

National College Of Ireland

Msc In Management



**National
College *of*
Ireland**

**How Can Irish Entrepreneurs Can Use The Cloud For
Scaling Their Business?**

**A thesis submitted in fulfillment of the requirements
for the degree of MSc in Management, in the School
of Business, at the National College of Ireland.**

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Abstract

The current study of the research sheds light on understanding the usefulness of cloud for the entrepreneurs in scaling up their businesses. It is important to mention that the new companies and the start-ups need to grow in order to achieve the necessary sustainability in the market. However, it is seen that most of the entrepreneurs fails in developing their business and thus the current study aims at identifying the importance of technological advancements, such as cloud computing in scaling up businesses. For the completion of this research successfully, the researcher has selected the quantitative method of research for the completion of the current study. Cloud computing is considered as a strategic tool that helps in the growth and development of businesses and also helps in the expansion of businesses. The findings of this research discuss regarding the importance and usefulness of cloud in scaling of business, the reason behind its inclusion in business and its advantages and disadvantages. It also discusses the role of cloud in the growth of start-ups and businesses and also the strategies required for the implementation of cloud for the growth of start-ups.

Declaration

I declare that no portion of work referred to in this dissertation has been submitted in support of an application for another degree or qualification to any other university or learning institution. Furthermore, all work in this dissertation is entirely my own except for specific sources that are referenced in the text and in the bibliography.

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Chapter 1: Introduction

1.1 Introduction

Entrepreneurs are widely considered innovators who are functional for facilitating the economic development of the country. New business ideas, tools, mechanisms and strategies are the critical assets that entrepreneurs foster. On the other hand, it is essential for the entrepreneurs that they regularly adopt the new technology to pave the path for innovation. In the recent past, it has been identified that technological advancement has disrupted the traditional business operations and procedures. The domain of business scaling has been significantly interrupted due to the usage of cloud technology in the process.

1.2 Background Of The Study

CB Insights has argued that most of the start-ups tend to fail around 20 months after raising \$1.3 million. One of the primary causes that have been outlined for the failure of the start-up companies is lack of financial stability as most of the start-ups suffer significant financial crises. Therefore, to sustain in the industry, it is essential for the start-up companies to scale as fast as possible. With API and Cognitive intelligence, it is possible for the start-up units to scale their business. Cloud computing is one of the significant elements that can help the start-ups to scale up to compete with the larger rivals. Three of the most critical aspects of cloud is the ability to handle the more significant amount of data, ubiquitous in nature and availability. According to Abramova *et al.* (2014), entrepreneurs can regularly adopt the technologies, which can help them to create new businesses. Adaptation of new and advanced technologies also helps the entrepreneurs to become market leaders in the competitive market. Thus, to sustain their performance in the competitive market, it is essential for the entrepreneurs to understand the significance of technology. Anandhi and Chitra (2012) have identified that in the past twenty years, some new and advanced technologies have developed that can significantly help the businesses to flourish. Entrepreneurs have also utilised such techniques to improve the traditional business practices. According to Baker *et al.* (2012), such technologies have significantly disrupted the conventional ways of business. One of such new technologies is a cloud that offers the scope for cheap and effective storage of data as well as it can also be used to analyse the data for necessary business purposes. According to Kamraand Manna (2012) cloud is not only used to store data, but it is preferably used mainly to manage the data effectively. After the inclusion of cloud in the business, the scenario of business scalability has changed. Whereas the most common meaning of the term cloud computing as suggested by So (2011) indicates the delivery of scalable IT resources over the internet, and it is used in opposite

to host and operating the funds locally. One of the most beneficial aspects of the cloud for a business is that it enables a company to react faster to the business needs of an enterprise. Baker *et al.* (2012) have mentioned that cloud computing has a significant impact over the business and the chief reason for such beneficial effect is due to its ability to facilitate the change in the way through which the companies operate. On the one hand, it offers business flexibility as well as scalability when it comes to the business needs.

Concerning scalability, the cloud can help any business to seamlessly upscale or downscale the IT requirements of the company and can manage the time of necessity. Abramova *et al.* (2014) have considered the effectiveness of the cloud providers to allow the businesses to increase the existing resources of the company and also helps in accommodating the increased business needs and changes. It helps in the faster business growth, which is one of the essential requirements of the entrepreneurs. However, the risks associated with implementing cloud in the business often hinder the practitioners from applying cloud in their business. Thus, it is essential to evaluate the necessity of proper implementation as well as the impact of cloud on increasing the scalability of a company.

1.3 Problem Statement

One of the most widely acknowledged challenges that the entrepreneurs face is managing the scalability of their business. In Ireland, as per 35% entrepreneurial ventures succumb to failure due to their inability of scaling their business correctly. As the characteristic trait of the entrepreneurs is to accept challenges and implement necessary innovative business practices, the cloud can be one of the leading alternatives that they can opt for instead of the traditional ways of scaling their businesses. To sustain in the highly competitive market, it has been significant to the companies to include recent technological advancement in their industry. Thus, it is essential to analyse how can cloud help the entrepreneurs in resolving the business issue of scaling and help the companies to scale up their businesses following the market needs.

1.4 Aims And Objectives Of The Study

Aim

The chief objective of the study is to understand how the cloud can be useful for the entrepreneurs in scaling up their businesses. In this regard, it is essential to mention that, the start-ups and the new companies need to grow to achieve the necessary sustainability in the market. Therefore, as most of the entrepreneurs fail in the process of developing their business, the current study aims at identifying how advanced technological reinforcements like cloud can help in the scaling of the market.

