CHAPTER II
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INTRODUCTION

Literature reviews are the evidence of previous research which helps to identify the gap in the existing studies that open a path for new research. This is the base for all research. Literature reviews help in framing conceptual and theoretical frameworks, research questions

In this study, articles are excerpted from the reputed journals such as Emerald, EBSCO, Elsevier, ResearchGate, IEEE, Routledge and Taylor & Francis. All the articles are related to the adoption of cloud ERP in micro, small and medium enterprises. Each study used various variables to measure the adoption and intention to continue the usage of cloud ERP based on the theories. Also different sampling methods are used to collect data. And each study analysis is done with various analyzing tools like percentage analysis, SEM, regression analysis, correlation and so on. 120 articles are collected and are grouped as international and national articles which are described as follows:

2.1 INTERNATIONAL REVIEWS:

Christiansen *et.al* (2021) conducted a research to identify the variables that affect the intention of adopting ERP on Cloud. Data were collected from both small and large enterprises in Taiwan. Both qualitative and quantitative study were done here. Security, system quality, vendor lock- in, data accessibility, top management support, financial advantage, regulatory environment, competitive environment, compatibility, relative advantage, complexity, observability and trialability were the variables measured in this study. Analysis was done based on the reviews of literature and the interviews from the cloud ERP experts and users. All the variables except complexity and vendor lock- in were significantly related to the dependent variable, continuance intention.

Razzaq *et.al* (2021) made a research on the variables that determine the adoption of Cloud ERP in Malaysian SMEs. Complexity, compatibility, trialability, privacy & security, IT readiness, employee knowledge, system quality, perceived ease of use, perceived benefits, cost, financial readiness, critical mass, government regular and competitive pressure were the

variables analyzed in this study to measure the intention of adoption of Cloud ERP. The analysis showed that all the variables had a positive impact on the dependent variable.

Awan et.al (2021) investigated the challenges faced by the Pakistani SMEs while adopting Cloud ERP. This was a qualitative study with unstructured interviews. Data were collected from eight companies. The analysis showed that security risk, performance of the system, internet reliability, customization, lack of awareness of the system, user resistance and vendor competence were the challenges faced in the adoption of Cloud ERP.

Ploder et.al (2021) examined the success factors of Cloud ERP implementation by conducting interviews with the American companies that provide personnel services. Implementation success was measured using the variables such as project planning, project management, project team, top management support, communication, external support from consultants, user acceptance, data privacy, training and compliance conformity. It was found that training, top management support and communication were the most crucial factors in the implementation of Cloud ERP system.

Robertsson et.al (2020) conducted a study on the critical success variables of the post implementation phase of Cloud ERP in Swedish firms. Samples were collected from the people in managerial positions by semi- structured interviews. The variables measured here were top management support, vendor support, team composition & teamwork, inter departmental cooperation & communication, project champion, training, business process reorganization, smaller scope and change management. And it was found that vendor support was the most important one.

Ahn et.al (2020) made a study on the variables that affect the Cloud ERP adoption in Korea. The variables were taken from TOE, diffusion of innovation and innovation resistance model. The variables used here were ICT skill, regulatory environment, organizational culture, relative advantage, trialability, complexity, observability, vendor-lock in, data security, customization and adoption intention. 148 samples were collected using questionnaires from Chief executive officers of SMEs. Frequencies, percentages, reliability and multiple regressions were the tests done in this study. The analysis inferred that vendor lock in, trialability, organizational culture, relative advantage and regulatory environment strongly influence the Cloud ERP adoption intention.

Jayeola et.al (2020) examined the contextual variables and its consequences on the Cloud ERP adoption. Competitive advantage, top management support, future task match, government financial support and organizational performance were the variables measured here. 382 samples were collected using questionnaires from senior IT managers, chief information officers and information technology officers and SMEs owners of Malaysia. Stratified random sampling was used here. The analysis result showed that competitive advantage and organizational performance had a strong influence on the adoption of Cloud ERP.

Akrong (2020) made a study on the adoption of cloud business intelligence in 17 Ghanaian SMEs. Here, the variables such as characteristics of organization, technological characteristics, characteristics of environment and characteristics of manager/owner were analyzed. Percentage analysis was tested here. The result was that all the variables used in this study were significant in the adoption of cloud in SMEs.

Alsharari et.al (2020) made a study on the challenges in implementing Cloud Enterprising Resource Planning in SMEs in UAE. Samples were collected from CEOs and MDs of various SMEs through in-depth interviews. In this study three variables such as technological variables, organizational variables and environmental variables were measured. These variables were measured using the variables security risk, privacy risk, relative advantage, scalability, compatibility, licensing, cost-effectiveness, time of use, top management support, innovation of firm, IS knowledge, organizational costs, accessibility flexibleness, technical efficiency, market scope, external computing support, type of ERP provider, government control, integration solutions and transparency. Among these, compatibility, organizational culture had no significant effect on adopting Cloud ERP in UAE SMEs. The findings approved that usage of Cloud ERP helped in decision- making, also increased the efficiency and productivity of the organizations.

Alhanatleh and Akkaya (2020) analyzed the variables influencing Cloud ERP adoption on user perspective the study was done both in pre and post implementation phases. Sampling used in this study was convenience sampling to collect the samples. 500 participants had participated in this study, but only 369 were the useful data. Thirteen variables from the TAM model were measured here. The result showed that technology factor, employee factor, perceived ease of use and perceived usefulness has a strong influence in the adoption of Cloud ERP.

Hasan and Murat (2020) with the help of technology factor, perceived usefulness, employee factor, decision making support, attitude found the variables that had the strong impact in the adoption of ERP on Cloud. This study was conducted in Jordanian companies. SEM and descriptive analysis were done here. The result indicated that other than perceived usefulness all the other variables had a positive significant relation with the Cloud ERP adoption.

Le and Cao (2020) made a study on accounting software used in cloud environments in Vietnamese firms with 112 samples. Perceived ease of use, perceived usefulness, perceived safety & privacy and perceived convenience were the variables analyzed here. Regression and descriptive analysis were used in this study. From the analysis it was depicted that perceived ease of use and perceived usefulness had the significant effect on the intention of the usage of the software.

Zieliński *et.al* (2020) examined the benefits and disadvantages of Cloud ERP implementation in Polish MSMEs. Data from 256 MSMEs in Poland were collected and analyzed. Questionnaires were the instrument used to collect the samples. Efficiency, accessibility, possibility of using IT resources, security level, flexibility & scalability and provider's technological support were the variables considered to measure the benefits and disadvantages of Cloud ERP. From the percentage analysis it was revealed that efficiency was the most significant variable related with the benefits of Cloud ERP.

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Masood and Sonntag (2020) examined the adoption of technology in UK based SMEs with 271 samples. Competitive advantage, manufacturing quality, operation cost, operational efficiency, manufacturing flexibility, implementation cost, technology knowledge, implementation time, awareness, implementation level, outlook, industry, production method, product mix, employee count, production volume and annual revenue were the variables measured here. SEM was tested in this study. Among the variables, awareness, production method and industry had no significant relation with the adoption of new technology in SMEs in the UK.

Marinho *et.al* (2021) made a research on the role of Cloud ERP in decision making in the companies in the USA. 109 responses were collected using online questionnaires. Flexibility, cost savings, agility, scalability, efficiency, business productivity, operation improvement, security, privacy, vendor support, technology readiness, competitive pressure, new business models, competency, relative advantage, reliability, compatibility, top management support,

compliance, complexity, interoperability issues, organizational size, observability, ease of use and IT transformation were the variables analyzed using reliability, regression and percentage analysis. The result indicated that top management support, vendor support, regulatory compliance, organization size, competency, technology readiness and competitive pressure had a positive influence on decision making and thus the performance of the firm can be improved.

Alsharari *et.al* (2020)measured the performance of firms using Cloud computing in Saudi Arabia. Competitive advantage, flexibility, integration, trust, perceived risk, perceived ease of use, IT spending were analyzed to measure the performance. This study recommended the random sampling method to collect the data, PLS to analyze the data.

Cheng (2020) conducted a study to examine the performance impact of using cloud information systems in the companies in Taiwan with 305 samples. The constructs used in this were information quality, system quality, confirmation, satisfaction, technical support, cloud storage service quality, perceived usefulness, continuance intention and task technology fit. SEM, percentage analysis, descriptive statistics, factor analysis were done here and it was found that all the variables used in this study had a positive significant impact on the performance.

Cheng (2020) measured the continuance intention of cloud ERP adoption by using the variables from TAM and ECM models. 355 samples were collected from general & professional employees, first, middle and top level managers of 50 Taiwanese companies using questionnaires. The variables measured here were task-technology Fit, perceived usefulness, confirmation, satisfaction, perceived ease of use, continuance intention and individual performance. SEM, reliability and correlation were done here. The result showed that both TAM and ECM model supported the continuance intention of the adoption of Cloud ERP.

Jayeola et.al (2020) made a research on the consequences of the adoption of ERP on cloud system in the manufacturing SMEs in Malaysia. 382 samples were collected for the study. Contextual factors and strategic consequences were measured using the variables future- task match, top management support on change management, government financial support, competitive advantage and organizational performance. The result of the study insisted that top management support had a strong influence in the adoption of Cloud ERP. And the result

also insisted that the adoption of Cloud ERP leaded to some strategic benefits such as better organizational performance and competitive advantage.

Zamzeer et.al (2020) made a qualitative study using semi- structured interviews in Jordan SMEs on the antecedents of adoption of Cloud ERP. Data were collected from top management and service providers of Cloud ERP. Top management support, firm size, cost, innovativeness, prior IT experience, industry, competitive pressure, supplier efforts, market scope, trialability, compatibility, complexity, uncertainty and relative advantage were the variables measured here. The result showed that support from management and Cloud ERP providers were the most influential variables. And the variables that were not influential were prior IT experience, complexity, uncertainty and market scope. A quantitative study had been recommended.

Wong et.al (2020) made a quantitative study on the variables influencing the adoption of Cloud ERP using the UTAUT model in large companies. A Google form questionnaire was used to collect the data. 30 samples were collected from 30 large Indonesian companies. Effort expectancy, facilitating conditions, social influence, hedonic motivation, habit, price value, use behavior and behavioral intention were the variables analyzed in this study. Validity and reliability were checked in this study. SEM- PLS was the analysis tool used here. The analysis result showed that all the variables used here had a strong influence in the adoption of Cloud ERP.

