza, & Rodríguez, 2020).

Phase 1. Information retrieval: in this phase the activities of design of the search equation and acquisition of the information to be analyzed were developed, for this purpose, keywords and terms were used, as well as Boolean operators in the Scopus metasearch engine that made the search more effective.

Phase 2. Information processing: from the information obtained, which was downloaded from Scopus in csv format, data processing was developed to generate information in the form of reports: bibliometric indicators, correlation analysis between countries, authors and keywords, co-citation networks between authors and documents, and knowledge evolution maps based on centrality (importance of the topic in the whole field of research or analysis), all this with the use of Rstudio software.

Phase 3. Report analysis: A descriptive and relational analysis was implemented for co-citation networks, correlation analysis and knowledge evolution maps, based on cluster analysis.

Phase 4. Construction of perspectives: based on the identified results and comparative analysis against global guidelines, define the contribution of the study topic "Customer Service and Communication Skills" or the opportunities to generate future studies identified in it.

Results.

The results of each of the four phases proposed in the methodology are presented below.:

As a strategy for the retrieval of relevant information, keywords and terms with their respective synonyms were used, logical operators such as "AND" and "OR", and the use of filters in the English and Spanish languages, resulted in the following search equation: (TITLE-ABS-KEY ("Client service") OR TITLE-ABS-KEY ("Costumer service") OR TITLE-ABS-KEY ("Costumer support") OR TITLE-ABS-KEY ("Costumer care") AND TITLE-ABS-KEY (communication)) AND (LIMIT-TO (LANGUAGE , "English")), From this, 170 documents of different types were obtained, in which information related to researchers, organizations, countries, citations, keywords and references are found. Table 1 lists the main information of the analysis performed.

Table 1. Key information about the study.

| Indicator | Result |
|--|-----------|
| Time lapse | 1978:2022 |
| Documents | 170 |
| Average citations per document | 7,241 |
| References | 3516 |
| Keywords | 1752 |
| Number of authors | 540 |
| Number of authors of single-author documents | 37 |
| Number of documents with a single author | 37 |
| Number of authors of multi-author documents | 3,33 |
| Collaboration index | 12,35 |

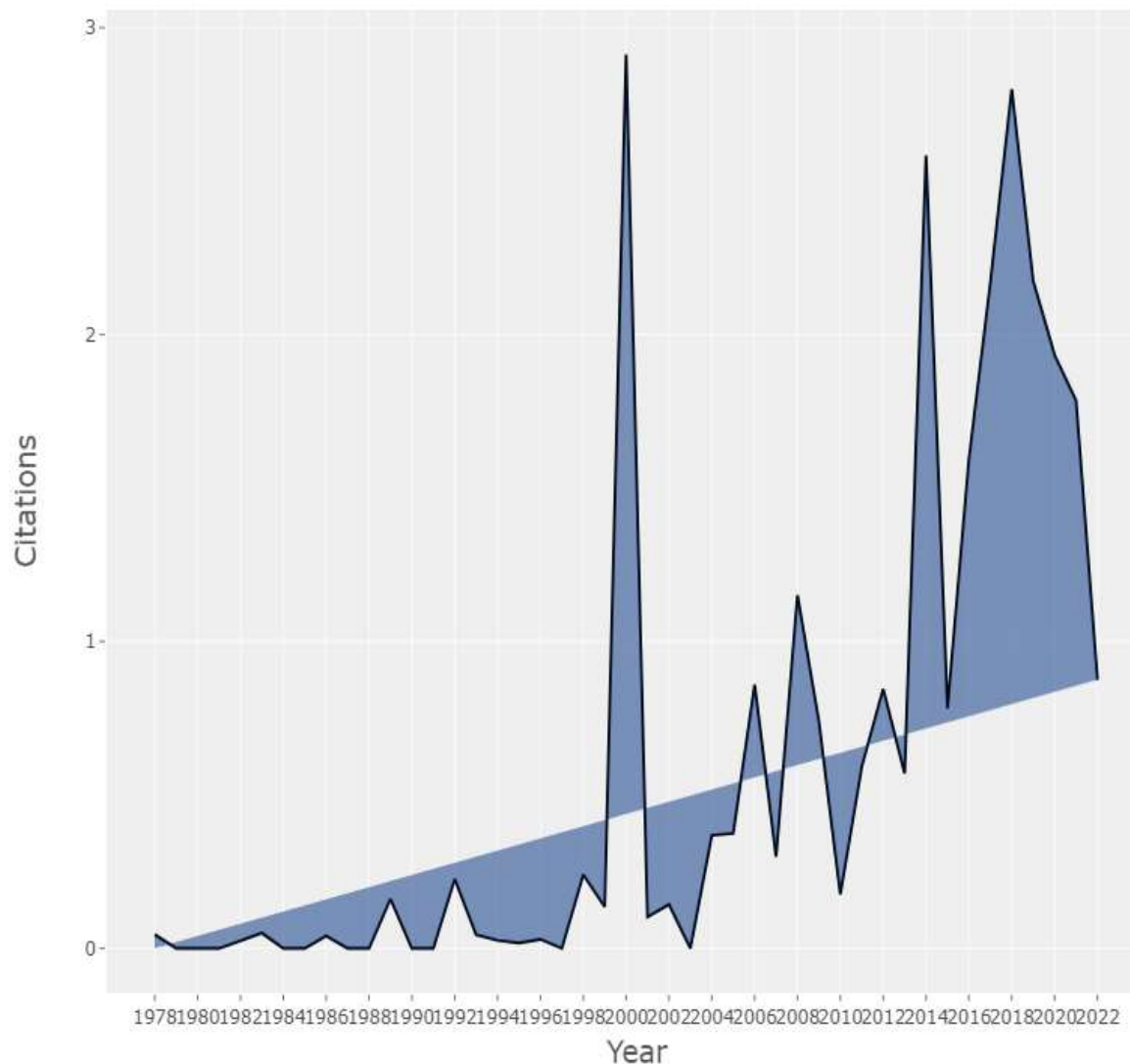


Figura 1. Promedio de citas por años.

The averages of the citations of the research papers help to know how the production of a particular topic advances in a given time, in addition to being an indicator of research quality. Considering the above, Figure 1 shows the average number of citations of the documents under study per year, in the period of time between 1978 and 2022 on the theme "Customer service and communication skills" where it is appreciated that the maximum number of citations of the studies carried out in 2000 was on average 2.9, followed by 2014 with 2.6 and 2018 with 2.8.