Objectives

The chief objectives of the research are:

- To evaluate the importance of cloud for expanding the business
- To locate the capacity of cloud in helping the start-ups to grow
- To gain a significant understanding of the strategies that can be used in implementing cloud effectively for the growth of the business.

1.5 Research Question

How can the entrepreneurs use the cloud to scale their business?

1.6 Rationale Of The Research

What Is The Issue?

In order to sustain in the competitive business market, one of the essential factors that become challenging for the entrepreneurs is to scale their businesses. The capability of the entrepreneurs of including innovation and advanced technologies in the business needs to be prioritised.

Why Is It An Issue?

It is essential to scale up the businesses in order to sustain in the competitive market that includes larger and successful businesses. Thus, disregarding the concern on any particular industry, the entrepreneurs are required to utilize new technologies for scaling up their businesses.

Why Is It An Issue Now?

In recent years, the entrepreneurs have faced failure due to their inability of appropriately scaling up their business. As they could not scale their businesses properly, it has been challenging the new businesses to sustain in the market.

What Can This Research Shed Light On?

This particular study can help in understanding how the cloud can help the entrepreneurs to scale up their businesses. The effectiveness of cloud in scaling the business resources and contributing to the growth of the company can be adequately understood from this study.

1.7 Methodological Overview

The study has been based on positivism research philosophy and primary research. The strategy that has been used in order to collect the required data surveys and the gathered data has been analysed using quantitative data analysis technique. The survey strategy has been used in order to obtain optimum data and the data has been analysed through quantitative data analysis technique for the statistical representation of the data.

Structure Of The Dissertation

The researcher has divided the entire study for this research into five different chapters. The chapters mainly discuss about the current study of the research from different views and perspectives. This helps in the evaluation of the study of the current research. The chapters included in the research helps the researcher to evaluate different aspects and possibilities of the issues identified in the research. The research is going to discuss about the literature review of the current topic of research, which includes a review on the topic of the research from different authors. The chapter discusses regarding the previous literature on the current topic of research. It also discusses regarding the gaps in literature that is observed during the research process. The third chapter is about the research methodology, where it discusses regarding the various types of methods selected for the current study of research. The chapter of methodology mainly discusses regarding the methods that helped in the decision-making procedure of the researcher for conducting the research successfully. In the fourth chapter, it analyses the data that is gathered for the conduction of the data. Lastly, it provides a finding and discussion regarding the research topic and finally a conclusion on the current study of research. This is the structure of the dissertation, which helps the researcher to conduct the research successfully.

1.8 Significance Of The Study

In the context of the current study of research, it is required to evaluate the importance of cloud for the expansion of businesses. That is the role of cloud in expanding different types of businesses. It is also required to identify the capacity of cloud that helps in the growth of startups. It identifies that whether cloud is capable to help in the growth of the start-ups in the country. The current study of research also focuses on identifying the important strategies that are required or used for the implementation of cloud for effective growth in the businesses. The study mainly provides an idea regarding the usefulness of cloud in scaling up the business of the entrepreneurs. However, it is important to mention that in order to achieve the necessary sustainability in the market the startups and the new companies are required to grow in the

market. The study sheds light on the fact that, as the entrepreneurs fails to develop their business, the study focuses on identifying the role of advanced technologies like cloud, in the scaling of the businesses.

1.9 Summary

In the introductory chapter of this current study of research, the researcher has aimed to identify the objectives of this study by evaluation of different aspects concerned with the current topic of research. The researcher has focused on identifying the importance of cloud for the entrepreneurs in scaling up their business effectively. After discussing about the importance of cloud in expanding a business, the researcher identifies several issues concerned with the current study of research. In this chapter, the researcher has mentioned the aims and objectives of the research and by the end of this research, the researcher discusses regarding the methods involved in reaching the aims and objectives of the current study of research. The research ends with a successful completion of the study.

Chapter 2: Literature Review

2.1 Literature Introduction

Several definitions are suggested for cloud computing in order to start up any business-like Irish entrepreneurs who are going to start their business in Ireland market. Cloud computing is called upon when required, and the provisioning needs alongside zero human association as it is electronic and easy to call upon by the cloud customers. A cloud computing advantage here is described as "customer and business things, organizations and plans that are passed on and eaten up continuously completed the Internet. The current literature is based on different cloud computing factors to start up any business of several entrepreneurs of Ireland, and those factors are polling resourcing process, broad network access, elasticity structure that is rapid as well as the measurement structure of different services.

Along with this, it can be shown that creating advancement as against an unpredictable development divulgence; it is a result of past research and change in preparing. The literature attempts at reviewing the existing refined approaches in the cloud-based and the integration of the IT systems into the business infrastructure of the SMEs in Ireland.

This particular literature review is associated with the different impact factors of cloud computing that can be associated in order to start up a new business. Several theories also highlighted by this literature review. This literature review practices mainly gives different advantages as well as disadvantages of cloud computing in the business development structure. This literature review can highlight the future progression of cloud computing on the start-up business of Irish entrepreneurs in the Ireland market.

