

# Readiness Factors for SMEs in e-Business to Adapt Digital Marketing in Sri Lanka: A Systematic Literature Review

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## Abstract

Digital Marketing is a critical factor for SMEs in e-business. Currently, in SMEs gradual increase in use of e-business can be observed to gain a competitive advantage in highly aggressive markets and to achieve global access. Within all these e-business tools and techniques Digital Marketing does a most prominent role in achieving markets and access levels. Hence SME and the country can vastly benefit from adopting digital marketing because SMEs are considered as the engine of growth of a local economy. Therefore, for an SME to adopt digital marketing a certain set of factors should exist. The factors such as technology and infrastructure, market forces, supporting industry, finance and budget, skills and knowledge and management support is identified as an extension of the PERM model through a systematic literature review.

## Keywords

Digital marketing, Digital marketing readiness, SMEs in Sri Lanka, e-Commerce

## 1. Introduction

In a dynamic environment where different opportunities arise with different levels of technological advancement Digital Marketing can be highlighted as one element. Many opportunities are created in the e-business world where organisations can reap them and use it for their own growth because of Digital Marketing. According to Chaffey & Ellis-Chadwick (2019) Digital Marketing can be elaborated as the utilization of digital media, data and technology fused with traditional communications to achieve marketing objectives. The objective of Digital Marketing is to interact with multiple audiences is a harmonised pattern communicating the innovations, ideas, trends, and organisational objectives.

SMEs are usually known to be the engine of growth for a country's economy due to their significant economic contributions (Putra & Hasibuan, 2015). In Sri Lanka context, SMEs are defined based on the number of employees and annual turnover under the SME policy framework (Ministry of Industry and Commerce, 2016). Medium, Small and Micro scale enterprises can be categorised under SMEs in Sri Lanka, where Annual Turnover and Number of Employees of Manufacturing and Service sector under of SMEs are listed in Table 1.

Table 1 SME Categorization

Size/Sector	Criteria	Medium	Small	Micro
Manufacturing	Annual Turnover	LKR 251-750 million	LKR 16-250 million	LKR 15 million or less than LKR 15 million
	Number of Employees	51-300	11-50	10 or less than 10
Service	Annual Turnover	LKR 251-750 million	LKR 16-250 million	LKR 15 million or less than LKR 15 million
	Number of Employees	51-300	11-50	10 or less than 10

### Digital Marketing in relation to SMEs in e-business

Organisations carrying out their business transactions, trading of good and services through electronic media is known as e-commerce (Department of Communications, Information Technology and the Arts 1999, p.1). Therefore, having a proper DM strategy for SMEs in e-business is vital. If looked within the SMEs point of view, in operation digital marketing anchors on managing multiple forms of online appearances, such as the websites and social media pages combined with integrated communication techniques including social media marketing search engine marketing, online advertising, email marketing, affiliated marketing and etc (Chaffey & Ellis-Chadwick, 2019). All of these can be used in SMEs in objective to acquire consumers, retain consumers, increase loyalty and sales provide services and develop the organisations' interface and gain a market growth.

According to the studies of Alnaser et al. (2013), SMEs play a vital role in the economic growth in developed and developing countries and account for 80% of the global economic growth. And further as SMEs have a smaller audience and it is much harder to reach it compared to larger organisations. Digital marketing can address that issue and help in reaching the first group of consumers. According to the author at WebFindYou (2017) much importance of digital marketing to SMEs can be elaborated as follows. Digital marketing brings the SME closer to the target audience, quick and instant results can be seen, changes can be adapted easily accordingly with the consumer opinion, cost-effective than traditional marketing. In the name itself SMEs are smaller or medium size organisation which need a boost to their brand identity, by an enhanced digital marketing scheme SMEs can build their brand identity and increase brand awareness rates. Further as the online consumer segment increase exponentially, SMEs can target and reach a wider target audience through proper enhanced digital marketing techniques (Ulster University, 2021).

### Current state of Digital Marketing in Sri Lanka

The lack of facility and resources with the change in consumer behaviour stand in between SMEs and e-commerce making it the main challenge for SMEs (Gunawardena,2018). Hence with that state back in 2018 in adoption of e-commerce, with development of technology in 2021 digital marketing has moved few more steps ahead of e-commerce, therefore we cannot expect much of difference in facility and infrastructure resources in adoption of digital marketing in SMEs which are currently in e-commerce in Sri Lanka. Further Gunawardena (2018) elaborates that the overall SMEs only use the basic to low level activities in e-commerce within their daily operations.