Alsaadi *et.al* (2020) made a study on the security of SaaS in the companies in the USA. Efficient resource utilization, cost effectiveness, high performance, collaboration, operation and administration, secure development, privacy and confidentiality, authentication and authorization, compliance and regulatory and secure architecture and disaster recovery were the variables studied here. The result of the study confirmed that as the data was secured, the performance and efficiency of the firm will be increased.

Chang (2019) investigated the impact of barriers and enablers in switching to ERP systems on cloud. 212 samples were collected and analyzed in Taiwanese companies. Switching cost, switching benefits, switching intention, system quality, information quality, financial advantage, government support, industry pressure, perceived risk, satisfaction and breadth of use were the variables measured here. Reliability and correlations were tested here and it was

found that system quality, industry pressure and financial advantage were the most significant variables.

Chang et.al (2019) conducted a survey study on the switching intention of ERP to private cloud in large enterprises in China. 227 top managers and enterprise owners were the respondents in this study. Partial Least Squares SEM and correlation were the analysis tools used here. The analysis result showed that the variables compatibility, financial support, vendor support and industry pressure had a significant relation with switching benefits. Also, it was found that data security and costs highly influenced switching cost. Switching benefits and switching cost influenced the intention of switching to cloud ERP.

Zhang (2019) made a study on the factors affecting the deployment decision of ERP on Cloud. Samples were collected from both consultant and client companies in Australia through semi-structured interview. Business complexity, security, customization, maintainability, scalability, integration, accessibility, vendor reliability, cost and business agility were the variables measures in this study. Among them integration, customization, business complexity, security, and vendor reliability were negatively significant to the Cloud ERP deployment decision.

Al-Sharafi *et.al* (2019) made a study to measure the performance of Malaysian SMEs. 415 samples were collected using purposive sampling. Variables used in the study such as financial performance, sustained use and non- financial performance were analyzed in PLS-SEM. the analysis result said that the performance can be interpreted with the variable sustained use.

Usman *et.al* (2019) made a research on the adoption of ERP on Cloud ERP in Nigerian SMEs. Security concerns, cost saving, technology readiness, top management support, firm size, cloud knowledge, competitive pressure, regulatory support, relative advantage, compatibility and complexity were the variables analyzed here. Questionnaire was used to collect the data. 436 samples were collected and analyzed. Reliability, validity and SEM were done in this study. The result revealed that cost saving was the most prioritized variable in the adoption of Cloud ERP in SMEs in Nigeria.

Henkie et.al (2019) made a quantitative study on the variables influencing the adoption of Cloud ERP using the UTAUT model in large companies. A Google form questionnaire was used to collect the data. 30 samples were collected from 30 large Indonesian companies.

Effort expectancy, facilitating conditions, social influence, hedonic motivation, habit, price value, use behavior and behavioral intention were the variables analyzed in this study. Validity and reliability were checked in this study. SEM- PLS was the analysis tool used here. The analysis result showed that all the variables used here had a strong influence in the adoption of Cloud ERP.

Cheng (2019) measured the performance of individuals who were using Cloud ERP using the variables task- technology fit, perceived usefulness, confirmation, satisfaction, perceived ease of use and continuance intention. Data were collected from 355 Taiwanese companies. The model was examined using SEM. Reliability, descriptive statistics and percentage analysis were measured in this study. The analysis result elucidated that perceived usefulness and satisfaction were the most significant variables in measuring the individual performance.

Sharafi *et.al* (2019) made a study to measure the performance of Malaysian SMEs. 415 samples were collected using purposive sampling. Variables used in the study such as financial performance, sustained use and non- financial performance were analyzed in PLS-SEM. the analysis result said that the performance can be interpreted with the variable sustained use.

Harris and Datta (2019) made a study on the security of SaaS in the companies in the USA. Efficient resource utilization, cost effectiveness, high performance, collaboration, operation and administration, secure development, privacy and confidentiality, authentication and authorization, compliance and regulatory and secure architecture and disaster recovery were the variables studied here. The result of the study confirmed that as the data was secured, the performance and efficiency of the firm will be increased.

Zhang (2019) conducted research in Australian companies to find the variables of Cloud ERP that improve the performance of companies using Cloud ERP. variables such as scalability, accessibility, security, customization, integration, maintainability, cost, business agility, business complexity and vendor reliability were identified from the reviews and were analyzed. The analysis depicted that scalability, maintainability, accessibility, cost and business agility were the variables that had a positive relation with the performance of the firm.

Usman et.al (2018) examined the variables that determined the adoption of ERP on Cloud. This qualitative study was conducted in the Nigerian SMEs, mainly agriculture,

manufacturing and construction. 158 SMEs participated in the study. Cost saving, security concern, relative advantage, complexity, technology readiness, compatibility, top management support, firm size, regulatory support, competitive pressure and cloud knowledge were the variables measured in this study. Reliability and validity were confirmed in this study. Kolmogorov- Smirnov test, correlation and SEM were conducted. The result confirmed that lack of security affected the adoption of Cloud ERP and also the environmental context variables had a favorable effect in Cloud ERP adoption.

Hameed and Bhaskaran (2018) conducted a study on the success variables in Hybrid Cloud ERP system implementation in IT organization. 137 respondents participated in this study. System Quality, Data Privacy, Top Management Support, BPR, User Involvement and others 58 variables were measured in this study. Kaiser- Meyer- Olkin test, correlation, ANOVA and Factor Analysis were conducted here. From the analysis, Data Privacy had the prioritized significance in the implementation of Cloud ERP.

Cheng (2018) analyzed the continuance intention of using Cloud ERP, considering variables from Task Technology Fit, Expectation- Information Model and DeLone and McLean IS. 315 samples were collected with self- reported questionnaires from general employees, professional employees, first, middle and top level managers of SMEs in Taiwan. The variables used in this study were system quality, confirmation, continuance intention, task - technology fit, information quality, perceived usefulness and satisfaction. Percentage analysis, validity and reliability, regression and SEM were used in this study. The result showed that satisfaction, perceived usefulness and confirmation were strongly dependent on system quality, task technology fit and information quality. And this automatically led to the continuance intention of the usage of Cloud ERP.

Cheng (2018) examined the variables that lead the continuance intention of the use of Cloud ERP with 395 samples in Taiwanese companies. A cross- sectional questionnaire survey was used here. The constructs such as subjective norm, compatibility, output quality, perceived behavioral control, confirmation, perceived usefulness, perceived ease of use, satisfaction and continuance intention were taken from Technology Acceptance model, TAM2, Expectation- Confirmation model and Theory of Planned Behavior. SEM, validity and reliability analysis were done in this study. The result showed that output quality and compatibility variables made the continuance intention of Cloud ERP in an organization.

Karim (2018) made a quantitative study on the migration to Cloud ERP with 83 samples in Ayadi and Arabia. The variables measured here were personal innovativeness, expected switching benefits, expected switching risks, information channel exposure and intention to switch toward cloud ERP. Validity, reliability and SEM were done in this study. The result showed that the construct personal innovation had a moderate effect in the switching intention of Cloud ERP.

Anwer (2018) examined the logistical variables of the adoption of Cloud ERP in SMEs of developing countries. 131 samples were collected from senior executives and IT managers of 10 developing countries like Jordan, Lebanon, Saudi Arabia, Bahrain, Qatar, Emirates, Egypt, Oman, Kuwait and Turkey. Web- based survey questionnaires were used to collect the data. Fourteen variables were analyzed in this study and they were compatibility, relative advantage, complexity, technology readiness, value creation, enterprise status, enterprise size, top management support, security concerns, technical barriers, government support, competitive advantage and communication. Logistic regression analysis is done here. And the result showed that technology readiness, compatibility, technical barriers, enterprise readiness, enterprise size and competitive pressure were the variables that had a significant relation with the adoption of Cloud ERP in SMEs.

Thanh et.al (2018) conducted a study in Vietnam to know how innovation took part in the Cloud ERP adoption by using Diffusion of Innovation Theory, Technology Acceptance Model, Technology- Organization- Environment and the Unified Theory of Acceptance and Use of Technology. 232 samples were collected using Convenience Sampling and analyzed. Questionnaires were sent in Google forms. The study was conducted in two phases. Firstly, it was conducted qualitatively and the quantitative study was done. The variables measured here were performance expectancy, IT infrastructure, top management support, organizational culture, external support, competitive pressure and innovation. Confirmatory and exploratory Factor Analysis, correlation and SEM were the tests conducted in this study. And the result showed that IT infrastructure, organizational culture, external support and innovation had a high influence in the adoption of ERP on Cloud.

Thanh et.al (2018) examined the success of Cloud ERP in Vietnam. 182 samples were collected for the study and analyzed using Factor Analysis and SEM. The constructs used were system quality, perceived risk, IT service quality, information quality, trust, intention to

use and net benefit. The result showed that information quality, system quality and IT service quality had a positive impact on the success of Cloud ERP.

Elise and Haddara (2018) made a study on the evolution of ERP systems in cloud and about the system updates. Samples were collected through snowball sampling method. Interviews were conducted with a cloud vendor in Norway and their 10 client companies through interviews. Change Management, ERP Training and ERP Updates were the constructs used in this study. The analysis revealed that size and date of updates, extinction of certain functionalities and lack of information and communication during the process were the main challenges in system updating process.

Ahmad et.al (2018) examined the variables that involved in the adoption of ERP on Cloud in SMEs. 394 samples were collected for the study from manufacturing, wholesale and retail companies. The variables measured here were organizational support, computer self-efficacy, compatibility, complexity, perceived ease of use, perceived usefulness, facilitating conditions, security, performance expectancy, relative advantage and intention to adopt Cloud ERP. General Linear Modeling and Artificial Neural Network Modeling were used for analysis here. The result revealed that facilitating conditions, organizational support, computer self- efficacy, perceived ease of use, perceived usefulness, relative advantage and security had a positive impact on Cloud ERP adoption.

David and Karl (2017) made a study on the flexibility of Cloud ERP software. The first step in the study was to collect the portfolio of 25 types of Cloud ERP from 33 vendors. In the next step, using purposive sampling, data were collected from 98 practitioners using 5-point Likert Scale. The data were analyzed in SPSS. Mann- Whitney U Test was done in this study. The test result showed that the PaaS system is more flexible than the other types of Cloud ERP systems.