2.2 Previous Literature

Kamel and Abouseif (2015) in their study aimed at understanding the use, role, challenges, opportunities and the impact of cloud computing on performance, productivity, efficiency and resource optimization on SMEs. The objective of the study was to analyses the effect and the magnitude of impact on SMEs on the economy as well as to describe the landscape of information and communication technology. The study also aimed at analyzing the current scenario of development in cloud computing by SMEs and the impact of the implementation of cloud computing. The study also proposed policy and regulatory frameworks needed to be introduced for more effective development of cloud computing and the study also suggested the actions need to be taken to accelerate and promote the development of cloud computing. The research methodology is primarily based on a sample of qualitative data generated through semi-structured

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interviews from various business sectors accumulating 105 focused interviews from various responses using different technological platforms and direct interviews. The findings indicated that there is a growing trend in the usage of non-conventional platforms of communication and an increase in the usage of Voice over IP. It also reflected upon that efforts are being taken to reduce the cost with the use of telephony gradually. The sample interviewed are mostly young and belong to the different field of work, and they are ready to take risks whether in business or regarding the use of new and high-level IT technology and applications. The findings analyzed that they were more upfront to deal with the business environment and meet the challenges associated with the changes in the market both locally and globally. The findings indicated that there is a dearth in the availability of governance models and its deployment.

Additionally, the individuals who were interviewed mostly had a decade or more of experience in their field and predominantly belong to the IT field. The study showed that though there has been a growth in the sharing of data at an acceptable level, there is still massive scope for improvement. The findings give a better understanding of the range of the cloud to be used in the expansion of start-ups, which can be further utilized to scale the potential for business development and growth. The study portrayed that there is further scope to improve the performance, lower the risks involved, improve security, development of technology and decrease the cost benefiting scalability of the business. The study further identified the lack of training, awareness and availability of skilled human capital holding back the optimum use of cloud computing.

Ross and Blumenstein (2015) in their study they have reflected upon the rapid adoption of ICT and cloud-based information technology and the impact of the strategies involved in cloud computing on the structures of organization, management practices and the skill set of the human capital in the ICT field. The study aimed at the development of cloud-based technologies for SMEs with the introduction of global markets facilitating lower opportunity costs supporting collaboration and increase in innovation. The study highlighted the risks associated with the introduction of cloud computing and ICT as the firms face steep competition globally and the potential to fail to adapt to the competition. Though there has been considerable development to deal with the risks associated with the introduction of global market through ICT, there is still a vast scope for further improvement on the study to adapt to the global markets.

Setiawan (2015) in their thesis explored the impact of ICT and cloud computing in the early stages of startups regarding the competitive edge it provides, benefits and scope to sustain in the globally competitive market. To gauge the impact of ICT, 3 early-stage startups from the different field were

interviewed, and the findings indicated several characteristics to be similar in all the 3 startups despite being from different field of business. The thesis indicated that though there has an increase in the number of cloud service providers, yet due to a continuous improvement in the number of companies opting for cloud services scope for further development is required.

Doherty *et al.* (2015) in their study the drivers and barriers for ICT and cloud computing were highlighted, while the research methodology implemented was exploratory in nature and the data collected by the quantitative method through an online questionnaire distributed by email, receiving 95 responses from SMEs. The findings identified that reduction of costs is encouraging the firms to use ICT and cloud computing while the continuous availability of cloud services for SMEs is obstructing the widespread use of the cloud technology. The research left the scope for further research in the field of adoption of cloud computing and extending the study within the range to implement it in other countries.

Carcary *et al.* (2014) in their study aimed at the increase in the adoption of cloud computing for the benefits of cost reduction, better scalability, adequate resource allocation, increase in worker collaboration and business sustainability. The study adopted an exploratory approach while data collected through quantitative methods through an online questionnaire survey. The findings analyzed the steps taken towards adoption of cloud computing by SMEs. The reason for non-adoption as well, which resulted in the development of actions and policies to be addressed to support cloud adoption by SMEs leaving a scope for further research to ensure the steps recommended and their implications on the firm as well as the adoption of cloud computing.

2.3 Startups Environment In Ireland

The current environment of Ireland is favorable for setting up significant notions associated with entrepreneurial activities. Furthermore, it was in the year 2017 that the overall entrepreneurial activity index of Ireland was over 8.9%. With significant tax incentives and a characteristically flexible approach to new businesses, the country has managed to facilitate the current condition of the country's entrepreneurial activity (Cantamessa *et al.* 2018). As per the 'Doing Business' report of the World Bank, Ireland has been regarded as one of the most favorable places to conduct entrepreneurial activities efficiently. In addition to this, the tax regime propagated by Ireland is another convenient way with the help of which most of the entrepreneurs tend to carry out essential processes and procedures. Another critical perspective that needs to be assessed is the fact that, the tax regime is so attractive that, it allows a low corporation tax, which accounts for over 12.5%. Furthermore, it has also been found that the initiation of entrepreneurial activities tends to act as a

manifestation of the overall business activities that are being carried out by the entrepreneurs in Ireland (Utoyo and Fontana, 2017).

As the Government of Ireland provides pursuing of pro-business economic policy, the country has managed to create significance towards welcoming foreign-owned business. The business-friendly environment that the country perceives helps in the facilitation of the tax regime that helps in benefitting the overall business processes of the country (Ghezzi *et al.* 2015).

Most of the sectors, which are much preferable to the entrepreneurs, are favored during the past years (Unterkulm Steiner *et al.* 2018). The Consumer Sectors, which accounts for over 36% is tentatively focusing on Business Services that has managed to carry out 23% of the total business shares. In addition to this, the majority of the entrepreneurs are tentatively planning to attain new business to start their businesses in Ireland relatively. The average planned investment that has been initiated by the government of Ireland is subjected to Epitomisation of the overall business activities that are being carried out by the entrepreneurs (Hidalgo, 2014).

