# BYOD Technological: Next Generation Business Development Programs for Future Accelerations, Innovations and Employee Happiness

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## ABSTRACT
The changing trends of technology have change the way of doing businesses. 21st century world is categorized by a dense addiction on information technology and technical devices to accomplish even the modest of tasks. Smart phones are one of the technical device that influences the dependence to put in a circumstances where the privacy, honesty and convenience of information resources. Bring Your Own Device (BYOD) is a new leaning area the IT organization that has to deal with the costs, profits and risks. In this research, the consumer is put in the focus of consideration to measure the discrete concepts in the research model with a qualitative approach of case studies is accompanied. The research offers consequences about which factors have an impact on a personal devices use and employer appeal changes by the presenting of a BYOD service and when the impending employees are attentive in BYOD use and how BYOD will help on future accelerations and employee happiness.

## Keywords
Information Technology, BYOD, Organizational Efficiency, Developing Knowledge, Innovations, Employee Happiness, Future Accelerations.

## 1. INTRODUCTION
Today's world is categorized with largely addiction on information technology. From domestic to business there is an information technology solution for everyone and everything, where this technology is helping future accelerations and people happiness. In recent years, the global IT groups have been working to build up fixed regulations with regard to their service contributions [34]. Both hardware and software components as well as the sustenance services were limited to a predefined IT service directory. These measures were taken to avoid that due to a wide diversity of offers the ability to manage all the mechanisms and therefore a safe practice is lost and can no longer be definite [14]. This adjustment process was just thought done to the end respectively many businesses have just executed such regulation measures. Since that time many businesses rely on the usage of consistent P.C patrons, a central IT spending cart and the central infrastructure on predefined calibration appliances. Shortly after the entrance of the first smartphones and tablet PCs the employees carried the first devices to the office [45].

Bring Your Own Device (BYOD) refers to knowledge models where employees of an organizations bring a personal devices to business for the purpose of learning or completing their respective tasks. The personal devices included any technology device carried into the businesses and owned by an employee or group of employees, staff or visitors [34]. BYOD is a resolution where employees fairly and accurately bring their own device to their offices in order to right to use the internet,

3G be it a smartphones, tablets, laptop or other hand held device. With the new user devices the user acquaintances increased contented user experience completely separate from the often prevailing prevention that is connected with the use of business I.T [10]. Most of these BYOD strategies are used deprived of knowledge of the IT and devices are managed by the corporation and for this reason no risk valuation and active protection functioned. Within the corporations ascend a shadow IT organization [71]. More and more users want to use effectively their own devices in routine business work. For this reason, some businesses like Citrix or IBM have begun to permit the employees to use private devices for commercial activities. The trend seems to act in future to the opposite course of the adjustment process and is known as Bring Your Own Device [59]. Citrix or IBM actions helped on employee happiness and supporting them to innovate on their assigned work which leads to future accelerations / accelerating the future.

In the IT organizational world, there are still wide spread arguments about whether BYOD is a step in the right track or whether the client benefits in relation to the expenses are not justified. Due to this trend, the limitations between work and private life are also distorting more and more and at the same time the work life equilibrium changes dramatically [13]. Mobility and flexibility are gradually moving into the emphasis of the employer but also of the workers. Mobile devices are particularly in demand in areas where it is difficult if not even incredible to get a landline connection to the communications system or to the Internet [2]. This trend is experiential mainly in the developed countries in which many large businesses expects high growth and therefore these markets characterize the possible upcoming target markets of a BYOD services [10]. The development model of BYOD into the organizational level get benefitted for the employees as well as the customers. They all are get benefits collectively along with certain applications of personal devices when are attached with the business purposes [21]. The usage of the mobile phones or other personal devices that can be came into the operational use of the business, can give the push towards the success and the carry the organization on the digital way of performing operations [12]. Though the usage of the personal devices are sensitive with the certain security issues attached with it. Organizations have attached their central servers within the personal devices of the personnel that have centrally accesses with the certain access on the information [82].

Though moveable devices provide universal connectivity and can grow the efficiency, the risks that they are related with has raised anxieties as to whether they are certainly a necessary tool for work or just a socio practical tool for private use [78]. Whereas laptops and personal computers have many antivirus

software to choose after and allow programs on them to be rationalized regularly to make them more protected and have additional settings that permits them to be extra tough and protected, convenient devices such as mobile phones, smartphones and hand held devices that do not have same structures [44]. Retreat on the outdated computer is mature, security on mobile devices such as phones is still in their beginning. On some convenient devices updates can only be made when the workers have made them presented [10]. Workers nowadays, want the independence to browse the web outside the when to browse and the how to peruse [54]. They want the autonomy of choosing which devices they look through with. However, they don't want these independences and their secrecy invaded upon by their companies. These workers do not agree with bosses tracking the employee online actions even on company distributed device [14]. They believe that owners have no business observing such performances. Where this is the case it postures a dare to information security employees. If there is no personal best of both positive out breaks, it might be problematic to choose the correct security practices that can secured a business information source. If an association has no idea who its opponents are, it becomes hard to know what security procedures to put in place in order to avert future break-ins [75].

This study provide the exposure on the use of convenient devices such as smartphones with the success of IT businesses. The study offers some elucidations that can be modified while using these devices as they are proposed to be performance improvement tools and cannot be eradicated. Additionally, the study examines the challenges that flexibility brings to Information Security with the use of BYOD model strategy with socio technical theory to address the complications that personal devices such as the smartphone to the businesses. In addition to that how BYOD will help on increase employee happiness and accelerating the future on governmental entities.

