

Factors influencing Behavioural intention to the usage of SBI YONO app

By

Thasleena. N

Research Scholar, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore-43

Email: 20phbap006@avinuty.ac.in,9747248960

CMA Dr.Apankajam

Associate Professor, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore-43

Email: pankajam_mba@avinuty.ac.in,9843036699

Abstract

Digital banking involves digitizing traditional banking products, processes, and activities through online channels available 24/7 on electronic devices like mobile phones, computers, and compatible smart devices, withoutcustomer's presence in the bank. Mobile banking helps the customer to perform all the financial transactions with the help of a mobile phone. Digital India, Covid 19 and the emergence of different mobile apps are the prime factors that helped to increase mobile banking usage. SBI YONO is an integrated mobile banking platform introduced by SBI to enable users to perform all their financial activities without visiting the bank. The important objective of the study is to find out the various factors influencing the behavioral intention to use the SBI YONO app. It also analyses the effects of those factors on the intention to use. The data used from both primary and secondary sources. The questionnaire was distributed to 180 customers, and 126 responses were received. Percentage, correlation analysis, and multiple regression analyses are used for the data. The research was undertaken with the help of SPSS. The findings indicate that the variables like awareness, performance expectancy, perceived trust, price value, and service quality are the significant factors influencing the intention to use the SBI YONO app. The study finds that the variables have a moderate positive relationship with the behavioural intention to use.

Keywords: YONO App, Digital Banking, Mobile Banking, Awareness, perceived trust, Behavioural intention to the usage

Introduction

Mobile banking is a part of digital banking conducted through mobile phones. This system helps people to save time, money, and extra effort. Only a smartphone with a stable internet connection is needed to use this mobile banking. One can control all of his banking activities through a single mobile application. This system gained popularity during the peak of COVID-19, which made the use of mobile banking services inevitable. **SBI YONO**, which stands for **You Only Need One**, is a digital banking app offered by the SBI which gives a solution for banking, lifestyle, insurance, investment, and shopping needs. YONO provides mobile banking services including bank account opening, cashless bill payments, fund transfers, loans etc. Using this one can make withdraw money without using any ATM card. YONO is an app used in Android and iOS that IBM developed in December 2017. This app is available on Google play. Any customers who

Published/ publié in *Res Militaris* (resmilitaris.net), vol.12, n°6, Winter 2022

Social Science Journal

are having SBI account can use this. Instant account opening, paperless transactions, fund transfer via UPI, spend analysis, transfer of funds, OD facility, etc.. are some of the features of the YONO app. This study helps to determine the various factors influencing the usage of the YONO app.

Literature Review

Dr. Raju Guguloth (2021), in his article, evaluates the customer perception of the SBI YONO mobile application. He estimates the satisfaction level of respondents in terms of account opening, loan application, and voice-assisted transactions. The result indicates that about 82% of respondents are delighted with account opening with YONO. The study also proves that 71 % of the respondents have a high opinion of the YONO loan mobile application, and only 52% are satisfied with the voice-assisted transaction. The study also suggests implementing a feedback and grievance handling system for online banking at the branch level.

Burra B, Ramana K (2020), in her article, compares the customer perception towards SBI YONO and other mobile banking services. He examines that most of the respondents are satisfied with mobile banking applications. The study reveals that SBI e-pay, SBI anywhere, and SBI Friend are the most favored applications. SBI Yono and SBI quick are the least desired apps. The study also proves that gender and usage in mobile banking systems have a positive relationship.

Vijaya Kittu Manda, Satuluri Subhadra Shashi Rekha, and Dr. Aruna Polisetty (2020), in their article, evaluate the services of SBI YONO app. They consider the features of SBI YONO and provide suggestions based on the end user experiences and requirements. The study finds that YONO is a mobile app used on smartphones and desktops. The customer can view their account details and access their passbooks without entering into the app. It is a large marketplace that helps the customer to make quick payments, book tickets, etc... This app also possesses the innovative spending feature, which automatically tags and categorizes transactions and provides analytical insights.

Seok Kang (2014) conducted a web-based survey based on motivational communication theory and the TAM model. The results show that easiness is the crucial factor influencing mobile app use. Entertainment, social utility, and communication are the other factors that lead to continuous usage.

Mohammed Rokibul Kabir(2013), in his article, discusses the factors influencing the usage of mobile banking. Perceived Risk, Trust, Convenience, and Relative Advantage are the four major factors that influence usage. Factors like performance risk, security/privacy risk, time risk, social risk, and financial risk have a negative relationship with the usage of mobile banking apps. The researcher also finds a positive relationship between trust and usage. The study analyses that social risk has no relationship with usage.

