



Critical Success Factors in B2C E-Commerce Strategy for SMEs

Lauren Gomer
C1422640

Schools of Computer Science and Informatics

BSc Business Information Systems

May 2018

Word count: 11,241

Abstract

This study explores the use of critical success factors in business to consumer e-commerce strategies for SMEs. Literature is analysed to identify factors suggested to have a significant influence on the success of implementing e-commerce strategies, whilst gaps in research are addressed by establishing factors for further analysis.

Primary data is accumulated through a case study based on a SME, accompanied with findings from a questionnaire proposed to a consumer audience. The knowledge found through these avenues is combined to compare and contrast critical success factors from business and consumer perspectives.

Data analysis identifies security as one of the most important factors a business should take into consideration when initialising, adopting and maintaining e-commerce strategies. When efficient and effective security measures are put in the place, it leads to higher customer satisfaction, loyal behaviour and trust in a business. It is recognised that remaining factors have different effects and influences upon e-commerce, which a business can utilise to improve their performance and service.

Acknowledgements

I would like to use this section to thank my dissertation supervisor Natasha Edwards, for her support in this process and aiding me to overcome any issues raised.

I greatly appreciate the time all participants of my questionnaire and case study took to help in my research findings and for their honest responses.

Contents

Abstract	2
Acknowledgements	2
Contents	3
List of Figures	5
Aims and Objectives	6
Introduction	6
Literature Review	7
Critical Success Factors	7
E-commerce Benefits	13
E-commerce Concerns	14
Success of E-commerce	15
Social Media E-commerce Strategy	16
Methodology	18
Case Study	18
Consumer Questionnaire	18
A Business View	20
Critical Success Factors	20
Why Might some SMEs not use E-commerce?	21
Benefits to the Business	21
Drawbacks to the Business	22
Risks	22

Summary	23
A Consumer View	24
Data Analysis	24
Summary	36
Business Response to Consumer Data Analysis	37
Conclusion	38
Further Work	40
References	41
Appendices	45
A: Case Study Questions for SME	45
B: Consumer Questionnaire	46

List of Figures

A: Extended valence framework	7
B: Percentage of businesses that use social media	16
C: E-commerce risk assessment	22
D: Gender of participants	24
E: Age of participants	25
F: Number of e-commerce users	26
G: Products bought online	28
H: Frequency of product purchasing	29
I: E-commerce platforms	30
J: Critical success factors	31
K: Online businesses	34

Aims and Objectives

The aim of this study is to explore critical success factors in business to consumer e-commerce strategies, for small to medium sized enterprises (SMEs). For the purpose of this study, a SME will refer to a business employing 250 people or less. The aim will be achieved by identifying and analysing success factors a SME would benefit from, by creating a case study specific to the retail industry. Benefits, drawbacks and risks will be discussed to shape an idea as to why companies and consumers may choose not to use e-commerce strategies.

This exploration will determine whether certain critical success factors are deemed more important than others, whilst reviewing their contribution to the success of a modern-day business. This will lead to understanding the effects of e-commerce and whether it is crucial in the success of a modern business.

Differences between large companies and SMEs will be investigated, addressing if e-commerce strategies and critical success factors can be as valuable to smaller businesses, compared to larger ones.

Introduction

E-commerce is defined as the purchasing and selling of products or services on the internet (Grandon and Pearson, 2004). Within e-commerce there are multiple routes; business to consumer,¹ which is the focus of this paper, as well as business to business² and consumer to consumer³ (Tiwana and Ramesh, 2001).

Critical success factors are identified as determinants in the success of an organisation or process (Boynton and Zmud, 1984). The success factors that are critical to the implementation of B2C e-commerce strategies, differ from business to business and person to person. This is due to the variation in opinion affected by factors related to the size, availability of resources and e-commerce benefits.

There may be a number of reasons why a business chooses to go ahead with e-commerce adoption. Some of the most beneficial effects of this appear to be accessing a wider geographical market and keeping up with competition within the industry, all whilst maintaining a close relationship with customers.

It is imperative that businesses identify their own critical success factors. Not defining clear and concise success factors in the initial stages of e-commerce implementation may result in poor business performance, uncertainty of financial benefits and limiting the size of the potential consumer market. (Dubelaar, Sohal and Savic, 2005).

¹ Involves the purchasing of products/services from a business to a consumer (B2C)

² Involves the purchasing of products/services from a business to a business (B2B)

³ Involves the purchasing of products/services from a consumer to a consumer (C2C)

1.0 Literature Review: Critical Success Factors

1.1 Trust

Throughout the course of my research, trust is found to be a reoccurring role in the success of e-commerce and B2C relationships (Corbitt, Thanasankit and Yi, 2003; Kim, Ferrin and Rao, 2009; Kassim and Abdullah, 2010). The impression is given that if customers do not have complete confidence in a company's intentions, they will take their business elsewhere.

The element of trust is especially crucial in e-commerce due to rapid technological advances, which often shed light on security risks (Al-Slamy, 2008). Customers put their faith in the company they are purchasing from, often having to provide personal details such as credit card information. This is where a strong B2C relationship is vital for a company to ensure its trustworthiness and reputation, guaranteeing customers that their sensitive information is safe and secure when being transferred across the internet (Kassim and Abdullah, 2010).

An "extended valence framework" has been proposed, showing how trust directly and indirectly influences a consumer's purchases (Kim, Ferrin and Rao, 2009).

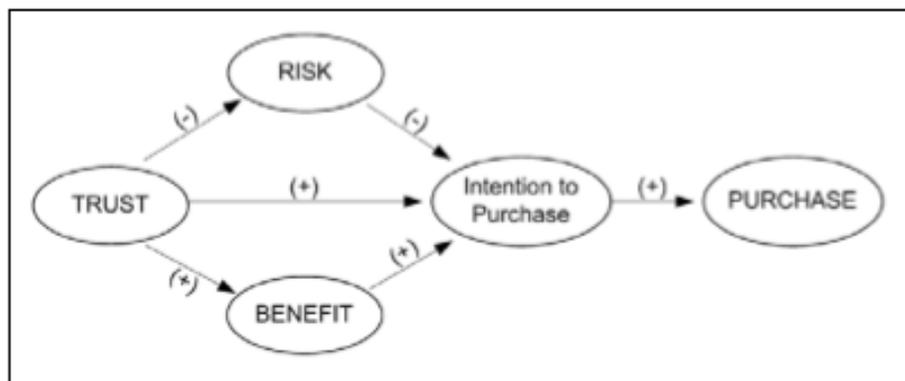


Figure A: Extended valence framework

The framework conveys the idea that trust directly influences the customer's intention to purchase, whilst also indirectly through the customer's perceived risks and benefits. The customer is portrayed to analyse the risks and benefits, weighing up the consequences to decide whether to continue with their purchase. Therefore, maintaining a trustful relationship is critical to the success of any business, as lack of trust equates to lack of sales.

1.2 Security

The importance of security is stressed to be a key critical success factor (Sung, 2006). Data privacy and security threats are always a concern in the conjunction of use with technology and e-commerce strategies, for both the business and consumer. According to a survey identifying customer's specific worries, it was expressed that 84% of users were concerned about the sharing of their personal data to

third party businesses. Compared to a lesser 68% more concerned with hackers gaining access to their credit card details (Liebermann and Stashevsky, 2002).

Another issue identified by researchers is the ease at which personal data can be sent anywhere in the world, in a matter of seconds (Fazlollahi, 2002). Therefore, providing a trustworthy and secure platform for customers is suggested to be critical in the success of B2C e-commerce. Flaws in the security of a website and customer data will result in loss of custom and a negative view of the company, which will be detrimental to revenue and reputation.

Trust and security are closely aligned, it has been portrayed that inadequate security measures result in a lack of trust. An example of the decline of a business to consumer relationship due to lack of trust is the Acer security threat. In May 2015 Acer Inc's website was compromised for almost a year, until the following April. This vulnerability meant that any customers that had purchased from Acer's website between this time, could have had their personal data accessed by a third party. Such data included names, addresses and credit card details.

The electronics company confirmed as many as 34,500 customers could have been affected, potentially exposing them to credit card fraud (Paul, 2016). When companies are victims of attacks like this, there introduces an element of lack of trust. This is heightened when businesses do not explicitly explain the situation, what has happened and how. It can put a visible strain on the business to consumer relationship or even sever it completely, which leads to loss of loyal custom.

1.3 Loyalty

Customer loyalty is generally measured by repeat purchase behavior (Srinivasan, Anderson and Ponnnavolu, 2002). If a customer returns to a specific retailer and shows patterns of repeat purchases, it implies they trust the products and service, showing loyalty to the company. However, some researchers have proposed the idea that this kind of behaviour does not reflect loyalty accurately (Jacoby, 1971). Some researchers believe that loyalty is divided into "true loyalty" and "spurious loyalty," which is said to arise from the inadequacy of other products and service alternatives available (Srinivasan, Anderson and Ponnnavolu, 2002).

The loyalty of customers is conveyed as critical in the successful utilisation of e-commerce and can be attained using a range of strategies which compliment online purchasing. It is suggested that customisation can be applied to highlight and suggest certain products a particular customer may want to try or re-purchase, based on the monitoring and analysis of past transactions (Srinivasan, Anderson and Ponnnavolu, 2002). In doing this, the consumer feels their online shopping process is personalised, accommodating their individual needs and preferences. If a business utilises customisation in this way, it can help to break down the business to consumer communication barriers that e-commerce can present. In addition, such personalisation techniques can lead to loyalty by reducing the amount of time a customer spends on choosing what products to add to their basket, increasing efficiency and convenience.

Factors noted by other researchers that tend to influence loyalty are website quality and the customer's

experience (Corbitt, Thanasankit and Yi, 2003). Based on a framework proposing the determinants of loyal customer behaviour by Cheung *et al.*, (2003) as cited by Chiu *et al.*, (2012), there is a strong contrast between the effects on initial purchases and repeat purchases. After thorough research, Cheung found that factors contributing to the website proved more significant in provoking a customer's trust, leading to initial purchases. Such elements include the ease of using the system, its layout and the business' reputation. Loyal behaviour and repeat purchases were more influenced by the e-commerce process, such as the quality of customer service and convenience of the process.

This research portrays the idea that customers who do not trust a business and who are not provided with the appropriate service, will not engage in loyal behaviour. Organisations who do not encourage loyalty and incline repeat purchases, will decrease its consumer base and lose profit. Ultimately, the higher the levels of customer satisfaction, the greater the customer loyalty (Eid, 2011).