## 1.1 Overview and background

The respective study is concerned under the implementation of BYOD model that is utilize to increase the performance and the productivity of an organizations. The study is concerned about the different section that depicting the study material of BYOD model for future accelerations and employee happiness. The section one is about the introduction that included the information about the BYOD assistances for the organization in the context of the employees own devices, devices provided by the employers and the devices that are shared in between the employees. This section also include the problem on which the study is focusing with the respective research gap and the aim. The objectives along with the research questions are provided.

The second section contained the prior work that are done by the different authors in the restive field of study. This section explores the different dimensions of the BYOD model into an organization along with the theoretical framework. The theoretical model for this study is also provided under this section which reflecting the roadmap of the study conduction approaches and dimensions. The third sections of this study includes the research conducting approach. This study is conducting on the qualitative methods which comprises of interviews, focus groups and the cased based study method. These all methods have different speculative nature and the data collection purposes. The last section of this respective study depicts the implementation and the conclusion for BYOD model into the organizations of United Arab Emirates

(UAE) and how will help the organizations meeting the UAE strategy to accelerate the future using all the facilities helping on that and people happiness.

The technological organizations are moving towards developing new trends into their businesses and focused on the innovative technologies [79]. Previously, businesses had to consume the time and the efforts besides their offices timings to complete their respective tasks of businesses [45]. To cope up with the business activities, it is needed to shift the business towards a technology which can save the organization from wasting the times as well as to save the resources [52]. BYOD, a new trend in the business technology that provide the critical view inside the depth of the business operations and lead towards the operational alignment with the projects and tasks. Many bases provide evidence about the prominence of mobile devices and the effects related with BYOD [53]. The indistinct limitations between private and occupational life which is strapped by a BYOD services apprises about the centroid movement in the number of Internet workers towards many businesses. The variations in working life related with BYOD are inspected for young employees in today business corporations that positioned itself concerning device elasticity and the media topic. Many young employees would rather reject a job offer which eliminates these features of IT practice than to accept it [10]. The drift in the developed countries are also emphasized the use of BYOD model for their organizations and to implement the strategies for the workforce of the organization in which they are assisted to get use their owned devices for the commercial purposes and to complete their projects within the off time of the organization. The data and information is shared across the internet and the access is provided to the specified persons of the organizations [80].

## 1.2 Problem Statement

In IT organizations the ideas are matter to support the work and performances and organizations are difficult in managing the time for the employees to precise their materials supporting their abilities and company instructions. Employees needed to be motivated and happy to be able to support the future accelerations especially those who get quickly concepts and struggles to improve their skills they all are needed to be centrally connected in off time too. They BYOD program is than assisting the employees to remain in contact with office software with their personal devices to ensure the understanding and accepting challenges for collective efforts at outside the organization. BYOD technologies are basically introduced in the organization to develop the central network on which the information in team members and the groups are shared and controlled within the organizational leaders. The organizations can linked the server with BYOD technology on the cell phones of the employee on which they can get assistance for work done and the inferred the employers about the remaining work load directly from the mobile devices.

## 1.3 Aim, objectives and research questions

BYOD model grasp the attention of the today's businesses and governments are adopting the BYOD model to run their success path. *This research study is aimed to know about the requirement and expectations of the organizational employees with active BYOD services in UAE and how will help on their happiness and accelerating the future.* The intention of the potential users examine with this research for BYOD when it is offered to them. In other words employees attitude towards the BYOD model services in UAE and what it can perform after installation of such process to make them happy and supporting their innovations to accelerate the future. BYOD technologies are adopting by different countries to increase

the working capacity of the organization in output of the employees. The research study understands the objectives from the aim of the research are as follow:

1. To explore the learning of the employees in technological organizations of UAE with BYOD model.
2. To explore the integrations of employees commitment with organizational success with BYOD model control.
3. To examine how will BYOD will increase employee happiness, innovations and how will help on future accelerations
4. To know about the input capacity level of Employees in UAE.

The respective study is concerned around the following research questions:

1. How BYOD programs are integrated with organizations in creating the learning programs, employee happiness, innovations and future accelerations?
2. What factors of BYOD programs impact the employees in commitment with organizational project completion?

## 1.4  Scope and Significance of Study:

The study will considered the government entities of UAE in development of BYOD programs. The government organizations of UAE will be taken into account and examine with device integration application with companies inside as well as outside the organization to develop the linkage and connecting the employees [63].

The study is important for the governmental entities to achieve the major benefits by means of improved in employee convenience as they are connected [13]. This BYOD programs will give push the increase in employee productivity, innovations and happiness with flexibility in working context for business operations [1]. Employees have not to carry multiple plans to finish the projects or alteration between personal and work devices [32]. This study approach can lead to change in the working habits of employees with connectivity from their mobile devices with access to corporate network also supporting the UAE objectives to accelerate the future [42].