On the study of customer service and communication skills, a correlation analysis was carried out between the

countries, the authors and the most relevant keywords (abstracts) of the documents found, in Figure 2 it can be identified that the countries most correlated with researchers and key terms were: United Kingdom in greater frequency, followed by Spain, France, United States, China and Germany, of these, the first country is related to the author Barclay S., which in turn is related to the words "client", "services" and "communication" to a lesser extent and to "care" to a greater extent; the authors most closely related to the terms "client" and "service" are Demeester P., Deboosere L., De Turk F. and Dhoedt B., which in turn are connected with the countries of France and Germany.

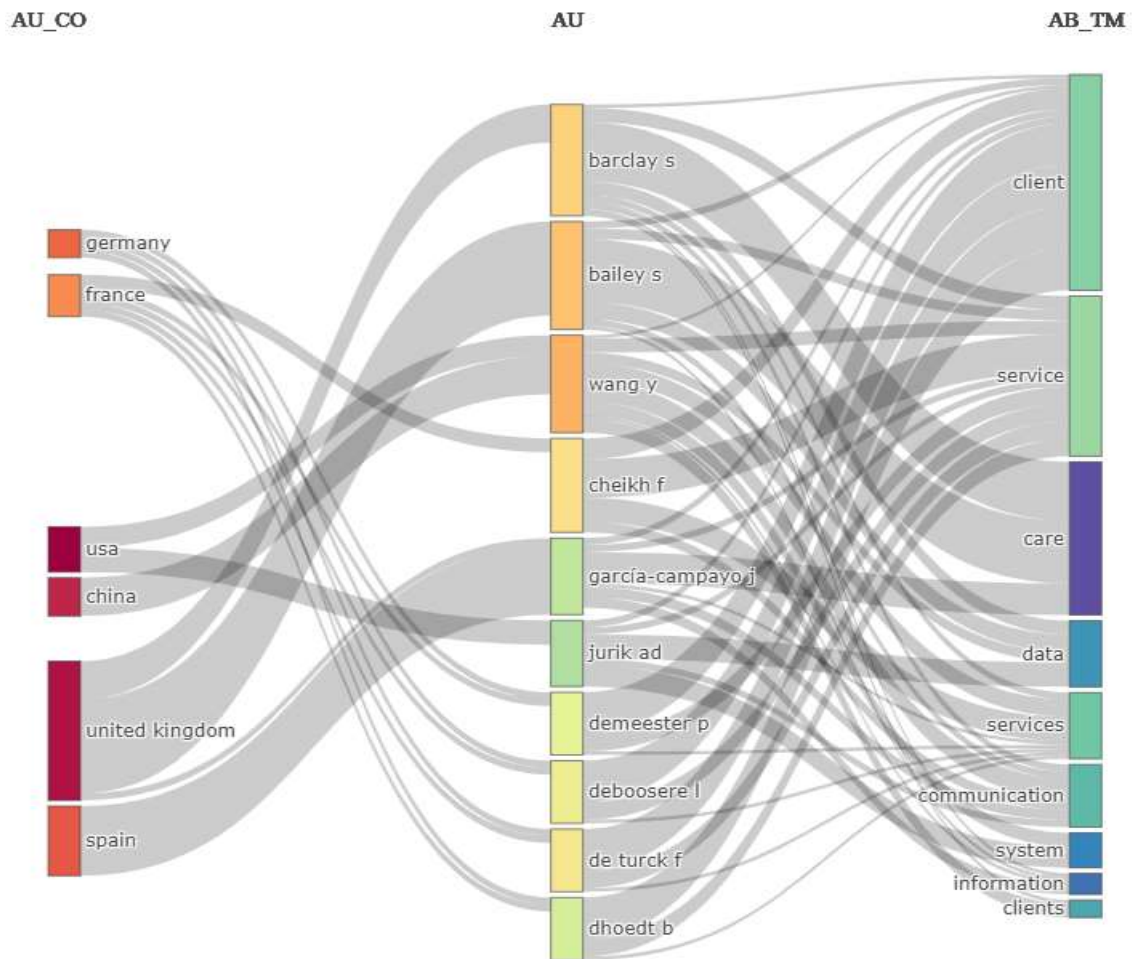


Figure 2. Correlation analysis countries, authors, and abstracts.

The clusters formed in the network of cocitations shown in figure 3 indicate that the most representative group, which

is red, is made up with the following authors: Bronsvoord W.F., Wang Y., Chen S., Chen X., Chan S., Nnaji B.O., Agrawal A. and Hoffmann C.M.; the one in blue by Beechan J. and Priebe S.; the one in violet by Elatawy A. and Osanaiye O.; Finally the one in green by Fernández A. and Badia X.