Though it can be concluded that in general e-commerce is established in Sri Lanka, the country has a significant potential to expand in e-commerce as the degree of e-commerce penetration and adoption is still limited. Only less than 10% of commerce is technology-driven (Commonwealth Secretariat, 2020). Thus, if only 10% of the commerce is technology driven in Sri Lanka, adoption rate of digital marketing is out of that 10% which is arguably less than 10% clearly not the total 10%.

### Current state of Digital Marketing in Developing Countries

SMEs in developing countries hardly keep up with the dynamic technological advancements, where usually lack of resources can be highlighted as the main obstacles to adopted digital marketing (Taiminen & Karjaluo, 2015), (Centobelli et al., 2016). Developing countries are usually identified with insufficiencies in infrastructure and

technological aspects, therefore this lack of resources affects the business operations of SMEs too which can be a main reason of lack of digital marketing adoption of in SMEs in developing countries.

SMEs owners/management in developing countries possess a restricted and a limited knowledge on new technologies in marketing. Even though there is a minimum awareness rate on opportunities and importance of technology in marketing in SMEs of developing countries, the main limitations are created through the technological advancement rate which creates a supply-demand gap and a knowledge gap which limits adopting digital marketing (Mohan & Ali,2019), (Alford & Page, 2015). Further as the technological advancement is increasing at an exponential rate, developing countries only experience few of them in real time and most of the technology after it matures. Hence that advancement rate creates a knowledge gap along with a supply-demand gap within the SMEs which limits the adoption of digital marketing.

### **Implication of the research problem**

Organisations have more advanced ways which shows promising results to explore their target markets, understand consumer buying behaviour and reach and address their needs and wants directly through advanced digital marketing technologies. And though SL SMEs have the potential to expand and reap the benefits of Digital Marketing, as a developing country certain technological, supply-demand and knowledge gaps restricts its maximum potential. Therefore, addressing this problem is important because, as SL is the centre of commerce in South-Asia, through DM locals could reach global levels of e-Commerce and the SL commerce systems can be lifted to a point to reap many benefits.

### **Justification of the Systematic literature review**

According to predictions, for at least the next 15 years there could be an exponential growth of online and mobile consumers. Which requires the businesses to incorporate the digital online technologies to engage with the target audience actively. Digital Marketing furnish SMEs to wider market opportunities and assist the SMEs to retain consumers and secure information on market trends and consumer behaviours via much cost-effective strategies with promising results (Mazzarol, 2015). Since SMEs can reap much more benefits through digital marketing, Digital Marketing should be enhanced within the local SMEs.

Hence the SMEs should be aware about the available advancements of technologies, also the infrastructure facilities, technological facilities and knowledge barriers within the country to do marketing in the digital form should be fulfilled. The current situation within the SMEs can be viewed as the reluctances to take a risk in using newer forms of e-business and stick to more traditional ways which already showed the promising results. Therefore, the SMEs should be provided with assurance of the results of digital marketing. Knowledge of there's more to digital marketing than posting on social media platforms and social media ads should be given to SMEs in order to enhance the Digital Marketing within the SMEs in Sri Lanka.

Thus, while addressing the research gap which was identified, the research will be analysing the influencing factors in digital marketing adoption. The sole purpose of this research is to identify the ability/capabilities and readiness of Sri Lanka SME in adopting digital marketing and putting forward a readiness model for SMEs in Sri Lanka which are into e-business to adopt digital marketing technologies and reap the potential benefits.

### **Scope of the Systematic literature review**

The research focuses on influencing factors for SMEs in e-business in Sri Lanka to adopt digital marketing technologies (figure 1). The research will focus on six most influencing factors for digital marketing adoption from the SMEs' point of view.

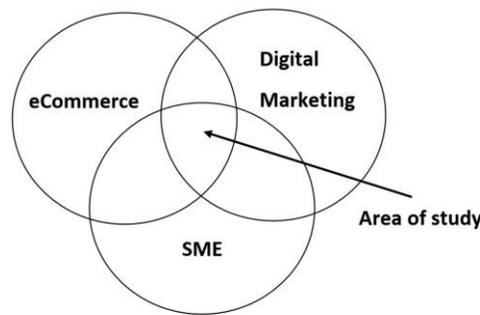


Figure 1 Scope of study

### Objectives of Research

The objective of the systematic literature review is to identify the current situation of digital marketing in SMEs in Sri Lanka benchmarking the global level of digital marketing. Further identify the influencing, readiness factors in order to adopt and implement digital marketing by Sri Lankan SMEs.