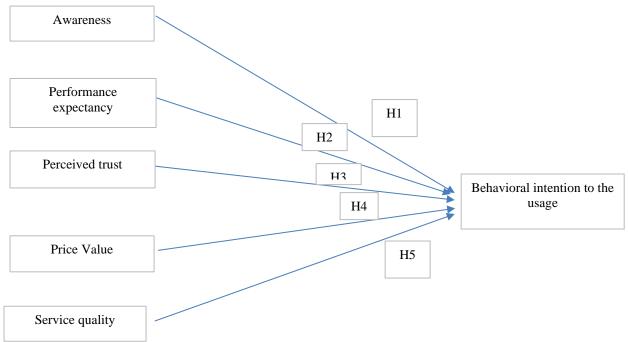


Figure 1: Conceptual framework

Objectives

- 1. To assess the various factors influencing the behavioral intention to usage of SBI YONO app
- 2. To analyze the effects of factors towards the behavioral intention to usage of SBI YONO app.

Research Hypothesis and Methodology

- 3. The primary data is collected via a Google form using a questionnaire method. Articles, research papers, websites, etc., are all secondary sources of information. The research sample consisted of 126 digital bank customers who were selected by using a simple random sampling method. An analysis was conducted by means of the Simple Percentage, Correlation, and multiple regression methods.
- 4. H1: There is a positive relationship between Awareness and behavioral intention to the Usage.
- 5. H2:A positive relationship exists between performance expectancy and behavioral intention to Usage.
- 6. H3: There exists a positive relationship between perceived trust and behavioral intention to Usage.
- 7. H4: A positive relationship exists between price value and behavioral intention to usage
- 8. H5: A positive relationship is there between service quality and behavioral intention to usage

Findings and Results

9. Various measures such as Simple Percentage, correlation and multiple regression are used for analysis. The collected data were examined with a statistical software program, namely the Statistical Package for Social Research (SPSS).

Simple percentage

Table 1: Percentage Analysis

Sl	Scale	Customer	Performance	Perceived	Drigo voluo	Service quality	
no	Scale	Awareness	expectancy	trust	Trice value		
1	Strongly Agree	44.20	26.18	27.38	19.05	20.63	
2	Agree	26.87	36.68	43.27	39.70	38.00	
3	Neutral	18.40	32.38	28.17	38.07	30.23	
4	Disagree	7.81	4.28	1.18	3.18	11.13	
5	Strongly Disagree	2.71	0.48	0.00	0.00	0.00	
Total		100	100	100	100	100	

Table 1 indicates that 44.2% strongly agree, 26.87% agree and 18.40% have a neutral opinion that they are aware to open the account, to transfer the money, to pay the bills and to book tickets. It also shows that 26.18% strongly agree, 36.68% agree and 32.38% have a neutral opinion about its usefulness, effectiveness and productivity.27.38% strongly agree, 43.27% agree and 28.17% have neutral opinion that YONO is a trustworthy ,safe and reliable software. 19.05% strongly agree, 39.70% agree, and 38.07% have a neutral opinion that YONO involves reasonable cost and provides value service. 20.63% strongly agree, 38% agree and 30.23% have a neutral opinion that they are satisfied with YONO service as it provides excellent and high quality services.

Table 2: Correlation analysis

Sl. No.	Hypotheses	Coefficient of correlation	Interpretation
1	There exists a positive relationship between Awareness and behavioral intention to Usage	0.532	Moderate positive correlation
2	A positive relationship exists between performance expectancy and behavioral intention to the Usage	0.530	Moderate positive correlation
3	There exists a positive relationship between perceived trust and behavioral intention to Usage	0.515	Moderate positive correlation
4	There exists a positive relationship between price value and behavioral intention to the usage	0.344	Moderate positive correlation
5	A positive relationship exists between service quality and behavioral intention to usage	0.617	Moderate positive correlation

The table 2 shows the correlation analysis of variables like awareness, performance expectancy, perceived trust, price value and service quality towards the behavioral intention to usage of SBI YONO App. All variables have a moderate positive correlation with the behavioral intention to the usage.

Table 3: *Model Summary*

Model		R	R Square	Adjusted R Square	Std. Error of the Estimate		
	1	0.725 ^a	0.526	0.506	2.65099		
a. Predictors: (Constant), awareness, performance expectancy, perceived trust, price value							

and service quality

Source: Survey Data

The table 3 demonstrates that the estimation of R Square equals .725, showing that 72.5 % of the variations in the behavioral intention to usage is influenced by the five independent variables (consumer awareness, performance expectancy, perceived trust, price value and service quality).