1.4 Availability of Resources and Expertise

Another prominent success factor is the availability of resources (Chwelos *et al.* 2001; Gibbs and Kraemer, 2004; Grandon and Pearson, 2004). It seems many researchers share the opinion that the access and availability of technology within an organisation is key to its e-commerce success, as it can make the implementation of various strategies run easily and smoothly. Aside from having technology resources, any new or upgraded systems and devices must be compatible with current organisation processes and facilities (Gibbs and Kraemer, 2004). Current software and hardware must be taken into consideration to ensure no present technology is deemed unusable due to the lack of compatibility with any newly introduced technologies.

With the use of technology resources, it is usually necessary for employees to acquire suitable technology skills or at minimum have some experience with its use, else it is seen as an obstruction (Dubelaar, Sohal and Savic, 2005).

The process of designing and implementing e-commerce strategies may be carried out by a professional in the field however, it is crucial that the manager of the company involved and any senior employees have the final say in developments and ideas (Viehland, 2000). External IT professionals will provide suitable framework and strategies, but the manager themselves must ultimately decide whether these will be appropriate and prove beneficial to their particular company. It is imperative the manager takes control, as they occupy the knowledge of their company's constraints, advantages and capabilities.

In saying this, viewing an organisation's IT expertise as a critical success factor appears to vary dependent on the business. Some researchers believe lack of technology resources and skills have no negative impact on an organisation's decision to implement e-commerce strategies, or its success thereafter. The idea is implied that it's the use of technology itself which is critical, not the level of experience a business has with it (Grandon and Pearson, 2004). Whilst others note that a manager enthusiastic and passionate about technology, is more likely to progress with e-commerce easily and effectively (Stockdale and Standing, 2006).

Occasionally, the lack of technology resources is due to a shortage of financial resources. Research suggests that businesses in a comfortable financial position are more likely to propose a greater investment in e-commerce strategies and consequently, become successful in using e-commerce to its full potential (Gibbs and Kraemer, 2004). Companies with the wealth to spend on required resources such as hardware and software, as well as maintenance and technical training for their employees, are said to be in a more powerful position than its less fortunate competitors.

1.5 Size of Organisation

The size of an organisation is also known to influence the availability of financial resources to invest into the appropriate technology for B2C e-commerce, which introduces size as a critical success factor. Based on the assumption SMEs may be short in training, information and human resources, (Jeon, Han and Lee, 2006) smaller businesses pose an increased risk of failure (Eikebrokk and Olsen, 2007).

Due to these obstacles, it can be considered difficult for a SME to set-up e-commerce strategies than for a larger, well established business. Although, it is believed a smaller business will find it easier to adapt to changes in technology advances and customer demands once e-commerce is in use, due to its flat structure (Zhu and Kraemer, 2005).

In Korea, the government have responded to the issue of SMEs being at a disadvantage by adopting action plans to increase the use of e-commerce strategies. An e-commerce resource centre⁴ has been established, providing the appropriate training and assistance for such businesses to succeed (Jeon, Han and Lee, 2006). This kind of support would prove useful to owners and employees of smaller enterprises in other locations too. If this idea was rolled out across the globe, it may make managers more inclined to utilise e-commerce developments and make the process less daunting. Albeit, research has disputed that data from one country will not necessarily represent another country, due to the different challenges developing countries face Dewan and Kraemer (2000), as cited by Ahmad *et al.*, (2014). So correspondingly, methods proving successful in one country, might not progress well in another.

Identifying size as a critical success factor causes a variation in opinion as to whether it is influential in the success of e-commerce adoption. Studies on the use of e-commerce strategies in large companies versus those in small companies have concluded that both types of organisation use e-commerce for different reasons.

Larger companies appear to utilise the benefits of an online presence to enhance their relationship with their customers and to simplify daily processes. To a smaller business, e-commerce usage focuses on expansion in aspects such as target audience and consumer base. It is suggested the size of an organisation will affect how and why e-commerce strategies are utilised, but not be distinctly decisive in its success (Daniel and Grimshaw, 2002).

⁴ Also known as ECRC

1.6 Reputation

Customers are unable to physically inspect a product before they buy it online and so, must rely on the accuracy and reliability of its seller's product descriptions and reputation. Research suggests it is difficult to measure a business' reputation, as there are a number of factors to take into consideration.

The reputation of a business is shaped by factors such as security, user experiences and product variety. If a company lacks in security which results in a data breach, this will not give them a favourable reputation. A business with a negative association will have trouble introducing new customers and maintaining their loyalty.

An investigation by Melnik and Alm (2003) implies the reputation of a seller has a statistically significant effect on a buyer's decision to purchase an item. Some researchers such as Houser and Wooders (2000) as cited by Melnik and Alm (2003), believe a customer will pay more, as long as the company's reputation indicates its products and services are reliable and of appropriate quality. Others such as McDonald and Slawson (2000) as cited by Melnik and Alm, convey the idea that reputation is purely required to provide businesses with an incentive to provide a high quality service to their consumers.

1.7 Ease of use

Buzzi *et al* (2009, p.500) defined usability as "the extent to which a website can be used by users to achieve goals with effectiveness, efficiency and satisfaction in a specified context of use."

There are many elements that contribute to the ease of use of e-commerce strategies. According to research, social presence has a positive influence on how useful a website is to the consumer. Social presence involves ideas such as socially-rich text, accompanied with photographs of people using the product or service, which will positively affect the ease of use of a website (Sivaji *et al.*, 2011).

The variety of languages available will greatly impact an individual's perceived ease of use. For example, if a website caters to customers of differing languages, they are targeting a larger audience as well as maintaining the ease of use across their consumer base.

It can be more challenging for customers with special needs to use a website with ease. For instance, customers who are blind can access websites by using a screen reader. This is a piece of software that reads what is present on the screen aloud. However, if this is not taken into consideration in the design process, the customer may experience difficulties which could result in them not completing their purchase (Buzzi *et al.*, 2009).

The design of any website must be carefully developed, to ensure all customers can navigate it efficiently and do not become confused. Other aspects that have been identified to influence ease of use are the availability of payment options e.g. credit card or PayPal and the presence of hyperlinks, search functions and recently viewed history.

Ultimately, a clear and accessible website leads to consumer loyalty and a positive reputation for the

business.

1.8 Past Experience

There are multiple factors which will influence a customer's past experience with e-commerce, ranging from the speed at which their transaction is completed, to the reliability and security of the service. (Buzzi *et al.*, 2009).

A positive experience is a result of a customer's satisfaction with the interaction of a business' services. Experiences can be both direct and indirect. Direct experiences refer to the customer purchasing goods however, indirect experiences refer to advertising, reviews and recommendations.

A direct experience explicitly affects the customer in question but gathering indirect knowledge through advertising and previous customers, aims to create a picture of the business for the consumer, made up of multiple aspects and opinions (Daugherty, Li and Biocca, 2005).

Whilst a positive experience satisfies the customer's needs, a negative experience is said to occur when a customer's e-commerce expectations are not achieved. This is likely to result in loss of loyal custom and trust in the business. It is suggested the most reliable past experience to a customer will be their own.

1.9 Product Variety

Product variety refers to the range of products available to the consumer. The assortment of products across e-commerce businesses provides the customer with alternative items to compare and contrast, making finding desired products at an appropriate price a simpler process (Dillon and Reif, 2004).

Due to the global access to products, customers can browse the internet to make purchases on high quality goods that fall within their budget. E-commerce makes this process much easier for the customer, as opposed to having to physically visit stores and compare products manually, which would take a considerable amount of time.

Research targeting the influence of product variety has suggested that the greater the assortment of products available, the greater the perceived quality and likelihood of purchase. This results in a positive effect on the customer's experience (Berger, Draganska and Simonson, 2006).

2.0 Literature Review: E-commerce Benefits

When identifying the benefits of adopting e-commerce strategies, the expected benefits and actual achieved benefits may differ. An organisation may expect certain outcomes which might not happen, this could be due to changes in circumstance, procedures or poor forecasting (Dubelaar, Sohal and Savic, 2005).

2.1 Expansion of the Consumer Market

One of the main advantages of e-commerce is its ability to expand the consumer market (Dubelaar, Sohal and Savic, 2005). A business' products and services are modified from being available to simply the local community, to a worldwide consumer platform. This development proves beneficial to both the business and the consumer. It enables SMEs to sell to a wider pool of customers, resulting in profit inflation, whilst giving customers increased accessibility to a larger variety of products from the comfort of their own home.

2.2 Ability to keep up with Competition

The implementation of e-commerce enables SMEs to keep up with the competition proposed by larger organisations, overcoming the obstructions raised by size capabilities (Kim, Ferrin and Rao, 2009). E-commerce strategies and technologies allow smaller enterprises to utilise the abilities that were once only available to larger establishments (Daniel, Wilson and Myers, 2002). Levelling the platform for organisations in this way, means SMEs can effectively respond to competition with their sector regardless of differences in size and resources.

2.3 Ease of Use

The ease of use of e-commerce is extremely valuable to consumers and relates to the user friendliness and accessibility of a website, when making a purchase (Srinivason, Anderson and Ponnayolu, 2002). Websites are also available 24/7, providing customers with access at times that suit them. According to research carried out by Schaffer (2000), 30% of consumers who leave a website without completing a transaction do so because they are unable to navigate through the website, as cited by Srinivason, Anderson and Ponnayolu (2002). This inconvenience could be due to an illogical, complex layout resulting in mistakes and confusion and so, the ease of use must be kept in mind else it can lead to lack of custom.

2.4 No Physical Store Requirement

E-commerce is particularly useful to businesses, as a physical store is not a requirement to sell goods. In this case, there would be no building or maintenance costs, so overheads are minimised (Laudon and Traver, 2008). This aspect means newly founded businesses, or those with little funds to expand, are still able to benefit from e-commerce and make a profit.

3.0 Literature Review: E-commerce Concerns

Critical success factors are linked to concerns raised by businesses and its consumers. The idea is conveyed that factors that influence the success of e-commerce, can also be considered causes for concern if not appropriately addressed.

3.1 Security

The most noted concern throughout e-commerce use by businesses and consumers tends to be security risks. These risks are identified as the main obstacle to the development of e-commerce by Dong-Her (2004), as cited by Eid (2011). There is particularly apprehension with privacy levels, raising unauthorised access, data use and spamming as concerns by customers.

