

# A SCIENTOMETRIC ANALYSIS OF CUSTOMER VALUE IN RETAILING

Ashish Pruthi<sup>1</sup>, Dr. Rajat Gera<sup>2</sup>, Dr. Priyanka Chadha\*<sup>3</sup>

<sup>1</sup>PhD Scholar, School of Management and Commerce, Manav Rachna University, Faridabad.

<sup>2</sup>Dean, School of Management and Commerce, Professor, K.R. Mangalam University, Gurgaon.

<sup>3</sup>Assistant Professor, School of Management and Commerce, Manav Rachna University, Faridabad.

## Abstract:

The paper is a Scientometric analysis of research trends, productivity analysis and conceptual structure of customer value in retailing (CVR). The study is conducted on articles extracted from online Scopus database and analysed through web based Biblioshiny software. The results show an increasing trend in CVR research especially in recent years. The leading sources of publication are inter disciplinary and varied subject areas of services, retailing, e-commerce, internet marketing, consumer research, interactive marketing, fashion marketing etc. Leading authors have used multiple conceptualizations of structure and dimensions of CV in their research while evaluating the relationship of CV with consumer attitudinal and behavioural outcomes in context of retailing. The focus of research is shifting from offline channels to online and multi channels. The service dominant consumer perspective of co creation of customer value is emerging as the pre dominant concept in this field

**Keywords:** Perceived value; Service dominant logic; Bibliometric analysis; Trends analysis; Citation analysis.

## I. INTRODUCTION:

Retailers are giving more importance to the online channel to enrich the multichannel customer experience (Ahrholdt, 2011). Leading bricks and mortar retailers (Walmart, Nordstrom, and Woolworths) are evaluating e-commerce as a key element of their expansion. The “brick and-click” business model is expanding with the advances in the integration of retail processes across multiple channels to deliver greater benefits and innovative services to customers (Oh et al., 2012). Hence, multi-channel retailers need to consider consumer decision making in technology mediated environments across country markets (Badrinarayanan et al., 2012). Scholars have called for further research into consumers

perceived value by incorporating the online channel and cross-channel effects (Maity and Dass, 2014) in their buying behaviour. Consumers judgements re influenced by coherent brand across multiple retail channels (Carlson and O’Cass, 2011; Badrinarayanan et al., 2012), and the convenience provided by online channel compared to other channels of the retailer (Banerjee, 2014). However, research on customer perceptions of value pertaining to online and cross channel as compared to offline channel has remained underexposed. Perceived value research within the online environment has been limited to single-channel mind-set with restricted research into customer value assessments in an e-tailing context and cross channel context (e.g. Barrutia and Gilsanz

2013). Hence an in-depth understanding of the specific drivers of value creation which evaluates cross channel and Omni channel buying behaviour is lacking.

Narrative review paper on CV in retailing by Gera and Pruthi (2021) was limited to 27 papers. Conference papers, non-indexed journal publications, opinion based and conceptual papers were excluded from the selected papers and hence the scope of the review is narrow and subjective. The review paper by Yulia et al., (2018) is limited to customer value in self-service kiosks and does not extend to other multi-channel retailing formats. No bibliometric review studies could be accessed by the authors related to the topic, which would enable assessment of the structure of the research subject. Based on literature search, the authors realized a paucity of published literature predominantly on "Scientometric analysis of Customer value in retailing". Hence, this study aims to enrich the existing literature in this field and provide scholars and practitioner with insights for further research and formulating actionable strategies for creating customer value propositions.

Scientometric was defined by Mulchenko as "a quantitative study of the research on the development of science" (Mulchenko, 1969). It's a technique to measure research impact, and map the knowledge structure and evolution of a scholarly domain based on large published dataset (Borner *et.al.* 2003). Analysis of bibliometric data using Scientometric methods enables researchers discover knowledge structures and patterns by systematic linking with literature concepts which may not be possible through subjective review studies (Su and Lee, 2010). The research questions which this review study aims to address are:

**RQ1.** What is the global trend of scientific publications and relevance of research on CV in retailing (CVR)?

**RQ2.** Who are the most impactful authors and sources publishing on CVR research?

**RQ3.** Which is the dominant key research topics and streams?

## 2. RESEARCH DESIGN

The literature published on CVR was extracted from Scopus online database which is an influential database multidisciplinary document. Eighty seven articles were extracted through Boolean search string: TITLE-ABS-KEY ("Customer Value Retailing"). The time span of publications was restricted to 2000 to 2022.