 Table 4: Coefficients

	Model		ndardized efficients	Standardized Coefficients	Т	Sig.
		В	Std. Error	Beta		
	(Constant)	5.722	1.512		3.784	0.000
	Awareness	0.182	0.052	0.305	3.486	0.001
1	Performance expectancy	0.408	0.085	0.434	4.809	0.000
	Perceived trust	-0.230	0.115	-0.254	-2.011	0.047
	Price value	-0.091	0.121	-0.065	-0.755	0.452
	Service quality	0.659	0.124	0.464	5.310	0.000
a Dependent Variable: Behavioral						

a. Dependent Variable: Behavioral

intention to the usage

Source: Survey Data

The above coefficient table indicate that Perceived trust (-0.230) and price value (-0.91) are negatively related with behavioral intention to usage. The other variables like awareness (0.182), Performance expectancy and service quality (0.659) are positively related to the behavioral intention to usage. It can also be seen that service quality (0.464) has a higher influence on intention to usage comparing with the standardized coefficients of other variables. The results indicate that the awareness, performance expectancy and service quality significantly influence the behavioral intention to usage as the p values for their coefficients is 0.000. The significant values of perceived trust (0.047) and price value (0.452) indicates that they don't have effect on intention to usage.

Findings and Suggestions

The study conducted among 126 digital banking customers. The study finds that Customer awareness, performance expectancy, perceived trust, price value and service quality are the major factors influencing behavioural intention to usage of SBI YONO app. The analysis finds that more than 70% of the customers are aware to transfer the funds, open the account, pay bills, book tickets and online purchase using SBI YONO. More than 62% customers agrees that it is very helpful for doing transactions from anywhere at anytime and they find it as a useful app in their daily life. More than 60% of the customer consider it as a trustworthy and reliable app for doing safe transactions. 58 % of the respondents consider this

Social Science Journal

app is worth of money. About 58% agree that YONO provides excellent and high quality services. Pearson Correlation coefficient was used to examine the relationship between the variables. All the variables like awareness, performance expectancy, price value, perceived trust and service quality have a moderate positive correlation with the behavioural intention to usage. The results indicate that the awareness, performance expectancy and service quality significantly influences the behavioural intention to usage. Perceived trust and Price value don't have effect on intention to usage .In order to increase the usage awareness should be created among the customers regarding its features and benefits. Some customers opines that YONO is not that much trustworthy. So bank need to create a trust among the users and they need to reduce the charges for transitions to increase the frequency of usage.

Conclusion and scope for future study

YONO is an integrated digital platform which help the customers for doing digital transactions. They only need to download the software from play store. It can be used to transfer money, pay the bills, book tickets and, online purchase. Data collected from 126 respondents to identify the factors influencing behavioral intention to usage of SBI YONO. Awareness, performance expectancy, perceived trust, price value and service quality are the major factors influencing behavioral intention to usage. All these variables have a moderate positive correlation with behavioral intention to usage of YONO. Majority of the respondents are aware about its features and transactions. Most of them find the app as a useful one which help them for day today transactions. They finds the app as a reliable one which provides high quality and excellent service. Some of them opines the app as a trust worthy one which values the price. The study helps the bank to identify the awareness, performance expectancy, trust and intention of customer towards usage. Bank need to create an awareness to increase the usage. They have to reduce the cost of transaction and need to increase the trustworthiness of the app. The study only considered awareness, performance expectancy, perceived trust, price value and service quality. There are many other variables which affects the usage and can be considered for future study.

Reference

- Burra, B., & Ramana, K. v. (n.d.). A Comparative study between customer perceptions towards SBI YONO and other mobile banking services.
- Girancourt, F. J., Kuyoro, M., Ofosu-Amaah, N. A., Seshie, E., & Twum, F. (2020, June 4). How the COVID-19 crisis may affect electronic payments in Africa | McKinsey. McKinsey & Company; McKinsey & Company. https://www.mckinsey.com/industries/financial-services/our-insights/how-the-covid-19-crisis-may-affect-electronic-payments-in-africa
- Guguloth, R. (2021). Consumer perception towards SBI YONO mobile application -An evaluation. In Peer Reviewed and Refereed Journal (Issue 10). http://ijmer.in/pdf/e-certificate%20of%20Publication-IJMER.pdf
- Kabir, M. R. (2013). Factors Influencing the Usage of Mobile Banking: Incident from a Developing Country Sustainable Development View project Corporate Social Responsibility Reporting Practices by Listed Multinational Companies in Bangladesh View project Factors Influencing the Usage of Mobile Banking: Incident from a Developing Country. In World Review of Business Research (Vol. 3, Issue 3). https://www.researchgate.net/publication/316582190
- Kang, S. (2014). Factors influencing intention of mobile application use. In Int. J. Mobile Communications (Vol. 12, Issue 4).

