

A Study into the Issues and Challenges with Mobile Computing

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Abstract

Technology plays an essential role in the upgradation of productivity of a business and this in turn allows firms to gain comparative advantages. In this 21st century mobile computing helps the companies to transform their business into smart business. This helps firms to make greater revenue and boost their market reputation. Despite the advantages there are several challenges and issues with mobile computing that impacts the overall efficacy of the business. Lack of security and proven policy and insufficient knowledge of the workers make the utilisation of technology more challenging. This study has been carried out with the assistance of suitable tools and methods and this has helped to provide sound and reliable findings. From the evaluation it is clear that all the issues that have been discussed can be mitigated with the help of appropriate measurements. As a consequence firms can re-establish their effectiveness greatly and this in turn can secure their future in the marketplace. Apart from that, it will help the companies to achieve competitive advantages with the help of boosted up profits and improved customer support.

Keywords

Competitive advantages, mobile computing, Productivity, technology.

INTRODUCTION

Mobile computing is one of the critical factors that help the companies to save their valuable time and gain competitive advantages. In other words, mobile computing can be explained as a technical field that protects the design, development as well as evaluation of mobile applications with the help of suitable strategic solutions that are capable of accomplishing the needs of the user [1]. In this modern era, this phenomenon is considered to help companies to evaluate important documents in a comparatively less time. This helps the employees to have great flexibility and eventually improves the overall communication to a great extent. Despite the advantages there are some issues that impact the business and make the utilisation of mobile technologies difficult. Mobile computing is a technology that makes the overall process of data sharing seamless as it does not require any physical or fixed connections.

One of the major issues faced by the companies is related to the security of data as lack of security ultimately results in data leakage. Apart from that storage is a factor that also acts as barriers and results in program failure. On the other hand, battery size also acts as obstacles as this impacts the storage capacity to a great extent. All these issues impact the workflow of the organisation and this eventually gives rise to several other challenges. It is evident that mobile computing helps the companies to effectively upgrade their communications and as a consequence this facilitates better business opportunities [2]. It cannot be denied that mobile computing or the technology allows the organisations to establish and maintain a greater relationship with their customers. This technology has the ability to enable the companies to gain customer loyalty as companies provide best services to the customers by knowing their requirements with the help of advanced technologies and assessment. Often the companies face issues due to the lack of proper privacy policy that need to be mitigated in order to utilise the benefits of computing. Apart from that, most of the time companies had to deal with network issues that directly impacted the utilisation of technology to a greater extent [3]. On the other hand, companies also face issues due to unethical activities or practices such as hacking and fraud. Lack of skilled employees and insufficient infrastructure gives rise to privacy related issues. Weak connectivity resulted in work delays and this ultimately impacts the work flow and impacts the image of the company indirectly.

MATERIALS AND METHODS

Research design

Research design is one of the crucial factors that help the researchers to ensure that the overall study is on the right track. This study has been conducted with the help of cross-sectional research design as this design has the potential of allowing the researchers to explore all the crucial aspects related to the subject matter of the study.

Research approach

Research approach has a great influence on the success of the study. This helps the researchers to represent sound and valid findings [4]. Inductive approach has helped to effectively carry out the overall study and have also allowed providing reliable findings.

Research types

It is crucial for the researchers to select a suitable method to ensure success of the overall study and this is capable of providing the necessary strength to the study. Qualitative researchers' methods have been used to secure the success of the study. This method helps the researchers to accomplish the overall work in a less time as this is a comparatively less complicated process.

Data collection methods

Data collection is one of the most critical parts of the study and this determines the effectiveness and success of the study. In order to accomplish the study secondary data has been gathered from reliable sources such as peer-reviewed journals and articles and authentic websites.

Inclusion and exclusion criteria

Inclusion and exclusion criteria have been taken into consideration to effectively accomplish the study. In order to secure the success of the study only secondary data has been gathered. No unverified sources have been taken into consideration for data consumption. Apart from that no primary data collection process has been carried out to represent findings.