The data processing was undertaken on the CSV file formats and tables. Graphs and tables were generated from the processed data using a web interface for Biblioshiny R. All type of publications was included for the study of CVR literature; Only English language documents were included. The study also analyses the Conceptual structure of CVR literature through factorial analysis of keywords plus.

## 3. RESULTS & DISCUSSION

### 3.1 Productivity Analysis:

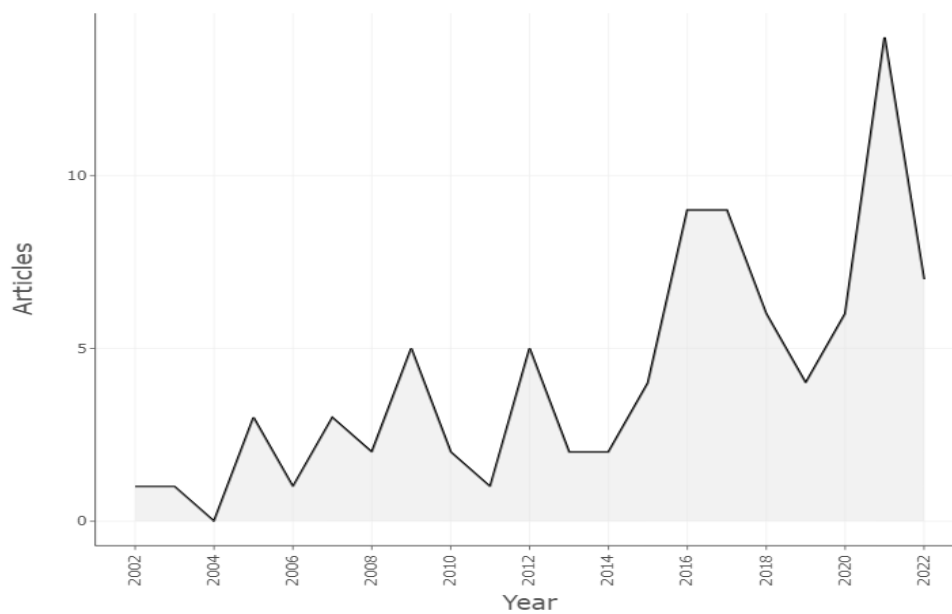
The analysis of productivity of documents shows that research on CV in retailing is an emerging field with 51% of the 87 publications of selected art in 2016-2022 and 31% publications of selected SCI art in 2020-2022. There is an upward trend in publications with peak in 2021 signifying the increasing attention being received from researchers.

Table 1.0: Year wise Publications on CV in Retailing in Scopus Citation Indexed (SCI) Database

Year	Articles
2002	1
2003	1
2004	0
2005	3

2006	1
2007	3
2008	2
2009	5
2010	2
2011	1
2012	5
2013	2
2014	2
2015	4
2016	9
2017	9
2018	6
2019	4
2020	6
2021	14
2022	7

Figure 1.0: Year wise publications trend on CV in retailing in Scopus citation indexed (SCI) database



### 3.2 Most Relevant Sources:

Evaluation of most cited journals on CV in retailing indicates the inter disciplinary and

multi theoretical nature of the research field. Journal of retailing and consumer studies (local h index 21, total citations 1353, no of publications 37), an interdisciplinary forum for

research and debate in the rapidly developing - and converging - fields of retailing and services studies is the most productive channel. Other platforms for publication on CV in retailing research transcend disciplines of Services, retail

distribution and commerce, e-commerce, technology forecasting and social research, strategic marketing, industrial management and data systems, administrative sciences and management and practice.