## 2.  LITERATURE REVIEW:

In 2008, the common wealth governments institutions have firstly introduce the electronic learning system for the work forces of their organizations where the people were allowed to work and complete their tasks on the personal computer provided to them with the internet connections. The D.E.R program in NSW depicts the five dimensions of electronic system of learning that reflect the wireless enable computer systems to increase the productivity of an organization [10]. The professional learning structure and supports for the organizational leaders to direct their work forces to the latest means of productivity with the revision of policies and procedures that centrally managed with wireless access points [10]. The current business markets and the learning for the professionals with the technical support in the target productivity and services sector more induced in technological sectors all deployed the employees with their self-owned devices for the business operations [18]. With the decease of funding of the technological equipment by the technology organization outside the organization are directing the businesses to cope-up with the latest technologies to satisfy the customers and increase the mobility in their operations with provision of flexibility [3]. The assistance in operation obtained with their self-owned devices that could be used for the business purposes [13]. One of the latest means and enhancement in the technological world is the use of

BYOD model. Bring Your Own Devices (BYOD) now assisting the organization to develop a central network for the business operation where all the employees are get connected for the specific tasks with their personal devices included smart phones, palm devices [29].

## 2.1  Bring Your Own Devices:

BYOD is an IT trend which permits the workforces to use their private IT devices within the scope of a providing IT Service for business determinations [4]. The development has made possible to develop the relationship in between the employees and the IT department to work collectively and design their strategies for efficient experiences of the working context for their customers [72]. BYOD model has made possible for the employees to use the organizational software and hardware appliances to provide the corporate solution in different manners [5]. Previously, the organizational related to I.T special effects the worker in his private purchase choices but today it is extra the other way. The top down invention flow within the business has been distorted into a bottom up methodology [19]. The employee gathers more and more knowledge with IT strategies in with the connectivity of private life to the working life to make able to use these positive connected features in his business life [72].

The major aspects of imminent BYOD model are the Digital Communities thus people who have educated the people about management of digital devices within context of business operations from an early age and now continue into business life. This model basically differs from the Digital Immigrants, those people without initial technical socialization [6]. Before this developed generation of workforce access the working life they have composed quite a different experience in their infant than the manual grown up generation. Likewise in 2001, in traditional organization in which people had to spent the average time of 5 hours daily into the business but the efficiency of the work was quiet low [7]. The introduction of Digital learning within the society has different desires of development for IT organization as Digital learning. Central features are among others a continuous flow of information on BYOD model in organizations and the persistent networking with social media stands and a desire for multitasking aptitude [9]. Because of these facts it is tough to explain the applications of BYOD model with observations of certain performances and ways of production with IT in private life are service but are rather difficult to handover in the business world [11].

## 2.2  Technological Solutions:

Organizations often spend enormous amounts of money and time on applying technical solutions but someway wholly or partially desertion the human factor in info security [15]. Whatever technical solution authors used for instrument must be used by persons and as such the human characteristic must also be taken into deliberation. For technical system to be real, the social system must also be operative [16]. Employees to some extent regulate if technological applications will work or not. No matter how respectable technical panels are if employees trash to work with them but rather use other resources of working that makes things easy for them deserting security; the impartial of security would have unsuccessful [20]. Linking human activities to security issues by connecting humans in information security applications is as a significant as any technology that is applied in order to diminish resistance. Technical controls are significant in securing information as there is the essential to defense who admissions which computer systems and what they can and cannot do once self-confessed [22]. If people are to be

complicated in information security applications then information security ends to be just a technical problem but also a common and organizational problem which can be mineralized with the right mix of communal theory, organizational theory and organization science [23]. Protecting information is not just the accountability of management and a few staffs at the technical level. It is the cooperative responsibility of all personnel starting from the top [24].

## 2.3 Security of Information:

Information security is a significant to organizations in order to defend the organization's aptitude to function, enable safe process of applications realized on the organizations IT systems, defend information the organization gathers and uses and lastly protection the technological assets in usage [30]. Information security is also imperative in guaranteeing that an organization's knowledgeable stuff is protected against stealing and misappropriation. If an organization's information is pinched or misplaced, it could result in enormous fines which could lead the organization to insolvency [26]. It could also reason the organization to lose its honesty and reputation with its clients which may finally lead to the failure of the organization as clients will catchphrase from doing commercial with them [30]. Information Security is essential as the pressures that information technological devices are vulnerable to are growing multifaceted and determined with technological progression [35]. These threats can originate internally or externally and can be deliberate or unintentional with internal intimidations in the central. Human error often leads to data breaks. It was reported that in 1992, human error accounted for a large fraction of internal threats recognized and they are accounts for most intimidations in smaller organizations that usually operate under the notion of total trust in workers, A trust which assumes that staffs always act within the best attention of the company [36].

It was further shapes that because some bosses think that their workers will work in the best attention of the organization, they devote heavily on technical information security resolutions that focus solely on external coercions [37]. This verdures the organization at the compassion of internal pressures such as human error and employee misbehavior, There is the general concept that good behavior leads to good consequences, organizations reason that their information security actions are effective because they have good behavioral policies in place when in real sense sureness in this area has reduced over the years [38]. The truth stands out that speaking both internal and external intimidations with the help of policies, events, software and strategies that work together to provide a protected and adaptive system are as significant as any other impartial of the organization as no one can assured [41].

Mostly confines access to information to only official and authentic persons that are persons allowable to access the organizations information systems while official persons are authentic persons with consent to access the information contained within these systems [43]. In confidence develops an issue with smart phone security because of their flexibility and the omnipresent connectivity they own. They are able to connect to both secure and unconfident networks through which they have contact to organizational possessions [46]. In approving the identity of a smart phone user linking from an independent service provider needs an in-depth security method. It goes on to say that in order to correctly secure all information resources, secrecy measures must be put in place

transversely all means of information storage, communication and dispensation so that illegal and unauthenticated persons do not get contact to confidential information [48].