Adnan and Rakibul (2017) collected 136 samples through an online questionnaire from Arabian organizations to study the Cloud ERP adoption in Saudi Arabia. The respondents were business operation managers, IS managers and CEOs. ICT skill, ICT infrastructure, top management support, organizational culture, regulatory environment, competitive environment, relative advantage, compatibility, complexity, trialability and observability. Reliability and validity were checked here. SEM and correlation were analyzed here. The

result showed that other than compatibility, trialability and organizational culture had no significant relation with the adoption of Cloud ERP.

MF Gohlami *et.al* (2017) made an empirical study on the key challenges during the transformation of cloud systems. 104 samples were collected from Australian firms. Online questionnaires were the instrument used to collect data. The variables measured here were adapt data, context, migration requirements, cloud provider, deploy system, elasticity, incompatibilities, handling transient faults, rebalance system components, replicate system components, isolate tenants, system templates, migration plan, migration requirements, virtual machine specification were the variables used in this study. T- Test was applied and the result showed that except isolate tenants and virtual machine specification all the other variables were significant in the migration of cloud systems.

Yan *et.al* (2017) measured the intention of adoption of Cloud ERP in 107 Chinese SMEs with trust as a mediation factor. Entrepreneurial orientation, institutional pressures, institution based trust, IT artifact trust which included reliability, functionality & helpfulness and cloud service transformation intention were the variables measured in this study. Correlation, ANOVA and SEM were used in this study. And it was found that institutional and entrepreneurial orientation had a positive impact on the adoption of Cloud ERP.

Tharhini *et.al* (2017) made a study in Aqaba on the intention of 205 end users in adopting cloud service in hotels. The intention of the end users was measured using the variables such as perceived usefulness, perceived ease of use, self-efficacy, job opportunity, trust, top management support, competitive pressure and regulatory support. The analysis tools here were T- test, ANOVA, correlation. Reliability and validity were confirmed. From the analysis, it was known that the independent variables, competitive pressure and job opportunity had a strong significant relation with the dependent variable intention.

Kinuthia and Chung (2017) with the variables compatibility, relative advantage, security concern and perceived benefits conducted a study on the adoption of Cloud ERP in various companies in the United States. 159 samples were collected using online questionnaires with 7- point Likert Scale from IT professionals. Samples were taken from the Survey Monkey database. Exploratory Factor Analysis, Reliability, validity, independent sample t- test and Leven's test were done in this study. From the result it was depicted that compatibility,

security concern and relative advantage had a positive relation with the adoption of Cloud ERP.

Saa *et.al* (2017) made a research on the data security issues that happened while switching ERP to Cloud in SMEs. The variables considered here were security concerns, compliance issues, reliability concerns, operational support and IT governance issues. Percentage analysis was done and the result showed that security concerns had a significant relation with the switching of ERP to Cloud.

Meganathan and RP Singh (2017) analyzed 23 Indian SMEs whether they were interested in adopting cloud computing. First the quantitative study was made to identify whether they were interested in transforming their current business to a cloud environment and the second part of the study included analyzing the variables that aid in adopting the cloud. Those variables were cost, scalability, flexibility, rapid deployment issues, security, privacy, availability, reliability and compliance. Percentage analysis was done in this study. And it was found that flexibility, scalability and cost had the most significant relation with the adoption of cloud.

Christina and Alessio (2017) made a study on Cloud ERP vendors and the variables helped to adopt ERP on Cloud. Vendors were sorted in terms of experience, implementation ability, maintenance ability, support services, successful outcomes in similar firms, market share. The variables analyzed in terms of ERP on cloud were system, adoption variables, cost and time. Weighted average was tested in this study. And it was found that all the variables were significant.

Haji and Rozan (2017) developed a framework to study the adoption of cloud ERP in SMEs. Compatibility, relative advantage, task dependence, security, cost, system trust, top management support, regulatory environment, employee cloud ERP knowledge, competitive, fit and vendor support were the variables used in this study. SEM was the analysis tool used in this study. From the analysis, it was found that task dependence and fit were the foremost variables in the Cloud ERP adoption.

Mohammad (2017) measured Expected Performance on the adoption of Cloud ERP with the institutional variables such as coercive, normative and mimetic pressures and organizational variables. 122 samples were collected from the companies in Jordan and most of the companies were SMEs by Judgemental Sampling for the study. SEM was the analytical tool

used here. Analysis results showed that institutional variables had a positive effect and organizational variables had no significant effect on the adoption of Cloud ERP.

Ming and Wong (2017) made a comparative study of ERP and ERP on cloud. The variables used for this study were upfront investment, mobility, maintenance cost, scalability, reliability, system enhancement, system and hardware control, integration, customization, privilege abuse and predictable performance were the variables analysed here. The result of the study revealed that maintenance cost and upfront investment were low, scalability, mobility and system enhancement were high compared to the traditional ERP.

Usman *et.al* (2017) with the variables complexity, firm size, compatibility, top management support, competitive pressure, technology readiness, relative advantage, security, trust, government regulations and cloud awareness, made a study on finding the influential variables of Cloud ERP adoption. These variables were ranked based on the reviews collected and it was found that security and top management support were the significant variables in the adoption of Cloud ERP.

Chang and Ping (2017) conducted a study on the intention to switch to Cloud ERP on the perspective of cost benefit. Using the 7- point Likert Scale, 277 samples were collected from Taiwan organizations. The variables measured here were perceived usefulness, perceived ease of use, trust, perceived control, perceived risk, privacy concerns and switching intention. Here, perceived ease of use & perceived usefulness were characterized as benefits and perceived risk and privacy concern were considered as costs. Covariance based SEM, reliability, and discriminant validity were measured in this study. And the analysis results showed that perceived ease of use, perceived usefulness and privacy concerns were the variables that significantly contributed to the switching intention of Cloud ERP.

Prasanna and Grandhi (2017) examined the personal innovativeness, security concerns, adoption and behavioral intentions of ERP on Cloud. Data were collected from 200 Australian IT professionals. SEM, correlation, reliability and factor analysis were done in this study. The result showed that the variables which had a strong impact were behavioral intention and security.

Pedro *et.al* (2017) conducted a research on the intention of the adoption of SaaS in Andalusia companies with 150 samples. Questionnaires were used to collect the data. The variables used in this study were communication, training, management support, perceived ease of use,

perceived usefulness, technology complexity, attitude towards using, organization size and behavioral intention. Correlation and SEM were the analysis tools used here. The result showed that training, technology complexity and training were the highly positive influencing variables in adopting SaaS systems.

Brenda and Denis (2016) with 41 samples made a study on the perceived benefits and drawbacks on Cloud ERP in South African SMEs. The variables used in this study were IT costs, access to latest system developments, security, flexibility, business efficiency, scalability, data execution time, collaboration, additional costs, security risks, service level agreement, customization, strategic risks, IT competencies and downtime. Percentage analysis has been done here. The result showed that flexibility, collaboration and business efficiency had a strong impact.

Martins *et.al* (2016) made both qualitative and quantitative studies regarding migrating to Cloud systems in SMEs and large companies in the UK. 114 participants such as cloud advisor, security expert, business end user, IT manager and IT technician participated in this study. Pricing flexibility, security & backup, collaboration, infrastructure cost, scalability & speed, availability & mobility, business agility, competitiveness and business intelligence were the variables measured here in the quantitative study. Using percentage analysis it was revealed that scalability & speed was the most prioritized variable

Tong *et.al* (2016) with 80 samples examined the variables that were hindrance in accepting Saas Cloud ERP in Malaysian construction companies that provided construction tools. Reliability, descriptive analysis, SEM and factor analysis were done here. Perceived risks, perceived incentive in new technology usage, perceived encouragement, attitude, perceived system performance and perceived costs were the variables measured here. The analysis result revealed that other than cost, risk and system performance all the other variables had a significance relation with the independent variable continuance intention in the usage of Saas Cloud ERP.

Adewale (2016) conducted a study to measure the perceived use and how this led to the acceptance of Cloud ERP in SMEs in the United States. Effort expectancy, performance expectancy, facilitating conditions and social influence were the variables measured here. Questionnaires were sent by Survey Monkey through random sampling and 218 valid samples were collected and analyzed. Chi square and Regression were the analysis done and

the analysis result showed that all the four independent variables had no correlation with the variable intention to use Cloud ERP in US SMEs.

Haji and Zaidi (2016) made a study on the challenges happening in Malaysian SMEs during the adoption of Cloud ERP. Questionnaires and semi-structured interviews were used to collect data from 5 SMEs. Vendor trust, data security issues, trust on cloud ERP, knowledge, system availability, government support, and fit to business were the variables used here. From the regression analysis, cloud ERP fit to business had the least impact on the Cloud ERP adoption.

Umet *et.al* (2016) made a study on the adoption of ERP system on organization perspective in Turkish SMEs. 20 respondents participated in the study. Trust, relative advantage, security & privacy, complexity, customization, IT resource of organization, top management support, organization size, Cloud fitness, competitive pressure, partner pressure, government policies and regulations and infrastructure were the variables considered in this study. Weighted average was the analysis done here. The analysis result showed that security & privacy was the strong impact factor in the adoption of Cloud ERP in Turkish SMEs.

Leow *et.al* (2016) measure the impact of competitive pressure, cloud security & data privacy, internet reliability, cost effectiveness and top management support on cloud ERP adoption in Malaysian SMEs. 51 valid questionnaires were collected and analyzed using reliability, correlation, regression and ANOVA. The result indicated that only the variable top management support had a strong impact on the adoption of cloud ERP.

Jorge *et.al* (2016) conducted a study in SMEs in Portugal regarding the adoption of SaaS. The variables measured here were data security, cost concern, usability, system availability, ubiquity, implementation, trust, compatibility, flexibility, best practices and analytics. Ranking and percentage analysis were done here and the result showed that cost concerns and trust were the prioritized variables in the adoption of SaaS in SMEs.

Andreas and Haddara (2016) made a research on finding the variables involved in the adoption of Cloud ERP in Norwegian public sectors. 148 samples were collected online and analyzed using one sample t-test and correlation analysis. 53 variables were used in this study including external task environment, technology, organization and innovation. The result confirmed that organizational variables had a significant relation with the Cloud ERP adoption.