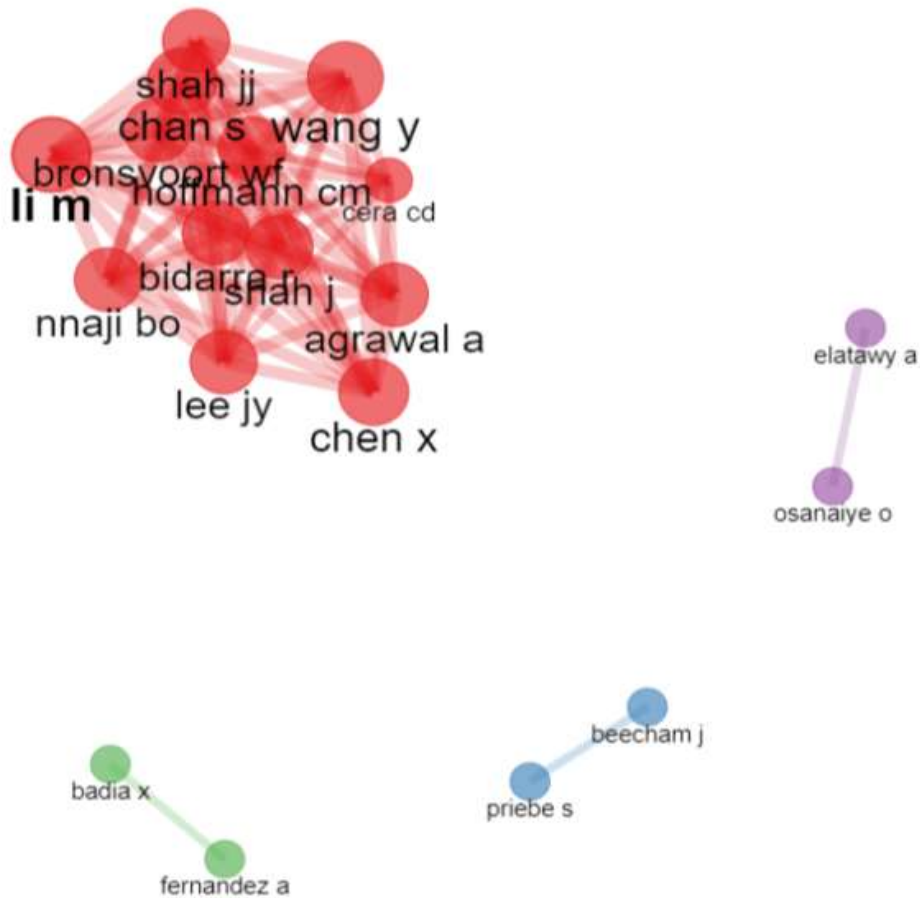


Figure 3. Co-citation of authors.

Wang Y. is the author with the highest H index listed in Table 2, one of his main works indicates that “Current computer-aided design (CAD) systems only support interactive geometry generation, which is not ideal for business-to-business collaboratively distributed engineering services with a generic thin client service-oriented architecture. This paper proposes a new feature-based modeling mechanism, document-based design, to enable batch mode geometry construction for distributed CAD systems. A model of semantic characteristics is developed to represent the intention of informative and communicative design. Feature

semantics are explicitly captured as a trinary relationship, which provides good extensibility and prevents semantic loss. Cross-domain data interoperability is enhanced by schema mapping and multi-resolution semantics. This mechanism aims to enable asynchronous communication in distributed CAD environments with ease of evaluation and alternative design reuse, reduction of human errors and improvement of system performance and utilization (Wang & Nnaji, 2006).

Table 2. H index of authors.

| Element | h_index | TC | NP | PY_start |
|------------------|----------------|-----------|-----------|-----------------|
| WANG Y | 3 | 43 | 5 | 2005 |
| BAILEY S | 2 | 26 | 2 | 2019 |
| DE TURCK F | 2 | 19 | 2 | 2009 |
| DEBOOSERE L | 2 | 19 | 2 | 2009 |
| DEMEESTER P | 2 | 19 | 2 | 2009 |
| DHOEDT B | 2 | 19 | 2 | 2009 |
| GARCÍA-CAMPAYO J | 2 | 24 | 2 | 2015 |
| KNAPP M | 2 | 12 | 2 | 2015 |
| MALIK SA | 2 | 6 | 2 | 2013 |
| NNAJI BO | 2 | 31 | 2 | 2005 |

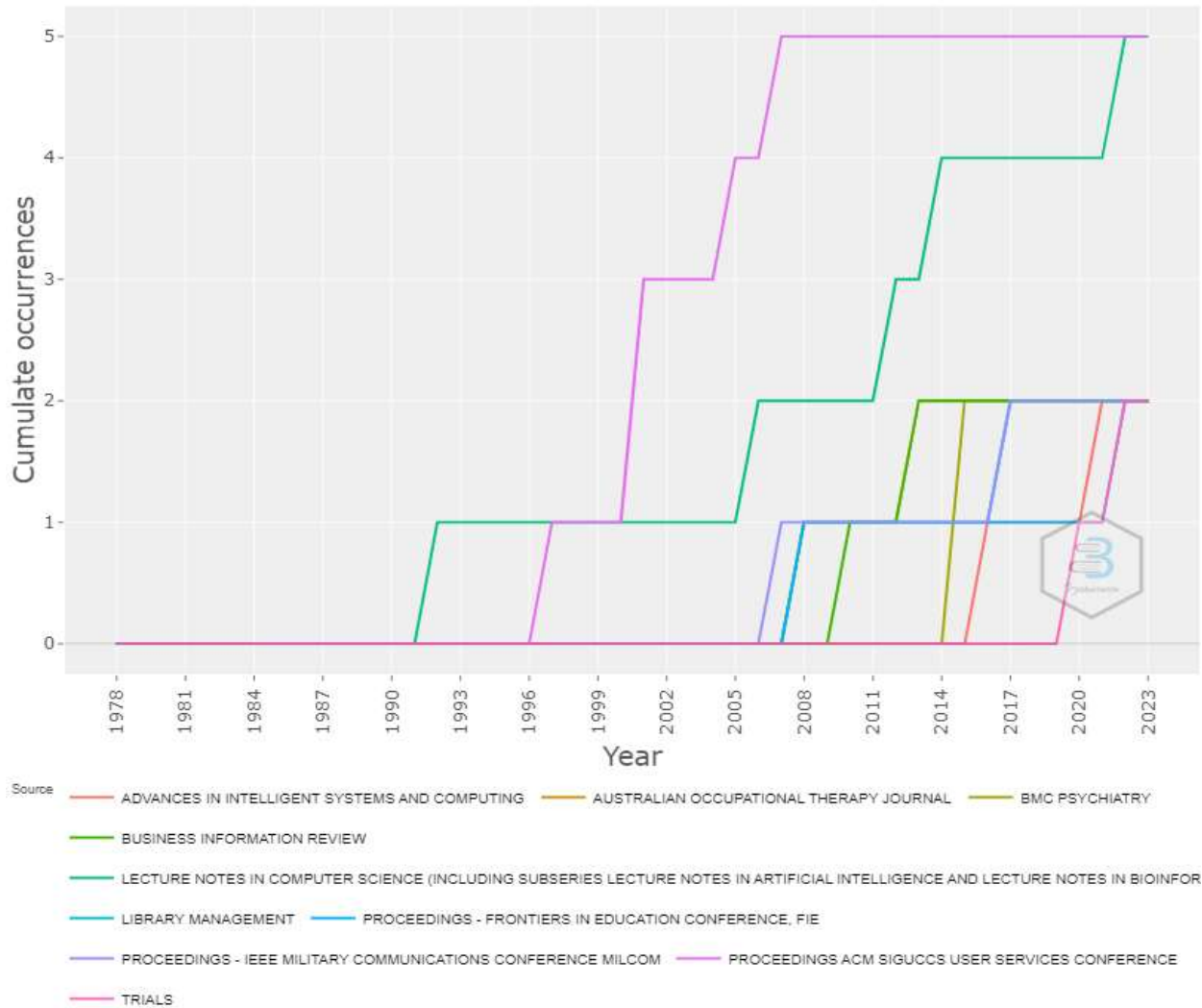


Figure 4. Source growth cumulate.