As per the views generated by the entrepreneurs in Ireland, it has been imperatively found that the entrepreneurs intend to create a positive environment for entrepreneurship. They intend on supporting a positive and optimistic culture, which is primarily characterized by a supportive culture. With the increase in the number of role models emerging in the field of entrepreneurship, it has been found that the future generation of entrepreneurial leaders has managed to associate the constant perspectives that are associated with business processes. With the initial growth in population, it so happens that, the supposed demographic structure of entrepreneurial activities in Ireland tends to play an important role (Poposka And Mihajloska, 2016).

Although the effective business environment that is being carried out by the entrepreneurs in Ireland, there are certain shortcomings, which tends to address the inhibiting environment of carrying out the effective entrepreneurial activity (Nurnberger, 2017). The first and foremost shortcoming that has been prevalent in the country lies in the fact that, there is lack of access and availability of finance, which needs to be imposed at an early stage. Due to the presence of small-sized businesses, it so happened that, the Irish economic growth has faced certain losses and it has resulted in the rise of costing within the implications of the competitiveness.

Another major problem that is often being faced by the entrepreneurs of Ireland lies in the fact that, low levels of commercialization characterize the country. It eventually results in the coordination and operations of the development agencies. Furthermore, the growth of population has also created a scope for entrepreneurial activity within the premises of the business activities of Ireland (Caseiro and Coelho, 2018).

After an extensive assessment regarding the presence of entrepreneurial activities in Ireland, it has been found that 48% of the adults are of the opinion that, they have the important skill to carry out their business process significantly. However, 45% of the adults are of the opinion that, there are certainly good opportunities, which awaits them for conducting entrepreneurial activities in Ireland (Hellmueller *et al.* 2017).

2.4 Cloud Computing Evolution Process For Setting Up Business

Cloud computing process is relatively a new term technology process as well as the technological world for people. According to Almorsy *et al.* (2016), cloud computing is the new term for the IT concept as well as the chronology and history. Over the past few years, it has been measured that evaluation of cloud computing has been increased and the technology also developed more than 64%. Technologies like the internet, Grid system and IT resourcing like security monitoring process, infrastructure development process of the network along with remote hosting also are associated with cloud computing. Cloud computing process in a startup business has most by far of its properties interrelated to before signs of progress as it will be found in its models, building et cetera., which are discussed later in this part.

On the other hand, Bassett *et al.* (2015) argued that the verifiable scenery or the cloud computing structure of dispersed registering returns to the start of figuring itself and its headway, from the super personal computers to the time of pack preparing. Here, all the startup businesses entrepreneurs were joined to shape a single greater PC to make a sentiment of super PC, it was pointed at harnessing more essential getting ready power.



Figure 1: Cloud computing evolution process for setting up business

(Source: Botta *et al.* 2016)

The evolution of cloud computing process is associated with the supercomputers, cluster computing, grid computing process, utility computing structure. Several definitions are suggested for cloud computing in order to start up any business-like Irish entrepreneurs who are going to start their business in Ireland market. The business entrepreneurs also know that the trade market growth of Ireland has been developed more than 56% from the year 2015. Therefore, it has been seen that business entrepreneurs are looking forward to evaluating and enhance their business in the Ireland market. Therefore, it can be said that the evaluation method of cloud computing can be more accurate. Previously the cloud computing was used by the by different ventures and the small companies by having their own servers in the company that are conjoint with other servers by connecting to one server to other servers in order to perform the operation for the desired function.

Cloud Architecture Process For Setting Up Business

Cloud computing is a new concept; the concept was introduced much earlier. According to Cleary and Quinn (2016), "Cloud Models are frameworks of programming applications that usage Internet-open on ask for benefits" this definition underpins some alluded to systems outlines. For instance, web organizations, advantage arranged structures, web application frameworks et cetera. Eventually the definition misses on a couple indispensable realities of a conveyed processing designing, which consolidates its multi-residency property too as its dispersed structures properties, which relates to autonomic system preparing and cross-section enlisting properly.

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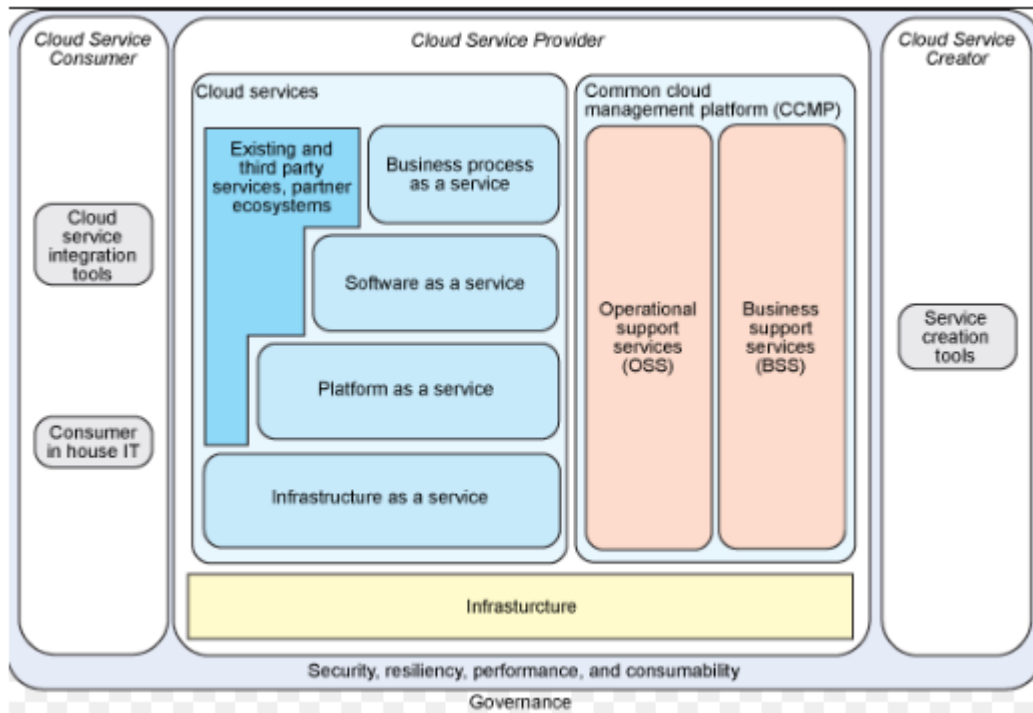