Prerna Lal (2016) made a study on the impact of cloud services in Indian firms. Relative advantage, perceived usefulness, perceived ease of use, vendor credibility, top management support cloud based model adoption and organizational flexibility were measured in this study. Semi-structured questionnaires and in- depth interviews were used to collect the data. 21 firms participated in the study. The analysis result showed that there were no insignificant variables in this study.

Saini and Madhukar (2016) made a research on the factors that determine the selection of cloud ERP and adoption of the system. This study was conducted in the educational sectors in India. Data were collected by semi- structured interview. Technical compatibility, relative advantage, technical complexity, observability, trialability, production timeliness, subjective norms, system reliability, strategic value, training and application specificity were the variables measured in this study. The result was application specificity, strategic value have no impact on the selection and adoption of ERP on cloud. Also the users suggested that the vendors should more concentrate on the security, reliability, convenient long term quality service.

Hassan and Murat (2016) conducted a research among the employees of the education ministry in Jordan about their attitude towards Cloud ERP usage. Online questionnaires were the instrument used to collect the data. 206 samples were collected and analyzed using reliability, standard deviation, means and regression. Employee variables, technological variables, perceived ease of use, perceived usefulness and attitude were the variables measured in this study. From the analysis it was revealed that perceived usefulness had the strongest impact on the usage of Cloud ERP.

Tong et.al (2016) conducted a research on Cloud ERP by measuring the variables such as perceived risk, perceived cost, perceived system performance, perceived usefulness, perceived ease of use, attitude and intention in Malaysian companies. PLS-SEM, descriptive analysis, factor analysis and reliability were tested in this study. The study revealed that the variables perceived ease of use, system performance, perceived usefulness and perceived costs had a positive impact on the behavioral intention of using Cloud ERP.

Salim et.al (2015) conducted a study on the reasons that made SMEs adopt Cloud ERP. 162 samples were collected from the owners of various Malaysian SMEs. Here, analysis was conducted in two stages namely evaluation stage and trial stage. The variables measured here

were attitude, normative belief, control belief, perceived behavioral control and subjective norms. Regression analysis was done in this study. Among all these variables, variable subjective norms was the most significant factor in the adoption of ERP in Cloud.

Walther *et.al* (2015) made a study on the continuance intention of the usage of Cloud ERP in German companies with the variables system quality, net benefits, information quality, system investment and technical integration. 115 questionnaires were collected and analyzed. From the PLS- SEM output, it was found that technical integration and system investment were the strong positive impact variables in the continuance intention of cloud ERP.

Antoniadis *et.al* (2015) conducted a study in Greece SMEs that were using ERP regarding the critical variables of using ERP software. 37 SMEs participated in this study. Communication, training, project group skills, process of surveillance, assessment of enterprise, clarity of objectives, vendor support, firm's financial resource, level of trust, level of quality service were the variables analyzed in this study. Chi- square and correlation were tested here. The result showed that cost of the software and training were the most critical variables in adopting ERP.

Alex and Chirag (2015) examined the benefits and dilemma of Cloud ERP in many organizations. Data were collected from 16 ERP consultants. Data were analyzed using thematic analysis approach. Data privacy & cloud transparency, cost, data security, system speed & performance, system upgrade & enhancement, mobility, vendor lock-in and integration were the variables measured here. The result showed that cost and mobility were the most significant variables.

Mustafa and Rakibul (2015) examined the variables that determined the adoption of ERP on Cloud in Saudi Arabia. The study was conducted in both public and private companies in Saudi Arabia. The variables used in this study were relative advantages, complexity, compatibility, trialability, observability, ICT expertise, ICT infrastructure, security, top management support, organizational culture, regulatory environment, competitive environment and organization type. Questionnaire was the instrument used to collect the samples. SEM was conducted in this study. The analysis result showed that observability, complexity, trialability, compatibility and relative advantage were the significant variables in the adoption of Cloud ERP.

Yang and Lin (2015) analyzed the continuous intention in using cloud storage service in the companies in Taiwan. The variables used in this study were cloud storage service support, unstructured task, cloud service self- efficacy, opinion of reference groups, perceived usefulness, privacy protection risk, lack of privacy-risk and continuous intention. 294 samples were collected. Reliability, validity, regression and correlation were tested here. The result showed that opinion of reference groups, cloud storage service support, cloud service self- efficacy, unstructured task and perceived usefulness had significant relation with the continuous intention in using ERP on Cloud.

Johansson *et.al* (2015) identified variables that determine the adoption of Cloud ERP on the perspective of organizational size. The study was conducted in 505 SMEs in Greece. Cost, customer service, resource management, decision making, planning, flexibility, compliance, availability, security, vendor lock- in, performance, productivity and quality were the variables measured in this study. Data were collected by interviewing with open ended questions. The result in the analysis indicated that security issues and compliance were the main issues in adopting Cloud ERP.

Peng and Chirag (2015) made an investigation on whether Cloud ERP benefited the modern organizations. In- depth interviews were conducted to 16 ERP consultants. The data were analyzed using a thematic analysis approach. Cost & support, system speed & performance, system upgrade & enhancement, mobility, transparency & data privacy, data security, vendor lock- in, integration difficulties and organizational changes were measured here. The analysis result helped to reveal that the technical and economic benefits of Cloud ERP aided the modern organizations.

Brenda and Denis (2015) made a research on the drawbacks and benefits of Cloud ERP system in South African SMEs. Online questionnaires were used in this study. 41 responses were collected and analyzed using percentage analysis. Flexibility, business efficiency, collaboration, IT security, scalability, access to latest development in ERP systems, core activities, IT costs and data execution time were the variables analyzed here and the result showed that flexibility was the highly prioritized variable in using Cloud ERP and IT security was the most critical factor in the adoption of ERP on Cloud.

Lung Hsu and Jady (2015) with 102 samples made a study on the adoption of ERP on cloud and how this attained better performance in Taiwanese firms. Security, relative advantage,

observability, trialability, ease of use, satisfaction, financial costs, firm size, global scope, regulatory environment and competition intensity were the variables measured in this study. PLS, reliability, percentage and ANOVA were calculated in this study and the result indicated that financial costs, satisfaction, competition intensity, observability, relative advantage and security were the significant variables of the study.

Sebastian *et.al* (2015) investigated the continuance intention of using Cloud ERP in organizational level. 115 samples were collected and analyzed. The variables analyzed in this study were system quality, information quality, net benefits, system investment and technological integration. SEM, validity and reliability were tested here. Other than technical integration all had significant impact on the continuance intention in using Cloud ERP.

Haddara et.al (2015) analyzed the variables that determined the Cloud ERP adoption. 180 samples were collected. Percentage analysis, regression and correlation were done with the variables such as perceived benefits, perceived disadvantages, attitude, perceived subjective norms and behavioral control in this study. The analysis result indicated that security concerns were the most perceived disadvantage in the adoption of Cloud ERP.

Haddara *et.al* (2015) measured the attitude and the variables that determine the adoption of Cloud ERP systems in companies in Norway. 297 samples were collected and analyzed in this study. Total cost of ownership, benefits, accessibility, security, attitudes, disadvantages, vendor lock-in and dependency were the variables analyzed here. Regression, inferential and descriptive statistical analysis were used in this study. The findings depicted that system accessibility, vendor lock-in and dependency were the prioritized variables that determined the attitude towards the Cloud ERP adoption.

 Haddara et.al (2015) analyzed the variables that determined the Cloud ERP adoption. 180 samples were collected. Percentage analysis, regression and correlation were done with the variables such as perceived benefits, perceived disadvantages, attitude, perceived subjective norms and behavioral control in this study. The analysis result indicated that security concerns were the most perceived disadvantage in the adoption of Cloud ERP.

Njenga (2014) investigated how the TOE variables affected the Cloud ERP adoption in the companies of the United States of America. The variables such as relative advantage, security concern and compatibility regarding Technological, Organizational variables including formalization, centralization, organization size, organizational readiness and top management

support and vendor support and competitive pressure were the variables regarding Environmental variables were measured in this study. Using Convenient Sampling the samples were chosen. Questionnaires were used to collect the data. 159 samples were collected and analyzed. Factor analysis, reliability and T- test were tested here. The analysis result showed that centralization and formalization were the most prioritized variables in adopting Cloud ERP.

Amini (2014) identified the influencing variables in adopting ERP on Cloud. Relative advantage, compatibility, security concerns and cost savings were the variables taken from DOI framework and technology readiness, top management support, competitive pressure and regulatory support were the variables taken from the TOE framework. 77 samples were collected from SMEs and analyzed. Reliability, validity, percentage analysis and SEM were tested in this study. And the result revealed that all the variables had a significant relation with the adoption of Cloud ERP in SMEs.

Ravi (2014) Organizational, environmental and technical variables were measured here. The study found that the variables that determined the adoption of ERP on cloud were reputation of vendor, participation of vendor, fit of ERP software and vendor support.

Michael (2014) investigated the barriers and variables that were motives in adopting ERP on Cloud in Georgian SMEs. 110 samples were used in this study. Perceived usefulness, attitude, perceived ease of use, behavioral intention, actual system use, technical compatibility, technical complexity, relative advantage, adoption infusion, information quality, system quality, service quality, intention to use, net benefits and user satisfaction were the variables considered and analyzed in this study. Wilcoxon Signed Rank Test, descriptive statistics, T- tests were used in this study. The result showed that all the variables used here were the motive variables in adopting Cloud ERP.

Njenga (2014) made a study on the role of Cloud ERP in the performance of US companies with 153 samples. Security concerns, compatibility, relative advantage, top management support, organization size, centralization, organization readiness, formalization, vendor support and competitive pressure were the variables that determined the role of Cloud ERP in this study. From the result of T-test and F-test, vendor support, top management support and security concerns had a positive effect on the dependent variable.

Martin *et.al* (2014) examined the interoperability and integration implications of cloud based enterprise applications. 114 respondents participated in the study. Samples were collected online. Integration implications included the variables business logic integration, communication layer integration, presentation layer integration. Interoperability included service interoperability, application and platform interoperability. The analysis interpreted that the main barrier to achieve flawless integration is poor interoperability.