Figure 4 shows the growth of journals found in literature exploration in the period from 1978 to 2022, of the 10 journals submitted, it stand out Proceedings ACM siguccs user services conference trials, which shows a continuous and constant production from the years 1996 to 2022, being the years from 2007 to 2022 the most productive; it also highlights the journal Lecture notes in computer science with constant contributions from 1992 to 2022, this last year being the one with the highest production with 5 published works. The most relevant conference paper of the first journal explains how “The Department of Integrated Technology Services (ITS) at the University of New Brunswick recently began implementing unit work planning.

Traditionally, ITS has done high-level work planning only at the time of budget. This case of study will show how the ITS Client Services Unit implemented work planning for their teams in an environment where this has never been done before. Customer Services is responsible for 5 teams, Hardware Repair and Support Services, Publications and Communications, Customer Support, IT Procurement and Account Management. The work planning process included: developing mission statements and team management plans; Prioritize teamwork and develop tools to know how busy we are; determination of cyclical activities; linking work plans with team management plans and mission statements; and finally inform and review the team's work plans. Client Services job planning process implemented in September 2006. Several challenges were faced as the process progressed. Team managers had to be on board with the process and steps taken to address their issues. Planning the work takes time and there was some resistance to its implementation. This presentation will cover both the challenges and successes of implementation, as well as where we are today. Finally, a number of next steps will be reviewed. The implementation of work planning has been an eye-opener for all members as the learning process continues" (El-Bayoumi, 2007).

Table 3. H-index of journals.

| Element | h_index | TC | NP | PY_start |
|--|---------|----|----|----------|
| AUSTRALIAN OCCUPATIONAL THERAPY JOURNAL | 2 | 43 | 2 | 2008 |
| BMC PSYCHIATRY | 2 | 24 | 2 | 2015 |
| BUSINESS INFORMATION REVIEW | 2 | 7 | 2 | 2010 |
| LECTURE NOTES IN COMPUTER SCIENCE (INCLUDING SUBSERIES LECTURE NOTES IN ARTIFICIAL INTELLIGENCE AND LECTURE NOTES IN BIOINFORMATICS) | 2 | 32 | 5 | 1992 |
| LIBRARY MANAGEMENT | 2 | 30 | 2 | 2008 |
| PROCEEDINGS - IEEE MILITARY COMMUNICATIONS CONFERENCE MILCOM | 2 | 4 | 2 | 2007 |
| 18TH WORLD IMACS CONGRESS AND MODSIM 2009 - INTERNATIONAL CONGRESS ON MODELLING AND SIMULATION: INTERFACING MODELLING AND SIMULATION WITH MATHEMATICAL AND COMPUTATIONAL SCIENCES, PROCEEDINGS | 1 | 1 | 1 | 2009 |
| 2004 IEEE/SARNOFF SYMPOSIUM ON ADVANCES IN WIRED AND WIRELESS COMMUNICATION | 1 | 6 | 1 | 2004 |

Of the top 10 journals with the highest H-index listed in Table 3, six of them have a similar score of 2 and are: Australian occupational therapy journal, BMC Psychiatry, Business information review, Lecture notes in computer science, Library management and Proceedings - IEEE military communications conference. From the first journal, the article-type research work is highlighted, which indicates that "Given a global reorientation of health services towards primary or bottom-up health promotion, it is necessary to explore the role of occupational therapy in this practice area. This study aimed to explore and describe the primary health promotion practice of community health workers with a background in occupational therapy. The study highlights their practice of working at the community or population (macro) level, rather than at the customer service (micro) level, and explores the enablers and barriers related to this practice. Methods: The study used the qualitative methodology of narrative inquiry. Five workers with occupational therapy experience were recruited from community health services within Victoria. Data were collected through in-depth interviews. Interview data from individual participants were ordered to form a narrative detailing each participant's experience. These narratives were analyzed to generate themes that represented important aspects of participants' experiences. Results: Although some professionals with experience in occupational therapy perform primary health promotion, The findings indicate that a number of barriers deter occupational therapists from engaging in this type of practice, including lack of funding, preparation, and limited understanding of occupational therapy's role in health promotion. Facilitators for engagement included undertaking higher education, gaining clinical experience, and establishing a professional identity. Conclusion: This study provides insight into the experiences of occupational therapists working at a macro rather than micro practice level, and emphasizes some of the barriers and facilitators to adopting the types of roles that are emerging as part of a

changing health system” (Wood, Fortune, & Mckinstry, 2013).

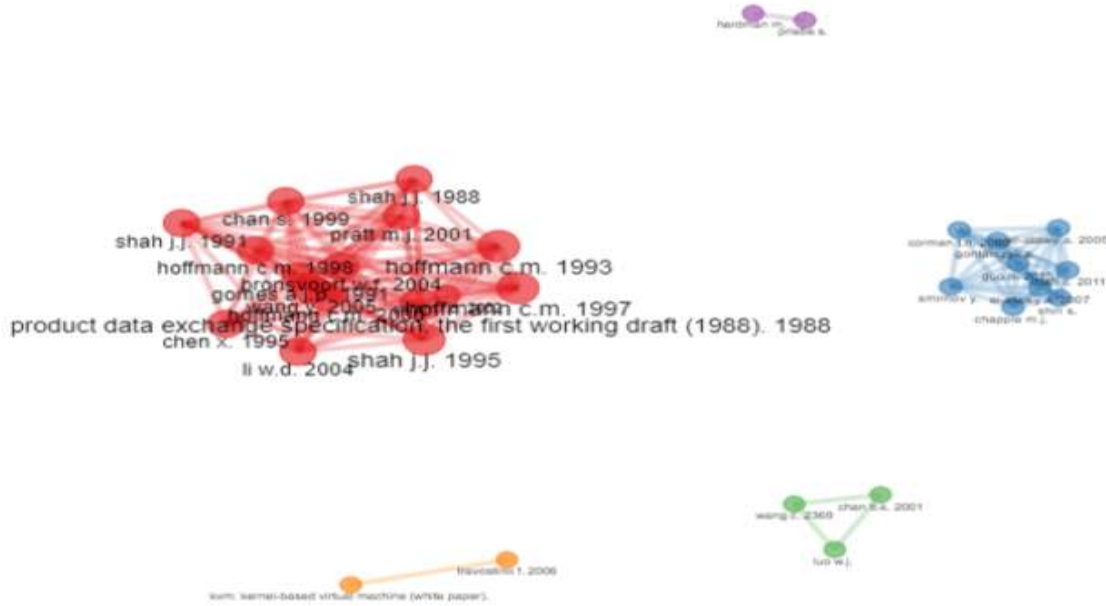


Figure 5. Co-citation of documents.