Figure 2: Cloud computing architecture

(Source: Botta *et al.* 2016)

Furthermore, Garrison *et al.* (2015) argued that cloud computing fundamental process is one of the best and appropriate processes by which any kind of market researchers, as well as Irish entrepreneurs, can establish their business in Ireland market along with the help of cloud computing process. The architectural process is mainly defined the summarized structure of any business by which any start-up business organization will be able to develop their business strategy in an appropriate way.

Furthermore, Applications in light of Cloud Architectures are on-ask for in nature, at whatever point the application draws the key resources on-ask for, plays out the specific task for which it is Application Stage United Resources Surface, Client Web Browser Presentation layer, Web Server HTML Filter, Middleware Application basis layer Resource organization layer. They are viewed as a short time bothersome resources that as often as possible organize themselves toward the fulfillment of the task while the application is in the errand it scales up or down adaptable in perspective of benefit needs (Martinez *et al.* 2017).

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In addition, cloud-based computing mainly helps Irish entrepreneurs who are going to start their business in Ireland market a data store and information process. Through this data store and information process, all the business markets can be able to store their confidential business data on cloud computing process. On the other hand, the cloud computing architectural operations also helped Irish entrepreneurs to enhance the communication by enhancing the decision-making style that will bring effectiveness of the organization. Therefore, it is to be noted on the fact that the use of the cloud computing software helps to maintain the strong relationship with the clients because the time required for the operation is less and support to carry out certain operations for the business by managing the strong and effective communication principles that are needed in the organization.

2.5 Cloud Computing Adoption Process Into The Business Frameworks

The adoption of Cloud computing in the business frameworks has characterized several factors, and these are:

Rapid Elasticity

According to Oliveira *et al.* (2014), rapid elasticity can moreover be called dynamic resource provisioning and versatility. This is a to a great degree critical part of disseminated figuring as this process is helped to enable cloud customers to use and release resources in perspective of need. Along with the help of rapid elasticity process, small business inventors will be able to communicate with their stakeholders within short time.

Resource Pooling

According to Rittinghouse and Ransome (2016), resource polling process in cloud computing are severely allocated out and reassigned in light of interest are in like way dependably pooled to serve distinctive clients meanwhile. On the contrary, Garrison *et al.* (2015) argued that cloud customers everything considered do not have the foggiest idea with respect to the physical zone of the advantage being utilized. Largely, different buyers in fact in the meantime utilize the favorable position, which can be deal with data trade confine, hoarding, memory, preparing power and so forth.

Along with this, resource-pooling structure on cloud computing software will help Irish entrepreneurs in order to increase the decision-making skills in the employees in order to increase their productivity for performing the quality of business for the clients in the market. It will also help

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to reduce the chance of the loss of data in the organization. Therefore, it helps the organization to retrieve the required data that is required to perform the operation of the business.

Cloud Delivery Models For Adopting Of Cloud Computing Into The Business Frameworks

Cloud Delivery Models are associated with major three service models such as software as a service, infrastructure as a service as well as platform as a service. All those layers are providing the base upon where other services are delivered (Almorsy *et al.* 2016).

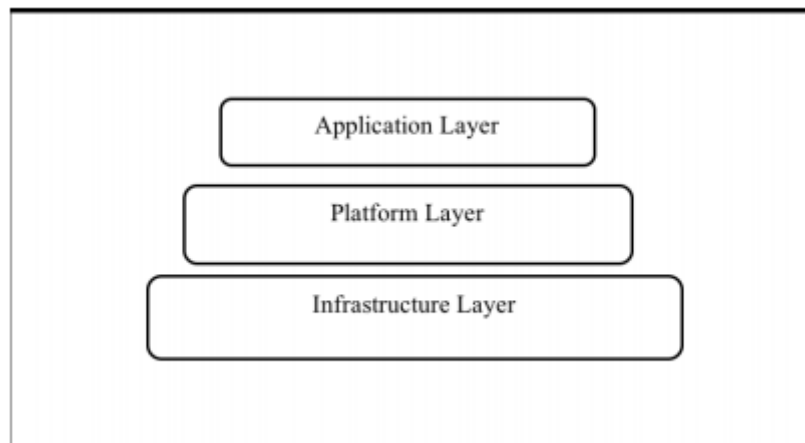


Figure 3: Cloud Delivery Models For Adopting Of Cloud Computing Into The Business Frameworks

(Source: Rittinghouse And Ransome, 2016)

Software As A Service Layer

SaaS is the most transparent distributed computing layer, and it gives on-request applications over the web. This accomplishment is accomplished by means of the hidden cloud framework. This layer also can help the new business inventors of Ireland to collect different data about the business by the SaaS process.