- Kittu Manda, V., & Rekha, S. (n.d.). YONO: "THE ONE" Digital Banking App of State Bank of India. https://doi.org/10.17605/OSF.IO/CPXR4
- Kulińska-Sadłocha, E., Marcinkowska, M., & Szambelańczyk, J. (2020). The impact of pandemic risk on the activity of banks based on the Polish banking sector in the face of COVID-19. Bezpieczny Bank, 79(2), 31–59. http://doi.org/10.26354/bb.3.2.79.2020
- Montazemi, A. R., & Qahri-Saremi, H. (2015). Factors affecting adoption of online banking: A meta-analytic structural equation modeling study. Information & Samp; Management, 2, 210–226. https://doi.org/10.1016/j.im.2014.11.002
- Munoz-Leiva, F., et al. "Determinants of Intention to Use the Mobile Banking Apps: An Extension of the Classic TAM Model." SSRN Electronic Journal, Elsevier BV, 2016. Crossref, doi:10.2139/ssrn.3489124.
- P. R. JEYALAKSHMI, A. S. LAKSHMI RANI. (2021). Attitude of the Community towards Digital payments Usage in Thrissur District with special reference to Digital-Economy District initiative. PalArch's Journal of Archaeology of Egypt / Egyptology, 18(1), 4703-4710. Retrieved from https://archives.palarch.nl/index.php/jae/article/view/7420
- Shree, S., Pratap, B., Saroy, R. et al. Digital payments and consumer experience in India: a survey based empirical study. J BANK FINANC TECHNOL (2021).
- https://doi.org/10.1007/s42786-020-00024-z
- https://www.thehindu.com/news/national/kerala/thrissur-gears-up-to-becomefirst-digital-district/article30589998.ece
- https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/CDDP03062019634B0E EF3F7144C3B65360B280E420AC.PDF
- R. B. Kadam, G. G Mali and B. S. Mohite, (2013). Analytical application of oly[dibenzo-18-crown-6] for chromatographic separation of thorium(IV) from uranium(VI) and other elements in glycine medium, J. Radioanal. Nucl. Chem.295 (1) 501-511.
- R. B. Kadam, G. G Mali and B. S. Mohite, (2012). Development of analytical method for chromatographic separation of copper(II) using poly[dibenzo-18-crown-6]. Int. J. Analytical and Bioanalytical Chemistry ,2 (2) 139-146.
- K. R. Mahanwar, S. R. Sabale, R. B. Kadam and B. S. Mohite, (2012). Reversed-phase column extractive separation of Gd(III) with poly[dibenzo-18 crown-6],Int. J. Inorganic Chemistry, 2012.
- Kadam R. B. and Mohite B. S. (2014). Analytical application of poly[dibenzo-18-crown-6] for chromatographic separation of Cobalt(II) in glycine medium, Res. J. Chem. Environ.18 (3),7-18.
- R.Kadam, S. Jadhav, P. Kamble, N. Madane, (2022). Chromatographic Extraction of palladium(II) ions in multi-component mixture using poly[dibenzo-18-crown-6] as sorbent, Journal of Emerging Technologies and Innovative Research,9(4),141-154.
- N. S. Madane, R. B. Kadam, P. N. Kamble, (2022). Development of Reliable Analytical Method for Extraction and Separation of Zinc(II) in Kerosene, The International journal of analytical and experimental modal analysis, XIV (VII),1039-1042.
- R. Kadam, S. Jadhav., (2022). Reversed-Phase Column Extractive Separation of Palladium(II) with Poly[dibenzo-18-crown-6]: A analysis of real sample, Science, Technology and devolpement journal, XI (VII),160-164.
- P.N. Kamble, N. S. Madane R.B. Kadam, (2023). Liquid-liquid extraction of Barium(II) using Cyanex 301 in Kerosene ,The International journal of analytical and experimental modal analysis ,XV (I),8-21.
- Pattnaik, S., Swain, K., Choudhury, P., Acharya, P.K., Mallick, S. (2009). Alfuzosin Hydrochloride Transdermal Films: Evaluation of Physicochemical, In Vitro Human