## 2.4 Information Integrations:

The veracity of information and information assets could be cooperated that apprehension about damage of confidential information is irresistible especially when you reflect that the term "private information" concealments a wide swath of data, counting intellectual property, the damage of which can overwhelm any association [47]. Integrity on the other hand is a distinguishing of information which seeks to indorse accurate, authentic and dependable information by guaranteeing that information is complete, comprehensive and unspoiled. Information technology has made it easy to adjust information [50]. Undesired alteration of information finishes the legitimacy of any information thereby creation that information misplaces its integrity [55]. The undesired alteration of information is imperative as it helps to a large degree sphere the integrity of information. To provide reasonable benefit, Information must be preserved in the arrangement that is best suitable to the business setting that it provisions. Integrity can be achieved with the help of privacy, yet guaranteeing integrity through discretion is not informal. Smartphone often connect information on unreliable network channels [56]. Organizations do not have controller over these stations and as such safeguarding the honesty of the information conventional and sent on these networks is significant in achieving satisfactory information safety. Availability of information is the aptitude to right of entry information when it is compulsory but if it adequately speak to, can provide inexpensive advantage for companies [57]. While using Smartphone as working outfits, establishments must make widespread use of unreliable networks. Satisfactory security for an organization's information should offer extenuation strategies for untrustworthy communication channels as confining access to untrustworthy networks could decrease or halt output gains possible through the use of Smartphone. Fitting levels of discretion, integrity and availability must be used in order to exploit productivity while enlightening information security.

## 2.5 Informational Workforce in BYOD:

Information by itself deprived of people using it for the supreme benefit yields nearly nonentity as it cannot work on itself to yield any advantage. For this reason establishments must identify that the modern workforce is powered by information. Information safety though defends an organization's material by way of applying privacy, integrity and obtain ability should not in any way prevent personnel from their daily responsibilities while at work or put extra stress on the working actions of employees [3]. There should be a poise between defensive information and allowing authorized access. Restricting admittance to information should be completed with careful thought and with emphasis on security and convenience by official and validated users [9].Constrictions securities by making systems unreachable can dishearten employees from employed and eventually make them less creative. Thus arresting this balance becomes vital to the success of any material security explanation. The acceptance of new skills is rapidly increasing with the explosion of workforces who view technology as a way to make commercial processes more operative, flexible and moveable while increasing partnership [2]. This can be understood from today's world where moveable devices such as Smartphone have been combined into the daily doings of our lives [10]. Mobile workers are typically reliant on this

technological device to continuously provide the facilities that they are required to offer as flawlessly as possible through various nets both trusted and un-trusted. This suppleness poses a great risk as staffs connect through dissimilar information super-highways that are not achieved by their administrations. This gives hackers, bugs and spyware the chance to exploit an organization's reserve if they do not accomplish very well how their employees attach from outside networks [10].

## 2.6  Success plans for organizations:

The developed countries have tended their businesses towards inventive way of business operations with the introduction of latest means of technology. As BYOD is one of the technological aspects for the organization that has change the shape of conduction businesses [42]. The self-owned devices and the business central information flow system combined and share across the organizational network that can be accessed by the people even in their private time besides working hours. BYOD model leads the organizations towards the improvement in the business operation and performances while extending the financial performances of the business [70].

There were always pressure from the customer for the delivery of the services on time and somehow before time to give them response for the change in the respective working tact. The pressure from the customer make the organization to use the extra time of the employees for the progression of the goals and task assigned [1]. There are many of the situations when employee cannot stay here in the organization for long hour working instead they gone from their offices in the off times. To determine the customer need and the timely services of the business, the digital learning environment has been created by industries of developed countries within which they offer their employees to complete their work with the use of their own devices to get the relative information [63]. The operational performances as well as the financial objectives can be achieved with BYOD model integration with the organizational network. The pressure to constraint for the better performances tends to realize the need to use the personal devices in off time too for the completion of the work within the respective time frame [73]. BYOD model allowed the employees of the organization to bring their personal devices get attached with the system servers and upload and download the information and share the assignments on the respective servers of organization even if not at office. In an explosion on BYOD for learning by the countries Australia and New Zealand, there had been noticed the dramatically upsurge in the development of the IT industrial sector with the integration of BYOD model into businesses [68]. The personally owned devices such as smart phones, laptops or palm devices with the personal capabilities to use into the business operations for developing the interest of working along with flexibility in performing work [14].

Now days, we live in the society where there are digital devices have the huge influence on the personal and social life of the people. Businesses have positioned themselves to manage their resources as well as to enhance the learning of the employees with the powerful influential appliances [29]. The digital devices have changed the life of the people either in business or at home. Web based tools and resources have introduced the new way to manage the busy life circles and operations with the unlimited advantage of digital resources. By efficiently leveraging such possessions, business specialists not only have the prospect to deepen employee learning but they can also improve digital knowledge, confidence and loyalty in employees for the organization

[25].The increase in the use of smart phones and other digital devices has reveal the upsurge in the business progression. Being the portable device, smart phones are most probably to use commonly that's why considered more in the development of the business under the BYOD model concept for the business [18]. Many of the authors have described the integration in between the employees' life and the BYOD model being the essential part of the organizational life circles that on the one side enhance the learning of the employees and on the other side it gave push towards the success of the organization in performances [17]. While in many countries, use of the smart devices or smart phones are strictly prohibited while working in office time but in developed countries, organizations especially IT organizations where the employees needed to perform and keep to update the system information on the web servers are connected with their owned self-devices to remain in contact after leaving their offices [13].