Igor (2014) investigated whether ERP on- premise or ERP on cloud is more effective in Serbia. Using convenient sampling, questionnaire and telephonic interview were used to collect the data. 457 samples were collected. Data were analyzed using an analytical hierarchy process. Cost, service availability, data lock- in, data transfer, performance, scalable storage, scaling, functional, technical and usability variables were considered here. And the result implied that performance and cost were the most significant variables in choosing ERP on Cloud.

Roger *et.al* (2014) found the variables for SMEs to adopt ERP on Cloud. In this study, the variables were ranked based on a heuristic mathematical model. Data were collected from media, financial services, softwares and cable TV service providers. The variables considered in this study were accessibility, mobility, business continuity, service extensibility, software management, security & privacy, service level agreement, interoperability, cloud migration, vendor lock- in and cloud expertise availability. Among these variables security & privacy, interoperability, service level agreement requirements, unavailability of cloud expertise and vendor lock- in had a negative impact on the adoption of Cloud ERP.

Alessandro *et.al* (2013) investigated 36 SMEs regarding the usage of Cloud ERP in both customer and vendor perspectives. The variables such as implementation cost, handling of large amounts of data, response to customers, ubiquitous access and function of software were the considered variables for this study. Samples were collected through questionnaires and telephonic interviews. Percentage analysis was done here and the result depicted that ubiquitous access was the most significant variable in the usage of ERP on Cloud.

Johansson and Pedro (2013) explored the variables in the adoption of ERP as SaaS. 20 Microsoft employees were interviewed. Security, cost, availability, implementation, usability, best practices, flexibility, ubiquity, analytics and compatibility were the variables considered

for the study. All the variables were ranked based on the interview. And it was revealed that system availability, cost and data security were the most prioritized variables.

2.2 NATIONAL REVIEWS:

S Gupta et.al (2019) examined the sustainable performance and Cloud ERP relation with 209 samples. Samples were collected from small, medium and large organizations in India such as Banking, insurance, retail, real estates, education, foods & beverages, government, and manufacturing. Organizational variables, technological variables, people variables, environmental performance, economic performance, social performance, firm size, cloud service offering and cloud service type were the variables measured here. Reliability was measured and SEM was analyzed. The result showed a positive significant relation between the cloud ERP and sustainable performance.

S. Gupta et.al (2018) analyzed the Cloud ERP implementation success variables in India by measuring the variables such as strategic goals & objectives, reduced organization resistance, implementation strategy, communication, project budget, business process reengineering, project management, selection of package, system testing and data integrity IT infrastructure, compliance, functionality, cloud based segregation of duties, data archiving, global compliance standards and regulations, network, network latency, lack of standardized APIs, upload time, printing in the cloud, security, network layer complexity, confidentiality of data accountability, encryption and maintenance. 208 samples were collected for this study from Indian SMEs. SEM and correlation were analyzed here. And the result showed that information security, compliance and network were the highly influential variables in the implementation of Cloud ERP.

Biswajit *et.al* (2018) made a study in Indian SMEs on the adoption of ERP on Cloud. Stratified random sampling was used to collect the data. 167 samples were collected from banking, IT, insurance, educational, healthcare, transport organizations in Mumbai, Kolkata, Bangalore and Delhi. Lack of industry standards, not cost effective, difficulty in integrating with the environment of organization, risk of data loss, risks of security, lack of control over infrastructure were the variables measured in this study. Percentage analysis was done and the result showed that lack of industry standards and no cost effectiveness were the main variables that stopped any organization from adopting Cloud ERP.

S. Gupta *et.al* (2018) analyzed the performance of an Indian firm in using Big Data and Cloud ERP. Managerial skills, Technical skills, Organizational variables, Technological variables, People variables, Data, Big Data Predictive Analytics, Control Orientation, Flexible Orientation, Market and Operational Performances were measured in this study. 231 respondents from construction, consulting, food & beverage, education, banking, manufacturing, retail and IT services participated in this study. Online survey was done in this study. SaaS, PaaS, IaaS and internal cloud were the cloud ERP services used by the organization where the data had been collected. SEM was the analyzing tool used here. The result depicted that organization control orientation had a negative approach on market and operational performance.

Meghana *et.al* (2018) conducted a study in 29 MNCs in Delhi, Bengaluru, Chennai, Hyderabad, Mumbai, Kolkata, Pune and Cochin and also from 142 Cloud ERP consultants to analyze the variables influencing the adoption of ERP on Cloud. The variables were ranked by Analytical Hierarchy Processing Approach. Data accessibility, operability, user friendliness, understandability, availability, data backup & recovery, reliability, risk- free performance, maintainability, scalability, ease of integration, flexibility, adaptability, data privacy, security, data detention, data loss, time of implementation, cost of maintenance, trustworthiness of vendor were the variables measured in this study. Data were collected based on the Saaty scale. Percentage analysis was also done here. The result showed that data accessibility, user- friendly, availability, scalability and data backup and recovery were prioritized Cloud ERP adoption variables.

S. Gupta et.al (2017) measured the performance of an organization using Cloud ERP. 154 samples were collected from Indian companies which included shipping companies, PL companies, trucking companies, logistic companies through online surveys. The constructs used in this study were supply chain performance, financial performance, marketing performance and supply base complexity. SEM and correlation were the analyzing tools used here and the result showed that financial performance and supply chain performance had a negative impact on the usage of Cloud ERP.

Chandra Kumar and Parthasarathy (2017) conducted a comparative study of private, public & hybrid cloud in India and also measured the performance of SaaS, IaaS and PaaS. The performance was measured using the variables such as operational cost, interoperability and

data security. The result of one sample t- test showed that all the variables had a significant effect but operational cost was the most prioritized factor in the adoption of Cloud ERP.

Sandu *et. al* (2017) conducted a research in Indian SMEs regarding the cloud service. Cost reduction, complexity, relative advantage, compatibility, security, innovative variables were the variables measured in this study. Regression analysis was done here to find the significant relation of the variables with the adoption of Cloud. And it was found from the analysis result that except complexity all the other variables had a significant relation with the cloud service adoption in Indian SMEs.

S. Gupta *et.al* (2017) with 208 collected samples from Indian SMEs, analyzed the critical success variables such as organizational variables, technological variables and extrinsic variables such as security, compliance and network during Cloud ERP implementation. Survey questionnaire was used to collect the samples. Reliability and validity had been checked. SEM and correlation had been done. It was found that both critical success variables and extrinsic variables had a positive impact in the Cloud ERP implementation.

S. Gupta *et.al* (2017) made a study on the variables that are a challenge in the adoption of Cloud ERP and also compared the adoption of Cloud ERP in large organizations and SMEs. Total of 93 samples were collected from Indian SMEs and large organizations.18 challenges were identified and analyzed using Factor analysis and one- way ANOVA. The analysis result showed that other than business complexity, monitoring, integration, security, performance and integrity of provider and limited functionality all the other challenges vary. Security was the most crucial Cloud ERP adoption factor.

Pragati *et.al* (2017) made a study on the adoption of cloud computing in 110 Indian SMEs. The rate of adoption was measured using the variables such as perceived IT risk, technology innovation, risk analysis, usage of technology, management style, industry usage and trust. Snowball and purposive sampling were used to collect the samples. 110 valid questionnaires were received from many SMEs in Hyderabad, Pune, Bangalore and Mumbai and analyzed using correlation. The result showed that security and privacy was the most significant variable in the adoption of cloud in SMEs.

Shailja (2017) made a research on the variables that determine the continuance intention of ERP on Cloud. Data were collected from Indian finance, manufacturing, retail and IT sectors. Perceived ease of use, perceived usefulness, perceived ubiquity, perceived risks, perceived

costs were the variables used in this study. SEM, Exploratory factor analysis, confirmatory factor analysis, reliability and correlation were done here. Perceived ubiquity and perceived usefulness had the most significant impact on the continuance usage of Cloud ERP usage.

S. Gupta and Subhas (2016) conducted research in Indian SMEs regarding the implementation of Cloud ERP.208 samples were collected online. Network, compliance, people variables and security were the variables used in this study. SEM and correlation were done with the variables. And the result showed that other than security and network variables all the other variables had a significant relation with the Cloud ERP implementation.

S. Gupta and Misra (2016) with 208 samples from Indian SMEs made a research on the success of implementation of Cloud ERP in Indian SMEs by considering organizational variables, people variables, technological variables, network and security as independent variables and compliance as mediating variables. SEM was conducted in this study and the result showed that security and network were the two non- significant variables in the implementation of Cloud ERP in Indian SMEs.

Gaurav and Popli (2016) made a study in Indian SMEs in adopting Cloud ERP system. Using random sampling data were collected through telephonic interviews and questionnaires. The variable measured in this study were flexibility in payment, IT infrastructure cost, operational cost, IT manpower, data backup & recovery, ubiquitous access, loss of key staff, lack scalability, vendor reliability, user friendly, customization, 24*7 availability, resistance to change, platform independence, data security, interoperability, service survival, perceived lack of control. From percentage and chi square analysis, it was found that lack of control and cloud vendor change were the hindrance in adopting Cloud ERP.

Saini and Madhukar *et.al* (2016) conducted research in the Indian education sector in selecting and adopting Cloud ERP. The variables measured in this study were technical compatibility, relative advantage, technical complexity, trialability, observability, production timeliness, training, system reliability, subjective norm, strategic value, and application specificity. Semi structured interviews were used to collect the data. Both qualitative and quantitative studies had been conducted here. Except strategic value and application specificity all the other values had significant relation with the adoption of Cloud ERP in the educational sector.

Dhiraj and yuvraj (2016) measured the efficiency of Cloud ERP. Data were collected from Indian IT companies. One way ANOVA test was used in this study. Automatic upgrade, cost, user experience, ease & fast deployment, pay per use, scalability, resource pooling and quick access from anywhere were the variables measured here and the result showed that reduced cost made the organization adapt to the Cloud ERP system. Scalability and access from anywhere were the variables that highlight the efficiency of the system.

Vijayakumar and Tanuja (2015) prioritized and ranked the critical variables of adopting ERP on Cloud in India. Security & standards, cost, functionality, organizational variables and performance were the variables used in this study. variables were ranked and prioritized using Analytic Hierarchy Process. 11 respondents from the SME association, project managers of software industries and ERP consultants participated in the study. Questionnaires were prepared using AHP scale. And the analysis result showed that cost was the most prioritized factor in adopting ERP on Cloud.

