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The relationship between e-marketing mix framework (4Ps) and customer satisfaction with electronic information services: An empirical analysis of Jordanian university libraries (2024) *Information Services and Use*, 44 (2), pp. 139-164.

DOI: 10.3233/ISU-240230

Abstract

This study employs Structural Equation Modeling (SEM) using Smart PLS 3.2.9 to offer valuable insight into the relationship between e-marketing mix (4Ps) and customer satisfaction with electronic information services provided by public university libraries in Jordan. The identified primary aspects within the e-marketing mix encompass e-product, e-pricing, e-place, and e-promotion. An online survey (questionnaire) targeting postgraduate student respondents at Jordanian public universities (a total of 792 participants) was used to gather data using a quantitative technique. Participants were chosen using voluntary response sampling. The study's findings revealed that all relevant elements of the e-marketing mix establish significant relationships with customer satisfaction among postgraduate student respondents utilizing e-information services in public university libraries in Jordan. Notably, e-products, e-pricing, and e-promotion demonstrated substantial positive relationships with customer satisfaction. Conversely, there was a negative relationship observed with e-place. The novelty of this study lies in its exploration of the previously unexplored realm of the e-marketing mix framework (4Ps) in the context of customer satisfaction with electronic information services within university libraries in Jordan. © 2024 – The authors. Published by IOS Press.

Author Keywords

customer satisfaction; E-marketing mix; electronic information services; Jordan; university libraries

Index Keywords

Commerce, Costs, Digital libraries, Information services, Libraries, Sales; Customers' satisfaction, E-marketing mix, Electronic information services, Empirical analysis, Jordan, Marketing mix, Postgraduate students, Public universities, University libraries; Customer satisfaction

References

• Pascucci, F., Savelli, E., Gistri, G.

How digital technologies reshape marketing: Evidence from a qualitative investigation

(2023) Italian Journal of Marketing, (1), pp. 27-58.

Alsaudi, S.

(2022) The Status Que of Using Electronic Publishing Tools to Marketing Information Services in Jordanian University Libraries in the Central Region from their Employees Perspectives.

Unpublished Master's Thesis), University of Jordan, Amman, Jordan

Bruce, E., Shurong, Z., Ying, D., Yaqi, M., Amoah, J., Egala, S.B.
 The effect of digital marketing adoption on SMEs sustainable growth: Empirical evidence from Ghana

(2023) Sustainability, 15 (6), p. 4760.

Hoffman, D.L., Moreau, C.P., Stremersch, S., Wedel, M.
 The rise of new technologies in marketing: A framework and outlook

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(2022) Journal of Marketing, 86 (1), pp. 1-6.

• Joshua, D., Michael, D.

Effective marketing techniques for promoting library services and resources in Academic libraries

(2020) Library Philosophy and Practice, (e-journal), 1, pp. 1-30.

Mandrekar, B., Rodrigues, M.C.

Marketing of library and information products and services during covid-19 pandemic: A study

(2020) Library Philosophy and Practice (e-journal), p. 4514. Retrieved from

Gaber, A.F., Abuelmagd, H.A., Ahmed, A.I.

The impact of e-marketing on achieving sustainable competitive advantage among libraries: A case study on Ithraa public library in Dammam-KSA (2021) *Ilkogretim Online*, 20 (3), pp. 2647-2668.

· Arbani. D.

Digital marketing and user satisfaction in library 2.0

(2020) Proceeding of the 8th International Conference on Management and Muamalah (ICoMM), pp. 21-41.

International Islamic University College Selangor, Malaysia

Arbani, D.A., Abdullah, C.Z.

Digital marketing and user satisfaction in library 2.0: A concept and research framework

(2017) International Journal of Academic Research in Business and Social Sciences, 7 (12), pp. 515-522.

• Ubogu, J.O.

E-marketing of library resources and services. Library of progress-library science (2021) *Information Technology & Computer*, 41 (1), pp. 144-154.

Al-Khalidi, M.