## 2.7  Next Generation Business Development:

In the 21st century, organizations are tend to shift their organizations towards BYOD model and many of the authors have cited to use the references for justification of the success of BYOD model into the technology organization [1].  Being the necessary part of life, smart phones and devices are integrated into the life of human so that the growing number of organizations let the people involved into the organization to develop the knowledge for the business as well as to understand the customers need and communicate to the peers with information flow, project update and videographer with integration with the devices [61].

The establishments in 21st century are working hard to provide their employees with enhanced technology learning environment within organization [14]. Bring Your Own Device (BYOD) initiative programs in organizations are introduced to overcome the hurdles incurred in the access of the technology to support the people by figure out and adhesive their devices [71]. BYOD is actually an idea by which establishments are allowed their employees to attach their personal devices i.e. Laptop, Smart phones and Smart tablet to the company system through which they can contact businesses and cooperative applications [80]. BYOD program is about to develop the web based learning management system that can be accessed by the employees of technology related organizations [45]. People in the organization have to need to access outside the organization [17]. BYOD programs are the opportunity for the organization to interact virtually with their other staff members and complete their projects with collective efforts [25]. This research is about to study the BYOD Model in UAE for application in technological organizations where employees will be able to use their personal devices to use for the business projects [73]. BYOD program is an initiative towards cost saving on hardware and software related to the IT operations [64]. The implication of BYOD model into the IT organizations is not only ensures the policies that are acceptable to employees but also provide the constitutional requirement in context of organizational vision and mission [18]. Many of the organizations considered their apps for mobile devices to push-up the employee satisfaction [74]. The trend is goes up and taken the BYOD form to concentrate on consumer preferences along with organizational projects to drive the technologies in context with consumer preferences [58]. With BYOD models, organizations are aware about the employee performances and their efforts for the certain projects [62]. On the other side,

organizations get the short term economic benefits because of saving the cost of the organization and moving towards good revenues generation [29].

## 2.8 Theoretical Framework:

BYOD model allows the organizational workforce to bring their devices and connect with the organizational network to integrate the information flow. This idea was being firstly implemented by Intel Corporation in 2009 when they realize the importance for personal devices with the organizational operations [49]. The literature has discussed the four different type of the BYOD implementation strategies and model that IT organizations had developed within the business environment difference under the nature of usage and ownership of smart devices. Organizations are balancing their business life in between the benefits risk and threats while adopting the BYOD model. On one hand, corporations desire to advance their employees' contentment and on the other hand, they want to evade risks and did not want to harm control over personnel [69].

**Table 1: Theoretical Framework**

| SR | Particulars Model | Description | Previous Work |
|----|-------------------|-------------|---------------|
| 1 | **BYOD-1** | Self-owned Devices | Devices are provided by organizations |
| 2 | **BYOD-2** | Choose from Devices | Employees choose from different devices provided by Employer |
| 3 | **BYOD-3** | Bringing Own Devices | Employees buy their own devices from Employers |
| 4 | **BYOD-4** | Personal Device | Employees can bring in any devices |

BYOD is valuable for both employees and businesses as designated by prior literature. For workers, they are more contented and aware with their own selections and more elastic and suitable while for businesses, BYOD is cost efficient and can growth output and employees' confidence [40]. These studies as shown in the theoretical framework that an increase on workers' flexibility may lead to arise on performances, innovations and happiness which ultimately increase efficiency and confidence at the business level, It give the idea that businesses' and workers' benefits are tightly tangled with each other that it is hard for businesses to be helpful from BYOD if employees be unsuccessful to get assistances. As well as supporting the organizations to accelerate the future and future foresight.

According to the BYOD model success based on multiple factors, these factors are performance enhancement, social influence, flexible environment and behavioral intentions. These factors contribute to the success of an organization. But how to use these factors in a comprehensive way is most important.