The groups formed in the network of co-citations of documents presented in figure 5 indicate that the most relevant cluster, which is the red one, is made up with the works: Hoffmann C.M. 1997 and 1993, product data exchange specification: the first working draft. 1988, Shah J.J. 1995, Bronsvoot W.F. 2004 and Chan S. 1999; the blue one by, Chao C. 2011, Cormen T.H. 2009, El-Atawy A. 2005 and 2007 and Guo H. 2015; the green one by , Chen B.K. 2001, Luo W.J. and Wang C.; Finally, the orange one by, Herdman M. and Priebe S.

Table 4. Most cited documents.

| Paper | DOI | Total Cites |
|--|---------------------------|-------------|
| HARDISON JL, 2008, PROC FRONT EDUC CONF FIE | 10.1109/FIE.2008.4720536 | 76 |
| KARINOU F, 2018, IEEE PHOTONICS TECHNOL LETT | 10.1109/LPT.2018.2810334 | 67 |
| BURT E, 2000, NONPROFIT MANAGE LEADERSH | 10.1002/nml.11201 | 67 |
| THAKER T, 2016, SYMP COLOSSAL DATA ANAL NETW, CDAN | 10.1109/CDAN.2016.7570919 | 59 |
| XUE M, 2009, PROC PACIFIC-ASIA CONF CIRCUITS, COMMUN SYST, PACCS | 10.1109/PACCS.2009.89 | 56 |

| | | |
|---|------------------------------|----|
| ELIASON S, 2014, REPROD HEALTH | 10.1186/1742-4755-11-65 | 51 |
| HANLEY T, 2012, COUNS PSYCHOTHER RES | 10.1080/14733145.2011.560273 | 38 |
| BELKORA J, 2006, PATIENT EDUC COUNS | 10.1016/j.pec.2006.03.017 | 29 |
| WANG Y, 2006, J COMPUT INF SCI ENG | 10.1115/1.2194911 | 28 |
| | 10.1111/j.1440- | |
| HOOPER K, 2007, AUSTR J RURAL HEALTH | 1584.2007.00849.x | 28 |
| WASON JD, 2011, IEEE INT CONF AUTOM SCI ENG | 10.1109/CASE.2011.6042513 | 27 |
| TAYLOR D, 2019, SYST REV | 10.1186/s13643-018-0921-4 | 25 |
| COURSARIS CK, 2013, ECIS - PROC EUR CONF INF SYST | | 24 |
| DOBRIJEVIC O, 2014, LECT NOTES COMPUT SCI | 10.1007/978-3-319-13174-0_11 | 23 |
| | 10.1111/j.1440- | |
| HOFFMANN T, 2008, AUST OCCUP THER J | 1630.2007.00693.x | 23 |
| DOUGLAS HE, 2017, INT J INTEGR CARE | 10.5334/ijic.2437 | 21 |
| FRASER-ARNOTT M, 2017, LIBR MANAGE | 10.1108/LM-09-2016-0074 | 20 |
| HILARI K, 2019, PILOT FEASIBILITY STUD | 10.1186/s40814-019-0397-6 | 20 |
| WOOD R, 2013, AUST OCCUP THER J | 10.1111/1440-1630.12031 | 20 |
| SHEA EO, 2017, BMC GERIATR | 10.1186/s12877-017-0676-0 | 19 |

The top 20 research papers that have been most cited in the field of research on customer service and communication skills are presented in Table 4, of these, the most relevant documents are those from, Hardison, J.L., et al., from 2008 that is conference paper type and was published in the journal Proceedings - Frontiers in Education Conference and has 76 citations; the article of Karinou, F., et al., from 2018 Published in the journal IEEE Photonics Technology Letters with 67 citations and conference paper by author Thaker, T., from 2016 posted on Symposium on Colossal Data Analysis and Networking, which has been referenced 67 times. The first paper listed in the table above, which is a conference paper, indicates that “The MIT iLab project has developed a distributed services infrastructure and software toolset to support a scalable community of online lab experiments. iLab's shared architecture provides a framework for the development and deployment of remote labs using a three-tier model based on web services consisting of lab clients, Service Agent, and Lab Server Middleware. This simplifies remote lab development by providing reusable components for common lab management functions. The initial focus of the iLab Project was on batch labs, which do not require interactive control. Following the project's success in

supporting these laboratories, it has expanded its efforts to include those requiring interactive control. Interactive labs require the user to have active control of laboratory instruments during the course of an experiment and can generate a large amount of data. To adjust to these requirements, iLab's shared architecture has been extended with a highly configurable lab resource scheduling service, a robust data storage system and support for high-bandwidth communication between lab client and server. By integrating these services into iLab's shared architecture, a more diverse set of educational value labs can now be easily deployed online and shared worldwide" (Hardison, DeLong, Bailey, & Harward, 2008).

The thematic map shown in Figure 6 indicates that the exploration conducted on the research topic customer service and communication skills, shows healthcare and digital-related aspects such as marketing and social media as the main or driving theme; as a basic and transversal theme to the other lines of study found, there are the terms; service and communication, related to words like: network, system, Evaluation, management and mobile; as emerging themes the words occupational and services are found; Finally as peripheral theme, the terms firewall and business.