The amount of privacy expected by a consumer will depend on their views on the subject, combined with their prior knowledge and experience. For example, there may be cultural differences in some countries, which influence the kind of privacy levels that considered normal and acceptable (Pennanen, Kaapu and Paakki, 2006). It should also be taken into consideration that data privacy and security legislation will differ around the world. As the perception of security risks decrease, customer trust, value and satisfaction will consequently increase (Eid, 2011).

3.2 Lack of Human Interaction

There seems to be a split in opinion as to whether the adoption of e-commerce strengthens customer relationships or deteriorates it. Lack of human interaction has shown to be a deterrent for customers as they miss the “human touch” that internet purchasing does not offer (Liebermann and Stashevsky 2002). This refers to the personal, face to face experience that cannot take place over a network.

However, some believe the customer loyalty gained by using e-commerce creates a long-term relationship between a business and its consumers (Srinivasan, Anderson and Ponnayolu, 2002). This implies the face to face aspect of commerce is not a necessity, but a preference to some customers.

3.3 Commitment and Expertise

A worry by organisation managers and employees is the lack of their colleague’s commitment and expertise (Dubelaar, Sohal and Savic, 2005). Anxieties have been expressed that e-commerce cannot be successful if not all employees have a particular standard or insight of technological knowledge. However, some researchers say this should not be considered a concern as appropriate training can be provided (Brown and Jayakody, 2008). The lack of commitment to e-commerce may be due to uncertainty, which can also be addressed by training and reassurance.

3.4 Financial Cost

The financial cost of setup and maintenance is a reoccurring cause for concern for organisations when debating whether to adopt e-commerce (Sparkes and Thomas, 2001). Especially to SMEs, these costs are

implied to be a barrier to certain e-commerce approaches, if an organisation does not have sufficient funds to develop their current strategies. There are however, low-cost alternatives available.

4.0 Literature Review: Success of E-commerce

Defining success is complex and can be difficult to measure across multiple SMEs and larger organisations (Daniel and Wilson, 2002). The idea of “success” can vary from person to person, and business to business. Research by Amit and Zott (2012) led them to claim that no single theory could fully explain the value potential of e-business (cited in Eikebrokk and Olsen, 2007, page 3) and so, it must be established on a case-by-case basis.

A proposal including six variables which can be used to measure success has been suggested by DeLone and McLean (1992), as cited by Daniel and Wilson (2002).

The six variables are:

1. System quality
2. Information quality
3. Extent of use of the system
4. Extent of user satisfaction
5. The system’s individual impact
6. The system’s organisational impact

System quality refers to the value of information processing and the system’s ability to provide the necessary functions and features. System quality is usually closely linked to information quality, which is used to ensure outputs meet the user’s specification (Gorla, Somers and Wong, 2010).

The extent of use of the system is used to measure success in multiple ways. For example, some organisations choose to analyse statistics such as frequency, durations and percentages, where as some focus purely on the number of sales or reoccurring trends (Chang, Lie and Fan, 2010).

User satisfaction is often measured directly through factors such as content, format and ease of use but also indirectly, through system and information quality, according to Rai *et al.*, (2002), as cited by (Gorla, Somers and Wong, 2010). In addition to this, organisational impact portrays how a range of contributing factors such as technology, leadership and environmental changes have positive and negative effects on the business. These factors can also affect individuals, for instance employees, customers and society (Skolny, 2014).

These six variables propose a detailed way of measuring success however, some organisations may measure it simply on whether a profit is made.

5.0 Literature Review: Social Media E-commerce Strategy

Low-cost e-commerce strategies such as social media allow businesses to not only sell products, but directly deal with a large number of customers in an innovative manner. A business can use social media to assess customer requirements and provide them with quick responses to their problems and queries (Zareba, 2014).

Advertising on social media by the sharing of posts and content between friends is thought to be beneficial due to the six degrees of separation theory. Milgram (1967) described the concept as being key to understanding the structure of society, by the ability to link any two people within six connections (cited in Kwak et al., 2010, p.3-4). This close connection is proven to be advantageous to businesses, relating to the ease at which products and content can be shared to potential customers.

According to data, the likelihood of a business utilising social media as an e-commerce strategy is significantly correlates to its size (Office for National Statistics, 2018).

Business Size	Percentage that use Social Media
1,000 or more employees	90%
10-49 employees	58%
0-9 employees	30%

Figure B: Percentage of businesses that use social media

This proposal may be due to the increased access to resources, expertise and time a larger company is likely to attain, opposed to its smaller industry rivals.

There are social media metrics identified in Jadhav, Kamble and Patil (2013) which can be used to determine success. They are shown below:

Return of investment

Description: measuring the efficiency of social media marketing

Calculation: ROI = social media return – social media investment

$$\frac{\text{social media return} - \text{social media investment}}{\text{social media investment (\%)}}$$

Engagement rule

Description: measuring how customers interact with your content

Calculation: ER = number of likes + number of comments + number of shares on given day

$$\frac{\text{number of likes} + \text{number of comments} + \text{number of shares on given day}}{\text{total number of fans on given day}} * 100$$

With regards to these calculations, social media engagement and interaction can be viewed as a critical success factor for a social media based business.

5.1 F-commerce

F-commerce refers to the process of making a purchase through the social media network, Facebook. The social-based functions of the network are utilised to allow “word of mouth” marketing, through sharing posts and content between friends. (Brock et al., 2011).

Trust and the security of information are concerns with the developing use of e-commerce strategies and can result in customers feeling uncertain and apprehensive (Dwyer, Hiltz and Passerini, 2007). The perception of trust, privacy and security of an e-retailer, accompanied with that of Facebook itself, is said to complement each other and have a direct effect on purchase intentions (Brock et al., 2011). In association with prior reviewed literature, trust can be identified as a critical success factor in the role of e-commerce and more specifically, social media-based commerce.

6.0 Methodology

The focus of this research is to identify, analyse and compare critical success factors in e-commerce from business and consumer perspectives. In accompaniment with this, it will touch on the benefits, drawbacks and risks of implementation which will lead to understanding reasons as to why some SMEs and consumers choose not to use e-commerce strategies.

6.1 Case Study

The first data collection will consist of qualitative, empirical data, in the form of a case study focused on one SME. To construct this study, primary research will be undertaken by conducting an in-depth interview where various questions will be proposed to a SME owner.

A set of open ended questions have been constructed to allow the interviewee to go into as much detail as they desire. Due to the conversational nature of the interview, preparation has been carried out to be able to reword and ask questions based on how the interview flows and the responses given.

Other methods have been considered, such as giving a questionnaire to multiple SMEs. However, I decided to create a case study based on one specific SME, to gather a more detailed vision of how e-commerce strategies work within a small business. The aim is to see how critical success factors identified in the literature review, specifically affect this SME. Handing out a survey to multiple SME owners would not be productive of time, as it would not give the in-depth detail desired.

Limitations of this process include the inability to be in the same location as the interviewee, due to time constraints. This is overcome by suggesting communicating through video conferencing and via e-mail. Due to the fact this is a case study, it only accounts for one business' perceptions and opinions. Although it is heavy in detail, there is purely one e-commerce strategy adopted to be analysed. It must be taken into consideration that other business' opinions may vary.

The business this case study is based on is predominantly handled through social media. Questions and topics discussed can be found in appendix A.

6.2 Consumer Questionnaire

The second primary data collection will consist of qualitative and quantitative data, in the form of a questionnaire. The questionnaire will consist of questions based on critical success factors to consumers when purchasing products online. It will be given to participants to assess their thoughts and opinions on this topic, as well as other aspects of e-commerce.

A second data collection is being carried out in accompaniment with the interview to get an idea of CSFs from business and consumer perspectives, leading to the identification of comparisons and differences. The majority of questions have a choice of answers provided, to analyse specific factors addressed when reviewing previous literature and research.

An online questionnaire creation facility is used to design and structure questions. Open ended questions are included to gather opinions, accompanied with multiple choice questions to allow for efficient identification of data trends and patterns.

Other methods have been considered such as focus groups. However, handing out a questionnaire will provide a wide range of opinions and address the desire to explore a range of customer views, rather than targeting a small group of participants. This decision will increase the reliability of the data collected, as more people's perceptions are being taken into consideration.

51 people participated in the study. After question 3, some of the customer's answers deemed them no longer relevant to the study, so the participant number drops from 51 to 48. This is due to some people stating they do not use e-commerce, however I have included their reasons as to why.

Limitations of this process included the inaccessibility to diverse age groups, so convenience sampling is utilised.

A blank copy of the questionnaire can be found in appendix B.

7.0 A Business View

The SME this case study is based on predominantly uses social media as an e-commerce strategy. There is no physical store, the business exists purely online. It was set-up to sell a selection of products to customers through Facebook. To ensure as much anonymity as possible, the interviewee will be referred to as “the owner” when necessary and no names will be revealed.

The owner initially only sold products to family and friends. When expanding her business, she decided to adopt a social media e-commerce strategy, to increase the number of customers reachable. Being enticed by the idea of working from home, the ease of access to social media played a large role in the move to e-commerce. This aspect was particularly persuasive when being unable to travel due to injury. With social media being accessible 24/7 and on a large geographical scale, it meant the owner could work from the comfort of her own home.

7.1 Critical Success Factors

7.1.1 Experience

With regards to experience as a critical success factor, whether that be knowledge in technology or e-commerce itself, the owner believes it is “important you know how to present yourself online.” Initially, she did not have a large amount of experience, but suggested any business can be a success if you have the willingness to learn. There is always the option of employing a professional to help identify, design and implement e-commerce strategies. However, it is advised the more you can do yourself, the more cost effective it will be for the business, as hiring experts will be of considerable charge.

7.1.2 Loyalty

It is imperative to look after customers and provide an excellent service which will entice them to return. The business often makes use of special offers and personal recommendations to attract new customers, as well as efficiently managing current ones. “Spreading the word online and having customers who recommend you is valuable,” this SME aims to keep the nature of the business personal by personally communicating with customers, in order to build strong relationships.

7.1.3 Financial Resources

When identifying financial resources as a critical success factor, the owner admits it is crucial you have sufficient funds to maintain stock, but she built up her business from just £50. The current availability of low-cost e-commerce strategies such as social media and e-mail, allow small businesses to set-up, even with little funds. This suggests it is not critical for businesses to start off with a large amount of financial resources in order to be a success but, it can increase access to more complex strategies.