Figure 2.0: Most Relevant Sources of Publication on CV in Retailing

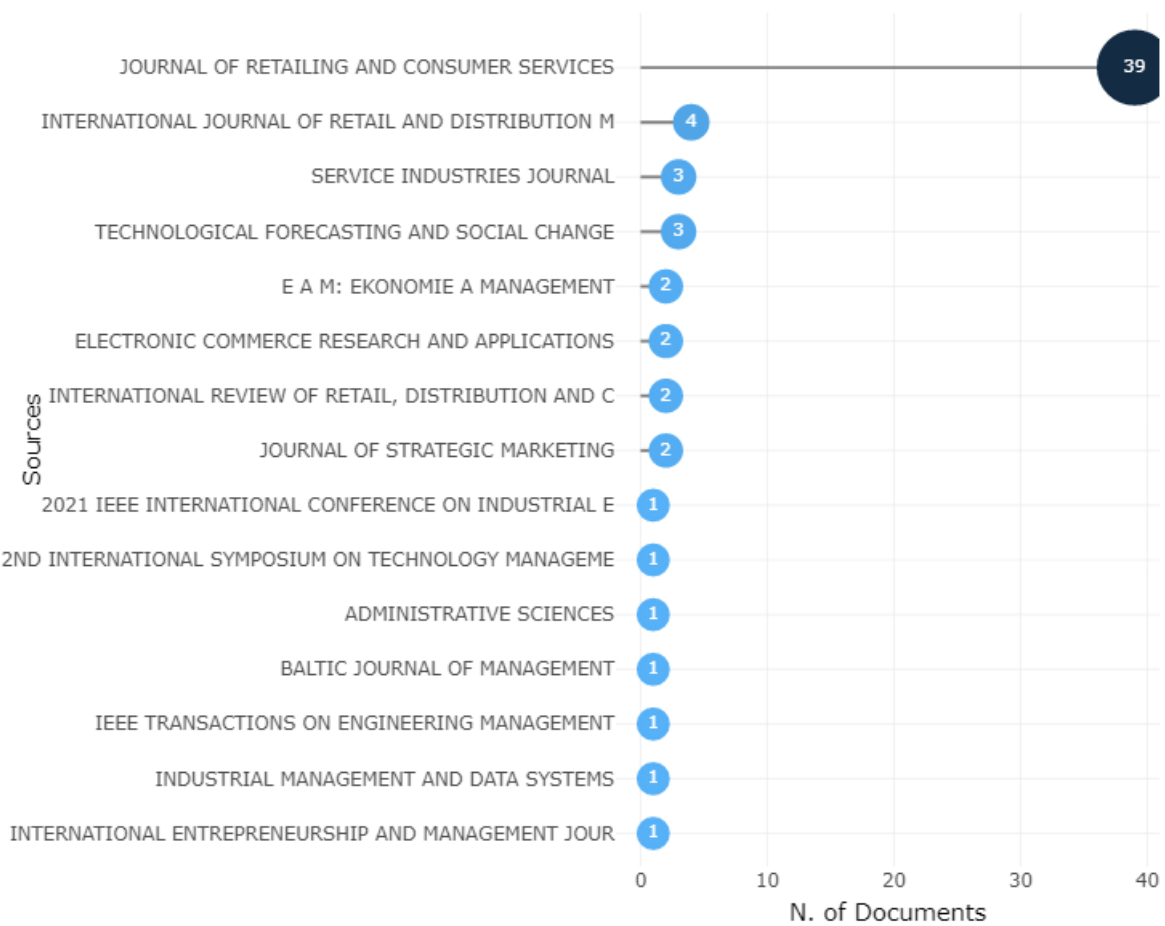


Table 2.0: Most Relevant Sources of Publication on CV in Retailing

Element	h_index	g_index	m_index	TC	NP	PY_start
JOURNAL OF RETAILING AND CONSUMER SERVICES	21	36	1.167	1353	37	2005
INTERNATIONAL JOURNAL OF RETAIL AND DISTRIBUTION MANAGEMENT	4	4	0.5	125	4	2015
SERVICE INDUSTRIES JOURNAL	3	3	0.273	50	3	2012
TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE	3	3	0.5	254	3	2017
E A M: EKONOMIE A MANAGEMENT	2	2	0.143	18	2	2009