**Table 2: Model Factors Description**

| Factor | Factor Description |
|--------|--------------------|
| Performance enhancement | Performance enhancement is a tool that can expand the performance of business, it transfer from one employee to another, under this circumstances to show the performance of one employee to the whole organization can motivate the other employees and ultimate results in the success of organization. |
| Social influence | Society has great impact on the performance of an organization. Success depends on the performance of workers, and performance of workers depends on the condition of society under which they grow and face the people. All type of organizations try to employee the low cast labor with full potency to work. In this way society impact the organization performance directly or in directly. |
| Flexible environment | An increase on workers' flexibility may lead to arise on performances which ultimately increase efficiency and confidence at the business level, It give the idea that businesses' and workers' benefits are tightly tangled with each other that it is hard for businesses to be helpful from BYOD. This model suggests that flexible environment contribute to the success of organization. There is need of flexibility from both ends like employees and as well as management of the organization. |
| Behavioral intentions | Behavioral intention is important for the success of organization, as the attitudes contributes towards the performance of organization. Employee with fresh behavior can work lightly and quickly, so behavioral intention is required for the success of an organization. Analyzing the above four points collectively contributes towards the success of organization as shown in the model above. This way BYOD strategy is easily to implement on any type of organization. The success of an organization largely depends on the BYOND strategy to get the competitive edge over the other organizations not using BYOD. |
| Innovation | According to mocaf, [76], Ministry of Cabinet Affairs and the Future develops an integrated system for innovation in government sector through innovation in policies, government services, processes and procedures, to enhance the competitiveness of UAE in government sector and turn the government innovation into and organized corporate culture embedded within UAE government. UAE Vice President, Prime Minister His Highness Sheikh Mohammed bin Rashid Al Maktoum has launched the National Innovation Strategy. In seven years, the strategy will make the United Arab Emirates among the most innovative nations in the world. Active within four major pillars, the strategy's first phase includes 30 initiatives with a lifespan of three years. The strategy will introduce a pack of new legislations that promote innovation incubators, building specialized national capacities, motivate private sector, develop international research partnership, enhance public sector toward more innovation. The strategy will stimulate innovation in seven governmental sectors including: renewable energy, transportation, health, education, technology, water and space. UAE has established the following to support government innovations (1) Mohammed Bin Rashid Centre for Government Innovation, (2) Government Innovation Lab, (3) UAE Innovation Week, (4) UAE Innovates which is a comprehensive portal that documents all the core innovation activities and achievements in UAE. |

| | |
|---|---|
| **People Happiness** | In 2016 Minister of State for Happiness was established in the new UAE Cabinet. Ministry of happiness aims to promote the UAE's plans, programmes and policies to promote the happiness of the UAE society including employee and customer of the government. UAE cabinet endorsed the launch of corporate happiness and positivity initiatives in the UAE Federal Government. His Highness Sheikh Mohammed bin Rashid said "*happiness and positivity in the UAE are a lifestyle, a government commitment and a spirit uniting the UAE community. The government system is evolving to realize the goals that every human seeks: happiness for him and his family.*" His Highness Sheikh Mohammed bin Rashid added "*we are at the beginning of our journey, learning day-by-day to achieve goodness and happiness for the individual. We wish happiness for all the peoples and countries in the world.*" The UAE Cabinet endorsed The National Happiness and Positivity Charter which stipulates the UAE Government's commitment, through its higher policies, plans, projects and services, to provide a nurturing environment for the happiness of the person, family and community, instill positivity as a core value in them so that they are able to be achieved. |
| **Future Accelerator** | In October 2016, the cabinet of UAE announced the creation of the world's first Government Accelerators, a new Government approach that will accelerate the achievement of the National Agenda of the UAE Vision 2021 [76]. "*We instructed the establishment of the world's first Government Accelerators, in order to accelerate work towards the realization of the National Agenda. We want to intensify efforts and accelerate our strides towards the future. Many challenges lie ahead, and time is the biggest challenge. There are only five years ahead of us*" said Shaikh Mohammad bin Rashid Al Maktoum. According to mocaf, [76], The Government Accelerators is a platform for cross sectorial government teams to address challenges and achieve ambitious goals in short periods of time, focusing on four key areas: NKPIs, Policies, Projects, and Services. The Government Accelerators will accelerate the implementation of projects, policies and regulations, and instill the culture of entrepreneurship and innovation in the Government, as well as encourage integration between Government entities and the private sector. |
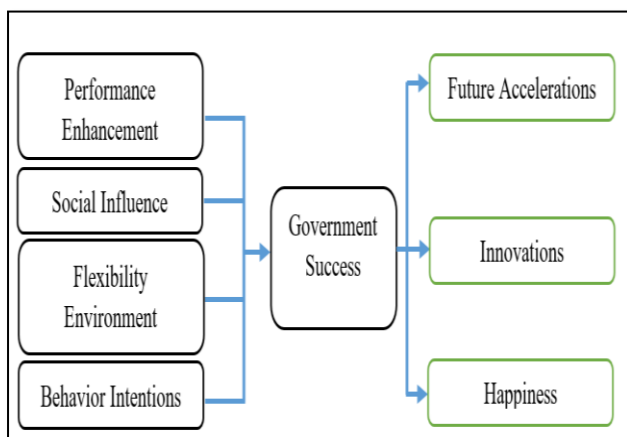


**Figure 1: Bring Your Own Device Model**

## 3. RESEARCH METHODOLOGY

Methodology explores the ways to achieve the responsibilities which are in accordance with the research. It displays that what steps we take and how we take that assists us in accomplishment the research objectives. To crack the implementation of BYOD model into the UAE government organizations, a step by step manner is followed to assess the employees' satisfaction and employer's benefits in terms of innovations, happiness and meeting the national agenda of future accelerations.

## 3.1 Qualitative Research Approach:

The respective research study will use Qualitative Research Method because of the speculative type of research. The research is rounded in between BYOD model and its different aspects and factors will be taken into account that can be measured through interviews and case study approaches. As the study concerned to research BYOD Model, so to know about the facts for IT organizations of UAE and collect the figures to support the objectives of study. Case study and interview approaches depicting the different factors of BYOD model that reflect employee satisfaction with the use of their personal devices and the business benefits in terms of cost efficiency and risk threats. Qualitative research methodology is more realistic and dynamic approach to reflect the clear-cut picture of the analysis of the study. The method of case studies and interviews as well as focus group tend to relive the more realistic approach being the interactive sessions with the people directly within the context of certain study objectives and research questions.