7.1.4 Size of Organisation

Commenting on the size of a business, it is believed the amount of sales physically capable as a small

business and sole trader is “a lot less than a larger company.” It can be difficult to absorb a loss as a small company, but SMEs do have advantages they can bring to a business. Such benefits include the control permitted over the business, due to its flat structure. This can prove easier when having to make important decisions which will affect the business, as fewer employees have to be taken into consideration. Directly working with e-commerce as a small company, proves much easier when building relationships with the customer.

7.1.4 Efficient use of time

Time is a factor not yet identified in this study. However, it is expressed that “as long as you can dedicate enough time to regularly update content and stay up to date with orders, the latest technology features and developments, your business will be a success.” Suggesting the efficient use of time as a critical success factor is logical, as if a company cannot commit to its daily tasks and responsibilities, it is unlikely to provide a valuable service to its customers.

7.2 Why might some SMEs not use e-commerce?

When asked if there were any contributing factors that resulted in hesitation to utilise e-commerce, the owner expressed her initial worries about advertising and the lack of customer base to promote to. Although this started off as a potential issue, it was quickly overcome due to the nature of sharing information and posts on social media.

Accompanying this anxiety was the fear of not being equipped with the appropriate technology experience and skills. Despite these concerns, e-commerce adoption commenced, and has proven to be essential to the success of this business.

7.3 Benefits to the Business

Benefits of adopting e-commerce strategies as identified by other businesses include the increased consumer audience and the ease of interaction with customers. As well as this, it provides businesses with the chance to share their “business personality” (Kwak et al., 2010). Comparing this with the benefits outlined in my case study, there is a strong correlation.

The main benefit to adopting e-commerce strategies found here, is the expansion of the target audience. The ability of social media to allow access to users all over the world, means e-commerce transactions can take place in other parts of the UK and beyond. The owner admits, “without an online facility, I would never have made those sales” when referring to sales in America and UAE.

As a SME, e-commerce proves advantageous as there is no need to rent expensive premises, which result in reduced overheads. The size of the business can also enhance the familiarity in a business to consumer relationship.

7.4 Drawbacks to the Business

Security was identified as the main disadvantage of e-commerce to this particular SME, as some customers express concerns about using their credit card details on the internet. As a business owner, the interviewee believes it is up to her to “provide customers with a secure payment system and reassure them that their details are safe.” The customer must feel they trust the business, else they will not be inclined to purchase from there.

7.5 Risks

Taking this interview and prior literature research into consideration, a set of potential risks a SME could face when using e-commerce strategies has been drawn together. Accompanying each risk is the likelihood of it occurring, the level of impact it could have and how to control them.

Likelihood and impact are rated either low, medium or high.

Description	Likelihood	Impact	Control
A customer falsely claims they did not receive an order.	Low	Medium	Ensure all orders are tracked from dispatch to delivery. Customers can also be required to sign for their deliveries.
A customer’s transaction is intercepted.	Medium	High	Implement appropriate procedures such as encryption and digital certificates.
Unauthorised access / modification of data.	Medium	High	Use passwords to gain access to customer databases, in conjunction with any other appropriate security measures.
The customer complains that a product or service is not as described.	Low	Low	When writing descriptions, make sure each one truly represents the particular product or service and that no exaggerations are made.
Lack of maintenance of website / social media resulting in loss of custom.	Low	Medium	Regularly update online content to provide customers with the latest products and services available.
A virus is introduced.	Medium	High	Install anti-virus software on all devices used in conjunction with business processes.
Poor website design resulting in long response times for transactions.	Low	Medium	Ensure the website is accurately designed, implemented and tested so this issue can be addressed as soon as possible.
Copyright infringement.	Low	High	Be aware of copyright legislation and abide by current rules.

Figure C: E-commerce risk assessment

7.6 Summary

A number of critical success factors are addressed, providing an insight into a business' perspective of e-commerce. Before starting her SME, the owner did not possess a great deal of technological or business experience, so does not deem this crucial. However, she believes as long as you present yourself professionally online and have a willingness to learn, the business can be a success.

As a SME, the loyalty of customers is crucial to reputation and revenue, so building and maintaining close relationships is a critical aspect. Access to large funds is portrayed as not being necessary, as there are a number of low-cost e-commerce strategies such as social media available.

Although the size difference in an organisation may account for the number and diversity of resources, being a small business will also produce benefits that are not obtainable by larger businesses. When managing a SME, the owner expressed how imperative the efficient devotion of time was to e-commerce success. Time must be taken to ensure the business can function whilst monitoring its progress, maintaining loyal custom and shaping a positive reputation in the industry.

The main advantage of e-commerce to this SME was identified as the access to a wider range of customers. Utilising social media networks which are available to share content all around the world, puts smaller businesses in a better position when trying to compete with their larger rivals. In saying this, businesses as well as consumers, show concerns with the security risks involved.

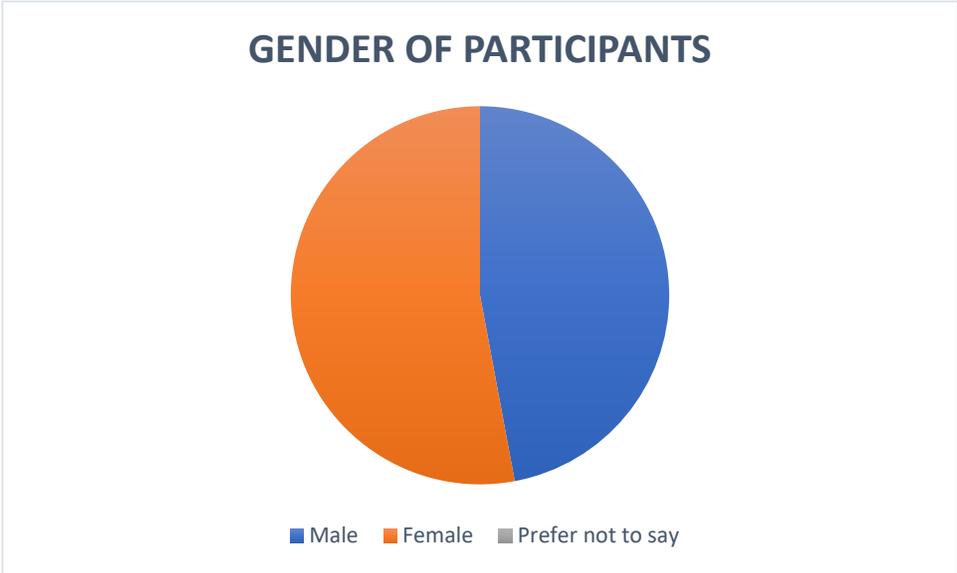
8.0 A Consumer View

8.1 Data Analysis

Please note: the percentages used in this analysis will be rounded to 2 decimal places to ensure accuracy and ease of comprehension.

The sample size is 51 for questions 1-3.

1. Gender of participants

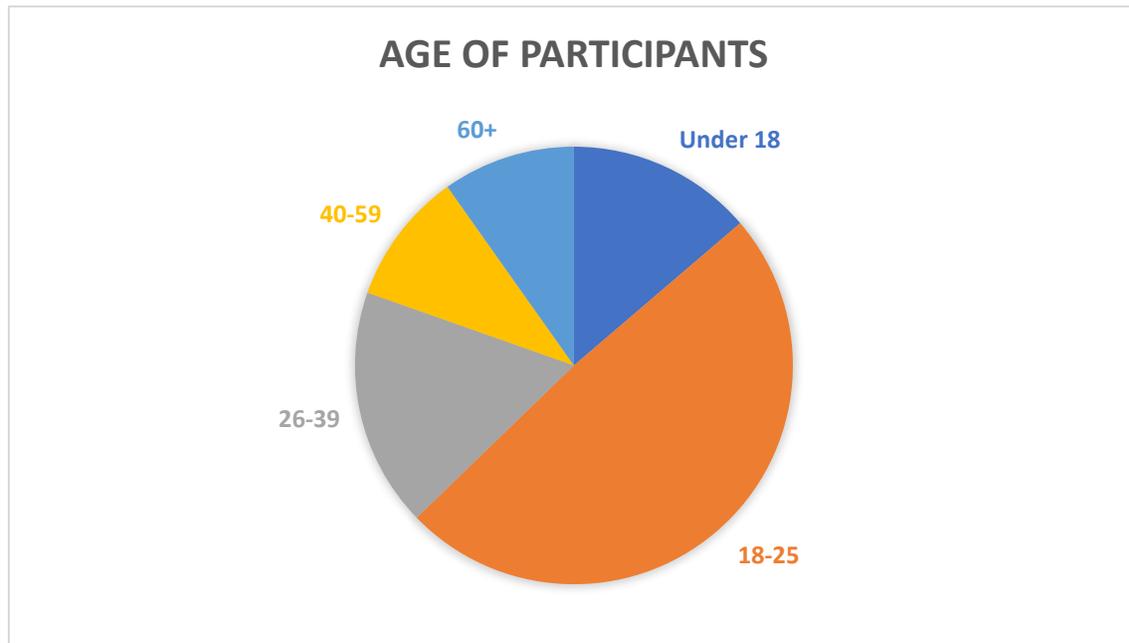


Response	Percentage	Number
Male	47.06 %	24
Female	52.94 %	27
Prefer not to say	0.00%	0

Figure D: Gender of participants

47.06% of participants are male and 52.94% are female, resulting in a considerably equal distribution.

2. Age of participants



Response	Percentage	Number
Under 18	13.73 %	7
18-25	49.02 %	25
26-39	17.65 %	9
40-59	9.80 %	5
60+	9.80 %	5
Prefer not to say	0.00%	0

Figure E: Age of participants

Age is split into five distinct categories, with the majority of people fitting into the 18-25 category. This age group is the easiest to access within the University, with some falling between 29-39. Due to this, convenience sampling was made use of, whilst still taking differing age groups and their habits into consideration.

Other age ranges were more difficult to locate; however, a focus was put on the 18-25 category as younger people tend to be more active in using e-commerce (Office for National Statistics, 2018). The reasoning behind this may be because they are a generation that have grown up with the developments in technology, so are more at ease and unphased by its use.

3. Do you use e-commerce?



Response	Percentage	Number
Yes	94.12 %	48
No	5.88 %	3

Figure F: Number of e-commerce users

94.12% of participants say they use e-commerce, by the definition of “buying products or services online.” The remaining 5.88% say they do not utilise e-commerce and so, will not be taking part in the remainder of the questionnaire.