ELECTRONIC COMMERCE RESEARCH AND APPLICATIONS	2	2	0.667	6	2	2020
JOURNAL OF STRATEGIC MARKETING	2	2	0.667	34	2	2020
2ND INTERNATIONAL SYMPOSIUM ON TECHNOLOGY MANAGEMENT AND EMERGING TECHNOLOGIES, ISTMET 2015 - PROCEEDING	1	1	0.125	6	1	2015
ADMINISTRATIVE SCIENCES	1	1	0.333	3	1	2020
BALTIC JOURNAL OF MANAGEMENT	1	1	0.5	1	1	2021
IEEE TRANSACTIONS ON ENGINEERING MANAGEMENT	1	1	0.167	20	1	2017
INDUSTRIAL MANAGEMENT AND DATA SYSTEMS	1	1	0.067	114	1	2008
INTERNATIONAL ENTREPRENEURSHIP AND MANAGEMENT JOURNAL	1	1	0.25	15	1	2019
INTERNATIONAL JOURNAL OF INTERNET MARKETING AND ADVERTISING	1	1	0.25	9	1	2019
INTERNATIONAL JOURNAL OF MANAGEMENT PRACTICE	1	1	0.063	18	1	2007
INTERNATIONAL REVIEW OF RETAIL, DISTRIBUTION AND CONSUMER RESEARCH	1	2	0.125	30	2	2015
JOURNAL OF BUSINESS AND RETAIL MANAGEMENT RESEARCH	1	1	0.167	3	1	2017
JOURNAL OF BUSINESS RESEARCH	1	1	0.143	57	1	2016
JOURNAL OF CONSUMER MARKETING	1	1	0.167	34	1	2017
JOURNAL OF EUROMARKETING	1	1	0.05	9	1	2003
JOURNAL OF FASHION MARKETING AND MANAGEMENT	1	1	0.091	113	1	2012
JOURNAL OF HOSPITALITY AND LEISURE MARKETING	1	1	0.063	24	1	2007
JOURNAL OF INTERACTIVE MARKETING	1	1	0.077	59	1	2010
JOURNAL OF INTERNATIONAL FOOD AND AGRIBUSINESS MARKETING	1	1	0.143	3	1	2016
JOURNAL OF OPERATIONS MANAGEMENT	1	1	0.5	1	1	2021
JOURNAL OF SERVICES MARKETING	1	1	0.5	2	1	2021
JOURNAL OF TEXTILE AND APPAREL, TECHNOLOGY AND MANAGEMENT	1	1	0.063	2	1	2007
LONG RANGE PLANNING	1	1	0.2	15	1	2018

MANAGEMENT DECISION	1	1	0.167	17	1	2017
TOURISM MANAGEMENT	1	1	0.083	68	1	2011
TRANSFORMATIONS IN BUSINESS AND ECONOMICS	1	1	0.071	7	1	2009
VIKALPA	1	1	0.059	1	1	2006

### 3.3 Most influential authors:

The most cited authors and their productivity between 2000-2022 year wise in this field is tabled in Table 3.0. Kesari B and Atulkar S (2016) were most influential authors in 2016 (TC-141) and their publication was on influence of utilitarian and hedonic benefits of shoppers in malls in India. Carlson, L., et al (2019) art on how retail customers derive value (functional value, emotional value, relational value and inactivity value) from customer participation

(CP) in social media brand communities was most impactful art in 2019 (TC-63) which shows the evolution of this research field towards web 2.0. Kumar V and Ayodeji, O. G., (2021), TC-11, in their study on online shoppers in India, found that combination of both utilitarian value and hedonistic values influence the repeat purchase intention (loyalty) positively. Hence, the focus of research in this field is moving towards online re tailing and e commerce though the sub topics of cross channel and Omni channel retailing are still relatively unexplored.