## 2. Literature review

### E-commerce adoption in SMEs

There are many research done on e-commerce adoption of SMEs research areas in developing and developed countries. Where research was carried out for the verification and development of models to internationalize SMEs through e-commerce. The authors Frąckiewicz and Grzesiuk (2013) provided a study by indicating SMEs into exports can reach higher revenues by expanding the operational range and having highly utilized distribution channels, further the authors forwards “a model of determinants of SMEs internalisation through e-commerce” in the area of ecommerce and internationalisation where it mainly addresses development factors and prominent barriers. Though it described the majority of factors determine e-commerce, is independent of the company size for SMEs, several considerations are important, where the process is described as “passing through two filter” 1. Subjective assessments and 2. Filter of communication. With relation to the proposed model authors gained the results through conducting pilot studies within a group of SMEs and customers.

On the other hand Idris, Edwards and McDonald (2017) forwarded a Model Driven Systematic Literature Review (MD-SLR) which was conducted to analyse the e-commerce readiness in developing countries using ten internal factors and nine external factors showing there is a significant obstacle in e-commerce adaption. Authors have used the basis of the PERM model (Perceived e-Readiness Model) in conceptualising the identifies factors. Initially the authors have reviewed the most common theories used in e-commerce adoption and assessment of readiness theories were regulated to bring-fourth the model driving the MD-SLR. Based on evidence authors had identified and sought out all the empirical qualitative studies which is relevant to refine the initial model. The evidence shows the existence of internal factors such as, commitment, awareness, technological resources, business resources, size of organisation, relational complexities, social relationships and human resources, and external factors such as, market forces, government readiness and supporting industries, for SMEs in e-commerce adoption. Further the authors identified new factors such as, power supply instability, family support, social and relationships, cultural issues and political uncertainty.

Further studies have been carried out to analyse challengers faced by SMEs in developing countries in adopting ecommerce. India also in adopting internet marketing by putting forward a supply-demand gap restricts the adaption (Mohan & Ali, 2019). The authors talk about the challengers faced by Indian SMEs which they collected through, dozen qualitative interviews and over hundred surveys from the operating MSMEs in India. Authors provide suggestions for policymakers to help MSMEs in domestic business and for the global outreach which would benefit in the country’s economy, for practitioners and for owners of means to evaluate their organisational practices aligning it to the culture and design of the organisation. Challenges such as, inadequate skills and knowledge were highlighted amongst the other challengers faced by Indian MSMEs in adopting internet marketing and e-commerce. In Tanzania organizational, political, legal, socio-cultural, economical and technological barriers hinders the adoption (Ndyali,

2013). The author had surveyed SMEs which are adopters and nonadopters of e-commerce, and the results show that the most prominent barrier which hinders the adoption is technical barriers, with lack of cyber security which is followed by limited online banking and online portals by SMEs and regulatory and legal barriers. Further in Nigeria adoption of e-commerce was studied in relation to a retail segment which conveys SMEs can overcome many disadvantages related to finance and technology and etc. through e-commerce adoption (Faloye, 2014). Results from questionnaires given to 228 SSEs owners was analysed where, government financial assistance, regular electricity supply, developed regulatory and legal system and internet security should be provided for SSEs in retailing to adopt e-commerce optimally.

The need for enhancing the understanding of the critical factors in e-business adoption and the effect on organisational business performance in developing countries is discussed in a Malaysian study for readiness of e-business adoption (Marimuthu, et al., 2011). Through the research authors put forward the factors impacting the e-business adoption which are technological characteristics, organisational characteristic and environmental characteristics and further emphasis that e-business adoption has a direct impact on SMEs' business performance. On the other hand Gunawardana (2018) has conducted a research to analyse the state of e-commerce in SMEs in Sri Lanka concluding that SMEs use the basic or low-level e-commerce activities in their operations. Further the author studied the relationship between adoption of e-commerce and firm-based characteristics, along with the critical success factors and potential benefits for SMEs in e-commerce adoption on a population of 30 SMEs in Sri Lanka under the BOI. The results showed that there is a notable relationship between the management involvement in IT adoption. Further the author identified critical factors for e-commerce adoption as supplier service and e-marketing.

### **Digital Marketing Adoption in SMEs**

While research was carried out basically related to e-commerce many studies have been conducted in relational to digital marketing and digital marketing adoption in SMEs. SME engagement with e-commerce, e-business and emarketing have been researched analysing there is cost-effective wider market opportunities for SMEs (Mazzarol, 2015). A systematic review of 16 papers published in 2013 - 2014 in the research area of "small business management and entrepreneurship" is discussed under four categories, 1. Significance of digital technology for the SME performance, 2. "SMEs engagement with e-commerce" 3 and 4. "SMEs engagement with e-business and emarketing". The study elaborated positive factors such as, ability even for the smallest firms to use digital technologies, access to wider market opportunities, ability analyse consumer buying behaviour and trends, consumers acquisition and retention cost effectively. The negative factor is elaborated as the owner/management mindset in ICT adoption.