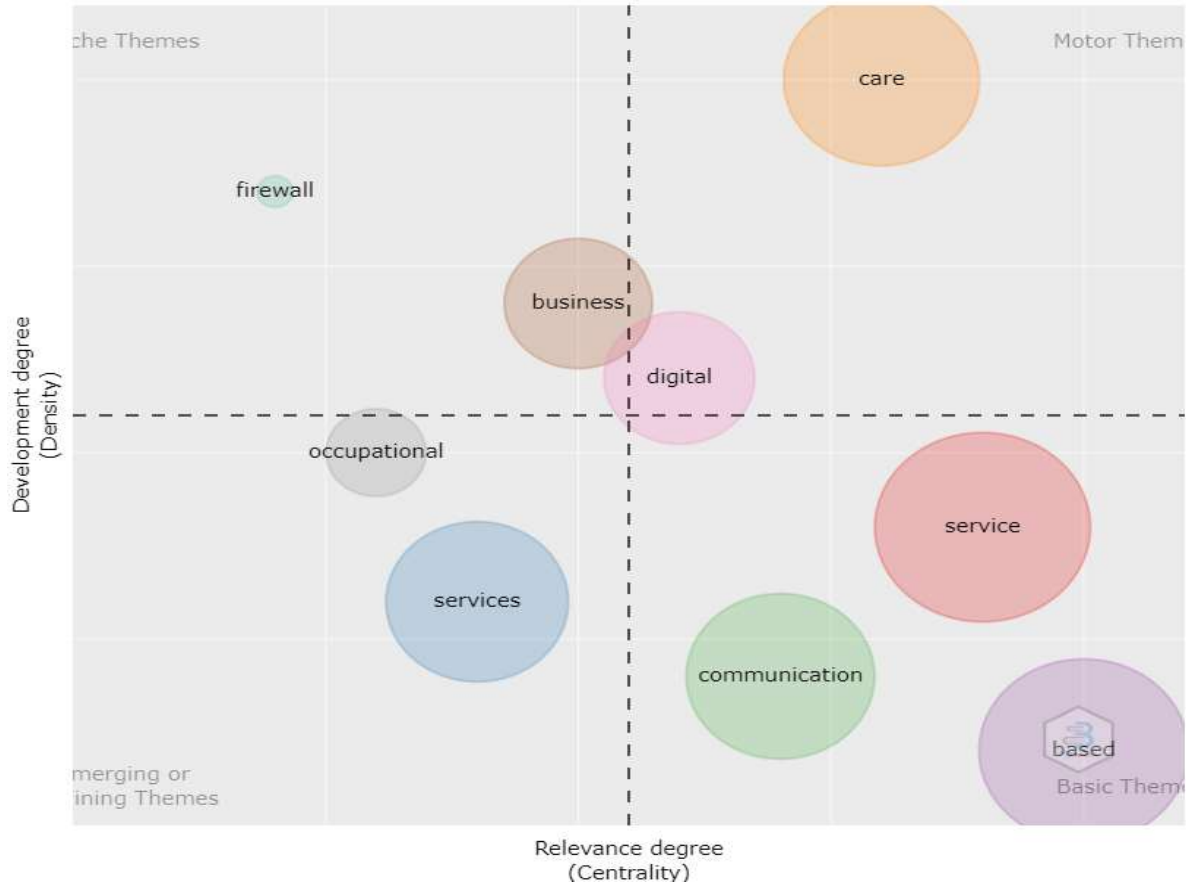


Figure 6. Thematic map.

Conclusions.

With respect to the scientometric study carried out, it is concluded that the scientific production on the field of research "customer service and communication skills" began in 1978 and reached its highest average in the years 2000, 2014 and 2018, there were 540 authors found, of which, 37 published as sole researchers, the average of multiple authors per document was 3.3 and citations on average per document were approximately 7.2.

The countries and authors most correlated with the research terms client, service, and communication, were from United Kingdom, Barclay S.; from France and Germany, the authors, Demeester P., Deboosere L., De Turk F., and Dhoedt B.; The journal with the highest growth in the time lapses investigated was Proceedings ACM siguccs user

services conference trials, which had its highest production from the years 2007 to 2022.

Finally, it is concluded that in the study the variable "customer service" and "Communication" are transversal to other lines of studies identified such as health care and administration, that is, the customer service studied together with communication skills has not been much explored or exploited by researchers, being an opportunity to carry out an innovative study.

References.

- Álvarez-García, J., González-Vázquez, E., Del Río-Rama, M. D. L. C., & Durán-Sánchez, A. (2019). Quality in customer service and its relationship with satisfaction: an innovation and competitiveness tool in sport and health centers. *International journal of environmental research and public health*, 16(20), 3942.
- Balbiani, P., Cheikh, F., & Feuillade, G. (2008). Composition of Interactive Web Services Based on Controller Synthesis. 2008 IEEE Congress on Services - Part I. doi:10.1109/services-1.2008.11
- Belkora, J., Katapodi, M., Moore, D., Franklin, L., Hopper, K., & Esserman, L. (2006). Evaluation of a visit preparation intervention implemented in two rural, underserved counties of Northern California. *Patient Education and Counseling*, 64(1-3), 350–359. doi:10.1016/j.pec.2006.03.017
- Berghofer, G., Castille, D. M., & Link, B. (2010). Evaluation of Client Services (ECS): A Measure of Treatment Satisfaction for People with Chronic Mental Illnesses. *Community Mental Health Journal*, 47(4), 399–407. doi:10.1007/s10597-010-9331-3
- Burt, E., & Taylor, J. A. (2000). Information and Communication Technologies: Reshaping Voluntary Organizations? *Nonprofit Management and Leadership*, 11(2), 131–143. doi:10.1002/nml.11201
- Castro, A., García-Palacios, A., García-Campayo, J., Mayoral, F., Botella, C., García-Herrera, J. M., ... Gili, M. (2015). Efficacy of low-intensity psychological intervention applied by ICTs for the treatment of depression in primary care: a controlled trial. *BMC Psychiatry*, 15(1). doi:10.1186/s12888-015-0475-0
- Cervantes, G., Muñoz, G., & Inda, A. D. (2020). El trabajo en equipo y su efecto en la calidad del servicio a clientes. *Revista Espacios*, 41(14), 27-37.