RESULTS

Concepts of mobile computing and its impacts on businesses

Mobile computing includes mobile communication, mobile hardware and software and this helps the companies improve their communication process greatly. The term mobile computing can be described as a technical field that has the capacity to over design, evolve and analyse mobile applications with the incorporation of suitable solutions that are capable of fulfilling the requirements. In other words, mobile computing and its utilisation or application are considered as common terminology that is used to address a group of devices that has the ability to use wireless network infrastructure any time in order to transfer data such as text, video, audio [5]. This technology helps the companies to save their time and upgrade their communication and ensure an improved workflow. Apart from that, this helps firms to make their cash flow seamless and less complicated and this allows the companies to establish great alliances with the business partners and secure their future in the global marketplace.

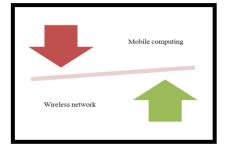


Figure 1: Relationship of mobile computing and wireless network

It is also evident that this helps the individuals to work according to their convenience and facilitates greater work-life balance. On the other hand, this also helps the companies analyse big data and as a consequence, this helps the companies to identify the market trends and the requirements of the customers. It is true that companies try to upgrade the efficiency of the organisation and this is achieved by the improvement of the business transaction. Mobile computing helps the companies to transform the way of business transactions and this in turn increases effectiveness of the company in the marketplace. Utilisation of wireless devices not only saves time and improves flexibility but at the same time enhances overall productivity [6]. This process helps the companies to ensure easy access of resources and this in turn helps the companies to maintain their effectiveness.

Communication has a great role in business expansion and this also helps the companies to get better business opportunities. It is essential for the companies to make sure the communication is optimum in order to ensure successful business operations [7]. On the other hand, It is visible that effectiveness of the organisation is crucial for the companies as this helps the companies to sustain in the corporate world. Mobile computing helps the companies to maintain their effectiveness in the marketplace and secure their market position with the help of competitiveness. This also helps firms to establish and maintain good relationships with customers. It is true that utilisation of digitalisation processes and other technologies allows the business to gain an overview about the requirements of the customers and that eventually helps companies to serve their customers in a better way.

Maintaining good relationships with the customers is a necessity for the business as this helps the companies to stay in the running with the help of their competitive advantages. Whenever companies try to fulfil the needs of the customers this in turn helps the firms to boost their productivity to a great extent. This helps the companies to ensure rapid growth in terms of the global marketplace. One of the greatest advantages of this technology is that it provides the power to work remotely and this allows the workers to work flexibly and boost communication and that ultimately facilitates business collaboration [8]. Apart from that, this helps companies to implement suitable marketing strategies to gain the attention of customers and boost sales to gain competitive advantages.

Issues and challenges related to mobile computing

It is true that there are several challenges and issues related to utilisation of mobile computing. One of the major challenges that is faced by the higher authority is due to the lack of second and privacy. Data leakage is the consequence of the issues and this impacts the effectiveness of the company to a great extent [9]. Apart from that often business faces issues related to the connectivity and this directly impacts the monetary transaction of the company. In severe cases this affects reputation on the marketplaces and impacts the financial growth of the company. Lack of skills of the technological professionals and insufficient knowledge also creates issues for the companies and this impacts the productivity and efficiency of the companies.

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Lack of security measures and lack of proper security policy eventually results in data leakage and this impacts the overall process as this affects the brand's image. On the other hand, this has the ability to act as a threat for the companies as this can result in leakage of company's trade secrets [10]. From another perspective, it is also evidence that in the majority of cases excessive usage of mobile computing results in greater dependency and this impacts the performance of the employees and on the overall business greatly. Often over usages of mobile and other technologies results in poor performance and this often decreases the standard of the service and product. As a consequence this damages the company - customer's relationships and thus is not good for the business in this competitive global marketplace.

Connection and battery backups also act as challenges for the business as lack of connections and insufficient battery backup slow down the overall process. Wi-Fi interference creates challenges in the monetary transaction. On the other hand, this eventually impacts the overall effectiveness and efficiency of the company. Speed and efficiency are two most essential parts of business and it is essential for the business as this helps companies to cope up with the market trend [11]. This in turn helps the companies to stay competitive and make profitable business. On the other hand, this also allows the companies to ensure success in the long run. It is evident that the overall process is vulnerable and there is a tendency to be hacked by other users and this result in a downfall in market share to a great extent. This in turn damages the market reputation and impacts the revenue of the company.