People who answered no were prompted to explain why, here were their reasons:

“I do not really understand how it works.”

“I do not feel comfortable putting my credit card details online.”

“I would rather go and look around the shops myself.”

In light of these findings, what can be done to increase the use of e-commerce by customers?

A person’s decision to use e-commerce is ultimately down to preference, but steps can be taken to incline customers to utilise the strategies available.

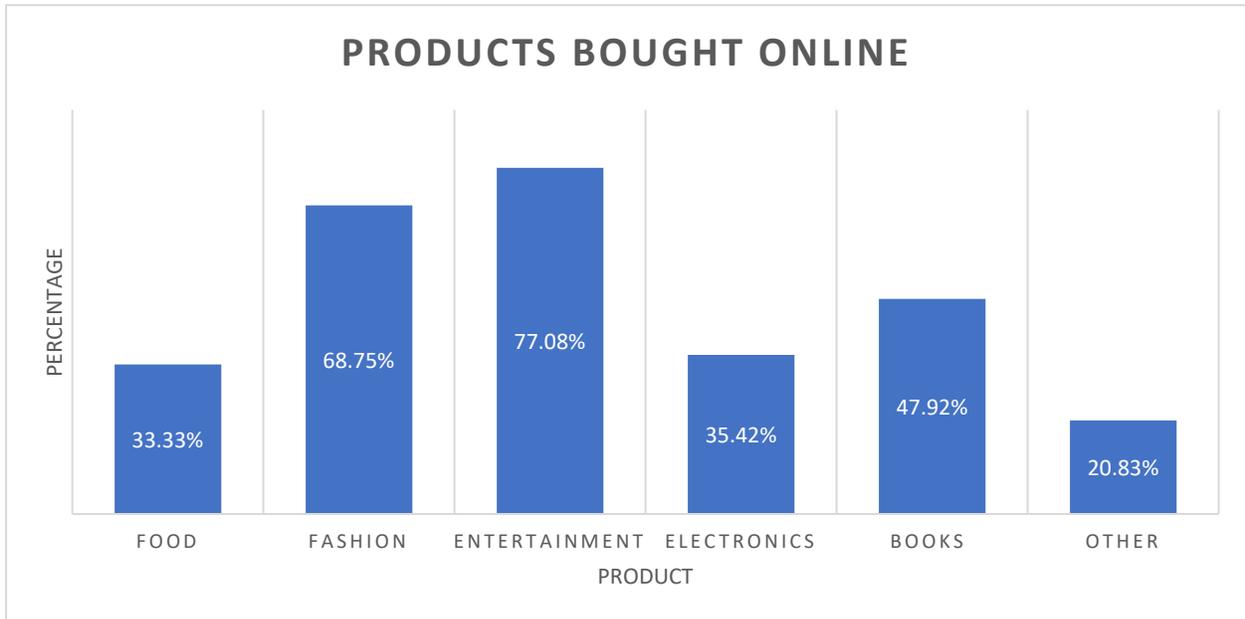
Researchers interested in privacy and security concerns, have proposed that businesses should ask their customers whether they want personal details to be accessible by third parties, whilst reassuring people that sufficient security measures are put in place. In doing this, consumers have more control and understanding over their own personal data and what it is used for (Joines *et al.*, 2003).

The issue of not understanding e-commerce can be addressed by providing courses for people to take, which can teach the basics of online purchasing. As identified, customer experiences contribute to e-commerce success. So, another suggestion could be trial and error, as a customer is likely to learn from their own experiences.

As for preference, companies can entice consumers by creating sales and discounts on online transactions for a certain period of time. This would attract more online custom, inclining the loyalty of e-commerce usage.

Please note: the sample size for the remaining questions is 48.

4. What type of products do you buy online?



Response	Percentage	Number
Food	33.33 %	16
Fashion	68.75 %	33
Entertainment	77.08 %	37
Electronics	35.42 %	17
Books	47.92 %	23
Other	20.83 %	10

Figure G: Products bought online

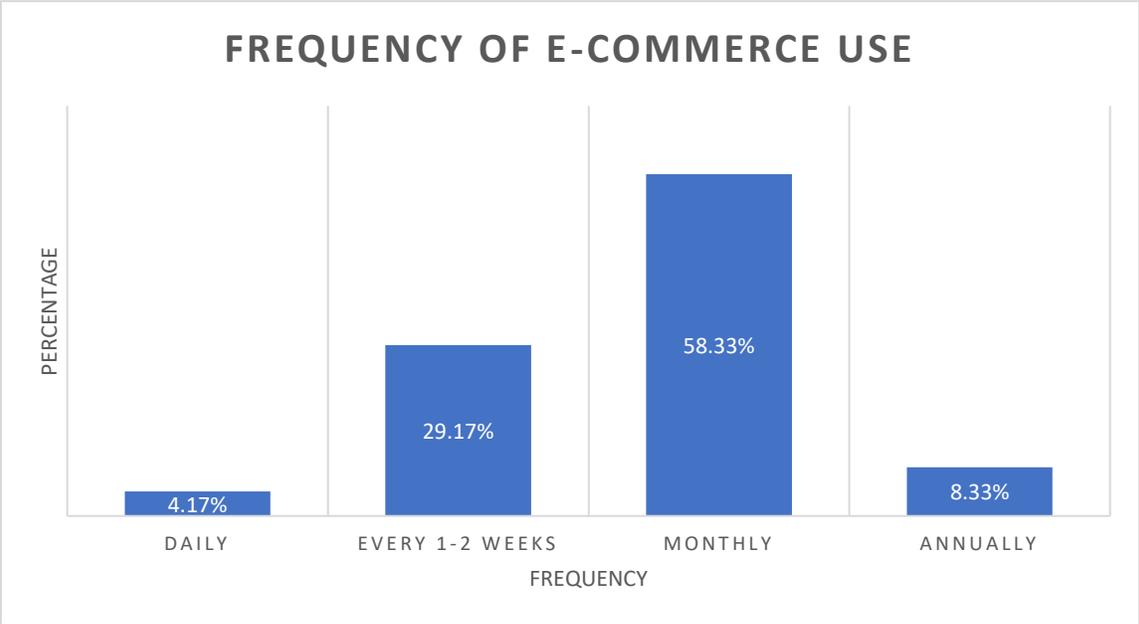
This question was multiple choice, so the participants are able to choose more than one answer as they are likely to buy multiple types of products online. The categories are determined according to popular choices in prior research (Office for National Statistics, 2018).

The data shows the majority of people (77.08%) use e-commerce to buy entertainment products or services. This term is defined to the participants as event tickets and online subscription services e.g. Netflix. Entertainment was closely followed by fashion with 68.75% of people using e-commerce to buy clothes, shoes and accessories.

After these two choices, the percentage of people who purchase products from the remaining categories noticeably decreases. The next popular “books” drops to 47.92%, “electronics” to 35.42% and “food” to 33.33%.

I included an “other” choice so participants are able to record any other reason they use e-commerce, which I had not already proposed. 20.83% of people chose this category, with most of the responses being for tourism e.g. hotels and travel. Unique responses included DIY products and wine.

5. How often do you buy online?

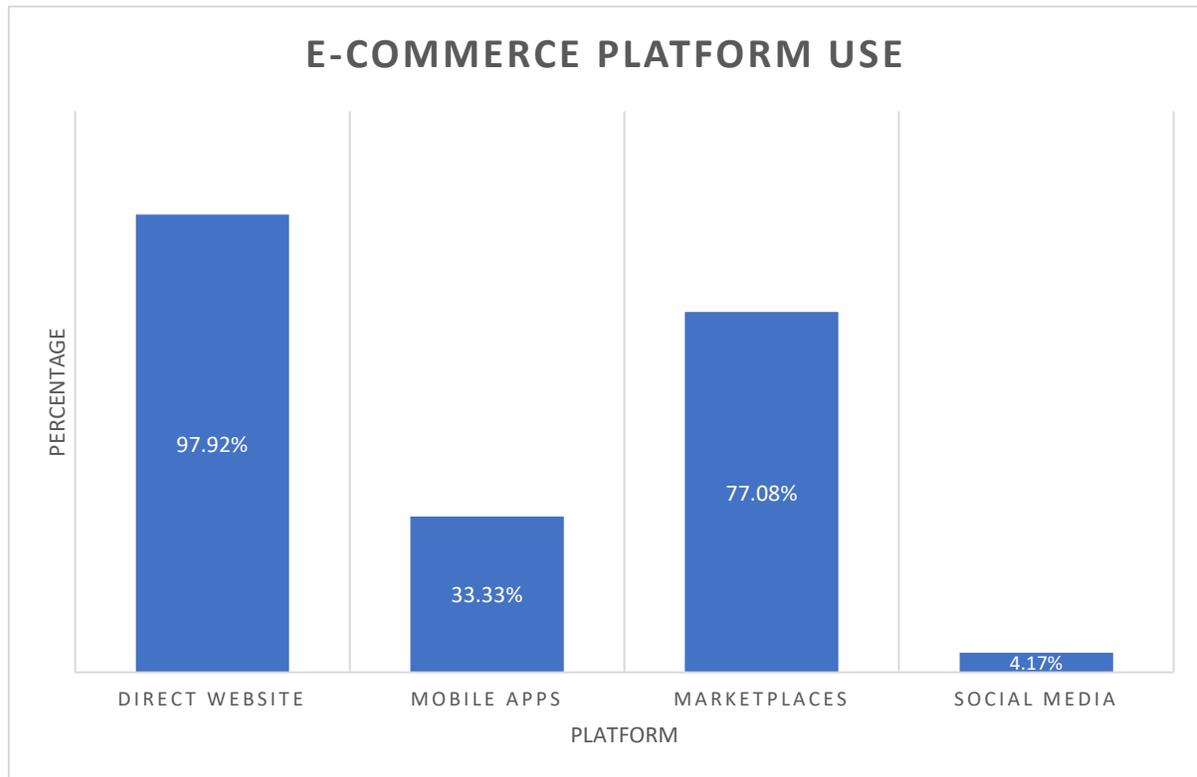


Response	Percentage	Number
Daily	4.17 %	2
Every 1-2 weeks	29.17 %	14
Monthly	58.33 %	28
Annually	8.33 %	4

Figure H: Frequency of e-commerce use

The majority of participants (58.33%) use e-commerce monthly, compared to about half that amount using it every 1-2 weeks. The amount of people using it daily or annually is not significantly large.