Marketing information services in university libraries central library at Al-Qadisiya university model

(2019) Journal of Al-Qadisiya in Arts and Educational Sciences, 19 (3), pp. 307-331.

Alawi, H.

The role of social networks in the development and marketing of information services in Algerian public reading libraries during the corona crisis (2021) The Journal of the Arab Center for Research and Studies in Library and Information Sciences, 8 (15), pp. 3-20.

Bouaziz, E.

(2019) The reality of e-marketing of information in university libraries: A field study at the central library Ahmed Erwa of Prince Abdul Qader Islamic University in Constantine, Unpublished Master's Thesis), University of Guelma, Algeria

. Mohapatra, N.

E-marketing: The library perspective

(2017) International Journal of Library Science and Information Management (IJLSIM), 3 (1), pp. 34-43.

• Shawabkeh, Y., Sultan, E.

Job satisfaction of library staff at public Jordanian university libraries and its relationship to the quality of information services as perceived by them (2019) *Dirasat: Educational Sciences*, 2 (46), pp. 19-45.

Obeidat, O.A.

Evaluation digital library services during COVID-19 pandemic: Using user's experience in academic institution, Jordan (2020) International Journal of Library and Information Science Studies, 6 (3), pp. 39-48.

. Hamshari, O.

The degree of e-resources use by postgraduate students of the faculty of educational sciences at the university of Jordan and the difficulties they face from their perspective

(2018) Zarga Journal for Research and Studies in Humanities, 19 (1), pp. 132-147.

Al-Sherman, A.B.

The Hashemite university library: Originality, contemporary and challenges: Working in light of the coronavirus pandemic as an example (2020) *Jordan Journal of Libraries and Information*, 55 (3), pp. 63-70.

- Al Zyoud, H.
 (2022) Status Quo of Information Services Provided by Governmental University Libraries in Jordan During the Corona Pandemic From their Employees Point of View, Unpublished Master's Thesis), University of Jordan, Amman, Jordan
- Elayyan, R., Al Zyoud, H., Elfadel, M.
 Difficulties in providing e-information services in public academic libraries in Jordan during the corona pandemic from their employees point of view (2022) The Saudi Journal of Library and Information Studies, 1 (1), pp. 167-215.
- Algnaidi, A.I.A., Tarofder, A.K., Azam, S.F.
 The impact of trust on e-marketing and customer satisfaction in the commercial banks of a developing country
 (2021) Psychology and Education, 58 (1), pp. 2602-2614.
- Bader, D.M., Aityassine, F.L., Khalayleh, M.A., Al-Quran, A.Z., Mohammad, A., Al-Hawary, S.I.

The impact of e-marketing on marketing performance as perceived by customers in Jordan

(2022) Information Sciences Letters, 11 (6), pp. 1897-1903.

- Alkufahy, A., Al-Alshare, F., Qawasmeh, F., Aljawarneh, N., Almaslmani, R.
 The mediating role of the perceived value on the relationships between customer satisfaction, customer loyalty and e-marketing
 (2023) International Journal of Data and Network Science, 7 (2), pp. 891-900.
- Manaf, P.A., Rachmawati, I., Witanto, M., Nugroho, A.
 E-satisfaction as a reflection of e-marketing and e-sequal in influencing e-loyalty on e-commerce
 (2018) International Journal of Engineering & Technology, 7 (4), pp. 94-98.
- Al-Zyoud, M.F., Al-Mu'ani, L.A., Alsoud, M., Alsoud, A.
 The role of TQMk in increasing the effectiveness of e-marketing within the Jordanian telecommunication sector
 (2021) Journal of Theoretical and Applied Electronic Commerce Research, 16 (5), pp. 1353-1368.
- Mahjabi, I., Al-Marous, A.
 The problem of using the applications of web 2.0 in marketing information services in the central academic library of the university of Algiers

 (2018) Annals of the University of Algiers
 (32), pp. 143-164.
- Ben Amira, A.A.
 Information services in university libraries and marketing tools in the electronic environment between opportunities and challenges

(2018) Arab Federation for Libraries and Information Journal (AFLI) (IALAM), (22), pp. 235-263.