Table 3.0: Leading Authors' Productivity over Time

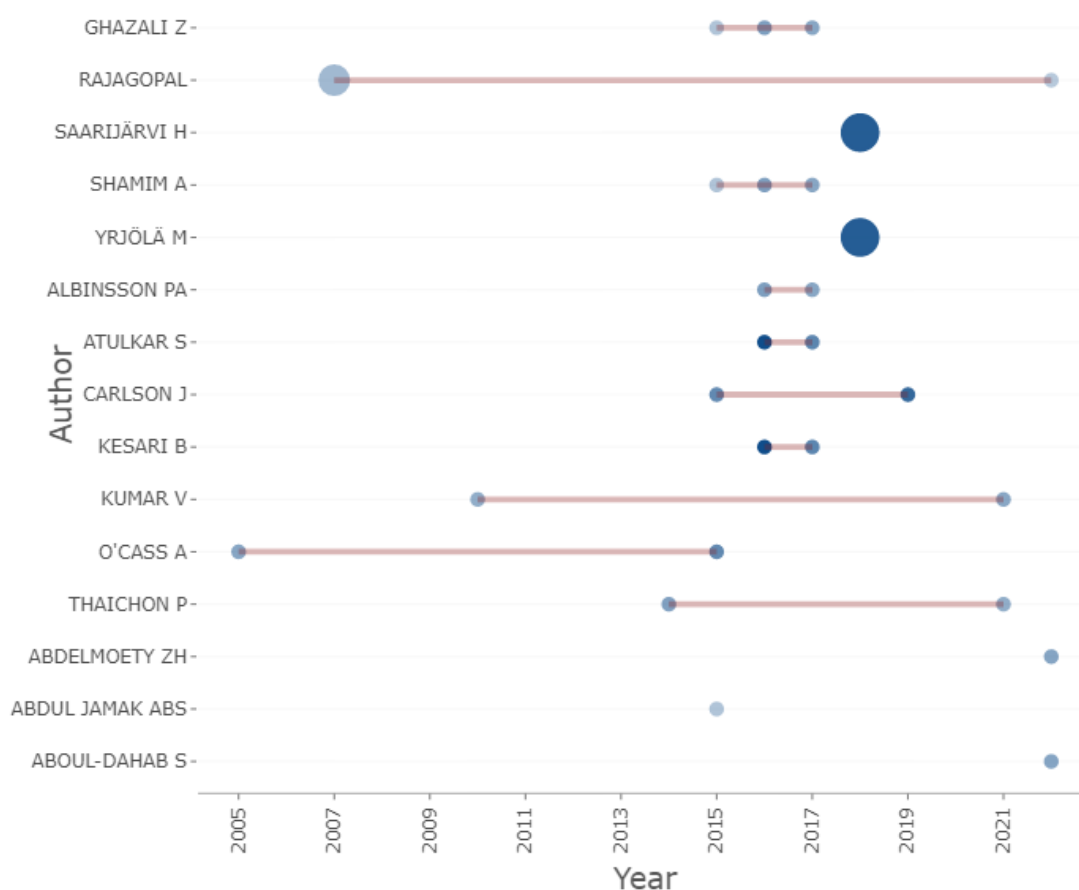
Author	year	freq	TC	TCpY
ABDELMOETY ZH	2022	1	6	6
ABDUL JAMAK ABS	2015	1	6	0.75
ABOUL-DAHAB S	2022	1	6	6
ALBINSSON PA	2016	1	48	6.857
ALBINSSON PA	2017	1	34	5.667
ATULKAR S	2016	1	141	20.143
ATULKAR S	2017	1	66	11
CARLSON J	2015	1	82	10.25
CARLSON J	2019	1	63	15.75
GHAZALI Z	2015	1	6	0.75
GHAZALI Z	2016	1	48	6.857
GHAZALI Z	2017	1	34	5.667
KESARI B	2016	1	141	20.143
KESARI B	2017	1	66	11
KUMAR V	2010	1	59	4.538
KUMAR V	2021	1	11	5.5

O'CASS A	2005	1	104	5.778
O'CASS A	2015	1	82	10.25
RAJAGOPAL	2007	2	42	2.625
RAJAGOPAL	2022	1	0	0
SAARIJÄRVI H	2018	3	88	17.6

Table 3.0 and Figure 3.0 present the authors productivity over the selected time period. Rajagopal, Monterrey Institute of Technology and Higher Education ITESM, Mexico, has been the most consistent contributor from 2006-2021. In his research, he has systematically analysed the dynamics of customer value in relation to

market forces, customer relationship management, and branding and customer loyalty in context of retailing. Yrjölä (TF) and SAARIJÄRVI H (2018) developed and empirically tested value propositions of multi-, cross-, and Omni-channel retailing.

Figure 3.0: Authors Productivity over Time.