Platform As A Service Layer

PaaS is the center layer of the cloud's administration model's chain of importance engineering. This layer gives assets like working frameworks bolster and structures for programming advancement. Through this layer, the Irish entrepreneurs who are going to start their business in Ireland market will be able to develop different business software for enhancing their business structure.

Infrastructure As A Service Layer

At this layer, the hardware is provisioned as organizations, which can fuse frameworks organization kinds of apparatus, cooling supplies, firewalls, storing and considerably server ranches. It is opined by Oliveira *et al.* (2014), along with the help of this layer the Irish entrepreneurs will be able to maintain the entire cloud environment for managing the business development process.

2.6 Early-Stage Entrepreneurial Activities Concerning Cloud

According to Oliveira *et al.* (2014), the companies of Irish and the organizations are generally lagging behind in the markets for embracing the cloud computing. Their ability can be compared to leapfrog because they are ahead of the competitors. The iris government has thus developed a very good strategic approach in order to develop the good sector for the recognition of gaining the Ireland potential for becoming the world leader in terms of cloud computing. They thus had already attracted to become excellent leaders in terms of gaining the skills of the workforce. Therefore, the cloud computing should be to masters the degrees for offering in every level of the institutions. Ireland has terribly increased in terms of ICT by gaining and hiring the skilled labors. The Irish entrepreneurs have thus progressed in terms of developing a very strong ecosystem, which has headed around providing the cluster for gaining the major ICT brands. Thus, it has provided a very good platform for Ireland in order to utilize their key attributes for rapidly developing the global potential for gaining the cloud sectors.

Ireland entrepreneurs are leading in data protection that has become a key factor in order to attract the companies' policies by following on to provide the better security to their internal as well as the external stakeholders by developing the very good service. The compliant environment has thus provided a competitive environment by having a cutting edge by providing an excellent approach to the data. Therefore, data protection legislation in Ireland is one of the most advanced which is highly competitive in the market. The connectivity of the Irish markets is highly competitive in terms of Tier 1 speed, which has helped to generate the success story of Ireland.

On the contrary to Smith and Clegg (2017) argued that the Irish center thus has aimed to develop an internationally recognized which has led to the center of excellence for driving to the innovation for generating the applied research by defining the outcomes of the cloud computing for performing the different functions of the business. The evolution of the cloud computing has thus created a huge impact by achieving its potential aspect for defining the strength and the weakness of the organization. Therefore, a set of recommendations will help to provide and manage to enhance the technology to meet the demand of the stakeholders.

2.7 Role Of Cloud In Enabling Growth Of The Business

Over the past few years, cloud computing in Ireland has managed to captivate the minds of the entrepreneurs. Varied corporations have managed to hoist their particular computer networks into the "clouds". With the gradual development of IT, cloud computing has led to deploying delivery models that help in enabling real-time delivery of essential processes (Doherty *et al.* 2015). Furthermore, with the initiation of cloud computing and other enumerated perspectives, the cloud services have created a myriad of opportunities for the entrepreneurs, which benefits their internal as well as the external business environment. As the large companies have managed to adopt new and modern technologies including cloud computing, the opportunities for entrepreneurs have become vast (Carcary *et al.* 2014).

A group of entrepreneurs tend to see cloud computing method as a definite opportunity in adding high-end computing power as well as storage to their skillset. The presence of cloud computing, however, lowers the barrier to entry and creates a provision for the start-up companies. This provision helps the entrepreneurs to have access to the enterprise-class servers, which is relative of traditional software and hardware licenses. The economic goals of the startups that have been carried out help in the practical manifestation of creating long-term financial efficiency.

Therefore, as it is essential to understand the basic principles that cloud computing has to offer, it is also essential for the startup companies to encourage effectively the diffusion of the entire process and to uptake the integration of Information and Communication Technology (ICT). For instance, it has often been found that trade barriers along with other restrictions in Ireland tend to create market fragmentation in the labor markets (Mital *et al.* 2015). It eventually prevents companies from hiring skill and competent employees and often becomes a challenge to optimize the benefits that the current technological advancement in Ireland has to offer. Thus, from this definite point of view, it can be said that, the effectiveness of skills that are extremely important for the presence of digital entrepreneurship. In order to identify the talents that are required for recruiting the skills need to be taken into account. The ability to significantly communicate management in an effective manner, the entrepreneurial business ventures that are being initiated by the startup companies help in creating opportunities for bringing out successful business opportunities (Carcary *et al.* 2014).

With the emergence of cloud computing, it so happened that, it has managed to reduce barriers and increased opportunities in delivering significant resources required for their business process. It also provides effective capacity make it globally accessible in nature. In addition to this, the presence of cloud computing has also helped the business entrepreneurs to reduce the costs by removing the definite need of buying types of equipment and services. The maintenance of expenses and services has dramatically improved the entrepreneurs to reduce the cost of IT in an enormous manner equally. In other words, the utilitarian nature of the modern cloud computing system has invested capital that might be previously required to develop better products and services. The capital firms hence allow significant investment within user demand. As the entrepreneurs acquire specialization of expertise in Ireland, it so happens that, it enables entrepreneurs to be more active towards managing the estimated costs and utilization of fixing the private infrastructure of computing with that of specializing effective implementation of cloud computing methods and processes (Clohessy *et al.* 2017).