- Cadaver Skin Permeation and Thermodynamic Parameters. Int Brazil J Urol, 35(6): 716-729. doi: 10.1590/s1677-55382009000600010
- Mallick, S., Pattnaik, S., Swain, K., De, P. (2007). Interaction characteristics and thermodynamic behaviour of Gatifloxacin with aluminium hydroxide. Drug Dev Ind Pharm, 33(5):535-541. doi: 10.1080/03639040601050130
- Swain, K., Pattnaik, S., Mallick, S., Chowdary, K.A. (2009). Influence of hydroxypropyl methylcellulose on drug release pattern of a gastroretentive floating drug delivery system using a 32 full factorial design. Pharm Dev Technol, 14(2):193-198. doi: 10.1080/10837450802498902
- Swain, K., Pattnaik, S., Sahu, S.C., Mallick, S. (2009). Feasibility Assessment of Ondansetron Hydrochloride Transdermal Systems: Physicochemical Characterization and In vitro Permeation Studies. Lat Am J Pharm, 28(5): 706-714.
- Pattnaik, S., Swain, K., Mallick, S. (2009). Influence of Polymeric System and Loading Dose on Drug Release from Alfuzosin Hydrochloride Transdermal Films. Lat Am J Pharm, 28: 62-69.
- Pattnaik, S., Swain, K., Bindhani, A., Mallick, S. (2011). Influence of chemical permeation enhancers on Transdermal permeation of alfuzosin: An investigation using response surface modeling. Drug Dev Ind Pharm, 37(4): 465-474. doi: 10.3109/03639045.2010.522192
- Pattnaik, S., Pathak, K. (2017). Mesoporous Silica Molecular Sieve Based Nanocarriers: Transpiring Drug Dissolution Research. Curr Pharm Des, 23(3): 467-480. doi: 10.2174/1381612822666161026162005
- Pattnaik, S., Swain, K., Rao, J.V., Talla, V., Prusty, K.B., Subudhi, S.K. (2015). Polymer coprocessing of ibuprofen through compaction for improved oral absorption. RSC Adv, 5 (91), 74720-74725. https://doi.org/10.1039/C5RA13038G
- Pattnaik, S., Swain, K., Manaswini, P., Divyavani, E., Rao, J.V., Talla, V., Subudhi, S.K. (2015). Fabrication of aceclofenac nanocrystals for improved dissolution: Process optimization and physicochemical characterization. J Drug Deliv Sci Technol, 29:199-209. https://doi.org/10.1016/j.jddst.2015.07.021
- Pattnaik, S., Swain, K., Rao, J.V., Talla, V., Subudhi, S.K. (2015). Aceclofenac nanocrystals for improved dissolution: influence of polymeric stabilizers. RSC Adv, 5 (112), 91960-91965. https://doi.org/10.1039/C5RA20411A
- Mahapatra, A.K., Murthy, P.N., Patra, R.K., Pattnaik, S. (2013). Solubility Enhancement of Modafinil by Complexation with β-cyclodextrin and hydroxypropyl β-cyclodextrin: A Response Surface Modeling Approach. Drug Delivery Letters, 3(3): 210-219. doi:10.2174/22103031113039990005
- Swain, K., Pattnaik, S., Yeasmin, N., Mallick, S. (2011). Preclinical evaluation of drug in adhesive type ondansetron loaded transdermal therapeutic systems. Eur J Drug Metab Pharmacokinet, 36 (4), 237-241. doi: 10.1007/s13318-011-0053-x
- Pattnaik, S., Swain, K., Rao, J.V., Talla, V., Mallick, S. (2015). Temperature influencing permeation pattern of alfuzosin: An investigation using DoE. Medicina, 51(4):253-261. doi: 10.1016/j.medici.2015.07.002
- Hota, S.S., Pattnaik, S., Mallick, S. (2020). Formulation and Evaluation of Multidose Propofol Nanoemulsion Using Statistically Designed Experiments. Acta Chimica Slovenica, 67(1): 179-188.
- Panda, D.S., Alruwaili, N.K., Pattnaik, S., Swain, K. (2022). Ibuprofen loaded electrospun polymeric nanofibers: A strategy to improve oral absorption. Acta Chimica Slovenica, 69(2), 483–488. doi: 10.17344/acsi.2022.7370
- Murali Muniraj, Ramaswamy Arulmozhiyal, "Modeling and Simulation of Control Actuation System with Fuzzy-PID Logic Controlled Brushless Motor Drives for Missiles Glider