### 3.4 Most Productive Affiliating Institutions:

Universiti Teknologi Petronas (UTP), a Malaysian research university and University of

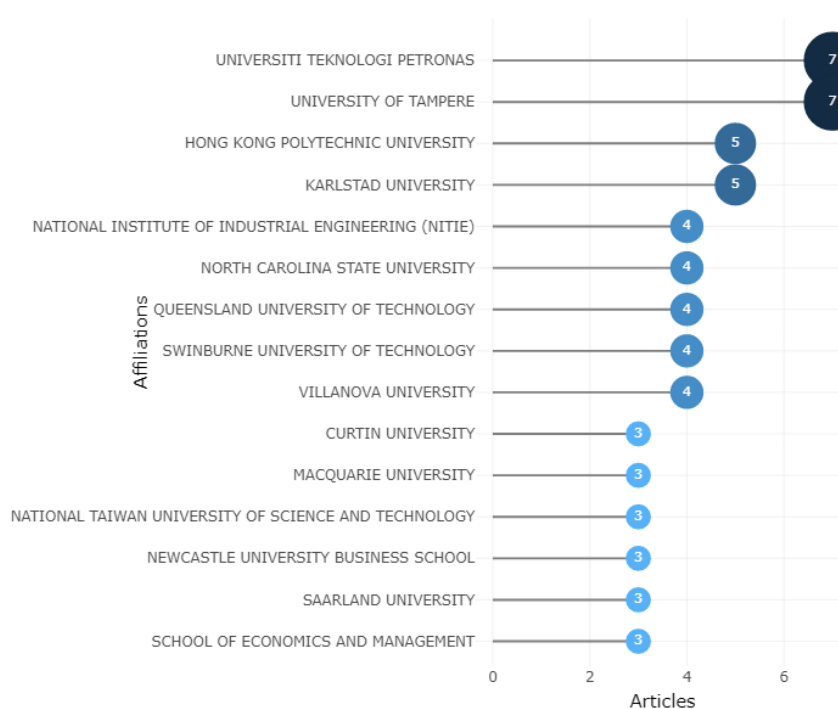
Tempere, Finland are most productive affiliations of corresponding author's with 7 publications each (Figure 4.0). Leading Researchers from UTP, Amjad Shamim et .al., (2016) have studied corporate brand experience

influence on customers’ attitudes towards value co-creation and customer engagement valence (CEV) within the service dominant perspective of value co creation (Vargo and Lusch, 2008). Amjad Shamin and Ghazali Z,(2014), proposed and empirically tested a conceptual model for Customer Value Co-Creation behaviour in retailing.

Pioneering researchers from TF, Timo Rintakani, (TF) has explored the potential dimensions of customer value (utilitarian, social and hedonic value dimensions) and their links to

the shopping experience and retailer performance under multiple perspectives of customer value (i.e. performance attributes, as a trade-off between benefits and costs and as outcome of means-ends chain of customer values and brand features). Yrjölä (TF) contribution has been linked with building a model of value creation in multichannel retailing context. Thus, multiple theoretical conceptualizations and structural operationalization of CV have dominated the research landscape in context of retailing.

Figure 4.0: Affiliations of corresponding authors with most publications of Institutions



### 3.5 Trending Topics:

Table 4.0 provides evidence of research trends in this field based on frequency of authors keywords year wise. The central axis of research has shifted from service sector in 2009 (service sector) to Shopping activity, retailing (2012),

hedonic analysis in 2013, perception ,internet in 2014, marketing in 2014, sales and consumption behaviour (2016,2017) and electronic commerce in 2021. Hence the trend is towards analysis of CV from consumer perspective which is subjective and the context has shifted from retailing to internet and e-commerce

Table 4.0: Frequency of author’s keywords year wise

Item	freq	year_q1	year_med	year_q3
service sector	5	2009	2013	2014
shopping activity	8	2012	2016	2017