While the SME engagement was analysed by Mazzarol (2015) the value of digital marketing tools for SMEs is analysed by Elisabete et al. (2021) putting forward that with the use of digital tool there can be an immediate impact for the organizational growth, where the authors too identify the benefits of come along with consumer buying behaviour analysis and adoption of digital tools. Authors describe there is a considerable link between the use of digital marketing tools and digital marketing adoption. Further a systematic mapping study by Thaha, et al. (2021) on digital marketing and SMEs elaborated digital marketing makes it easier for SMEs to monitor and cater the desired needs of consumers. Authors identified that there is an increase in trends in digital marketing in SMEs for the past three years in developed and also in developing countries, while they too mostly catered on digital marketing adoption and the performance of the business. The authors have done categorisation of SMEs under many SME sectors, followed by single sectors namely, food and beverage, hospitality and manufacturing.

Furthermore, a theoretical analysis of adoption of digital marketing by startups was studied by Teixeira et al. (2018) by showing adoption of digital marketing is essential for performance growth of SMEs as the other authors. In this study authors emphasis as SMEs have low resources they should be aware about the options when adopting digital marketing. The authors have analysed the influencing for digital marketing adoption as Ease of Use/Complexity, Perceived Benefits, Cost, Perceived Industry Pressure, Expectable Performance, External Pressure, Compatibility, Government Pressure, Readiness, Size, Business Dependence on IT, Availability/Manager Attributes, Customer Power/Pressure, Social Influences, Relative Advantage, Technological Infrastructure and Support, Top Management Support, Trialability, Expectable Effort/Organizational Readiness, Innovativeness and Strategic Complexity.

Adoption of Digital marketing by SME entrepreneurs have been studied by putting forward that although entrepreneurs are aware about the benefits and have a raising level in interest towards digital marketing, many constraints including lack of financial resources and knowledge constraints their adaption Coman et al. (2019). The authors call to attention the opinions, behaviour and attitude of the SME entrepreneurs in regarding digital marketing, collected from 100

Romanian SME representatives. These authors too further elaborates though there is a considerable level of interest for digital marketing, there is a significant reluctance because of insufficient knowledge, lack of budget and lack of trust in abilities in applying digital marketing. Further studies have been conducted to elaborate the importance of digital marketing in managing brand equity, growth and sustainability (Dumitriu, et.al., 2019), The authors elaborate that though there are many benefits in adopting digital marketing if the proper digital marketing tools and technologies (DMTT) are not chosen properly it's hard reap the maximum benefits. For that reason, the authors put forward a conceptual model to link DMTT and other elements in business. Deraz and Gebrekidan (2018) studied the impact on SMEs' business model and performance in adopting digital marketing in Sweden manufacturing firms through a conceptual framework on how digital marketing affects the financial performance and strategic performance. Here the authors talk about "SME's financial performance" under "profitability", "Growth" and "market value" and "SME's strategic performance" in relation to "customer's satisfaction", "employee's satisfaction", "social performance" and "environmental performance", and how those factors affect digital marketing adoption in improving firm performance in SMEs.

Furthermore, the impact of web-based technologies in relation to handicraft and retail SMEs in the jewellery industry and digital marketing was researched analysing there is a lack of resources with the technological advancement which is an obstacle for adoption (Centobelli et.al., 2016). Here the authors have analysed that usage of traditional technologies are higher than the digital technologies in marketing as financially it is cheaper and furthermore, as the support from service providers are considerably low and due to lack of resources. Sahu et al. (2020) have studied on the influencing factors on digital marketing adoption. The authors have presented their study through an analysis of over 155 published research papers to achieve the authentic level of digital marketing acceptance in the industry for SMEs. Through elaboration of benefits such as reach of larger audience same as the other authors, they highlight the fact that digital marketing techniques can be measured effectively, and promises better results compared to traditional marketing. Further the authors identify the accountable elements to embrace digital marketing as, perception of the usage of the deployed tool, internet consistency and technology compatibility, awareness levels of the management/owner of SMEs, type of industry and the readiness of the target customer and other stakeholders.