Apart from that low bandwidth is another concern and that also acts as a challenge. Often companies face issues related to the speed of the wireless internet and that eventually impacts the effectiveness of an organisation. Wireless and mobile computing help ad-hoc network without a previous instruction manual within the sender and the receivers. That in turn generates greatest challenges and issues for the user before the network administration and it is related to the reliability and security concern to a great extent [12]. On the other hand sometimes technical and political reasons act as the barriers and these results in limited frequencies. Fluctuation in stability is another reason that acts as challenges for mobile computing and impacts the overall efficiency of the organisations.

Ways to mitigate challenges related to mobile computing

Mobile computing has a lot of advantages and in this modern world it is relevant and can also be considered as one of the major keys of success. There are several ways by which the issues and challenges that are faced by the organisation due mobile computing can be mitigated. The primary issues that are faced by the officials are the privacy and security issues and this can be resolved with the assistance of the skilled and expert employees. It is essential for companies to hire talented and skilled employees with appropriate technological knowledge to ensure uninterrupted flow and rapid growth in the marketplace [13]. In this 21st century it becomes essential for the higher officials and management to focus on the growth of the business for the sake of the competitive advantages. With the help of skilled employees companies can effectively secure their data and can also make sure a seamless business process and better bushes opportunities.

By installing security hardware and software organisations can effectively and successfully reduce the chances of being hacked by hackers. This in turn allows the companies to gain competitive advantages and on the other hand, this also secures the business strategies of the companies that are capable of securing the future of the company. In addition, incorporation of security hardware and software can also make the security policy of the firms more robust and effective. Apart from that, expert employees and their knowledge is also capable of provoking necessary support to gain the advantage of this technology. Productivity and efficiency of the business can be boosted with the help of this incorporation of suitable software and appropriate knowledge of the skilled employees [14]. Most importantly, the management and leaders of the company also have to understand and identify the necessity of the utilisation of technologies to avoid dependency.

It is important for the organisation to provide training to educate the employees about the utilisation of technology to prevent issues and other challenges that have been created by companies. It is evident that, whenever the user becomes aware about the ethical utilisation of technology this eventually results in more effective use, and it is a great way to prevent misuse of the technology [15]. With the help of the appropriate hardware devices and by increasing the battery backup and with necessary measures all the companies can effectively mitigate the issues related to the connectivity and battery backups. By enforcing proper access rights and permission is also an effective way to prevent security related issues. On the other hand, organisations can also incorporate suitable vans effective policies depending on the needs of forms to make the utilisation of technology seamless and uninterrupted.

Companies need to make sure that speed and efficiency is maintained for the better business opportunities and greater alignment with the business partners to stay in their running in this competitive world with the help of mobile computing and fastest communication. Incorporation of appropriate hardware and software can provide the necessary support that is required to access greater support and ensure uninterrupted workflow and greater productivity [16]. This in turn can provide greater profits and improved market reputation. These two aspects are essential for the companies as these two determine the future of the organisation to a great extent.



Future of mobile computing for businesses

By considering all the aspects and the current challenges that are facing by the business it is clear that the future of mobile computing is bright. This has the ability to change the bushes into smart business by transforming the mode of action of the business operations. Large screen smart phones, tablets, have made several changes in the computing spaces and itself a revolution. The advantages that the technology brings to the table are the major reason for the increasing number of adaptations of this technology into the business. With the help of this technology companies effectively maintain their effectiveness in the marketplace by strengthening the customer base and gaining better business opportunities [17]. This technology has the ability to change the entire system of business operations with the help of speed and seamless data transfer process. In figure mobile computing can also be used as an active marketing method and gain the attention of the customers with the aim to boost customer engagement.

Mobile commuting has the ability to enhance the overall workflow to a great extent and improve the communication greatly for the betterment of the business. It is essential for the companies to look into the communication to ensure rapid growth and better business collaboration to achieve the goal of the businesses [18]. Apart from that with the assistance of this technology productivity and efficiency of the workers can be increased rapidly and this in turn can boost the overall work efficiency of the organisation. In the present days, trailblazing technology such as AI, machine learning, IoT and cloud computing is transforming mobile computing and this is capable of changing the traditional business into a smart business with upgraded productivity.