S. Gupta *et.al* (2015) with 93 samples conducted a study on the determinants of ERP on Cloud in Indian SMEs. Questionnaires were sent online. Subscription costs, perception, performance, integrity of provider, awareness, functionality, network dependency, security, migration. Monitoring, data extraction, integration, legal issues, loss of IT competencies, business complexity, long term costs, organizational change and customization were the considered variables in this study. One- way ANOVA and factor analysis were done here and the result showed that security was the most critical factor in the adoption of Cloud ERP.

Prashanth et.al (2015) investigated the quality of ERP systems in Indian SMEs. Data were collected from 95 SMEs using structured questionnaires. Hardware & Software, training, top management support, project management and skill of workforce were the considered variables here. Factor analysis and regression were tested in this study. The result showed that top management support, hardware & software and skill of workforce had no significant effect in the adoption of ERP systems in Indian SMEs.

Hsu and Lin (2015) investigated the variables affecting Cloud services adoption in Taiwan. 102 respondents participated in this study. Security, relative advantage, compatibility, trialability, ease of use, observability, frim size, global scope, financial costs, satisfaction, competition intensity and regulatory environment were the variables analyzed in this study. Questionnaires were used to collect the samples. Factor analysis, ANOVA, reliability and

descriptive statistics were tested here. Among the variables, relative advantage, observability, security, competition intensity, satisfaction and financial costs were the significant variables in adopting cloud services.

Mohammed (2014) measured the decision of customers in adopting Cloud ERP in India. The variables chosen for this study were strategy, cost, technology, environment, elasticity & shifting risk, data security concern, performance & availability, customization and structure. The result showed that customization has the most negative impact on the independent variable.

Bhatia and Vikram (2014) investigated the role of ERP on Cloud in Indian SMEs. Usability, scalability, mobility, upgradability, implementation time, business cost and accessibility were the variables used in this study. Online questionnaires were used to collect the samples. ANOVA, T-tests, Chi- square and descriptive statistics were tested here. The analysis interpreted that scalability was the most prioritized factor in the study.

Mahara (2013) made a study on the selection of Cloud ERP in 30 Indian SMEs. The variables analyzed in this study were ubiquitous access, flexible payment, IT cost, operational cost, IT manpower, data backup & recovery, scalability, vendor reliability, availability, user friendly customization, resistance to change, data security, platform independence, interoperability, perceived lack of control and service survival. Percentage analysis was done here and the result was operational cost was too low and hence the Cloud ERP was the most preferential system in Indian SMEs.

The above reviews are the proof that Cloud ERP software is being used in small and medium enterprises as well as in large enterprises. The reviews figure out that this software is adopted mostly by small and medium enterprises. Hence from these reviews an idea for a new research is generated and is titled as "Continuance Intention Usage of Cloud ERP Among MSMEs in Coimbatore". These reviews confirmed that Cloud ERP is being determined by various determinants for its continuance usage in MSMEs.

Research Gap

Success of an organization relies on many factors and one among them is the adoption of an IT system. In this rapidly moving world, accessing all the functions of an organization in one click is the most congenial thing. Hence to modernize an organization with all success rates,

cloud ERP systems are being adopted in many organizations. Numerous reviews figure out that more international studies on Cloud ERP adoption have been done and only a few national studies have been done. As cloud ERP systems are available at low cost, MSMEs can afford this system. Hence this study is carried out to perceive how far the adoption of ERP on Cloud has been done in Coimbatore district especially in MSMEs, how the MSMEs are benefited with this system and their continuance intention to use the system.

Many literature reviews are studied to examine the factors that govern an organization in adopting the cloud ERP system and intend them in using the system continuously. From the literature reviews it is understood that many factors determine the adoption and continuance intention of the usage of cloud ERP. Some studies signified that system quality, perceived ease of use, task technology fit, information quality, perceived usefulness and expected performance determine the intention of the usage of cloud ERP continuously (Cheng 2020 & 2018). In many studies, some other factors namely cost effectiveness, cloud security & data privacy and environmental context (Leow *et. al*, 2016) shows significance with the continuance intention of the usage of ERP on cloud. Hence in this study all these factors are combined together to perceive how far ERP on Cloud has been used in Coimbatore district among the MSMEs and the intention of its continuance usage.

List of Variables from the Above Reviews of Literature:

Table 2- List of Variables

Author & Year	Variables
International Reviews	
Christiansen *et.al* (2021)	**Security**, **system quality**, vendor lock- in, data accessibility, top management support, financial advantage, regulatory environment, competitive environment, compatibility, relative advantage, complexity, observability and trialability
Ploder *et.al* (2021)	Project planning, project team and project management, top management support, communication, external support from consultants, user acceptance, , compliance conformity, **data privacy** and training
Razzaq *et.al* (2021)	Complexity, compatibility, trialability, **privacy & security**, IT readiness, employee knowledge, **system quality**, **perceived ease of**

	use, perceived benefits, **cost**, financial readiness, critical mass, government regular and competitive pressure
Awan et.al (2021)	Security risk, **performance of the system**, internet reliability, customization, lack of awareness of the system, user resistance and vendor competence
Robertsson (2020)	Top management support, vendor support, team composition & teamwork, inter departmental cooperation & communication, project champion, training, business process reorganization, smaller scope and change management
Ahn et.al (2020)	ICT skill, regulatory environment, organizational culture, relative advantage, trialability, complexity, observability, vendor-lock in, **data security**, customization and **adoption intention**
Jayeola et.al (2020)	Competitive advantage, top management support, future task match, government financial support and organizational performance
Akrong (2020)	Characteristics of organization, technological characteristics, characteristics of environment and characteristics of manager/owner
Alsharari et.al (2020)	**Security risk, privacy risk**, relative advantage, scalability, compatibility, licensing, cost-effectiveness, time of use, top management support, innovation of firm, IS knowledge, **organizational costs**, accessibility flexibleness, technical efficiency, market scope, external computing support, type of ERP provider, government control, integration solutions and transparency
Hasan and Murat (2020)	Technology factor, **perceived usefulness**, employee factor, **perceived usefulness**, decision making support, attitude
Le and Cao (2020)	**Perceived ease of use**, perceived safety & privacy and perceived convenience and **perceived usefulness**
Masood and Sonntag (2020)	Competitive advantage, manufacturing quality, operation cost, operational efficiency, manufacturing flexibility, implementation cost, technology knowledge, implementation time, awareness, implementation level, outlook, industry, production method, product mix, employee count, production volume and annual revenue
Marinho *et.al* (2021)	Flexibility, **cost savings**, agility, scalability, efficiency, business productivity, operation improvement, **security, privacy**, vendor

	support, technology readiness, competitive pressure, new business models, competency, relative advantage, reliability, compatibility, top management support, compliance, complexity, interoperability issues, organizational size, observability, **ease of use** and IT transformation
Alsharari *et.al* (2020)	Competitive advantage, flexibility, integration, trust, perceived risk, **perceived ease of use**, IT spending
Cheng (2020)	**Information quality, system quality**, confirmation, satisfaction, technical support, cloud storage service quality**, perceived usefulness, continuance intention** and task technology fit
Zielinski *et.al* (2020)	Efficiency, accessibility, possibility of using IT resources, **security level**, flexibility & scalability and provider's technological support
Zamzeer et.al (2020)	Top management support, firm size, **cost**, innovativeness, prior IT experience, industry, competitive pressure, supplier efforts, market scope, trialability, compatibility, complexity, uncertainty and relative advantage
Wong *et.al* (2020)	Effort expectancy, facilitating conditions, social influence, hedonic motivation, habit, price value, use behaviour and behavioral intention
Usman *et.al* (2019)	**Security concerns, cost saving**, technology readiness, top management support, frim size, cloud knowledge, competitive pressure, regulatory support, relative advantage, compatibility and complexity
Cheng (2019)	Task-technology Fit, **perceived usefulness, perceived ease of use**, confirmation, satisfaction, **continuance intention** and individual performance
Chang (2019)	**Switching cost**, switching benefits, switching intention, **system quality**, **information quality**, financial advantage, government support, industry pressure, perceived risk, satisfaction and breadth of use
Chang et.al (2019)	Compatibility, financial support, vendor support, industry pressure, **security** and **costs**
Zhang (2019)	Scalability, accessibility, **security**, customization, integration,

	maintainability, **cost**, business agility, business complexity and vendor reliability
Usman et.al (2018)	**Cost saving, security concern**, relative advantage, complexity, technology readiness, compatibility, top management support, firm size, regulatory support, competitive pressure and cloud knowledge
Shahul and Bhaskaran (2018)	**System Quality, Data Privacy**, Top Management Support, BPR, User Involvement
Cheng (2018)	**System quality**, confirmation, **continuance intention**, task - technology fit, **information quality, perceived usefulness** and satisfaction
Cheng (2018)	Subjective norm, compatibility, output quality, perceived behavioral control, confirmation, **perceived usefulness, perceived ease of use,** satisfaction and **continuance intention**
Karim (2018)	Personal innovativeness, expected switching benefits, expected switching risks, information channel exposure and intention to switch toward cloud ERP
Anwer (2018)	Compatibility, relative advantage, complexity, technology readiness, value creation, enterprise status, enterprise size, top management support, **security concerns**, technical barriers, government support, competitive advantage and communication
Thanh et.al (2018)	**Performance expectancy**, IT infrastructure, top management support, organizational culture, external support, competitive pressure and innovation
Thanh et.al (2018)	**System quality**, perceived risk, IT service quality, **information quality**, trust, **intention to use** and net benefit
Ahmad et.al (2018)	Organizational support, computer self- efficacy, compatibility, complexity, **perceived ease of use, perceived usefulness**, facilitating conditions, security, **performance expectancy**, relative advantage and **intention to adopt Cloud ERP**
Adnan and Rakibul (2017)	ICT skill, ICT infrastructure, top management support, organizational culture, regulatory environment, competitive environment, relative advantage, compatibility, complexity, trialability and observability