Further in Sweden impact on adoption of digital marketing on the performance of SMEs is elaborated through a study conducted with regard to manufacturing and retailing firms (Deraz, and Gebrekidan, 2018). The authors have identified key variables for the adoption as Digitization, Firm Performance, ICT, Strategic performance and Financial Performance. Further the authors analyses the extent on difference on performance of manufacturing and retailing SME firms through the adoption of digital marketing tools and technologies. Furthermore, studies have been conducted to put forward the usage of digital marketing for SMEs by highlighting the positive effect on growth performance and competitiveness (Taiminen and Karjuluoto, 2015). But the authors elaborate that SMEs does not seem to use the digital tools to its full potential which does not let SMEs have the maximum benefit, and this is because of the lack of knowledge within SMEs about digital marketing. On the other hand, development of digital marketing in Sri Lanka was studied by Ranasinghe. and Kartheeswaran (2019), analysing the digital marketing influence for the growth of local business and to seize opportunities to improve their marketing strategies to enhance profit, analysed that the global level of internet penetration is at 53% while internet penetration in Sri Lanka in 2018 is only 32%, where business possess a huge potential to expose themselves to digital marketing, but the adoption of digital marketing strategies is low.

Further the impact of digital marketing is studied specifying the tourism industry in Sri Lanka (Nuskiya, 2018). The author has mainly addressed three variable factors impacting digital marketing namely, "Organisational Supportive Function, Customer Supportive Functions and Social Supportive Function" in relation to digital marketing. And further the author addresses 1. "The role of digital marketing in the tourism industry", 2. Types of services that could be given to the consumers with the help digital marketing, 3. Influencing factors on consumers to consume digital marketing and finally the author analyses the factors influencing tourism industry to move forward with digital marketing. On the other hand, further in Sri Lanka factors which impact the consumer behaviour in digital marketing is studied relating to the retail fashion industry (Rathnayake, 2018). The author has conducted the study based on secondary data sources. The author addresses the facts on how the retail fashion industry has changed with digital marketing, and the effect on consumer behaviour. Through analysis the author recommends that to encounter the changes on the retail fashion industry due to digital marketing a strategic response such as a customer relationship marketing should be used. Further the author identified how the professional marketers' attitudes, skills and behaviour should be shaped accordingly.

### **Factors affecting the adoption in SMEs**

Out of many research done and filtered in the respective research area, many researches have studied and spoken on the factors affecting the adoption of e-commerce by SMEs. Authors Hung et al. (2014) have studied intentions on accepting websites and the degree of implementing it is affected by the level e-readiness. Authors have put forward a validate model to evaluate e-readiness for web acceptance in SMEs. Further authors have studied deeper into understanding the impact of e-readiness on “intentions to accept and degree to implement” of corporate websites through management, technology, organisation and environment point of views. Unlike some of the studies here the authors have studied the factors through the implementation of the PERM model (Perceived e-Readiness Model), and the result of the study has elaborate factors which impacts “intentions to accept and degree to implementation” in relation to e-readiness as 1. “Awareness of corporate website, technological resources, enterprise resources, market force e-readiness, government e-readiness, and supporting industries e-readiness have a positive effect on intentions to accept”, 2. “Awareness of corporate website, corporate website governance, technological resources, human resources, government e-readiness, senior executive commitment and market force e-readiness have a significant impact on degree of implementation”.

On the other hand, authors have spoken about practical and viable solutions to address challenges which arises with the changes in the economic environment through the study of literature (Kapurubandara, 2009). Further the author indicates that only a few numbers of studies are available under developing countries and in those the authors elaborate the factors and reasons for e-commerce adoption failures and delays in SMEs. Here the author like most of the authors classifies the factors and barriers under internal and external factors. Further the author put forward a model for ecommerce adoption in developing countries where “Owner/manager characteristics”, “Firm characteristics”, “Cost and ROI” as internal barriers and “Infrastructure”, “Political”, “Cultural and Social”, “Legal and regulatory” as external barriers. Further authors Sriram and Vinodh (2020) have analysed factors on readiness of SMEs by identifying 15 factors. As the authors have carried out this study by analysing the data gathered from industry practitioners, they have prioritised the factors according to the easiness in adoption of technology in SMEs. The 15 readiness factors as prioritised are 1. “Customer focused innovativeness”, 2. “comfortability of technology used”, 3. “dealing with insecurity” 4. “Compatibility with existing technology”, 5. “existing technical skills within organisation”, 6. “financial support”, 7. “management support and leadership”, 8. “competition and pressure from business partners”, 9. “custom expectations”, 10. “supply chain management and collaboration”, 12. “global engagement”, 14. “modularity”, 15. “hardware and software connection”. While those authors have prioritised readiness factors as such Neykova and Miltchev (2019) puts forward a conceptual approach in improving business technologies in relation to SMEs. Here the authors have elaborated significant issues which is identified in the organisational practises in relation to management functions technology and infrastructure management information flow and communication in SMEs when it comes to adapting e-commerce. The result of this study is producing an integrated model in introducing technological solutions for SMEs in their e-commerce activities. Here the authors mainly focuses on managerial support and technological and infrastructure resources when adapting e-commerce.