- Applications", The Scientific World Journal, vol. 2015, Article ID 723298, 11 pages, 2015. https://doi.org/10.1155/2015/723298
- M. Murali , Arulmozhiyal, P Sundaramoorthy A Design and Analysis of Voltage Source Inverters for Renewable Energy Applications, TELKOMNIKA Indonesian Journal of Electrical Engineering Vol. 12, No. 12, December 2014, pp. 8114 ~ 8119 DOI: 10.11591/telkomnika.v12i12.6893.
- M. Muniraj, R. Arulmozhiyal, D. Kesavan, An Improved Self-tuning Control Mechanism for BLDC Motor Using Grey Wolf Optimization Algorithm, in: V. Bindhu, J. Chen, J.M.R.S. Tavares (Eds.), Lect. Notes Electr. Eng., Springer Singapore, Singapore, 2020: pp. 315–323. https://doi.org/10.1007/978-981-15-2612-1_30.
- M. Murali and R. Arulmozhiyal, Investigation on modeling and simulation BLDC motor fed universal actuation system, Rev. int. métodos numér. cálc. diseño ing. (2021). Vol. 37, (1), 10 URL https://www.scipedia.com/public/Murali_Arulmozhiyal_2020a.
- Murali M& Arulmozhiyal R 2018 Investigation on Solar PV generation and design of switched reluctance motor for SmartAgriculture actuation system Brazilian Archives of Biology and Technology, Tecpar Publisher 61 1-1 Oct, ISSN: 1678-4324.
- Murali, M; Arulmozhiyal, R; Arun Kumar, S, Investigation on Block Chain Based Controller Design for Bidirectional Inverter for Micro Grid Tie System, Journal of Computational and Theoretical Nanoscience, Volume 16, Number 4, April , 2019. https://doi.org/10.1166/jctn.2019.8074.
- Suresh V & Jegan A, Experimental studies on wear and corrosion resistance of pulse electrodeposited Ni-TiO2 nano-composite coatings on AISI 304 stainless steel, Materials Research Express, 9 (2022) 126401, 1-13, https://doi.org/10.1088/2053-1591/acabb2.
- R. Arulmozhiyal, M. Murali and T. P, "Single Input Multi-Output DC-DC converter for Sustinable energy applications," 2022 Second International Conference on Advances in Electrical, Computing, Communication and Sustainable Technologies (ICAECT), Bhilai, India, 2022, pp. 1-5, doi: 10.1109/ICAECT54875.2022.9807941.
- Kandavalli, S. R., Khan, A. M., Iqbal, A., Jamil, M., Abbas, S., Laghari, R. A., & Cheok, Q. (2023). Application of sophisticated sensors to advance the monitoring of machining processes: analysis and holistic review. The International Journal of Advanced Manufacturing Technology, 1-26.
- Kandavalli, S. R., Kandavalli, S. R., Ruban, R. S., Lo, C. H., Kumar, R., & Pruncu, C. I. (2022). a conceptual analysis on ceramic materials used for dental practices: manufacturing techniques and microstructure. ECS Journal of Solid State Science and Technology, 11(5), 053005.
- Kandavalli, S. R., Wang, Q., Ebrahimi, M., Gode, C., Djavanroodi, F., Attarilar, S., & Liu, S. (2021). A brief review on the evolution of metallic dental implants: history, design, and application. Frontiers in Materials, 140.
- Kandavalli, S. R., Rao, G. B., Bannaravuri, P. K., Rajam, M. M. K., Kandavalli, S. R., & Ruban, S. R. (2021). Surface strengthening of aluminium alloys/composites by laser applications: A comprehensive review. Materials Today: Proceedings, 47, 6919-6925.
- Suman, P., Bannaravuri, P. K., Baburao, G., Kandavalli, S. R., Alam, S., ShanthiRaju, M., & Pulisheru, K. S. (2021). Integrity on properties of Cu-based composites with the addition of reinforcement: A review. Materials Today: Proceedings, 47, 6609-6613.
- Ruban, S. R., Selvam, J. D. R., Wins, K. L. D., & Kandavalli, S. R. (2020, December). Optimization of cutting parameters of hybrid metal matrix composite AA6061/ZrB2 and ZrC during dry turning. In IOP Conference Series: Materials Science and Engineering (Vol. 993, No. 1, p. 012135). IOP Publishing.