• Alamro, H.

(2021) The Impact of E-Marketing on Competitive Advantage and the Roles of Social Influence and Marketing Innovation,

Unpublished Doctoral Dissertation), University Putra, Malaysia

Neves, B.

Conceptual approach and possibilities of digital marketing: The social media strategist librarian

(2018) Brazilian Research in Information Science and Library Science, 13 (1), pp. 214-225.

Sahu, L., Deb, S., Mazumder, S.

E-marketing of information and services in libraries: Tools and applications (2018) International Journal for Research in Engineering Application & Management (IJREAM), pp. 27-30.

Special ICFPI

Aloysius, D., Awa, P., Aquaisua, A.

E-marketing of library resources and patronage by students in university libraries of Akwa Ibom State, Nigeria

(2019) Library Philosophy and Practice (E-Journal), pp. 1-18.

 Kotler, P., Keller, L.K. (2016) Marketing Management, 15th ed. Pearson Education, New Jersey

 Kotler, P., Armstrong, G. (2017) Principles of Marketing, 14th ed. Pearson Education International, UK

 Heckman, P.E., Vestergaard, A.J., Sole, K.M. Guiding principles model: A call to integrate the 4 Ps into a strategic construct (2018) Journal of Marketing Development and Competitiveness, 12 (4), pp. 60-68.

• Booms, B.H., Bitner, M.J.

Marketing strategies and organization structures for service firms (1981) Marketing of Services, pp. 47-51. American Marketing Association, Chicago

Rakiq, S., Ezzedine, A.

Recent trends in e-marketing mix under the new digital age (2021) Al-Badeel Economic Journal, 3 (5), pp. 380-397.

· Lamrous, A., Mehadjbi, A.

E-marketing for academic's libraries services: A model of the central library of the university of Amohamed Bouguerra Boumerdes

(2019) Bibliophilia Journal of Library and Information Studies, 1 (3), pp. 35-56.

• Do, Q., Vu, T.

Understanding consumer satisfaction with railway transportation service: An application of 7Ps marketing mix

(2020) Management Science Letters, 10 (6), pp. 1341-1350.

Loo, P.T., Leung, R.

A service failure framework of hotels in Taiwan: Adaptation of 7Ps marketing mix elements

(2018) Journal of Vacation Marketing, 24 (1), pp. 79-100.

- Abedian, M., Amindoust, A., Maddahi, R., Jouzdani, J.
 A game theory approach to selecting marketing-mix strategies
 (2022) Journal of Advances in Management Research, 19 (1), pp. 139-158.
- Al-Habbari, S.G.

E-marketing of information services in Yemeni private university libraries in Sana'a City

(2023) Arab Journal of Sciences & Research Publishing (AJSRP), 9 (2), pp. 114-136.

. Morsi, N.

The reality of marketing information services at public libraries through social networks: In public libraries through social networks: Elzawya Elhamra Public Library in Cairo is a model

(2019) Research Journal on Library Science and Information, Cairo, 23 (23), pp. 257-297. University

- Gamit, R., Patel, J., Patel, B.
 Innovative digital marketing strategies of academic library services in global era
 (2021) International Journal of Research in Humanities and Social Sciences, 9 (9), pp. 30-43.
- Onwuekwe, N.C.

The marketing of the information products and services in the libraries (2022) *Library Philosophy and Practice (e-journal)*, p. 7019. Retrieved from

• Fatmawati, E.

Library experiential marketing strategy as a means of increasing library satisfaction in the use of e-resources during the Covid-19 pandemic (2021) *International Journal of Science and Society*, 3 (4), pp. 72-84.

- Yusree, A.F., Husaini, H., Md Aziz, S.H., Rambli, Y.R.
 Systematic literature review on the adaptation of marketing practices in providing information services to UiTM students for COVID 19

 (2022) Journal of Information and Knowledge Management (JIKM), 1, pp. 171-181.
- Fraser-Arnott, M.
 The marketing mix in parliamentary library websites
 (2020) Journal of Library Administration, 60 (8), pp. 875-888.
- Widyastuti, A.N., Pujiharto, P., Tubastuvi, N., Santoso, S.B. **The effect of marketing mix on purchase decisions** (2020) *Journal Management Basins*, 11 (2), pp. 163-176.
- Anh, N.D.