## 3.2 Previous Case Studies about BYOD:

### 3.2.1 Case-I:

This case is about the examination of BYOD model into the technological development of educational institutions. The author [27], depicted the different aspects of the BYOD model into the information and technological area for the development and improvement of their businesses as a whole. The author has conducted the study with qualitative approach of the study under taken into account the six dimension of BYOD model. These six dimensions are:

1. Teaching & Learning.  2. Technology Infrastructure.
3. Security Compliance.   4. Planning & Governance.
5. Fiscal Considerations.  6. Support Strategies.

For the initial purpose, BYOD model is applied and examines by the authors is on the educational sectors for the improvement of the learning for the students and the findings are than examine on the personnel of the IT sectors. The qualitative approaches of interviews and focus groups are conducted by the author from the educational institutions and conduct the study on the respective approaches. The findings of the study is that 19% of the people who are adult in the educational institutions are owning an IPad or Smart Tablets devices, 15% are those who are studied in undergraduate and owning an IPad, 46% owning the smart phones in the educational classes and 20% are using phones other than smart phones. From the institutional perspective the interviews about supporting material on smart phones or devices for learning purposes are shows in the following:

**Table 3: Study Result**

| Contents | Descriptions | Findings |
|---|---|---|
| IT Security | Personnel have access to the organizational servers | 90% |
| Phone Coverage | Working of the organizational servers outside the institutions | 88% |
| Phone Coverage | Coverage of the phone inside the organizational boundaries | 92% |
| Ipv6 | Security on the servers of the organizational active on phones | 57% |
| Internet | Open Wi-Fi access into the organizations | 31% |
| Internet | Restricted internet usage into organization | 47% |
| Personal Devices | People owned their own personal smart devices | 29% |
| Ipv6 | People have developed their own network inside | 8% |

### 3.2.2 Case-II:

The second case is about to testing the employees' satisfaction and the productivity within the IT organizations. Author [31], examine the productivity and the employee satisfaction into the IT organization with respect to increasing trends of usage in smart phone devices globally. The BYOD model is examined by the author to depict about the creativity and innovation within context of performance improvement.

The author have taken into account the five aspects of BYOD model and examined into the IT organizations. The following are the aspects of BYOD model:

1. Employee Convenience     2. Employee Productivity.
3. Workforce Mobility.         4. Retention and Innovations.
5. Agility in Business operations.

The qualitative approach of Interviews is conducted from the IT organizations of UK. The interview result has shown that only 9% organizations have get the no benefit from the BYOD model implementation while 67% of the IT organizations are get the reduce in the expenditures. On the other hand, 24% of the organizations are in the division of increase in the expenditures while implementation of BYOD model. Author of the case has suggested from the result that to apply the roll out strategy of BYOD into the organizations that will give a complete guidance to the employees of the IT organizations while considering the cost structure and the productivity of the employees. The employees are given with their own smart devices either by the company or by their own expenses on which they are connected to the organizational network that assist in the performances of the personnel while integrating all the organizational network with the mobile devices.

### 3.2.3 Case-III:

This case is about the usability and security issues regretting the BYOD model into the organizations. The author (Emea, 2013), examine the BYOD model in context of security and the usage of personal devices at the work places. The IT organizations of France are considered by the author and examine the owning of the personal devices by;

| • Employers (company). | • Employee. | • Shared |
|---|---|---|

These aspects are examine by taken into account the six dimensions of BYOD integrations. These dimensions are:

| • Customer Need. | • Organizational Safety. |
|---|---|
| • Employee Communication. | • Application control on device. |
| • Corporate Work Load. | • Work Sensitivity. |

The data is collected from the organizations of France with the focus group from the employees and then analyze on the basis of the above dimensions as per the security faced by organizational owners. The result shows that the personal need of the customers are satisfied by 87% on time with the implementation of BYOD model. The safety of the organizational data is 72% with the element of trust on the employees and the restriction of the usage by them. The corporate work load is decreased by 79% with the owning of personal devices for the office purposes. The applications are controlled by the central network of the organization and people get the required information on their devices. This is 84% maintain the accuracy of the information and the work sensitivity is decreases 56% with the assistance of personal devices. The author of the study has concluded about the result that BYOD model have gave push the productivity and the performances of the organization while adopting the BYOD model for the business purposes. Without considering either employer provide the device or person has its own device for the usage of personal devices at work place.

### 3.3 Interviews:

The interview approach is used to know about the different facts with interactive sessions of questions and answers for the particular ideas [8]. Within the interviewing approach, a sample of the population under contemplation for a particular research, it can enter into other people's viewpoints and comprehend how people make sense of their world and involvements. The development of performing the comprehensive interview involved in respective study are included the different aspects of BYOD given the following:

| • Work and flexibility. | • BYOD and Innovations |
|---|---|
| • Smartphone information and Performance improvement | • Applications setting up and Behavior Integration. |
| • Smartphones usage in social use | • BYOD and Happiness |
| • BYOD Strategy and Organizational Success. | • BYOD and future accelerations or BYOD is future accelerator |

These are the basic concept about which the interviews are conducted for the respective study. The interview instrument is used within context of the respective study. These basic contents are used to understand the respondent attitude and their performances with the usage of their smart phones for their work into the organization.