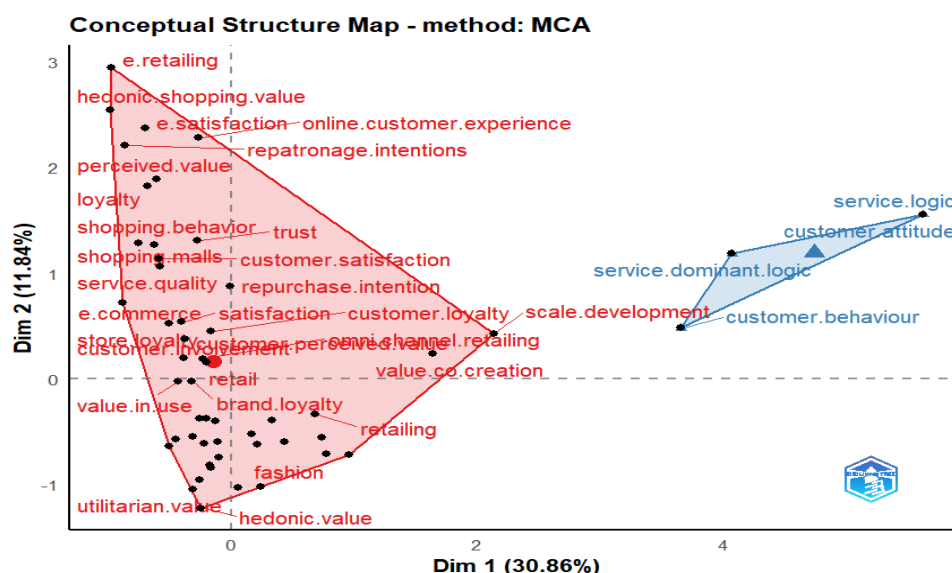


hedonic analysis	6	2013	2016	2020
Retailing	51	2012	2017	2021
Perception	9	2014	2017	2020
Internet	5	2014	2017	2021
consumption behavior	32	2016	2018	2021
Marketing	13	2015	2018	2020
Sales	12	2017	2018	2021
empirical analysis	5	2013	2020	2021
electronic commerce	5	2021	2021	2021

Conceptual structure of research in CV in retailing is evaluated through MCA method of factorial analysis (Figure 5.0). There are two dominant conceptual themes in this field. The first network of keywords ( e-retailing, e-satisfaction, repatronage intentions, perceived value, loyalty, shopping behaviour, scale development, utilitarian value, brand loyalty, trust, shopping malls hedonic value, is oriented towards evaluating the relationship of customer value dimensions (utilitarian and hedonic) with customer outcomes of satisfaction, repurchase

intentions, shopping behaviour, brand loyalty, trust through lens of perceived value, value-in-use and value co creation. The second network of keywords explores how customer attitude and behaviour is impacted through the service dominant logic of value co creation. Thus two dominant conceptual perspectives evident in research on CV in retailing literature are the objective measurable scale of customer value and the subjective, service dominant logic customer value as a result of co creation between customers and retailers.

Figure 5.0: Factorial analysis of keywords plus



#### 4. CONCLUSION:

A Scientometric analysis of CV in retailing (CVR) literature was undertaken using the Scopus database. The findings of the study

identified the trends of 22 years (2000-2022) of CVR research and the publication trends, most influential authors and sources on research in CVR domain and conceptual structure of this

research field was mapped. Consistent growth in CVR research is observed especially in recent years. The most productive and impactful journals are inter disciplinary and the most productive authors in terms of publications are GHAZALI Z, SAARIJÄRVI H with 3 articles each.