2.8 Industry Predictions Considering The Cloud Computing On Start-Up Business Of Irish Entrepreneurs

Cloud computing in Ireland is not only the possible delivery facet of saving flexibility of the organizations but, it has also managed to create facilitation of the entrepreneurs of the country as well. Therefore, to store the massive amount of data that is being generated by the cloud computing process, it so happens that, the internet of things helps in accommodating data with the help of developmental platforms. It helps in using a hybrid of edge computing. As per the instances of the particular industries, it has been found that cloud computing has managed to dramatically reduce the investment and technical barriers that brings new and modern digital products and services, in addition to his, it also helps in facilitating the barriers that create a much greater emphasis on the proper environmental conditions. With the enabling of digital entrepreneurs, it so happens that, the developing countries help in allowing the creation of new markets (Carcary *et al.* 2014).

With the further implementation of cloud computing methods, it so happens that, Ireland manages to avoid the definite contemplations which are associated with the inclusion of market access and maximization of properties and business environment. It eventually creates maximization of exact opportunities that allows subsequent facilitation of increasing the significant coherence relative of international supply chains. With the highlighting of scopes and breaks towards the initiation of cloud computing methods and processes. Therefore, from this definite point of view, it can be said

that the presence of cloud computing plays an indefinite role in carrying out specific entrepreneurial activities that help in the accommodation of rigorous standards and processes (Mottiar, 2017).

2.9 Role Of Government In Encouraging Entrepreneurial Activities In Ireland

The government of Ireland has managed to recreate the effective policies and regulations for entrepreneurs. The good dose of regulatory humility as well as fast-moving digital space has managed to facilitate the negotiation of emerging applications. In order to maintain consistency towards harmonization of certain government regulations and processes in the country, the government (Mottiar, 2016) is playing the following roles. They are as follows:

Supply Of Appropriation Of Skills

Simplification and speeding up of procedures help in the recruitment of the associated costs and risks that help in promoting the necessary valued concepts of cloud computing. In other words, it has also been found that the vocational training institutions, as well as the educational organizations, tend to ensure the appropriation of skills that are required for the institution of the effectiveness of enabling cloud computing within the premises of the country. Furthermore, it can also be imperatively noted that, with the initiation of appropriate skill, sets and competencies, the entrepreneurs will be able to effectively evaluate the necessary processes and procedures that need to be taken into account (Autio *et al.* 2014).

Competitive Environment And Initiation

With the reduction of barriers to entry, it is important for the government to initiate a fostering business environment, where the entrepreneurs can facilitate their business processes in an effective manner.

Recognition Of Self-Interest Of Entrepreneurs

The well-established businesses often tend to use the influence of policy that helps in defending markets and its positions that aids in the attainment of different disruptive technologies. Therefore, it is essential for the government and the policy makers to abide by the settled principles of interventions and strategic implementation that needs to be taken into account. Furthermore, as the government policies and regulations are being formulated, it is important for the certain factors that help in the initiation of these fostering business processes (Shirokova *et al.* 2018).

Promotion Of Open Data And Open Standards

The Irish government is providing the new generation of the involvement of significant government regulations and standards. It helps in unlocking the full potentiality that the “Internet of things” has to offer. The government policy makers help in the creation of new and modern digital services for the entrepreneurs, who that they can have a convenient business environment (Webb, 2014).

2.10 Evaluation Of Entrepreneurship According To GEM Ireland

The term Gem relates to the projection of the quadrants of effective entrepreneurship management. Comprehensive annotation of the postulates of business management concerning a small-scale entity can be asserted as a basic function of appreciating the reliability of resources in a conceptual portfolio. A critical analysis of the business functions can be acknowledged through a comprehensive annotation of the strategic gradients as a perpetual acceptance of the substantial elements in optimum the utility of resources in a business profile. The management of the business resources can be enhanced through creative implementation of cloud computing as a lucrative derivative of business functions. An acceptance of the strategic opportunities in order to apprehend the critical annotation of a cloud computing agenda can be asserted through a segregation of the opportunities in accordance with the utility of the resources.

A compulsive representation of the business function along with a critical annotation of the effectiveness of the supply channel in Ireland can be accelerated through a constructive identification of business growth (Maria, K., 2017). A creative annotation of the business types can be secured through an effective reflection on the perpetual components of the operational standards. A comprehensive derivation of the nominated standards can be secured through a reflection on the strategic agendas as a definite appraisal of the comprehensive derivation of the managerial components.

An integration of the distinctive postulates of GEM can be secured through a positive bias and a lucrative development of the operational prototypes in accordance with a defined illustration of their utilities. An acknowledgement of the relative profile can be segmented through a creative dissection of the agendas as a unique interface of managing business development. The utility of an integrated portal in comprehending the scopes of GEM in small-business development in Ireland can be considered as a critical function of operations management. A distinctive implication of the similar functions can be acknowledged through a creative acceleration of business mechanisms.

The nomination of the variances in profile management can be secured through a creative reflection on the liabilities of differentiating the distinctive standards of operations management (Tomak, 2018). An appreciation of the comprehensive functions can be accumulated through a preventive dissection of the basic agendas as critical determinants of sustainable resource management. Optimization of the functional profiles in order to distinguish a comparative preference can be rationalized through a nomination of the postulates of critical comprehension.