- Rajesh Ruban, S., Jayaseelan, P., Suresh, M., & RatnaKandavalli, S. (2020, December). Effect of textures on machining of carbon steel under dry cutting condition. In IOP Conference Series: Materials Science and Engineering (Vol. 993, No. 1, p. 012143). IOP Publishing.
- Dhas, D. E. J., Velmurugan, C., Wins, K. L. D., Senthilkumaran, S., & Kandavalli, S. R. (2022, November). Mathematical modelling of machining performance during dry face milling of AA5052/tungsten carbide/graphite hybrid composite. In AIP Conference Proceedings (Vol. 2446, No. 1, p. 180043). AIP Publishing LLC.
- Ratna, K. S., Daniel, C., Ram, A., Yadav, B. S. K., & Hemalatha, G. (2021). Analytical investigation of MR damper for vibration control: a review. Journal of Applied Engineering Sciences, 11(1), 49-52.
- Kandavalli, S. R., Preetham, G. S., Kandavalli, S. R., Manaswini, B., Snehitha, T. R. B., & Yadav, V. (2022). Design and Analysis of Residual Learning to Detect Attacks in Intrusion Detection System. Telematique, 5068-5077.
- Raja, R., Jegathambal, P., Jannet, S., Thanckachan, T., Paul, C. G., Reji, S., & Ratna, K. S. (2020, November). Fabrication and study of Al6061-T6 reinforced with TiO2 nanoparticles by the process of friction stir processing. In AIP Conference Proceedings (Vol. 2270, No. 1, p. 030002). AIP Publishing LLC.
- Raja, R., George, L., Jannet, S., Simha I, P. V., & Ratna, S. K. (2022). Development and analysis of SiC, TiO2, and Biochar hybrid reinforced aluminium-based metal matrix composite. Advances in Materials and Processing Technologies, 8(sup3), 1485-1493.
- Prabha, C., Arunkumar, S. P., Sharon, H., Vijay, R., Niyas, A. M., Stanley, P., & Ratna, K. S. (2020, March). Performance and combustion analysis of diesel engine fueled by blends of diesel+ pyrolytic oil from Polyalthia longifolia seeds. In AIP Conference Proceedings (Vol. 2225, No. 1, p. 030002). AIP Publishing LLC.
- Vijayalakshmi A, Vidyavathy Balraj (2017), 'Optical, thermal, laser damage threshold, dielectric studies and z-scan technique of novel semiorganic NLO material: sodium boro succinate (NaBS)', U.P.B. Scientific Bulletin- Series B, vol. 79, issue 1, pp. 221-232.
- Vijayalakshmi A, Vidyavathy Balraj, Determination of basic solid state parameters and characterization of optical, dielectric and fluorescence properties of Calcium Boro Lactate(CaBL), Journal of chemical society, Pakistan. Vol. 38 Issue 6, pp. 1092-1097.
- Vijayalakshmi A, Vidyavathy Balraj, G. Vinitha, (2016), "Crystal structure, growth and nonlinear optical studies of Isonicotinamide p-nitrophenol: A new organic crystal for optical limiting applications", Journal of crystal growth, 448 pp.82-88.
- doi: https://doi.org/10.1016/j.jcrysgro.2016.05.002
- Vijayalakshmi A, Vidyavathy Balraj, Vinitha G., (2016) "Structure and characterization of a new organic crystal for optical limiting applications, isonicotinamide bis-paminobenzoic acid", Ukranian J. Phys. Opt., Volume 17, Issue 3.pp. 98-104.
- Vijayalakshmi A, Vidyavathy, B, Peramaiyan, G & Vinitha, G (2017), 'Synthesis, growth, structural and optical studies of a new organic three dimensional framework: 4-(aminocarbonyl) pyridine 4 (aminocarbonyl) pyridinium hydrogen L-malate, Journal of Solid State Chemistry, vol. 246, pp. 237-244. doi: https://doi.org/10.1016/j.jssc.2016.11.025
- Vijayalakshmi A, Vidyavathy Balraj , B. Gunasekaran, Abdul Razack Ibrahim, Synthesis, Structural, Optical, Thermal and LDT Characterization of Novel Semi-Organic Non-Linear Optical Material: Calcium Borolactate, Asian Journal of Chemistry; Vol. 28, No. 12 (2016).