MF Gohlami *et.al* (2017)	Adapt data, context, migration requirements, cloud provider, deploy system, elasticity, incompatibilities, handling transient faults, rebalance system components, replicate system components, isolate tenants, system templates, migration plan, migration requirements, virtual machine specification
Yan *et.al* (2017)	Reliability, functionality & helpfulness and cloud service transformation intention
Tharhini *et.al* (2017)	**Perceived usefulness**, self-efficacy, job opportunity, **perceived ease of use**, trust, top management support, competitive pressure and regulatory support
Njenga and Chung (2017)	Compatibility, relative advantage, **security concern** and perceived benefits
Saa *et.al* (2017)	**Security concerns**, compliance issues, reliability concerns, operational support and IT governance issues
Meganathan and RP Singh (2017)	**Cost**, scalability, flexibility, rapid deployment issues, **security, privacy**, availability, reliability and compliance
Christina and Alessio (2017)	Vendor experience, implementation ability, maintenance ability, support services, successful outcomes in similar firms, market share
Haji and Rozan (2017)	Compatibility, relative advantage, task dependence, **security, cost**, system trust, top management support, regulatory environment, employee cloud ERP knowledge, competitive, fit and vendor support
Ming and Wong (2017)	Upfront investment, mobility, **maintenance cost**, scalability, reliability, system enhancement, system and hardware control, integration, customization, privilege abuse and **predictable performance**
Usman *et.al* (2017)	Complexity, firm size, compatibility, top management support, competitive pressure, technology readiness, relative advantage, **security**, trust, government regulations and cloud awareness
Chang and Ping (2017)	**Perceived ease of use**, perceived risk, **privacy concern, perceived usefulness and cost**
Prasanna and Grandhi (2017)	Personal innovativeness, **security concerns**, adoption and behavioral intentions of ERP on Cloud
Martins *et.al* (2016)	Pricing flexibility, **security & backup**, collaboration, infrastructure

	cost, scalability & speed, availability & mobility, business agility, competitiveness and business intelligence
Tong *et.al* (2016)	Perceived risks, perceived incentive in new technology usage, perceived encouragement, attitude, **perceived system performance and perceived costs**
Adewale (2016)	Effort expectancy, **performance expectancy**, facilitating conditions and social influence
Haji and Zaidi (2016)	Vendor trust, **data security issues**, trust on cloud ERP, knowledge, system availability, government support, and fit to business
Umet *et.al* (2016)	Trust, relative advantage, **security & privacy**, complexity, customization, IT resource of organization, top management support, organization size, Cloud fitness, competitive pressure, partner pressure, government policies and regulations and infrastructure
Leow *et.al* (2016)	Competitive pressure, **cloud security & data privacy**, internet reliability, **cost effectiveness** and top management support
Jorge *et.al* (2016)	**Data security, cost concern**, usability, system availability, ubiquity, implementation, trust, compatibility, flexibility, best practices and analytics
Prerna Lal (2016)	Relative advantage, **perceived usefulness, perceived ease of use**, vendor credibility, top management support
Hassan and Murat (2016)	Employee variables, technological variables, **perceived usefulness,** attitude and **perceived ease of use**
Tong *et.al* (2016)	Perceived risk, perceived cost, perceived system performance, **perceived usefulness, perceived ease of use**, attitude and **intention**
Salim *et.al* (2015)	Attitude, normative belief, control belief, perceived behavioural control and subjective norms
Walther *et.al* (2015)	**System quality**, net benefits, **information quality**, system investment and technical integration
Alex and Chirag (2015)	**Data privacy** & cloud transparency, **cost, data security**, **system performance**, system speed, system upgrade & enhancement, mobility, vendor lock-in and integration
Mustafa and Rakibul (2015)	Relative advantages, complexity, compatibility, trialability, observability, ICT expertise, ICT infrastructure, **security**, top

	management support, organizational culture, regulatory environment, competitive environment and organization type
Johansson *et.al* (2015)	**Cost**, customer service, resource management, decision making, planning, flexibility, compliance, availability, **security**, vendor lock-in, performance, productivity and quality
Peng and Chirag (2015)	**Cost**, support, system speed, **performance**, system upgrade & enhancement, mobility, transparency & **data privacy**, **data security**, vendor lock- in, integration difficulties and organizational changes
Brenda and Denis (2015)	Flexibility, business efficiency, collaboration, IT security, scalability, access to latest development in ERP systems, core activities, **IT costs** and data execution time
Lung Hsu and Jady (2015)	**Security**, relative advantage, observability, trialability, **ease of use**, satisfaction, financial costs, firm size, global scope, regulatory environment and competition intensity
Sebastian *et.al* (2015)	**System quality, information quality**, net benefits, system investment and technological integration
Haddara et.al (2015)	Perceived benefits, perceived disadvantages, attitude, perceived subjective norms and behavioral control
Haddara *et.al* (2015)	Total cost of ownership, benefits, accessibility, **security**, attitudes, disadvantages, vendor lock-in and dependency
Njenga (2014)	Formalization, centralization, organization size, organizational readiness and top management support and vendor support and competitive pressure
Mini (2014)	Relative advantage, compatibility, **security concerns, cost savings**, technology readiness, top management support, competitive pressure and regulatory support
Ravi (2014)	Reputation of vendor, participation of vendor, fit of ERP software and vendor support
Michael (2014)	**Perceived usefulness**, attitude**, perceived ease of use**, behavioral intention, actual system use, technical compatibility, technical complexity, relative advantage, adoption infusion, **information quality, system quality**, service quality, **intention to use**, net benefits and user satisfaction

Njenga (2014)	**Security concerns**, compatibility, relative advantage, top management support, organization size, centralization, organization readiness, formalization, vendor support and competitive pressure
Roger *et.al* (2014)	Accessibility, mobility, business continuity, service extensibility, software management, **security & privacy**, service level agreement, interoperability, cloud migration, vendor lock- in and cloud expertise availability
Alessandro *et.al* (2013)	Implementation cost, handling of large amounts of data, response to customers, ubiquitous access and function of software
Johansson and Pedro (2013)	**Security, cost**, availability, implementation, usability, best practices, flexibility, ubiquity, analytics and compatibility
National Reviews	
S Gupta et.al (2019)	Organizational variables, technological variables, people variables, environmental performance, economic performance, social performance, firm size, cloud service offering and cloud service type
S. Gupta et.al (2018)	Strategic goals & objectives, reduced organization resistance, implementation strategy, communication, project budget, business process reengineering, project management, selection of package, system testing and data integrity IT infrastructure, compliance, functionality, cloud based segregation of duties, data archiving, global compliance standards and regulations, network, network latency, lack of standardized APIs, upload time, printing in the cloud, security, network layer complexity, confidentiality of data accountability, encryption and maintenance
Biswajit *et.al* (2018)	Lack of industry standards, not cost effective, difficulty in integrating with the **environment of organization**, risk of data loss, risks of security, lack of control over infrastructure
S. Gupta *et.al* (2018)	Managerial skills, Technical skills, Organizational variables, Technological variables, People variables, Data, Big Data Predictive Analytics, Control Orientation, Flexible Orientation, Market and Operational Performances
Meghana *et.al* (2018)	Data accessibility, operability, user friendliness, understandability, availability, data backup & recovery, reliability, risk- free

	performance, maintainability, scalability, ease of integration, flexibility, adaptability, data privacy, security, data detention, data loss, time of implementation, cost of maintenance, trustworthiness of vendor
S. Gupta et.al (2017)	Supply chain performance, financial performance, marketing performance and supply base complexity
Chandra Kumar and Parthasarathy (2017)	Operational cost, interoperability and **data security**
Sandu *et. al* (2017)	**Cost reduction**, complexity, relative advantage, compatibility**, security**, innovative variables
S. Gupta *et.al* (2017)	Organizational variables, technological variables, **security**, compliance and network
S. Gupta *et.al* (2017)	Business complexity, monitoring, integration, **security, performance** and integrity of provider
Pragati *et.al* (2017)	Perceived IT risk, technology innovation, risk analysis, usage of technology, management style, industry usage and trust.
Shailja (2017)	**Perceived usefulness**, perceived ubiquity, perceived risks, **Perceived ease of use and perceived costs**
S. Gupta and Subhas (2016)	Network, compliance, people variables and **security**
S. Gupta and Misra (2016)	Organizational variables, people variables, technological variables, network and **security** as independent variables and compliance
Gaurav and Popli (2016)	Flexibility in payment, IT infrastructure cost, operational cost, IT manpower, data backup & recovery, ubiquitous access, loss of key staff, lack scalability, vendor reliability, user friendly, customization, 24*7 availability, resistance to change, platform independence, data security, interoperability, service survival, perceived lack of control
Saini and Madhukar *et.al* (2016)	Technical compatibility, relative advantage, technical complexity, trialability, observability, production timeliness, training, system reliability, subjective norm, strategic value, and application specificity
Andreas and Haddara (2016)	External task environment, technology, organization and innovation

Dhiraj and yuvraj (2016)	Automatic upgrade, **cost**, user experience, ease & fast deployment, pay per use, scalability, resource pooling and quick access
Antoniadis *et.al* (2015	Communication, training, project group skills, process of surveillance, assessment of enterprise, clarity of objectives, vendor support, firm's financial resource, level of trust, level of quality service
Vijayakumar and Tanuja (2015)	**Security** & standards, cost, functionality, organizational variables and **performance**
Yang and Lin (2015)	Cloud storage service support, unstructured task, cloud service self-efficacy, opinion of reference groups, **perceived usefulness**, privacy protection risk, lack of privacy-risk and continuous intention
S. Gupta *et.al* (2015)	Subscription costs, perception, **performance**, integrity of provider, awareness, functionality, network dependency, security, migration. Monitoring, data extraction, integration, legal issues, loss of IT competencies, business complexity, long term costs, organizational change and customization
Prashanth et.al (2015)	Hardware & Software, training, top management support, project management and skill of workforce
Hsu and Lin (2015)	**Security**, relative advantage, compatibility, trialability, **ease of use**, observability, frim size, global scope, **financial costs**, satisfaction, competition intensity and regulatory environment
Mohammed (2014)	Strategy, **cost**, technology, environment, elasticity & shifting risk, data security concern, **performance** & availability, customization and structure
Igor (2014)	**Cost**, service availability, data lock- in, data transfer, **performance**, scalable storage, scaling, functional, technical and usability
Bhatia and Vikram (2014)	Usability, scalability, mobility, upgradability, implementation time, **business cost** and accessibility
Mahara (2013)	Ubiquitous access, flexible payment, IT cost, operational cost, IT manpower, data backup & recovery, scalability, vendor reliability, availability, user friendly customization, resistance to change, data security, platform independence, interoperability, perceived lack of control and service survival