Furthermore, Ho (2017) have spoken about factors in e-commerce adoption by elaborating the benefits an SME could reap in relation to SMEs in Vietnam. The author has identified the factors, “environmental factors, knowledge factors, characteristics of managers, organisational factors end technological factors and characteristics of innovation as factors” which are affecting ecommerce adoption in SMEs in developing countries such as Vietnam through a single case study, literature and qualitative interviews. Further the authors bring out factors or issues such as lack of knowledge on e-payments, sufficient capital investment consumer habits an inefficient and ineffective managerial planning when it comes to adapting E commerce in developing countries. On the other hand, Bi et al. (2017) validate theoretical models in evaluating e-business capabilities of SMEs, where are the authors put forward that the fast growth of a SME depends on the usage and availability of IT resources and infrastructure, organisational strategic planning, organisational culture and business partnerships. The conceptual framework or the research model which is elaborated by the authors depicts the facts such as “IT infrastructure”, “IT expertise”, “strategic IT alignment”, “market orientation” and “business partnerships” as factors influencing e-business capabilities and that influences business process competence and where the interrelation of all the factors affects the performance of SMEs. Daughters have tested the conceptual framework on 310 fast growing Australian SMEs across multiple sectors of industries.

Further as social media marketing is one of the aspects in digital marketing, authors have separately spoken about factors which would affect social media marketing of SMEs. Authors elaborate the use of tools and technologies and the opportunities and unique offers that an SME could gain when using the appropriate tool or technology (Dahnil, et.al., 2014). As all the other literature the author puts forward a common set of factors in adapting social media

marketing for SMEs, while producing a balanced image of the current global state of social media marketing in relation to digital marketing adoption. Moreover, Al-Alawi and Al-Ali (2015) have also spoken about e-commerce adoption in factors affecting that, here the authors same as most of the other authors puts forward the factors as technological, organisational, and environmental factors in a theoretical model. Under the proposed model by the authors “top management support”, “financial resources”, “organisational competence” are categorised under organisational factors, “perceived benefits”, “perceived complexity” under technological factors and “government regulations” under environmental factors where which altogether affect the adoption of e-commerce by SMEs. Further the authors elaborate factors which are positively affecting adoption of e-commerce as “top management support”, “perceived benefits”, “government regulations”.

The PERM model which was used in most of the literature studied on the respective topic of e-commerce adoption was introduced by the authors Molla, and Licker (2005). Here the model PERM (perceived e-readiness model) was derived by combining two constructs perceived organisational e-readiness (POER) and perceived external e-readiness (PEER). Here authors have categorised awareness, resources, commitment, governance under perceived organisational e-readiness and government e-readiness, market forces e-readiness, support industries e-readiness under perceived external e-readiness which adds up to the perceived e-readiness model (PERM). The introduced model is validated through the data which is collected from over 150 organisations in South Africa and is mainly used in modern literature in assessing readiness levels of ecommerce and digital marketing adoption in developing countries.

Furthermore, under the literature studied the authors commonly put forward the factors affecting ecommerce and digital marketing adoption in developing countries. The most common factors which can be seen in the study done in Iran for non-profit ICT SME are technological and infrastructure resource, the security, the financial budget skills and knowledge managerial support organisational support and legal barriers (Fathian, Akhavan and Hoorali, 2008). And further as in most of the studies in the study done in Jordan too authors have identified a set of independent variables to the dependent variable “intentions and continuance to adopt ecommerce” as “compatibility, relative advantage, competitive pressure, security and organisations support” in the conceptual framework (Hussein and Baharudin, 2016). Here the authors mainly focuses on the managers or the owners perceptions and intentions in adopting and continuing ecommerce in SMEs and the factors which affect the managerial perceptions.

Finally, on the other hand, as most of the authors in Sri Lanka have elaborated the fact that the technology and ecommerce adoption in Sri Lanka is at a minimum level, (Senarathna and Wickramasuriya, 2011) these authors too emphasis and highlights the fact. Here the author as one of the previous authors (Gunawardana, 2018) identifies and talks about the effect of organisational factors on ecommerce adoption. Here the author bill's a conceptual framework in identifying the influencing factors in ecommerce adoption and the factors which would affect through e-commerce adoption and the main factor the author identified through his analysis on the data collected is the organisational culture, the adhocracy culture among the local SMEs have a negative effect in adopting newer technologies and mostly E-commerce, further the author describes that the top management opinion has an fact on the innovative level of the organisation and the adoption of ecommerce. Furthermore, previously same as the other authors Ramdansyah and Taufik (2017) too elaborated the factors affecting adoption of ecommerce by SMEs in the form of a case study for Indonesia. here the authors put forward a theoretical framework with the factors such as “compatibility, top management, organisational support, perceived benefits and external drive” as factors influencing ecommerce adoption and the combination of all those affects the performance of the SME.