It is evident that mobile technology is nothing but a technology that helps the users to share data via wireless medium for the sake of a seamless data transformation process. This has the ability to provide the much needed flexibility to the user and encourage remorse working for better productivity. With the help of speed and efficiency forms can effectively maintain their market position to gain the attention of the potential investors and customers [19]. It is crucial for the business to ensure that the company possesses great customer support and has the sufficient financial backups to sustain in the marketplace. All the future is capable of facilitating a brighter future to the companies and ensures that the business is competitive.

DISCUSSION

Technology has great impacts on the business and this has the power to transfer the overall business. Mobile computing helps the users to share data via wireless media and this facilitates greater productivity and efficiency. Despite the advantages there are several disadvantages that eventually result in interruption in the workflow. The major issues faced by the officials are the lack of security and privacy and lack of knowledge. These factors act as the barriers and give rise to implementing circumstances and damage the reputation of the business on the marketplace. Apart from that this even causes financial loss and as a consequence companies go through severe challenges. It is evident that this technology helps the companies to establish great relationships with the clients with the help of seamless communication.

Often firms face issues due to unethical activities and other security related issues and that eventually causes issues to maintain the effectiveness of business. Lack of expert candidates makes the issues more severe for efficiency and performance of the organisation. On the other hand, lack of appropriate testing often gives rise to unethical activities and this in turn impacts the effectiveness and the image of the firms. In addition, often lack of suitable policy and strategy results in faulty systems and this eventually results in interrupted workflow. It is essential for the companies to ensure that the company has sufficient knowledge that is capable enough to handle all the activities. Apart from that, skilled employees also have the ability to ensure that no one is misusing the technology and on the other hand, the expert candidates also provide the right guidance that in turn helps the companies to gain the benefits of mobile computing.

Skilled professionals allow firms to secure their data and prevent the secret information from being hacked. On the other hand, firms often face challenges to carry out seamless business operations due to the lack of connectivity and other technical issues. As a consequence, this impacts the reputation of the organisations. With the help of suitable hardware and software firms overcome these issues for the betterment of the business. Implementation of suitable tools allows companies to enjoy the advantages of the technology and secure their existence in the marketplace. It is clear that whenever companies focus on the efficiency and look into the upgradation productivity these results in upgraded competitiveness. On the other hand, competitiveness is a crucial aspect for the business as this not only secures the existence of the companies but at the same time helps firms to secure the future of the company. It cannot be denied that there are several ways by which companies can effectively mitigate the issues and establish a seamless business process. Incorporation of suitable policy and by focusing on the needs of the company firms can effectively and remove all the obstacles and secure their growth in the marketplace. By considering the advantages and the market trends it is more than clear that the future of the technology is bright. With the help of these technologies, companies can effectively optimise their business operations for a better future and greater revenue.

CONCLUSION

In these modern days, technology has become an essential part of day to day life and this scenario is relevant for the business sectors as well. Mobile computing has made the overall business operations more effective and seamless. With the help of this technology firms have successfully and effectively boosted their productivity and efficiency to gain competitive advantages in the global marketplace. Mobile commuting has the capability of transforming valuable information through a wireless connectivity to another device for better and fastest communication. Communication is one of the most essential aspects of the business as this helps businesses to gain better opportunities and allow the business to establish greater alliance with business partners. As a consequence, market image and revenue of the company increases that in turn allows the companies to stay ahead from the competitors.

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Despite the advances there are several issues and challenges associated with mobile computing. Lack of privacy and security, insufficient skilled employees and lack of policy make the utilisation of mobile computing challenging. It is evident that all the issues and challenges result in interrupted workflow and losses of efficiency. Apart from that, a hacked system results in loss of competitiveness and it directly impacts the performance of the organisation and their market position. With the help of the suitable policies and with the help of the skilled employees all the issues can be mitigated and productivity of the business can be re-established.

Incorporation of appropriate measures and proper guidance companies can gain the advantages of this technology and can secure their future for better productivity and efficiency. This technology has a bright future as the benefits of mobile computing have the ability to transform business into smart business. Apart from that, this is also capable of allowing the companies to upgrade the workflow to a great extent. It is expected that this technology has the ability to boost the customer engagement and also facilitates competitive advantages. With the help of mobile computing companies can transform marketing strategies to a great extent and can boost the customer base for carrying out business in a most effective manner. Innovative technology has the ability to help the business achieve their goals in a comparative business world with the help of greater efficiency and better business opportunities. It is true that greater customer base and greater productivity results in upgraded revenue and improved market reputation.

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