6. What e-commerce platforms do you buy from?



Response	Percentage	Number
Direct website	97.92 %	47
Mobile apps	33.33 %	16
Marketplaces	77.08 %	37
Social media	4.17 %	2

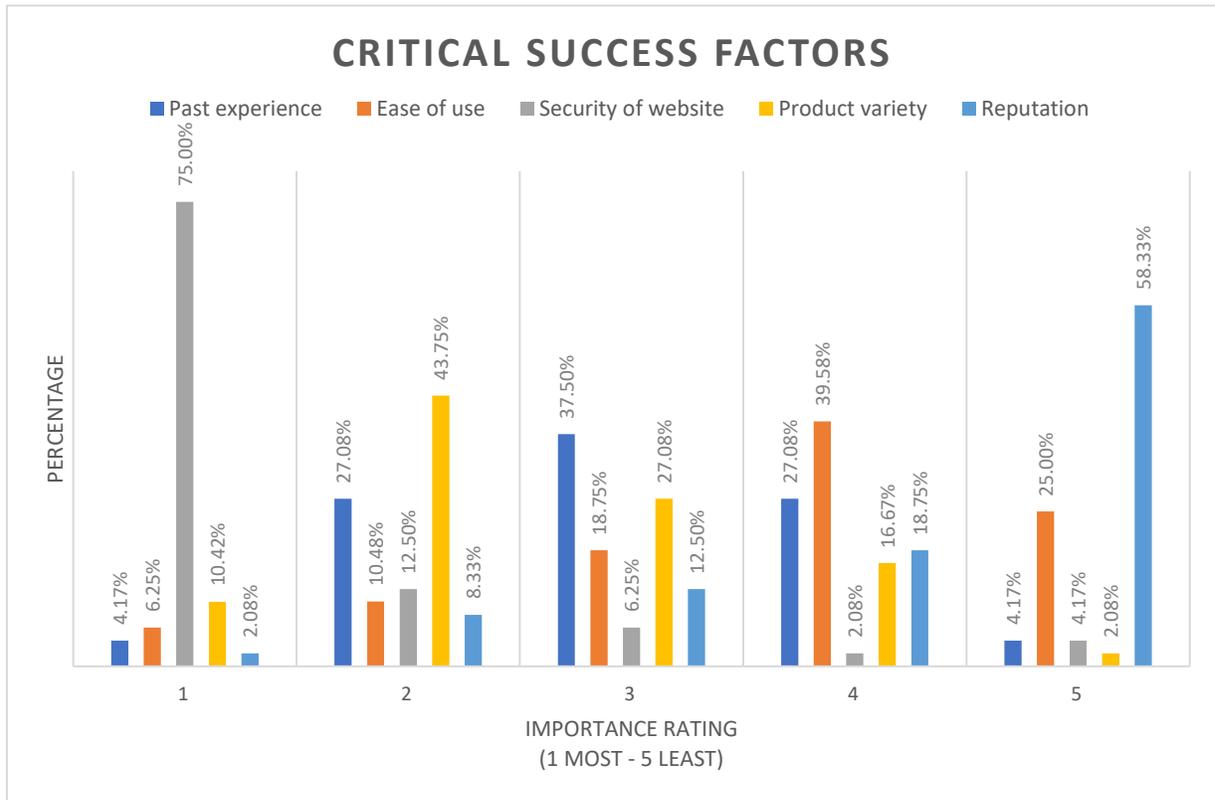
Figure 1: E-commerce platforms

This question is also multiple choice, enabling participants to choose more than one option as more than one platform is likely to be used. The options are based on the most well-known platforms in e-commerce usage.

97.92% of people buy from direct websites such as Tesco or Topshop, which accounts for 47 out of 48 people and so, is identified as the most popular choice. Marketplace purchases closely followed with 77.08%, which are websites such as Amazon and eBay that facilitate transactions between sellers and buyers.

The percentage of people who online shop through mobile apps was 33.33% and those purchasing through social media is only 4.17%. According to this data, customers participating in e-commerce via social media is extremely low compared to other platforms. In light of this, it suggests either people are not utilising this option because it does not prove beneficial, or they are not aware of its availability.

7. Rate these factors in importance to you when buying online
(1 is most important, 5 is least important)



(Percentage)

Factor	1	2	3	4	5	Total
Past experience	4.17 %	27.08 %	37.50 %	27.08 %	4.17 %	100.00 %
Ease of use	6.25 %	10.48 %	18.75 %	39.58 %	25.00 %	100.00 %
Security of website	75.00 %	12.50 %	6.25 %	2.08 %	4.17 %	100.00 %
Product variety	10.42 %	43.75 %	27.08 %	16.67 %	2.08 %	100.00 %
Reputation	2.08 %	8.33 %	12.50 %	18.75 %	58.33 %	100.00 %

(Number)

Factor	1	2	3	4	5	Total	Average rating
Past experience	2	13	18	13	2	48	3
Ease of use	3	5	9	19	12	48	3.67
Security of website	36	6	3	1	2	48	1.48
Product variety	5	21	13	8	1	48	2.56
Reputation	1	4	6	9	28	48	4.23

Figure J: Critical success factors

Five factors are chosen to investigate to avoid overloading the participants, as this may lead to confusion and unreliable findings. The factors are either identified as prominent determinants in e-commerce or have little research on their use and effects. All factors are suggested to be linked to the

loyalty and trust in a business and its e-commerce strategies.

Security

75% of participants chose the security of the website as the factor that is most important to them when shopping online. As identified in recent literature and the SME case study, security is proposed as a crucial element of implementing successful e-commerce strategies. Two people rank it as the least important success factor, which contrasts previous research. However, this act might be due to the participants having up to date security measures put in place, so it is not a great issue to them. Otherwise, perhaps these participants just do not view security risks as influential in their choice of e-commerce transactions and view others of higher importance.

Product Variety

The variety of products available will inevitably influence consumers and in this case, is voted the second most important success factor. It is also considered the number one factor to 10.42% of people, meaning some participants are inclined to shop from a certain website based on products available above any other factor.

Past Experience

Placed at the third critical factor out of five, is a user's own experience with the company or website in question. A customer's prior experience and knowledge of a business and how it works will shape a positive or negative view upon it. If the customer has had a satisfactory experience and service, they are likely to return. An unsatisfactory encounter will possibly persuade them to shop elsewhere.

Ease of use

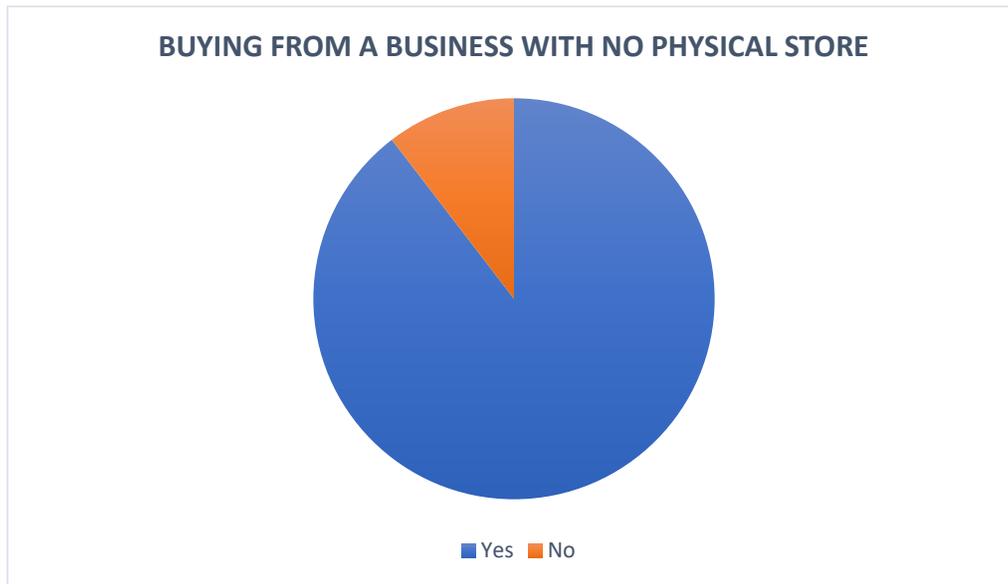
Almost 40% of customers place the ease of use of e-commerce strategies as the fourth most important factor and 25% as the least important. From data collection, this suggests that as a whole, consumers do not rate usability as highly as other elements such as security and product variety. In saying this, 6.25% believe it to be the most influential factor and rate it as their first choice. The diversity of this opinion suggests the importance of usability as a contributing factor of e-commerce purchases to most customers, but not as a necessity.

Reputation

Over half of the consumers involved in this questionnaire believe a business' reputation to be the least important factor when considering e-commerce use. The reputation of a company is constructed by many aspects, with some outlined in this questionnaire e.g. security and past experiences. Reputation may be considered least important as the elements involved in its creation are also listed individually in this questionnaire. Another reasoning could be that customers like to form their own opinions of a business, as opposed to relying on someone else's.

Taking this data into consideration, it is clear to see people are most concerned with the security of a website when purchasing online. Although the remaining factors are influential, customers being assured of the safety of their information is crucial in their decision to purchase online.

8. Would you buy from a business that has no physical store, just a website?



Response	Percentage	Number
Yes	89.58 %	43
No	10.42 %	5

Figure K: Online businesses

This question is included to find out whether a business having no physical set-up will affect a customer's decision to buy from them. 89.58% express this element would not impact their purchase intentions.

If the consumer answered no, they were asked to provide reasoning. These included:

"I find it difficult to trust online companies, especially when they are not well-known."

"The returns process is too long. If a shop has a physical store, it is much easier to just go in, return my items and get my money back straight away."

For a business that solely operates online, this could result in loss of custom. Issues like this can be addressed by ensuring appropriate security measures are in effect and that the business obeys current security and data protection legislation.

Customers can confirm the secure connection to websites by carrying out precautions such as viewing the website's certificate, whilst businesses can gain trust by addressing critical success factors and putting appropriate security measures in place.

With regards to the returns process, this relates to the ease of use. As previously identified, the ease of

e-commerce contributes to a customer's decision to purchase and so, must be addressed in all aspects of the process.

9. In your opinion, what is the main advantage of e-commerce to a customer?

This section is designed as a place for customers to input their own opinion, without having to choose from a list of options. The most popular comment is the accessibility that e-commerce brings to customers, with many people appreciating the fact they can order products such as food and clothes, "without leaving the house."

Other opinions included:

"It is easier to compare products."