### **3. Method**

PRISMA 2020 for systematic literature review methodology (figure 2) was used in identifying eliminating and conducting the systematic literature review.

#### **Identification of Literature**

During the identification stage 105 records (n=105) according to the research topic was identified from the following database Research Gates Google Scholar, Emerald, Semantic Scholar and EBSCO using keywords. Records were mainly from “Digital Marketing” and “e-Commerce” related areas for SMEs in Sri Lanka, developing countries and developed countries. Thirty-one records were discarded 1. Because of duplication (n=16) and 2. Because of the inability to access the record other than the topic (n=16). Hence seventy-four records were passed to the screening process.

### Screening the Literature

Seventy-four (n=74) records for screened using inclusion and exclusion criteria. The main inclusion criteria were role of ecommerce and digital marketing and factors which affects the adoption of digital marketing for SMEs in Sri Lanka, developing countries and developed countries. Seventeen records (n=17) were excluded by the author due to the irrelevance of the record which is identified through the abstract. Hence fifty-seven (n=57) reports were sought for retrieval. Fifteen (n=14) reports were excluded under the criteria of unavailability of the full text. Hence forty-two (n=43) reports were accessed for eligibility by browsing through the entire text and twelve were excluded under the exclusion criteria, Reason 01: irrelevant study area (n=4), Reason 02: Papers are over 16 years (n=5), and Reason 03: study is done for large scale organisations (n=3). Hence thirty (n=31) papers were finally included to the critical analysis for the literature review.

### Included Literature

Thirty (n=31) papers were included for the literature review (figure 2) where the papers will be grouped and categorised bases on three criteria 1. E-commerce adoption in SMEs 2. Digital Marketing adoption in SMEs and 3. Factors affecting the adoption in SMEs, under the study area of ecommerce, digital marketing and factors which affects the adoption of digital marketing for SMEs in Sri Lanka, developing countries and developed countries.

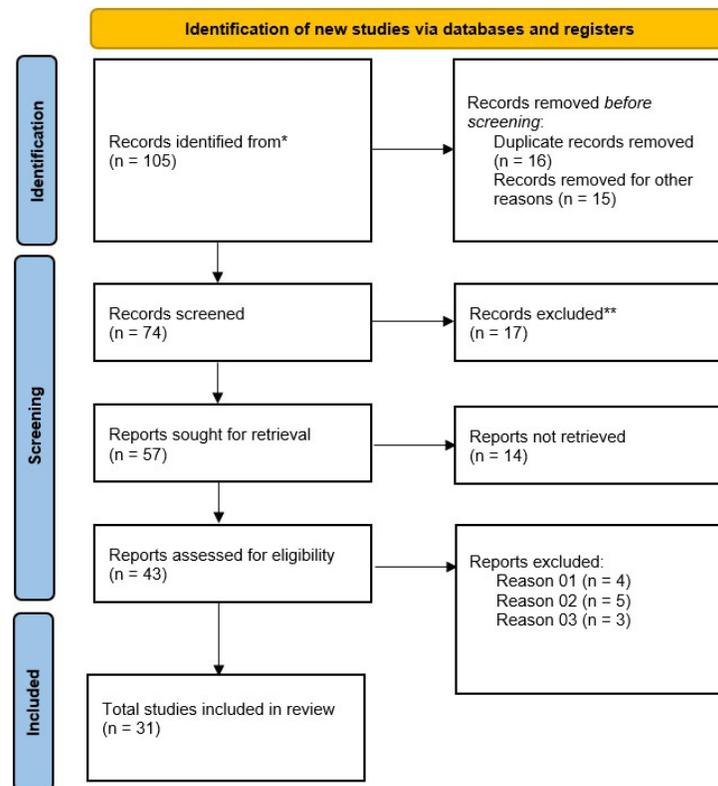


Figure 2 PRISMA flow diagram for systematic literature review

## 4. Results and Discussion

Accordingly, as most of the identified literature mainly focuses on the perceived e-readiness model (PERM) and different forms of its extension. Furthermore, through analysis of literature the mostly used influencing factors in theoretical models or conceptual frameworks in identification of adoption levels of e-commerce or digital marketing listed according to the rate of occurrence are, technological and infrastructure resources, management support, market forces, supporting industry, skills and knowledge, finance and budget and customer. Therefore, as mentioned before it can be identified that most of the literature done under the topic “ecommerce adoption” or “digital marketing” adoption of developing countries or developed countries mainly focuses on the factors on the PERM model or its extension. Hence in this study the influencing factors identified for digital marketing adoption would be an extension of PERM model along with factors identified through the analysis of the literature, are technological and infrastructure

resources, management support, market forces, supporting industry, skills and knowledge, finance and budget and customer. Therefore, according to the literature the discussion on each factor is as follows.