(2019) Marketing mix strategy for New Island bar of La Belle Vie hotel in Ha Long Bay, Unpublished Master's Thesis), Satakunta University of Applied Sciences, Stakeman, Finland

Nabila, J., Erlianti, G.
 Strategic marketing planning for services at the library of University Negeri Padang (2021) 4th International Conference on Language, Literature, and Education (ICLLE), pp. 142-151.
 Atlantis Press

Matura, P., Mbaiwa, J., Mago, S.

Marketing mix strategies of small and medium tourism enterprises in Masvingo Province, Zimbabwe

(2021) Marketing, 10 (3), pp. 1025-1047.

Gohel, N.B.

Marketing of library in the age of social media and the digital world. Towards excellence: An indexed, refereed & peer reviewed (2021) *Journal of Higher Education*, 13 (2), pp. 664-674.

Segun-Adeniran, C.D., Olawoyin, O., Lawal-Solarin, E.
 Marketing of library and information services in a digital age: Application of the marketing mix: A case study of two private universities in Ogun and Osun State (2019) Library Philosophy and Practice (e-journal), pp. 28-76.
 Retrieved from

. Egharevba, E.

Users' satisfaction with ICT-based resources and services in university libraries: A study of Igbinedion university library, Okada, Edo State, Nigeria (2018) Covenant Journal of Library and Information Science (CJLIS), 1 (1), pp. 51-62.

- Saidani, B., Sudiarditha, K.R.
 Marketing mix-7ps: The effect on customer satisfaction
 (2019) Journal Pendidikan Ekonomi & Bisnis, 7 (7), pp. 72-86.
- Razak, I., Nirwanto, N., Triatmanto, B.
 The impact of product quality and price on customer satisfaction with the mediator of customer value
 (2016) Journal of Marketing and Consumer Research, 30 (1), pp. 59-68.
- Hassan, H., Alassouli, A.
 The impact of e-marketing strategy upon customer satisfaction An applied study on Mazaj Company for public trade
 (2020) The First International Conference in Information Technology and Business (ICITB), pp. 1-29.
 Gaza University (GU) and Universiti Teknologi Malaysia (UTM), Palestine & Malaysia,
- Tirtayasa, S., Syahrial, H., Nasib, S., Nofriza, B.
 The effect of market orientation and product innovation on performance-mediated competitive advantage marketing (case study of MSME boutiq women in medan market center)
 (2022) International Journal of Applied Finance and Business Studies
 (IJAFIBS), 10 (1), pp. 23-30.
- Almugari, F., Khaled, A.S., Alsyani, M.K., Al-Homaidi, E.A., Qaid, M.M.
 Factors influencing consumer satisfaction toward online shopping: A special reference to India context
 (2022) International Journal of Procurement Management, 15 (2), pp. 236-256.
- Cai, R., Chi, C.G.Q.
 The impacts of complaint efforts on customer satisfaction and loyalty (2018) The Service Industries Journal, 38 (15-16), pp. 1095-1115.
- Sopyan, A., Febrian, W.D., Sani, I., Sari, A.R., Sarinastiti, N., Firdiana, A.
 Strategy to increase e-customer loyalty through e-customer satisfaction in e-commerce business in Indonesia
 (2023) Scandinavian Journal of Information Systems, 35 (1), pp. 38-46.
- Alqudah, O.
 The influence of e-marketing mix strategy on organizational performance: An empirical analysis of Jordanian Smes
 (2023) International Journal of Professional Business Review, 8 (6), p. 2243.
- Afandi, B., Parhusip, A.A.
 The effect of 4p marketing mix on satisfaction J&T Express Saentis Service Users,

Medan Branch

(2023) Journal Multidiscipline Shambu, 3 (1), pp. 35-45.