"Shopping online is available at any time convenient for you."

"There is more variety e.g. in a physical shop, they may not have your size."

The advantages identified by consumers are all related to proposed critical success factors, such as the ease of use and product variety. The fact participants have recognised these factors, shows their importance to the consumer.

8.2 Summary

The data collected is based equally between male and females, with a focus on the 18-25 age group. Just under 95% of participants shop online, the majority of which use it to purchase entertainment and fashion products / services on a monthly basis.

The handful of participants that do not shop online are influenced in this decision by security risks and lack of e-commerce knowledge. Measures can be put in place to decrease the threats posed by security issues, which may persuade more customers to turn to e-commerce. Lack of knowledge can be addressed through courses or trial and error, for the customer to gather experience of the e-commerce process. In saying this, the decision lies with the individual.

Direct websites and marketplaces are the main platforms customers use to make transactions, with almost 90% of people saying they feel comfortable buying from a business with no physical store. Social media is the least utilised e-commerce platform, with only 4.17% of participants frequently using it to purchase goods.

All five factors investigated are confirmed as important to the success of completing an e-commerce transaction by the participants, with each factor being rated the most crucial by one or more consumers. The most important factor identified by the consumers is security. Security breaches can be detrimental to a business and can result in the loss of custom, as conveyed in previous literature. As long as the customer feels assured the website is safe and secure, they are likely to complete a purchase. Effective security measures used in e-commerce strategies will contribute to loyal customer behaviour, as well as increasing the likelihood of initial purchases.

The main advantage of e-commerce as identified by the consumer is the ease of access to products. Participants feel encouraged to make online purchases due to the fact they can be made anywhere in the world, at any time – especially in the comfort of their own home.

The ease of access could also be portrayed as a critical success factor and can be applied in the ease of e-commerce use, which is ranked the fourth most influential factor. This finding suggests customers may not use e-commerce if the process proves too complex. It must be more convenient for the customer than physically purchasing items from a store.

Collecting and analysing this data has enabled the conclusion to be drawn that whilst security is of utmost importance to the consumer, factors such as past experience, ease of use, product variety and business reputation are greatly influential. In summary, the starting point for e-commerce adoption must address potential security risks and issues, by putting appropriate measures in place.

9.0 Business Response to Consumer Data Analysis

After collecting and analysing the consumer data, it was forwarded onto the owner of the SME for her to assess and gain an insight into e-commerce from a consumer perspective. She was invited to look over the data patterns and trends found, to provide opinions from a business viewpoint.

The owner acknowledges that being a social media-based business means it can be difficult to control certain factors. Facebook and all other social media networks have their own structure and security measures, so there are other elements which the SME cannot contribute to e.g. processing speed and ease of navigation.

In saying this, the business ensures it maximises factors such as ease of use, by using detailed descriptions of products and clear images. This helps to make the browsing process simple and user friendly, resulting in a positive consumer experience. The identification of factors currently out of her complete control is something the owner will incorporate and be aware of in the future design of her website.

The low utilisation of social media e-commerce in this study is recognised, with the owner suggesting some people are not aware of its existence. It is proposed more needs to be done by social media itself, to “normalise” it. She was however, pleased to see that businesses with no physical set-up do not deter the majority of participants from ordering online, as this would also directly affect the nature of her organisation.

In summary, the owner of the case-study SME accepts there are some factors she could incorporate, to increase the levels of success e-commerce brings to her business. Whilst there are factors currently integrated to ensure a customer’s satisfaction, these can be enhanced when adopting further e-commerce strategies.

10.0 Conclusion

All factors identified and analysed in this study can be perceived as contributors to the loyalty and trust of consumers to a business, which themselves, are considered critical success factors. For instance, positive experiences, ease of use and a good business reputation are all influential in the trust and loyalty a consumer shows towards a business.

As suggested from reviewing literature, the element of trust plays a major part in the success of e-commerce. Although this is not directly analysed through primary data collection, its effects are taken into consideration. It is practical to say most of the success factors lead to an increase in trust. One question to consumers inquired why people may not use e-commerce, to which a commonly identified response is not wanting to reveal personal details such as credit cards, online. This can arise from a lack of trust in a business, or even the e-commerce process itself.

To a business, loyal consumer behaviour is of high importance to the success of e-commerce strategies. The loyalty of customers arises from contributing factors such as trust and previous interactions with the company's e-commerce process. Loyalty not only enhances revenue, but also the business' reputation. If a customer engages in frequent transactions with a specific business, it implies their service is satisfactory to the customer.

There are a number of other factors identified from a consumer point of view, that are dependent on the presence of factors from the business side. For example, the ease of use may arise from a business' experience in e-commerce design, as well as its financial resources.

Taking data collection into consideration, it is evident that the reoccurring theme of security can be considered one of the most influential critical success factors in e-commerce strategies. Identified by both the business and consumer, security risks effect both parties and show significance in the decision of e-commerce transactions.

A business that can assure its customers reliable and effective security measures are put in place to protect customer data and privacy rights, are more likely to engage customers in loyal purchasing behaviour, due to the enhanced aspect of trust. Data breaches and security issues can severely affect a business' reputation, resulting in the loss of new and loyal custom. In the retail industry, this can be detrimental to the trustful business to consumer relationship.

A factor causing a variation in opinion, is the size of an organisation and the extent to which it influences e-commerce use is debatable. Some researchers are led to believe SMEs are at a disadvantage by being a smaller business, often resulting in the assumption they obtain fewer financial and technological resources. As the case study was based on a SME, the advantages e-commerce can bring to a smaller business are highlighted. The availability of financial resources is not identified as being critical to the implementation of e-commerce strategies, as there are low-cost alternatives applicable.

Analysing a SME and the effects e-commerce has on it, enables the portrayal of how such organisations can utilise e-commerce, to keep up with larger-scale competitors. By increasing the potential customer

audience to a world-wide level, it is much easier for a SME to manage a higher influx of customers.

This study has led to the discovery that size can influence the success of e-commerce however, it is not definitive success itself. Both SMEs and larger businesses can adopt e-commerce and gain benefits from it through different avenues. There is no evidence to suggest e-commerce is only successful to a certain sized business.

Experience is a factor investigated from both the business and consumer point of view. The business owner in this SME did not have a large amount of experience in e-commerce prior to implementation, but stresses it is not decisional in success. If a business would feel more comfortable with expertise at their disposal, there are options available. Such ideas include hiring experts who can take control of the design and implementation of e-commerce strategies, taking the pressure off the SME.

The consumer perspective portrays a slightly different take on experience, in that consumer experiences shape opinions and attitudes towards a business. It is suggested that these outlooks influence company reputation and often result from other factors such as the ease of use and product variety.

Business experience as a necessity is debated, depicting variations on perception from researcher to researcher and business to business. However, consumer experiences are implied to be crucial, as they sculpt the perception of a business which influences the decision to purchase.

The “fear of the unknown” has been conveyed as a reoccurring concern. Through both lenses of the data collection, it can be viewed as an obstruction to the use of e-commerce. With the developments of technology comes complex strategies and so, people can be apprehensive of their use. As a SME, this fear can be addressed by hiring professionals or taking part in training to aid in the design and implementation of e-commerce strategies. As a consumer, courses can be completed to gain an insight into e-commerce use, or a trial and error approach can be adopted.

The main advantage as conveyed by businesses and consumers are connected. To a business, the most valuable aspect is the large increase in accessibility to customers and the ease in which it can be done. Consumers are affected by this, as their most favourable aspect of e-commerce is that goods can be purchased any place, any time. These two benefits go hand-in-hand and complement each other in the e-commerce process.

To conclude, the identification of some factors as being critical to e-commerce success varies widely throughout personal opinions and research. There are many factors that are influential in customer intentions to purchase, but not crucial. This means although the presence of the factor can increase the likelihood of a customer making a purchase, the lack of its presence would not deem the adoption of e-commerce strategies unsuccessful.

This study approves the idea that certain aspects of B2C e-commerce strategies are critical to its success in SMEs. Whilst there are factors that vary, dependant on the business or customer perspective, security is a strong determinant of B2C e-commerce success, as it influences the loyalty and trust a consumer shows to a business. Security is found to be a factor all businesses should be aware of when initiating,

adopting and maintaining e-commerce strategies.

10.1 Further Work

Further research can be undertaken to interpret critical success factors from the perspective of a large organisation. This study contains ideas from SMEs but does not directly research and analyse the effects of e-commerce adoption to a larger business. Extended research could be carried out to thoroughly compare and contrast this to a SME's point of view.

Data collection and analysis has led to the idea that social media is not utilised as frequently in comparison with other mentioned platforms. This aspect is not explored in this study, but may equate to the lack of trust concept, especially in light of data breaches. Further research into this theory could be executed across a wider sample size, to gain an understanding into the use of social media e-commerce by consumers, compared to other platforms. If such research confirms usage is low, analysis can take place to confirm reasoning why.

An extended critique of success factors could also be carried out, by considering and comparing a larger number of factors. This may help to identify further determinants of B2C e-commerce strategies.