- Chen, K. Y., Chiang, M. Y., & Huang, T. C. (2023). Redefining Customer Service Education in Taiwan's Convenience Store Sector: Implementing an AI-Driven Experiential Training Approach. In *International Conference on Innovative Technologies and Learning* (pp. 57-66). Cham: Springer Nature Switzerland.
- Christie, L., Egan, C., Wyborn, J., & Simpson, G. K. (2021). Evaluating client experience of rehabilitation following acquired brain injury: a cross-sectional study. *Brain Injury*, 35(2), 215–225. doi:10.1080/02699052.2020.1867768
- Darling, S. D., & Cunningham, J. B. (2016). Underlying values and competencies of public and private sector managers. *Asian Education and Development Studies*, 5(4), 371–387. doi:10.1108/aeds-09-2015-0050
- Deboosere, L., Simoens, P., De Wachter, J., Vankeirsbilck, B., De Turck, F., Dhoedt, B., & Demeester, P. (2011). Grid design for mobile thin client computing. *Future Generation Computer Systems*, 27(6), 681–693. doi:10.1016/j.future.2010.12.010
- Dobrijevic, O., Kassler, A. J., Skorin-Kapov, L., & Matijasevic, M. (2014). Q-POINT: QoE-Driven Path Optimization Model for Multimedia Services. *Wired/Wireless Internet Communications*, 134–147. doi:10.1007/978-3-319-13174-0_11
- Douglas, H. E., Georgiou, A., Tariq, A., Prgomet, M., Warland, A., Armour, P., & Westbrook, J. I. (2017). Implementing Information and Communication Technology to Support Community Aged Care Service Integration: Lessons from an Australian Aged Care Provider. *International Journal of Integrated Care*, 17(1). doi:10.5334/ijic.2437
- Eliason, S., Awoonor-Williams, J. K., Eliason, C., Novignon, J., Nonvignon, J., & Aikins, M. (2014). Determinants of modern family planning use among women of reproductive age in the Nkwanta district of Ghana: a case-control study. *Reproductive Health*, 11(1). doi:10.1186/1742-4755-11-65
- Elshater, Y., Martin, P., & Hassanein, E. (2015). Using Design Patterns to Improve Web Service Performance. 2015 IEEE International Conference on Services Computing. doi:10.1109/scc.2015.106
- Fawcett, J., Schutt, R. K., Gall, G. B., Cruz, E. R., & Woodford, M. L. (2007). The Work of Nurse Case Managers in a Cancer and Cardiovascular Disease Risk Screening Program. *Professional Case Management*, 12(2), 93–105. doi:10.1097/01.pcama.0000265344.65193.fa
- Fraser-Arnott, M. (2017). Competencies for information specialists in emerging roles. *Library Management*, 38(1), 65–76. doi:10.1108/lm-09-2016-0074

- Gibelman, M., & Whiting, L. (1999). Negotiating and Contracting in a Managed Care Environment: Considerations for Practitioners. *Health & Social Work, 24*(3), 180–190. doi:10.1093/hsw/24.3.180
- Hancock, G., & Yates, J. (1989). Client Services for Geriatric Pets. *Veterinary Clinics of North America: Small Animal Practice, 19*(1), 187–196. doi:10.1016/s0195-5616(89)50013-5
- Hanley, T. (2012). Understanding the online therapeutic alliance through the eyes of adolescent service users. *Counselling and Psychotherapy Research, 12*(1), 35–43. doi:10.1080/14733145.2011.560273
- Hardison, J. L., DeLong, K., Bailey, P. H., & Harward, V. J. (2008). Deploying interactive remote labs using the iLab Shared Architecture. 2008 38th Annual Frontiers in Education Conference. doi:10.1109/fie.2008.4720536
- Herrera-González, Y., Cantero-Cora, H., & Leyva-Cardenosa, E. (2021). Gestión del servicio al cliente para lograr ventajas competitivas en empresas comercializadoras. *Ciencias Holguín, 27*(3), 16-26.
- Hilari, K., Behn, N., Marshall, J., Simpson, A., Thomas, S., Northcott, S., ... Goldsmith, K. (2019). Adjustment with aphasia after stroke: study protocol for a pilot feasibility randomised controlled trial for Supporting wellbeing through PEer Befriending (SUPERB). *Pilot and Feasibility Studies, 5*(1). doi:10.1186/s40814-019-0397-6
- Hoang, K., Jamal, K., & Tan, H.-T. (2019). Determinants of Audit Engagement Profitability. *The Accounting Review. doi:10.2308/accr-52438*
- Hoffmann, T., & Cantoni, N. (2008). Occupational therapy services for adult neurological clients in Queensland and therapists' use of telehealth to provide services. *Australian Occupational Therapy Journal, 55*(4), 239–248. doi:10.1111/j.1440-1630.2007.00693.x
- Hooper, K., Thomas, Y., & Clarke, M. (2007). Health professional partnerships and their impact on Aboriginal health: An occupational therapist's and Aboriginal health worker's perspective. *Australian Journal of Rural Health, 15*(1), 46–51. doi:10.1111/j.1440-1584.2007.00849.x
- Hughes, C., & Chapel, A. (2013). Connect, communicate, collaborate and create. *Business Information Review, 30*(4), 191–195. doi:10.1177/0266382113517829
- Hughes, T., & Vafeas, M. (2019). Marketing Agency/Client Service-For-Service Provision in an Age of Digital Transformation. *Journal of Business-to-Business Marketing, 1*–16. doi:10.1080/1051712x.2019.161108

- Huotari, P., & Havrdová, Z. (2016). Stakeholders' roles and responsibilities regarding quality of care. *International Journal of Health Care Quality Assurance*, 29(8), 864–876. doi:10.1108/ijhcqa-06-2015-0070
- Karinou, F., Brunner, H. H., Fung, C.-H. F., Comandar, L. C., Bettelli, S., Hillerkuss, D., ... Poppe, A. (2018). Toward the Integration of CV Quantum Key Distribution in Deployed Optical Networks. *IEEE Photonics Technology Letters*, 30(7), 650–653. doi:10.1109/lpt.2018.2810334
- Kaushik, S., Tiwari, S., & Goplani, P. (2012). Reducing dependency on middleware for pull based active services in LBS systems. In *Wireless Communications and Applications: First International Conference, ICWCA 2011, Sanya, China, August 1-3, 2011, Revised Selected Papers 1* (pp. 90-106). Springer Berlin Heidelberg.
- Lee, S. M., & Lee, D. (2020). "Untact": a new customer service strategy in the digital age. *Service Business*, 14(1), 1-22.
- Neff, J. L., Patterson, M. M., & Johnson, S. (2012). Meeting the Training Needs of Those Who Meet the Needs of Victims: Assessing Service Providers. *Violence and Victims*, 27(4), 609–632. doi:10.1891/0886-6708.27.4.609
- Pallickara, S., Gadgil, H., & Fox, G. (2005). On the Discovery of Brokers in Distributed Messaging Infrastructures. 2005 IEEE International Conference on Cluster Computing. doi:10.1109/clustr.2005.347076
- Paton, B., Beranek, L., & Smith, I. (2008). The transit lounge: a view of organisational change from a point in the journey. *Library Management*, 29(1/2), 87–103. doi:10.1108/01435120810844676
- Pimentel-Laurens, D., Niebles-Nuñez, L. D., & Ramírez-Durán, J. (2023). Factores de la gestión del desempeño y las estrategias de marketing en las pequeñas empresas. *Desarrollo Gerencial*, 15(2), 1–20.
- Rahi, S., Ghani, M. A., & Ngah, A. H. (2020). Factors propelling the adoption of internet banking: the role of e-customer service, website design, brand image and customer satisfaction. *International Journal of Business Information Systems*, 33(4), 549-569.
- Ramírez, J., Gallego, G., Niebles, W., & Tirado, J. G. (2023). Blockchain Technology for Sustainable Supply Chains: A Bibliometric Study. *Journal of Distribution Science*, 21(6), 119-129.
- Rennick-Egglestone, S., Elliott, R., Smuk, M., Robinson, C., Bailey, S., Smith, R., ... Slade, M. (2020). Impact of receiving recorded mental health recovery narratives on quality of life in people experiencing psychosis, people experiencing other