Kibebsii, N., Egwu, B., Ntangti, C.

The influence of service and product quality on customer satisfaction: A study of UBA-Ventures PLC Bambili, Cameroon

(2023) Journal of Business and Strategic Management, 8 (3), pp. 80-90.

Al-Sukar, A.S., Alabboodi, A.S.

The impact of E-marketing mix elements on chain stores performance in Jordan (2020) *IJAR*, 6 (11), pp. 106-112.

Nasib, N.

The role of customer satisfaction in mediating the relationship between service quality and price on costumer loyalty

(2021) Enrichment: Journal of Management, 12 (1), pp. 400-411.

Arizal, N., Listihana, W.D., Nofrizal, N.

The effect of marketing mix on satisfaction and its impact on hotel customer loyalty in Pekanbaru-Riau

(2018) Proceedings of the First Padang International Conference on Economics Education, Economics, Business and Management, Accounting and Entrepreneurship (PICEEBA), pp. 395-403.

Atlantis Press

Erdem, O., Tufan, S.

The impact of pricing strategies on firm performance: Evidence from SMEs in Turkey

(2019) Journal of Business Economics and Finance, 8 (3), pp. 481-489.

Othman, B., Harun, A., Sadq, Z.M., Rashid, W.N., Abdullah, K.M., Mohammed, H.O.
 Effects of service marketing mix on umrah customer satisfaction: Empirical study on umrah traveling industry in Malaysia
 (2020) TEST Engineering and Management, 83, pp. 22895-22909.

March-April

• Muhaimin, A.W., Yapanto, L.M.

Marketing strategy based on analysis of marketing mixture on consumer purchase decisions in the area of Dermo Café Coffee, Malang, Indonesia (2020) TEST Engineering and Management, 83, pp. 16174-16182.

May–June

Elgarhy, S.D., Mohamed, L.M.

The influences of services marketing mix (7ps) on loyalty, intentions, and profitability in the Egyptian travel agencies: The mediating role of customer satisfaction

(2022) Journal of Quality Assurance in Hospitality & Tourism, 24 (6), pp. 782-805.

• AL-Zu'bi, K.N.

The effect of e-marketing on the competitiveness of tourism firms: an applied study on Jordanian tourism firms during corona (Covid-19) pandemic situation (2022) *Indian Journal of Economics and Business*, 20 (1), pp. 237-257.

Mohammad, H.I.

7ps marketing mix and retail bank customer satisfaction in Northeast Nigeria (2015) *British Journal of Marketing Studies*, 3 (3), pp. 71-88.

Khumnualthong, P.

(2015) The Effects of Service Marketing Mix (7Ps) on Customer Satisfaction and Customer Loyalty of Medical Aesthetic Clinics,

Unpublished Master's Thesis), University of the Thai Chamber of Commerce, Thailand

- Basnet, A., Sherpa, L., Del Cid, J.H.
 Examining Coupang's customer satisfaction among international students at Kyungsung University in Busan, South Korea-Analyzing the impact of the contemporary marketing mix (7Ps)
 (2023) The Journal of Industrial Innovation, 39 (2), pp. 171-180.
- Suyono, S., Lestari, D.A., Rusilawati, E., Kudri, W.M., Renaldo, N.
 Marketing mix on customer satisfaction at the tax consulting office Dr. Sudarno,
 S.Pd., M.M., BKP and colleagues Pekanbaru
 (2023) Journal of Applied Business and Technology, 4 (3), pp. 198-213.
- Sabir, R.I., Irfan, M., Akhtar, N., Pervez, M.A., ur Rehman, A.
 Customer satisfaction in the restaurant industry; examining the model in local industry perspective
 (2014) Journal of Asian Business Strategy, 4 (1), pp. 18-31.
- Cheng, C.C., Chiu, S.I., Hu, H.Y., Chang, Y.Y.
 A study on exploring the relationship between customer satisfaction and loyalty in the fast-food industry: With relationship inertia as a mediator (2011) African Journal of Business Management, 5 (13), pp. 5118-5126.
- Al-Dwairi, R., Al-Majali, A., Al-Adwan, A., Al-Dmour, R.
 The impact of online distribution channels on small and medium-sized enterprises' performance in Jordan: An empirical study