References

- Ahmad, S., Abu Bakar, A., Faziharudean, T. and Mohamad Zaki, K. (2014) An empirical study of factors affecting e-commerce adoption among small and medium sized enterprises in a developing country: evidence from malaysia, *Information Technology for Development*, 21(4), pp.555-572.
- Al-Slamy and Nada, M. A. (2008) E-commerce security, *IJCSNS International Journal of Computer Science and Network Security*, 8(5), pp.340-344.
- Berger, J., Draganska, M. and Simonson, I. (2006) The influence of product variety on brand perception and choice, *SSRN Electronic Journal*, pp.1-40.
- Boynton, A.C. and Zmud, R.W. (1984) An assessment of critical success factors. *Sloan Management Review*, 25(4), pp.17-27.
- Brock, C., Blut, M., Linzmajer, M. and Zimmer, B. (2011) *F-commerce and the crucial role of trust*. Paper presented at the Proceedings of the 32nd International Conference on Information Systems, Shanghai, China. [Online]. Available from: <https://pdfs.semanticscholar.org/0b4d/877c0313c47fcb42e4e03ed48ee85bd489f5.pdf>. [Accessed 28th April 2018].
- Brown, I. and Jayakody, R. (2008) B2C e-commerce success: a test and validation of a revised conceptual model. *Electronic Journal Information Systems Evaluation*, 11, pp.167–184.
- Buzzi, M. C., Buzzi, M., Leporini, B., and Akhter, F. (2009) Usability and accessibility of eBay by screen reader, *Proceedings of the 5th Symposium of the Workgroup Human-Computer Interaction and Usability Engineering of the Austrian Computer Society on HCI and Usability for e-inclusion*, 5, pp.500-510.
- Chang, K., Lie, T. and Fan, M. (2010) The impact of organizational intervention on system usage extent, *Industrial Management & Data Systems*, 110(4), pp.532-549.
- Chiu, C., Wang, E., Fang, Y. and Huang, H. (2012) Understanding customers' repeat purchase intentions in B2C e-commerce: the roles of utilitarian value, hedonic value and perceived risk. *Information Systems Journal*, 24(1), pp.85-114.
- Chwelos, P., Benbasat, I. and Dexter, A. (2001) Research report: empirical test of an EDI adoption model, *Information Systems Research*, 12(3), pp.304–321.
- Corbitt, B., Thanasankit, T. and Yi, H. (2003) Trust and e-commerce: a study of consumer perceptions, *Electronic Commerce Research and Applications*, 2(3), pp.203-215.
- Daniel, E. and Grimshaw, D. (2002) An exploratory comparison of electronic commerce adoption in large and small enterprises, *Journal of Information Technology*, 17(3), pp.133-147.
- Daniel, E., Wilson, H. and Myers, A. (2002) Adoption of e-commerce by SMEs in the UK: towards a stage model, *International Small Business Journal*, 20(3), pp.253-270.
- Daugherty, T., Li, H. and Biocca, F. (2005) Experiential e-commerce: a summary of research investigating the impact of virtual experience on consumer learning, *Online Consumer Psychology: Understanding and Influencing Consumer Behavior in the Virtual World*, pp.428-459.

- Dillon, T. D., and Reif, H. L. (2004) Factors influencing consumer's e-commerce commodity purchases, *Information Technology Journal of Learning and Performance*, 22(2), pp.1-12.
- Dubelaar, C., Sohal, A. and Savic, V. (2005) Benefits, impediments and critical success factors in B2C e-business adoption, *Technovation*, 25(11), pp.1251-1262.
- Dwyer, C., Hiltz, S. and Passerini, K. (2007) *Trust and privacy concerns within social networking sites: a comparison of facebook and myspace*. Paper presented at the Proceedings of the 13th Americas Conference on Information Systems, Keystone, CO. [Online] Available from: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.148.9388&rep=rep1&type=pdf>. [Accessed 28th April 2018].
- Dyllick, T. and Hockerts, K. (2002) Beyond the business case for corporate sustainability, *Business Strategy and the Environment*, 11(2), pp.130-141.
- Eid, M. (2011). Determinants of e-commerce customer satisfaction, trust and loyalty in Saudi Arabia, *Journal of Electronic Commerce Research*, 12(1), pp.78-93.
- Eikebrokk, T. and Olsen, D. (2007) An empirical investigation of competency factors affecting e-business success in european SMEs, *Information & Management*, 44(4), pp.364-383.
- Fazlollahi, B. (2002) *Strategies for eCommerce success*. Hershey, Pa. [Online] Available from: <https://pdfs.semanticscholar.org/b2e7/5fae1038612cfd9a081885a23ded489d622e.pdf> [Accessed: 28th April].
- Gibbs, J. and Kraemer, K. (2004) A cross-country investigation of the determinants of scope of e-commerce use: an institutional approach, *Electronic Markets*, 14(2), pp.124-137.
- Gorla, N., Somers, T. and Wong, B. (2010) Organizational impact of system quality, information quality, and service quality, *The Journal of Strategic Information Systems*, 19(3), pp.207-228.
- Grandon, E. and Pearson, J. (2004) Electronic commerce adoption: an empirical study of small and medium US businesses, *Information & Management*, 42(1), pp.197-216.
- Jacoby, Jacob (1971) Brand loyalty: a conceptual definition, *In Proceedings of the American Psychological Association*, 6, pp.655– 656.
- Jadhav, N., Kamble, R. and Patil, M. (2013) Social media marketing: the next generation of business trends, *IOSR Journal of Computer Engineering*, 2(21), pp.45-49.
- Jeon, B., Han, K. and Lee, M. (2006) Determining factors for the adoption of e-business: the case of SMEs in korea, *Applied Economics*, 38(16), pp.1905-1916.
- Joines, J., Scherer C. and Scheufele, D. (2003) Exploring motivations for consumer web use and their implications for e-commerce, *J Consum Market*, 20(2) pp.90-108.
- Kassim, N. and Abdullah, N. A. (2010) The effect of perceived service quality dimensions on customer satisfaction, trust, and loyalty in e-commerce settings, *Asia Pacific Journal of Marketing and Logistics*, 22(3), pp.351-371.

- Kim, D., Ferrin, D. and Rao, H. (2009) Trust and satisfaction, two stepping stones for successful e-commerce relationships: a longitudinal exploration, *Information Systems Research*, 20(2), pp.237-257.
- Kwak, H., Lee, C., Park, H. and Moon, S. (2010) What is twitter, a social network or a news media? *Proceedings of the 19th International Conference on World Wide Web*, pp.591-600.
- Laudon, K. and Traver, C. (2008) *E-commerce*, 4th ed. Upper Saddle River, N.J: Pearson/Prentice Hall. [Online]. Available from: https://www.cpe.ku.ac.th/~mcs/courses/2008_01/214571/slides/Laudon_Traver_E-commerce4E_Chapter09.pdf [Accessed: 21st April 2018].
- Liebermann, Y. and Stashevsky, S. (2002) Perceived risks as barriers to internet and e-commerce usage, *Qualitative Market Research: An International Journal*, 5(4), pp.291-300.
- Melnik, M. and Alm, J. (2003) Does a seller's e-commerce reputation matter? evidence from ebay auctions, *The Journal of Industrial Economics*, 50(3), pp.337-349.
- Office for National Statistics. (2018) *Internet access – households and individuals - Office for National Statistics*. [online] Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/householdcharacteristics/homeinternetandsocialmediausage/bulletins/internetaccesshouseholdsandindividuals/2017> [Accessed 21 Apr. 2018].
- Paul, I (2016) *Massive Acer security breach exposes highly sensitive data of 34,500 online shoppers*. [Online]. Available from: <https://www.pcworld.com/article/3085650/security/massive-acer-security-breach-exposes-highly-sensitive-data-of-34500-online-shoppers.html> . [Accessed 31st March 2018].
- Pennanen, K., Kaapu, T. and Paakki, M. K. (2006) Trust, risk, privacy and security in e-commerce, *Frontiers of e-business research*, pp.1-10.
- Rashid, A. and Al-Qirim, N. (2001) E-commerce technology adoption framework by new zealand small to medium size enterprises, *Res. Lett. Inf. Math. Sci.*, 2, pp.63-70.
- Sivaji, A., Mazlan, M. F., Shi-Tzuaan, S., Abdullah, A., and Downe, A. G. (2011) Importance of incorporating fundamental usability with social, trust and persuasive elements for e-commerce website, *IEEEExplore Business, Engineering and Industrial Applications (ICBEIA)*, pp.221- 226.
- Skolny, V. (2014) *The individual and organisational impact*. [Online]. Available from: <https://www.linkedin.com/pulse/20141120165807-4321527-the-individual-and-organizational-impact> . [Accessed 4th April 2018].
- Sparkes, A. and Thomas, B. (2001) The use of the internet as a critical success factor for the marketing of welsh agri-food SMEs in the twenty-first century, *British Food Journal*, 103(5), pp.331-347.
- Srinivasan, S., Anderson, R. and Ponnayolu, K. (2002) Customer loyalty in e-commerce: an exploration of its antecedents and consequences, *Journal of Retailing*, 78(1), pp.41-50.
- Stockdale, R. and Standing, C. (2006) A classification model to support SME e-commerce adoption initiatives, *Journal of Small Business and Enterprise Development*, 13(3), pp.381-394.

- Sung, T. (2006) E-commerce critical success factors: east vs. west, *Technological Forecasting and Social Change*, 73(9), pp.1161-1177.
- Tan, J., Tyler, K. and Manica, A. (2007) Business-to-business adoption of e-commerce in china, *Information & Management*, 44(3), pp.332-351.
- Tiwana, A. and Ramesh, B. (2001) E-services: problems, opportunities, and digital platforms, *Proceedings of the 34th Annual Hawaii International Conference on System Sciences*, pp.1-8.
- Viehland, D. (2000) Critical success factors for developing an e-business strategy, *R.L.I.M.S.*, 1, pp. 1-7.
- Zareba, I. (2014) The adaptation of social media networks to increase sales in the UK hostels industry, *The Beagle: A Journal of Student Research and Enterprise*, 2(1) pp.1-23.
- Zhu, K. and Kraemer, K. (2005) Post-adoption variations in usage and value of e-business by organizations: cross-country evidence from the retail industry, *Information Systems Research*, 16(1), pp.61-84.

Appendices

Appendix A: Case Study Questions for SME

1. Why did you decide to use e-commerce strategies to set up your business?
2. What e-commerce strategies do you currently use?
3. Were there any worries you had before adopting e-commerce strategies?
4. How experienced were you in e-commerce before-hand?
5. Which of the following critical success factors do you think is most important when using e-commerce?
 - your experience / skills
 - loyalty and trust of your customers
 - your resources e.g. technology / finance
6. Do you struggle to keep a strong business to consumer relationship over the internet?
7. Do you think as a small business, you are a disadvantage compared to larger businesses?
8. What would you say are the main benefits and drawbacks of e-commerce strategies?
9. Would you recommend using e-commerce to other SMEs?
10. Do you think being able to buy products online is essential for a business to succeed in modern-day life?

Appendix B: Consumer Questionnaire

1. Gender (circle as appropriate)

Male Female Prefer not to say

2. Age (circle as appropriate)

Under 18 18-25 26-39 40-59 60+ Prefer not to say

3. Do you use e-commerce*? (circle as appropriate)

**buying products or services online*

Yes No

If no, please state why.

.....
.....
.....

4. What type of products do you buy online? (circle all as appropriate)

Food Fashion Entertainment (e.g. event tickets, subscription services such as Netflix)

Electronics Books Other (please specify)

5. How often do you buy online? (circle as appropriate)

Daily Every 1-2 weeks Monthly Annually

6. What e-commerce platforms do you buy from? (circle all as appropriate)

Direct websites e.g. Tesco, Topshop Mobile apps Marketplaces e.g. Amazon

Through social media