- Padmaja, D. L., Nagaprasad, S., Pant, K., & Kumar, Y. P. (2022). Role of Artificial Intelligence and Deep Learning in Easier Skin Cancer Detection through Antioxidants Present in Food. Journal of Food Quality, 2022.
- Padmaja, D. L. (2021). Performance Analysis of Different Architectures on Face Mask Detection. Turkish Journal of Computer and Mathematics Education (TURCOMAT), 12(13), 377-381.
- Gundu, K. S., Dhyaram, L. P., Ramana Rao, G. N. V., & Surya Deepak, G. (2023, January). Comparative Analysis of Energy Consumption in Text Processing Models. In Advancements in Smart Computing and Information Security: First International Conference, ASCIS 2022, Rajkot, India, November 24–26, 2022, Revised Selected Papers, Part I (pp. 107-116). Cham: Springer Nature Switzerland.
- Ramirez-Asis, E., Guzman-Avalos, M., Mazumdar, B. D., Padmaja, D. L., Mishra, M., Hirolikar, D. S., & Kaliyaperumal, K. (2022). Metaheuristic Methods for Efficiently Predicting and Classifying Real Life Heart Disease Data Using Machine Learning. Mathematical Problems in Engineering, 2022.
- Padmaja, D. L., Tammali, S., Gajavelly, N., & Reddy, K. S. (2022, May). A comparative study on natural disasters. In 2022 International Conference on Applied Artificial Intelligence and Computing (ICAAIC) (pp. 1704-1709). IEEE.
- Padmaja, D. L., Sruthi, B. S., Deepak, G. S., & Harsha, G. S. (2022, April). Analysis to Predict Coronary Thrombosis Using Machine Learning Techniques. In 2022 International Conference on Sustainable Computing and Data Communication Systems (ICSCDS) (pp. 21-27). IEEE.
- Padmaja, D. L., & Sriharsha, G. K. (2022, December). Challenges in Crop Selection Using Machine Learning. In Artificial Intelligence and Data Science: First International Conference, ICAIDS 2021, Hyderabad, India, December 17–18, 2021, Revised Selected Papers (pp. 66-76). Cham: Springer Nature Switzerland.
- Padmaja, D. L., Nagaprasad, S., Pant, K., & Kumar, Y. P. (2022). Role of Artificial Intelligence and Deep Learning in Easier Skin Cancer Detection through Antioxidants Present in Food. Journal of Food Quality, 2022.
- Baker, M. R., Padmaja, D. L., Puviarasi, R., Mann, S., Panduro-Ramirez, J., Tiwari, M., & Samori, I. A. (2022). Implementing Critical Machine Learning (ML) Approaches for Generating Robust Discriminative Neuroimaging Representations Using Structural Equation Model (SEM). Computational and Mathematical Methods in Medicine, 2022.
- Lakshmipadmaja, D., & Vishnuvardhan, B. (2018). Classification performance improvement using random subset feature selection algorithm for data mining. Big Data Research, 12, 1-12.
- Padmaja, D. L., & Vishnuvardhan, B. (2018). Evaluating the influence of parameter values on the performance of random subset feature selection algorithm on scientific data. Data & Knowledge Engineering, 117, 174-182.
- Padmaja, D. L., & Vishnuvardhan, B. (2016, February). Comparative study of feature subset selection methods for dimensionality reduction on scientific data. In 2016 IEEE 6th International Conference on Advanced Computing (IACC) (pp. 31-34). IEEE.
- Dhyaram, L. P., & Vishnuvardhan, B. (2018). RANDOM SUBSET FEATURE SELECTION FOR CLASSIFICATION. International Journal of Advanced Research in Computer Science, 9(2).
- Padmaja, D. L., & Vishnuvardhan, B. (2014). Survey of dimensionality reduction and mining techniques on scientific data. International Journal of Computer Science & Engineering Technology, 1(5), 1062-6.
- Padmaja, D. L., & Vishnuvardhan, B. INFLUENCE OF DATA GEOMETRY IN RANDOM SUBSET FEATURE SELECTION.



- Lakshmi Padmaja, D., & Vishnuvardhan, B. (2019). Variance-based feature selection for enhanced classification performance. In Information Systems Design and Intelligent Applications: Proceedings of Fifth International Conference INDIA 2018 Volume 1 (pp. 543-550). Springer Singapore.
- Padmaja, D. L., Surya Deepak, G., Sriharsha, G. K., & Ramana Rao, G. N. V. (2021). Ensemble Methods for Scientific Data—A Comparative Study. In Information and Communication Technology for Competitive Strategies (ICTCS 2020) Intelligent Strategies for ICT (pp. 587-595). Singapore: Springer Nature Singapore.
- Nagaprasad, S., Padmaja, D. L., Qureshi, Y., Bangare, S. L., Mishra, M., & Mazumdar, B. D. (2021). Investigating the impact of machine learning in pharmaceutical industry. J. Pharm. Res. Int., 33, 6-14.
- Sriharsha, G. K., Padmaja, D. L., Rao, G. R., & Deepa, G. S. (2022, December). A Modified Approach of Hyper-parameter Optimization to Assess The Classifier Performance. In 2022 IEEE Pune Section International Conference (PuneCon) (pp. 1-9). IEEE.