 (2018) Journal of Research in Business, Economics, and Management, 8 (2), pp. 868-876.
- Altay, B.C., Okumus, A., Adıguzel Mercangoz, B.
 An intelligent approach for analysing the impacts of the COVID-19 pandemic on marketing mix elements (7Ps) of the on-demand grocery delivery service (2022) Complex & Intelligent Systems, 8 (1), pp. 129-140.
- Mishbakhudin, M., Aisyah, M.
 The e-marketing mix strategy of Tokopedia Salam during the Covid-19 pandemic (2022) International Research Journal of Business Studies, 14 (3), pp. 215-227.
- Kadhim, F.A., Abdullah, T.F., Abdullah, M.F.
 Effects of marketing mix on customer satisfaction empirical study on tourism industry in Malaysia
 (2016) International Journal of Applied Research, 2 (2), pp. 357-360.
- Al-Shbiel, D.M., Siam, I.
 The effect of marketing mix elements on competitive advantage: An empirical study of Jordanian pharmaceutical companies
 (2018) International Journal of Business and Management, 13 (5), pp. 114-124.
- Ben Shanina, K., Mattai, A.
 The extent to which electronic banking marketing contributes to achieving the competitive advantage of banking institutions in Algeria
 (2019) Journal of Accounting and Financial Studies, 14 (47), pp. 500-540.

Sanny, L., Marselli, D., Effandi, R., Simek, L.

- The impact of instagram e-marketing in SME Fashion Industry on customer satisfaction (2021) 2021 International Conference on Software Engineering & Computer Systems and 4th International Conference on Computational Science and Information Management (ICSECS-ICOCSIM), pp. 43-46.
- Esan, A.O., Adeyemi, I.O.
 Influence of marketing on use of library services by postgraduate students in

selected federal universities in Nigeria

(2022) Library Philosophy and Practice (E-Journal), p. 6954.

• Otuu, F.O., Unegbu, V.E.

Marketing strategies and use of library information services in academic libraries in Lagos State, Nigeria

(2022) Information Impact: Journal of Information and Knowledge Management, 13 (1), pp. 10-24.

. Haftu, W.

(2019) The Effect of Marketing Mix Tools on Customer Satisfaction Case study for Wegagen bank,

Unpublished Master's Thesis), Addis Ababa University, Addis Ababa

Alam, M.J., Mezbah-Ul-Islam, M.

Impact of service quality on user satisfaction in public university libraries of Bangladesh using structural equation modeling

(2023) Performance Measurement and Metrics, 24 (1), pp. 12-30.

Krejcie, R.V., Morgan, D.W.

Determining sample size for research activities

(1970) Educational and Psychological Measurement, 30 (3), pp. 607-610.

- Hair, J.F., Jr, Matthews, L.M., Matthews, R.L., Sarstedt, M.
 PLS-SEM or CB-SEM: Updated guidelines on which method to use
 (2017) International Journal of Multivariate Data Analysis, 1 (2), pp. 107-123.
- Comrey, A.L., Lee, H.B.
 (2013) A First Course in Factor Analysis,
 Psychology Press, London
- Ramayah, T., Hwa, C.J., Chuah, F., Ting, H., Memon, M.A.
 (2018) Partial Least Squares Structural Equation Modeling (PLS-SEM) using smartPLS
 3.0. An Updated Guide and Practical Guide to Statistical Analysis,
 Pearson Singapore, Singapore
- Field, A.

(2013) Discovering Statistics Using IBM SPSS Statistics, Sage Publications, Inc, London

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Publisher: IOS Press BV

ISSN: 01675265 CODEN: ISUSD

Language of Original Document: English **Abbreviated Source Title:** Inf Serv Use

2-s2.0-85197885560

Document Type: Article

Publication Stage: Final

Source: Scopus

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