- mental health problems and for informal carers: Narrative Experiences Online (NEON) study protocol for three randomised controlled trials. *Trials*, 21(1). doi:10.1186/s13063-020-04428-6
- Rousseau, S., & Rousseau, R. (2021). Bibliometric techniques and their use in business and economics research. *Journal of Economic Surveys*, 35(5), 1428-1451.
- Rubio-Valera, M., Beneitez, I., Peñarrubia-María, M. T., Luciano, J. V., Mendive, J. M., McCrone, P., ... Serrano-Blanco, A. (2015). Cost-effectiveness of active monitoring versus antidepressants for major depression in primary health care: a 12-month non-randomized controlled trial (INFAP study). *BMC Psychiatry*, 15(1). doi:10.1186/s12888-015-0448-3
- Sampson, J. P., & Makela, J. P. (2014). Ethical issues associated with information and communication technology in counseling and guidance. *International Journal for Educational and Vocational Guidance*, 14(1), 135–148. doi:10.1007/s10775-013-9258-7
- Shanmugalingam, S., Crespi, N., & Labrogere, P. (2010). User mobility in a Web-based communication system. 2010 IEEE 4th International Conference on Internet Multimedia Services Architecture and Application. doi:10.1109/imsaa.2010.5729395
- Shea, E. O., Timmons, S., Shea, E. O., Fox, S., & Irving, K. (2017). Key stakeholders' experiences of respite services for people with dementia and their perspectives on respite service development: a qualitative systematic review. *BMC Geriatrics*, 17(1). doi:10.1186/s12877-017-0676-0
- Singh, R., Mukhtar, M., Krishna, A., Parkhi, A., Padhye, J., & Maltz, D. (2021). Surviving switch failures in cloud datacenters. *ACM SIGCOMM Computer Communication Review*, 51(2), 2–9. doi:10.1145/3464994.3464996
- Song, P., Chen, C., Li, K., & Sui, L. (2008). The Design and Realization of Embedded Gateway Based on WSN. 2008 International Conference on Computer Science and Software Engineering. doi:10.1109/csse.2008.889
- Stone, G., & Lightbody, M. (2012). The Nature and Significance of Listening Skills in Accounting Practice. *Accounting Education*, 21(4), 363–384. doi:10.1080/09639284.2011.617062
- Taylor, D., Lunny, C., Lolić, P., Warje, O., Geldman, J., Wong, T., ... Ogilvie, G. (2019). Effectiveness of text messaging interventions on prevention, detection, treatment, and knowledge outcomes for sexually transmitted infections (STIs)/HIV: a systematic review and meta-analysis. *Systematic Reviews*, 8(1). doi:10.1186/s13643-018-0921-4

- Thaker, T. (2016). ESP8266 based implementation of wireless sensor network with Linux based web-server. 2016 Symposium on Colossal Data Analysis and Networking (CDAN). doi:10.1109/cdan.2016.7570919
- Vielma, R. D. E., Segovia-Romo, A., & Mendoza-Gómez, J. (2021). La comunicación efectiva como habilidad impulsora del Servicio al Cliente en el área de ventas en tiempos del Covid-19. *Innovaciones de negocios*, 18(36).
- Wang, Y., & Nnaji, B. O. (2006). Document-Driven Design for Distributed CAD Services in Service-Oriented Architecture. *Journal of Computing and Information Science in Engineering*, 6(2), 127. doi:10.1115/1.2194911
- Wang, Y., Peng, J., He, L., Zhang, T., & Li, H. (2012). LBSs privacy preserving for continuous query based on semi-honest third parties. 2012 IEEE 31st International Performance Computing and Communications Conference (IPCCC). doi:10.1109/pccc.2012.6407781
- Wason, J. D., & Wen, J. T. (2011). Robot Raconteur: A communication architecture and library for robotic and automation systems. 2011 IEEE International Conference on Automation Science and Engineering. doi:10.1109/case.2011.6042513
- Wayner, C. J., & Heinke, M. L. (2006). Compliance: Crafting Quality Care. *Veterinary Clinics of North America: Small Animal Practice*, 36(2), 419–436. doi:10.1016/j.cvsm.2005.10.004
- Wolfinger, B., & Moron, M. (1992). A continuous media data transport service and protocol for real-time communication in high speed networks. *Lecture Notes in Computer Science*, 171–182. doi:10.1007/3-540-55639-7_15
- Wood, R., Fortune, T., & McKinstry, C. (2013). Perspectives of occupational therapists working in primary health promotion. *Australian Occupational Therapy Journal*, 60(3), 161–170. doi:10.1111/1440-1630.12031
- Xue, M., & Zhu, C. (2009). The Socket Programming and Software Design for Communication Based on Client/Server. 2009 Pacific-Asia Conference on Circuits, Communications and Systems. doi:10.1109/paccs.2009.89
- Yoshikawa, T., Komura, H., Nishiwaki, C., Goto, R., Matama, K., & Naito, K. (2022, January). Evaluation of new CYPHONIC: Overlay network protocol based on Go language. In 2022 IEEE International Conference on Consumer Electronics (ICCE) (pp. 1-6). IEEE.
- Zhou, Z., & Bambos, N. (2015). A general model for resource allocation in utility computing. 2015 American Control Conference (ACC). doi:10.1109/acc.2015.7170985