## REFERENCES:

- [1] Abdelmoety, Z. H., Aboul-Dahab, S., & Agag, G. (2022). A cross cultural investigation of retailers commitment to CSR and customer citizenship behaviour: The role of ethical standard and value relevance. *Journal of Retailing and Consumer Services*, 64, 102796.
- [2] Atulkar, S., & Kesari, B. (2017). Satisfaction, loyalty and repatronage intentions: Role of hedonic shopping values. *Journal of Retailing and Consumer Services*, 39, 23-34.
- [3] Badrinarayanan, V., Becerra, E. P., Kim, C. H., & Madhavaram, S. (2010). Transference and congruence effects on purchase intentions in online stores of multi-channel retailers: initial evidence from the U.S. and South Korea. *Journal of the Academy of Marketing Science*, 40(4), 539–557. <https://doi.org/10.1007/s11747-010-0239-9>
- [4] Banerjee, M. (2014). Misalignment and Its Influence on Integration Quality in Multichannel Services. *Journal of Service Research*, 17(4), 460–474. <https://doi.org/10.1177/1094670514539395>
- [5] Barrutia, J. M., & Gilsanz, A. (2012). Electronic Service Quality and Value. *Journal of Service Research*, 16(2), 231–246. <https://doi.org/10.1177/1094670512468294>
- [6] Börner, K., Chen, C., & Boyack, K. W. (2005). Visualizing knowledge domains. *Annual Review of Information Science and Technology*, 37(1), 179–255. <https://doi.org/10.1002/aris.1440370106>
- [7] Carlson, J., & O’Cass, A. (2011). Managing web site performance taking account of the contingency role of branding in multi-channel retailing. *Journal of Consumer Marketing*, 28(7), 524–531. <https://doi.org/10.1108/07363761111181518>
- [8] Carlson, J., O’Cass, A., & Ahrholdt, D. (2015a). Assessing customers’ perceived value of the online channel of multichannel retailers: A two country examination. *Journal of Retailing and Consumer Services*, 27, 90–102. <https://doi.org/10.1016/j.jretconser.2015.07.008>
- [9] Carlson, J., Wyllie, J., Rahman, M. M., & Voola, R. (2019). Enhancing brand relationship performance through customer participation and value creation in social media brand communities. *Journal of Retailing and Consumer Services*, 50, 333-341.
- [10] Gera, R., & Pruthi, A. (2021). Customer value in retailing (2000-2020): A narrative review and future research directions. *University of South Florida M3 Center Publishing*, 5(2021), 74.
- [11] Grace, D., & O’cass, A. (2005). An examination of the antecedents of repatronage intentions across different retail store formats. *Journal of retailing and Consumer Services*, 12(4), 227-243.
- [12] Jamak, A. B. S. A., Shamim, A., & Ghazali, Z. (2015, August). Impact of customer citizenship behavior on corporate brand experience. In *2015 International Symposium on Technology Management and Emerging Technologies (ISTMET)* (pp. 193-196). IEEE.
- [13] Kesari, B., & Atulkar, S. (2016). Satisfaction of mall shoppers: A study on perceived utilitarian and hedonic shopping values. *Journal of Retailing and Consumer services*, 31, 22-31.
- [14] Kumar, V., Aksoy, L., Donkers, B., Venkatesan, R., Wiesel, T., & Tillmanns, S. (2010). Undervalued or overvalued customers: Capturing total customer engagement value. *Journal of service research*, 13(3), 297-310.
- [15] Kumar, V., & Ayodeji, O. G. (2021). E-retail factors for customer activation and retention: An empirical study from Indian e-commerce customers. *Journal of Retailing and Consumer Services*, 59, 102399.
- [16] Maity, M., & Dass, M. (2014). Consumer decision-making across modern and traditional channels: E-commerce, m-

- commerce, in-store. *Decision Support Systems*, 61, 34–46. <https://doi.org/10.1016/j.dss.2014.01.008>
- [17] Nalimov, V. V., & Mulchenko, B. M. (1969). *Scientometrics. Studies of science as a process of information. Moscow, Russia: Science.*
- [18] Oh, L. B., Teo, H. H., & Sambamurthy, V. (2012). The effects of retail channel integration through the use of information technologies on firm performance. *Journal of Operations Management*, 30(5), 368–381. <https://doi.org/10.1016/j.jom.2012.03.001>
- [19] Shamim, A., & Ghazali, Z. (2014). A Conceptual Model for Developing Customer Value Co-Creation Behaviour in Retailing. *Global Business & Management Research*, 6(3).
- [20] Shamim, A., Ghazali, Z., & Jamak, A. B. S. A. (2015, August). Extrinsic experiential value as an antecedent of customer citizenship behavior. In *2015 International Symposium on Technology Management and Emerging Technologies (ISTMET)* (pp. 202-206). IEEE.
- [21] Shamim, A., Ghazali, Z., & Albinsson, P. A. (2016). An integrated model of corporate brand experience and customer value co-creation behaviour. *International Journal of Retail & Distribution Management.*
- [22] Shamim, A., Ghazali, Z., & Albinsson, P. A. (2017). Construction and validation of customer value co-creation attitude scale. *Journal of Consumer Marketing.*
- [23] Vakulenko, Y., Hellström, D., & Oghazi, P. (2018). Customer value in self-service kiosks: a systematic literature review. *International Journal of Retail & Distribution Management.*
- [24] Vargo, S. L., & Lusch, R. F. (2008). Service-dominant logic: continuing the evolution. *Journal of the Academy of marketing Science*, 36(1), 1-10.
- [25] Yrjölä, M., Saarijärvi, H., & Nummela, H. (2018). The value propositions of multi-, cross-, and omni-channel retailing. *International Journal of Retail & Distribution Management.*
- [26] Yrjölä, M., Spence, M. T., & Saarijärvi, H. (2018). Omni-channel retailing: propositions, examples and solutions. *The International Review of Retail, Distribution and Consumer Research*, 28(3), 259-276.