### 3.4 Focus Group:

The study as per concerned with the qualitative approach, also conducting with focus group sessions from the personnel of the organization. The focus group of the respective study includes the investigation of the different aspects of the organizations while adopting the BYOD model approach. The research as includes the governments of UAE; so, the governments are taken into account for the conducting focus group sessions. The focus group is consisted of the following dimensions of the BYOD model for which the success of the organization is evaluated.

| • Device ownership | • Customer Satisfaction. |
|---|---|
| • Operational Assistances. | • Behavior Impact. |
| • Social Influences / Integration. | |

The author [31] has conducted the study on BYOD and used the focus group session to evaluate the characteristics of self-owned devices. The direct interaction with the personnel of the organization direct lead the study towards understanding the behavior as well as the information about the respective study can be concluded with the evaluation of certain findings about the organizational success.

## 3.5  Case Study Methodology:

The cased based methodology of conducting the research is considered as the efficient for the reasoning the findings and the analytically review about the result within comparison of the previous studies. The cased based methods included the investigation with of the study within context to the view represented by the other authors in the respective concern of the study. It involves the grounded work that established under the framework model for the BYOD model and measure the aspects by implementing the dimensions of the study into the government by representing it theoretically except statistically. The case study approaches involves the more than one case to look deep inside the notions of the previous authors about the certain organizations while adopting the BYOD model. The respective study also have

provided the three cases for the developing the understanding about the evidences found the studies and make comparison within that context with this study. Many of the authors previously have founded the utilization of case study approach in qualitative research approaches being their interpretative nature and their socializing context. The cases for the study are chooses under the ideas and their information inside representing the similar context as the respective study going to explore but with the different dimensions taken into accounts.

## 4. IMPLICATIONS OF STUDY

Bring Your Own Devices are stay connected with the government while UAE adopt it in context with IT concerned department within the government while satisfying more their employees towards progress directions on the way to improving the performances of the organizations with enhancement of productivity, innovations, happiness and future accelerations. With BYOD model in UAE, government can easily present the corporate desktop with the employees by provision of their own devices i.e. palmtop, smart phones and other devices without having to offer the more money, time and facing of security threats within the corporations.
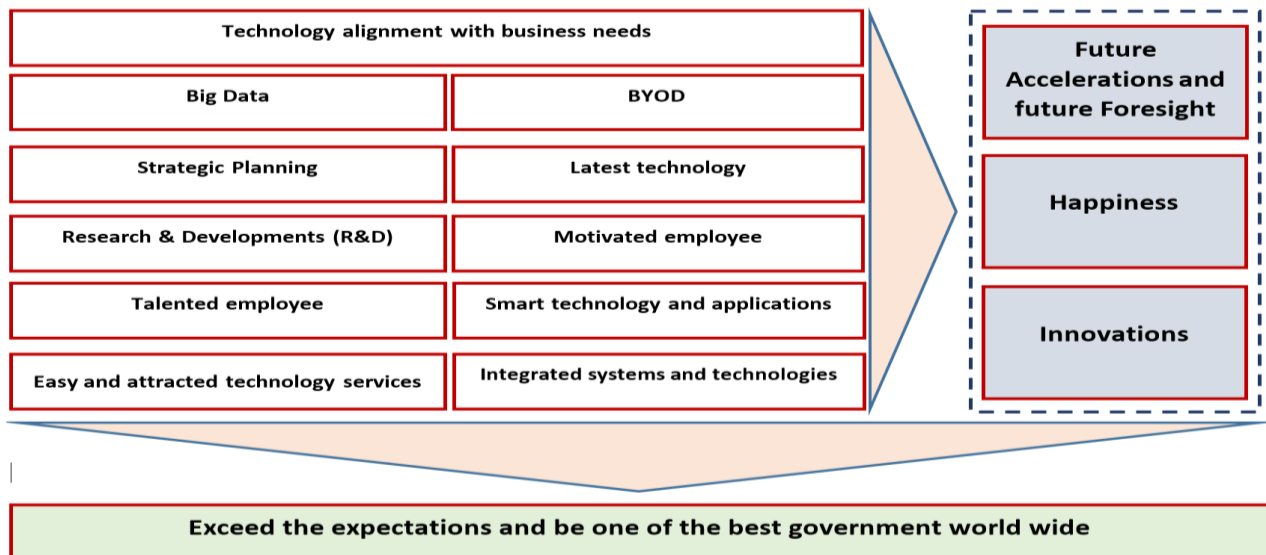


## 5. CONCLUSIONS AND RECOMMENDATIONS

This study emphasized the apparent or experienced the consequence of the use of BYOD model into the government by employees to access the information in secured way to perform the operational tasks on behalf of the government to support the government initiatives happiness, innovations and future accelerations. The study also examined the effects of the use of personal devices such as mobiles devices for the organization purposes and identified the most substantial threat and risk areas of the use of personal devices within a government except the purpose of the use. Some security measures that could enable a relatively threat free employed setting with the use of the smartphones were recommended. Finally, the come across of flexibility on the information security needs of an organization were deliberated and the socio technical theory was used to speech the difficulties that personal devices through mobility pose in information security. Choosing which personal device to use for work should not be imperfect to a device such as mobile phones,

laptop or any form of convenient device but to the device that comes in handy and suitable as and when desired. It might be at ease to check emails on a smartphone while in the automobile than it is to check same on a laptop in the same place. It may not be appropriate to work on large capacities of data in a workplace or in a room from a smartphone. The following model is a conclusion of the study to accelerate the future, achieving the happiness objectives and innovations through the technology perspectives and not limited to BYOD, since those are journey to meet the national agenda and to compete internationally.

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