### **Technology and Infrastructure**

According to the literature Technology and Infrastructure factor is one of the most demanding factors in adopting digital marketing as it sets the foundation for any technology aspect of an organisation to rise above. Hence extent of computerisation of the SME, the flexibility of the existing systems in adopting digital marketing and currently used platforms will be taken into consideration under technology and infrastructure. The impact from technology and infrastructure is created on adoption of digital because technology and infrastructure is the basic requirement when it comes to adopting any digital form of technology.

### **Market Forces**

Market forces is how the external environment of the organisation react to digital marketing adoption. Through the literature the suppliers of the SME and the customer of the SME is considered as the external environment. Hence the electronic media usage of the customer and suppliers in order to adopt digital marketing is taken into consideration. Market forces has an impact on adoption of digital marketing in SMEs when it comes to the acceptance given by their respective customers and suppliers. Customers and supplier should be willing to accept the digital form of marketing and related activities which are intended to carry out by the SMEs.

### **Supportive Industry**

For a SME to carry out the ongoing tasks or business of the organisation support from the supportive industries should exist. Here banks or financial providers, telecommunication and internet service providers and third-party IT service industries are considered as the supportive industries for an SME. Hence the support given by these institutions and plausibility of the SMEs in accepting that support is taken into consideration. The impact from the supportive industries is created when the awareness, financial support and internet and telecommunication support comes into play as a local SME needs the support from those industries to carry out their business in relation to digital marketing effectively.

### **Finance and Budget**

Any organisation or any activity needs a budget or a financial support to successfully execute and maintain the respective task. Hence for digital marketing to be carried out an organisation or the SME should be capable of allocating a budget to carry out the activities. Therefore, either the ability to allocate a budget or existence of an allocated budget in order to adopt digital marketing will be considered. Finance and budget is considered as a factor which has an impact on digital marketing adoption is because there should be sufficient finance and budget to carry out and maintain the digital marketing activities, though it does not require a high sum of capital to initially adopt digital marketing.

### **Skills and Knowledge**

The skill and knowledge are referred to the literacy and the ability of the employees to adopt digital marketing and the current literacy level of the organisation. Hence the focus will be on education qualification as in postgraduate, graduate, diploma, certificate or any other qualification in ICT, marketing or any other related field. Further experience in the digital marketing field is also taken into consideration. Skills and knowledge in highly important in adopting digital marketing because the know-how should be within the SMEs to carry out these tasks. How to initiate, execute and maintain the digital marketing tasks require the necessary domain knowledge hence skills and knowledge have an impact on digital marketing adoption.

### **Management Support**

Management support and a positive attitude is necessary in adopting new technologies and strategies in the organisation, same goes when adopting digital marketing technologies at an SME. Hence, top management support and commitment is directly affecting the digital marketing adoption. Further, factors such as a clear-cut vision and attitude of the management, strategies which are used by the management, the leadership and attitude along with support on new technology adoption will be considered. In order for any organisation to successfully continue its operations in any field and positive management attitude is important. It's the same when it comes to adopting digital marketing therefore management support has an impact on digital marketing adoption.

### Digital Marketing Adoption

Once an organisation does their marketing activities through digital media it is known to be digital marketing (Smith, 2012, p.86). Once an organisation uses the necessary digital marketing strategies, tools, and technologies, to reach the target consumer segment it's when an organisation has adopted digital marketing. Hence consideration on the digital marketing strategy, tools and technique usage, and reach of consumers through the usage of channels.

### 5. Conclusion

The above studies have talked about e-commerce in SMEs, the challenges, uses and impacts through models and various forms of research and further discusses about digital marketing in SMEs and digital marketing adaptation in SMEs the multiple benefits varying from increase in consumer awareness to expanding the market globally. Hence through literature, the global situation in digital marketing can be identified as developed and advanced reaping the maximum benefits possible. And further according to literature it can be identified that adoption of e-commerce and digital marketing level is low though there is a considerable potential to expand in which is a significant problem in Sri Lanka. The impact and different aspects of digital marketing is addressed catering to specific industries. Through the papers which discuss on the situation in Sri Lanka the current situation of digital marketing in SMEs in Sri Lanka can be identified as though Sri Lanka has the potential to adopt to global level of digital marketing, financial, technological and facility resources restrictions hinder the adoption. Finally factors as technology and infrastructure, market forces, supportive industry, finance and budget, skills and knowledge and management support are identified as the influencing, readiness factors in order to adopt and implement digital marketing by Sri Lankan SMEs.

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