Tripti (2013)	Service survival, vendor credentials, non- compliance issues, market existence, loss of key staff, resistance to change, perceived lack of control, ubiquitous access, service quality, data lock-in, availability, data & storage, **security**, interoperability, **performance**

Objective 1: To identify the factors determining the continuance intention of the usage of cloud ERP

The above grouping of the variables helped to understand that many theories are used to collect the variables for the study of adoption and continuance usage of cloud ERP. With the help of those theories, the most suitable variables for this study, the adoption of ERP on cloud among MSMEs in Coimbatore are identified. These variables are further grouped on the basis of the variables related to adoption of cloud ERP and variables related to MSMEs. Those grouped variables are system quality, environmental context, information quality, cloud security & data privacy, cost effectiveness, perceived usefulness, expected performance, perceived ease of use and continuance intention. Thus by identifying these factors, **objective 1** is set. The theories from which these variables are adopted are described below:

2.3 THEORETICAL BACKGROUND

MSMEs are the recognized source of income of the economy of a country. Any organization can thrive in society with a strong economy and technology. If a technology is available at low cost which is user friendly, flexible and makes the business flourish, of course anyone will adopt such technology and definitely will have the intention of using the same technology continuously. Here in this study cloud ERP fits all these characteristics. There are many theories which ensure that there are many variables that aid to know the variables that help to adopt ERP on cloud in MSMEs and continuance intention in the usage of cloud ERP. Social Cognitive Theory (Compeau *et. al*, 1995) in which computer self-efficacy is measured with variables such as personal self-efficacy, expected performance and so on. In this study the variables expected performance is used to measure how the performance outcome of Cloud ERP helps in the betterment of the performance of MSMEs. Information System Success model (DeLone and McLean, 1992) measured the impact of a system with the success of an organization with the variables information quality and system quality. System quality is measured with respect to the functionality, ease of use, reliability, quality of data, flexibility, integration, importance and portability of a system. Information quality of a

system can be measured with respect to timeliness, accuracy, completeness, consistency and relevance and here the system is a cloud ERP system.

TOE framework (Tornatzky and Fleisher, 1990) introduced the TOE framework-Technological, Organizational and Environmental Contexts for the base for the adoption of any kind of innovation or technology and also its continuance usage in an organization. Technological context includes security and data privacy items in it. Susan and Govindarajulu in 2015 introduced the TOE framework in which environmental context including trust in vendors and partner readiness. In this study both technological and environmental contexts with the items cloud security & data privacy and competitive pressure, vendor trust respectively are measured in this study.

TAM- Technology Acceptance Model (T. Oliveira and M.R. Oliveira (2009) added competitive pressure in the environmental context. Davis, 1989 measured the technology acceptance of users with the variables perceived usefulness and perceived ease of use. From this easiness of a technology and the belief of users of using a technology improves the performance of their business are measured. In this study these two variables are used to value the easiness and the usefulness of ERP on cloud and are measured its role in the adoption and continuance intention of the usage of Cloud ERP. Bhattacherjee, 2001 in his Expectation- Confirmation Model used the variable continuance intention to measure the intention of usage of the information system continuously. In this study the variable continuance intention is used to measure the intention of the users of cloud ERP continuously in the MSMEs in Coimbatore.

2.4 RESEARCH FRAMEWORK

Based on the above reviews, it is found that some variables such as system quality, cloud security & data privacy, information quality, environmental context, perceived ease of use, cost effectiveness, perceived usefulness, expected performance and continuance intention which are perceived to be the most appropriate variables for this study and a framework is framed with these variables which is shown in Fig.2. The variables perceived usefulness, perceived ease of use, expected performance and continuance intention are chosen from the article of Cheng (2020). The variables information quality and system quality are selected from the article of Cheng (2019). The variables cloud security & data privacy, environmental context and cost effectiveness are taken from the article of Leow et.al (2016).

Figure 2.1
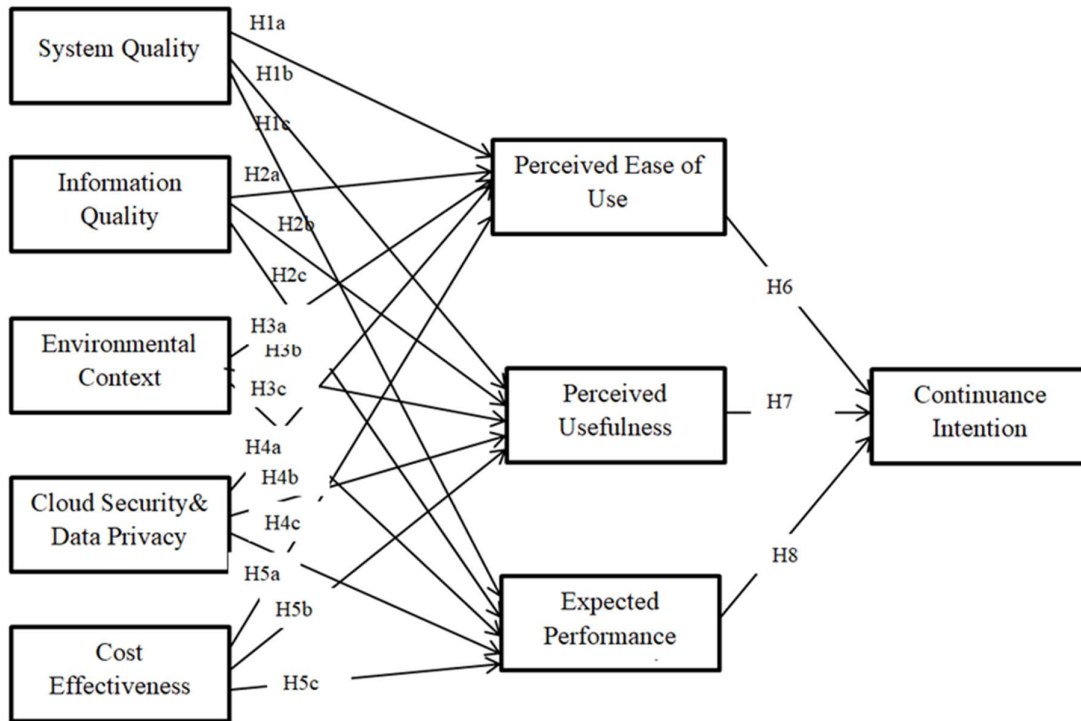
Ref: Cheng (2020& 2019), Leow (2016)

2.4 HYPOTHESES TO BE TESTED

System quality is the quality of performance of a system. This can be measured with the help of flexibility, adaptability, availability, convenience, efficiency, reliability, responsiveness and usability in the function of cloud ERP. Here it refers to the characteristics and functionality (DeLone and McLean, 1992) of cloud ERP system. Users will be satisfied if they are provided a system with high quality relevant function (Roca *et.al*, 2006) *Perceived Usefulness* is the extent to which a person considers a system to improve one's job performance. In terms of cloud- based context, this leads to the satisfaction of a person with the cloud ERP services. The users feel cloud ERP system is useful if the system provide them with stability, reliability, availability, accessibility, timely response and functionality which automatically improve the productivity of the organization (Lee *et.al*, 2009). *Perceived Ease of Use* is the level to which a person believes that using a particular system, here the cloud ERP could be free from effort. *Expected Performance* is the level at which the expected result or outcome achieved in a business performance from the function of a cloud ERP system.

H1a: System Quality has a significant relation with Perceived Ease of Use

H1b: System Quality has a significant relation with Perceived Usefulness

H1c: System Quality has a significant relation with Expected Performance

Information Quality is the quality of the content of a system. This can be measured by scope, accuracy, efficiency, timeliness, personalized, completeness and relevance of information (DeLone and McLean, 1992). Users will be motivated by using a system, here cloud ERP system if the information provided by the system is broad enough and frequently updated.

H2a: Information Quality has a significant relation with Perceived Ease of Use

H2b: Information Quality has a significant relation with Perceived Usefulness

H2c: Information Quality has a significant relation with Expected Performance

Environmental Context is the area in which a firm conducts its business, competitors, government policies and vendors. Here competitive pressure and vendor support are included.

H3a: Environmental Context helps the organization in the continuance intention of the usage of cloud ERP through Perceived Ease of Use

H3b: Environmental Context helps the organization in the continuance intention of the usage of cloud ERP through Perceived Usefulness

H3c: Environmental Context helps the organization in the continuance intention of the usage of cloud ERP through Expected Performance

Cloud Security includes a set of policies, controls, technologies and procedures together to protect cloud based systems. *Data Privacy* is the determination of the ability of an organization to share data in the system to a third party.

H4a: Cloud Security & Data Privacy insure Continuance Intention of the usage of cloud ERP through Perceived Ease of User

H4b: Cloud Security & Data Privacy insure Continuance Intention of the usage of cloud ERP through Perceived Usefulness

H4c: Cloud Security & Data Privacy insure Continuance Intention of the usage of Cloud ERP through Expected Performance

Cost Effectiveness here is that Cloud ERP meets all the required specifications at a fair price that an organization can afford with.

H5a: Cost Effectiveness determines the continuance usage of Cloud ERP through Perceived Ease of Use

H5b: Cost Effectiveness determines the continuance usage of Cloud ERP through Perceived Usefulness

H5c: Cost Effectiveness determines the continuance usage of Cloud ERP through Expected Performance

Continuance Intention is the intention to use a system continually. When the user feels cloud ERP services are satisfactory, they will surely intend to continue using the services forever.

H6: Perceived Ease of Use assures Continuance Intention in using cloud ERP

H7: Perceived Usefulness assures Continuance Intention in using cloud ERP

H8: Expected Performance assure Continuance Intention in using Cloud ERP

These hypotheses are tested in the analysis chapter.

SUMMARY

Cloud ERP has been used in many countries. As it is known that only a few studies have been conducted in India, it is being decided to conduct a study on the continuance intention of the usage of Cloud ERP in Coimbatorian MSMEs. The above said variables can determine the level of continuance intention of the use of Cloud ERP. With the help of the above said reviews, suitable determinants for the continuance intention usage of Cloud ERP have been determined, a new framework has been created. Research questions have been raised and hypotheses have been set for the study.