2.11 Relationship Between Entrepreneur Traits And Cloud Computing Adoption Into Smes

According to Alam *et al.* (2018), Cloud computing is making effect on the SMEs and slowly sneaking into the strategies of the formulation of the business. The SMEs are integrating the cloud into their business due to the convenience and ease to use the system. The SMEs are adopting the system due to the factors associated with privacy and improved security. The SMEs also adopt the system due to the factors associated with cost reduction as well. According to Gutierrez *et al.* (2015), there is a strong relationship that lies between the entrepreneur's traits as well as cloud computing adoption. In this regards the theoretical model associated with the literatures on the personal traits of the entrepreneurs are emphasized. The characteristics of the entrepreneurs are considered to have influence on the factors associated with cloud computing adoption in the SMEs.

The entrepreneurial traits in regards of the cloud computing is considered to have seven components. The personal characteristics of the entrepreneurs are considered to have effect on the cloud computing adoption in the business. According to Yeboah-Boateng and Essandoh, (2014), in regards of understanding the frameworks related to the relation of entrepreneur traits and cloud computing the conceptual and theoretical studies are emphasizes. The models like the Diffusion of Innovation, Technology Acceptance Model, the Technology Organization Environment, Institutional Theory as well as Resource Based Theory. The different aspects associated with the business technology are examined with the application of the conceptual frameworks and theories.

The theories help in regards of understanding the effect of the traits of the entrepreneurs in adopting technology in the business. In this regards the attitude of the entrepreneur in the context of adoption of technology in the business plays an important role. The characteristics and behavior of the entrepreneur also affects the decision-making process in the organization that involves the adoption of cloud computing system as well. The factors that are associated with the individual characteristics like innovators, leaders as well as other key position also has significant impact on explaining the degree of innovation adoption.

According to Sallehuddin *et al.* (2015), personality of the entrepreneur also plays an important role in regards of adoption of cloud computing in SMEs in the Irish companies. The personality profile of the entrepreneurs that involves the traits, cognition, emotion etc has impact on the adoption of the system as well. In this regards the factors associated with adaptive and creative response to new technologies is considered to be an important factor in regards of adoption of the cloud computing system in SMEs in Ireland.

2.12 Gaps In Literature

In regards of the conduction of the study, the researcher has found gap in the previous literatures related to the topic of the research. Specifically, it can be said that the investigation paper is not been coordinated in regards of the key data, which could be assembled in the proper manner (Yeboah-Boateng and Essandoh, 2014). Besides, it can be said that the theories and models related to the entrepreneur traits and cloud-computing adoption in the business needs to be studied in broader manner. This will help in regards of the future study as well.

2.13 Summary Of Literature Review

Throughout this chapter, the researcher has emphasized on discussing the research variables focusing on the aspects with appropriate incorporation of the models and theories. In regards of the study lucid understanding has been gained in the context of solving the issues related to the research. It has helped the researcher in regards of proceeding towards the next chapter that is methodology.

Chapter 3: Research Methodology

3.1 Introduction

In the context of this current study of research, the researcher has selected several methods to gather required information for conducting the research in an appropriate manner. There are a number of methods involved in the evaluation procedure of the current research. In this chapter of the current research, the researcher focuses on different processes for the collection of relevant data for the study of research. The procedure helps the researcher for a successful completion of the research. Relevant information is required for performing the decision-making procedure for completing the research with a successful conclusion. It helps in reviewing the way in which the researcher is conducting the research. Research methodology chapter includes several stages for the collection of proper and relevant data as per the current topic of research. The stages are type of the research, philosophy of the research, approach of the research, design of the research, data collection procedure for the research, strategies for the collection of data, type of the data collected, sampling method and lastly analysis of the data collected. The researcher needs to go through all these procedures for a successful completion of the research. Research methodology makes it easier for the researcher to collect the proper data from a proper source. This will lead to a successful completion of the research.

3.2 Research Type

There are two research types required for conducting a research, Primary research and secondary research. In the context of this current study of research the researchers have used primary research type for this research. Secondary research has also been used but the researchers mostly prefer primary research. Primary research mainly includes surveys and questionnaires. The researchers mainly take direct interviews of the respondents. The researchers prepare questionnaire for taking interviews of the respondents through email. The questionnaire includes relevant questions that help in the successful collection of relevant data for the completion of this research. They even visit the field of research for a proper survey in order to successfully complete the research. However, the questionnaire needs to be prepared properly with questions relevant to the topic of research and no other invalid questions need to be included in the questionnaire. The questionnaire includes all the important questions that are required for conducting the research properly with adequate information.

By using the primary research type, the researchers are able to gather more appropriate data and information on the particular topic of research. Secondary research would not be helpful in this case of study and hence the researcher has opted for both primary and secondary research in this case because only secondary research would not be able to provide the researcher with proper data and current updates on the topic of research (Jain and Sharma, 2016).

3.2.1 Justification Of The Research Type

In the context of this current research, selection of primary research is justified because with the help of interviews from the respondents, the researcher will be able to gather relevant data regarding the current topic of research. Secondary research is also used in case of this research because information from books, websites and journals are also required for this research. The books and journals provide information on previous literature of the current topic of research. Therefore, it can be said that the selected research type for the current case of study is justified.

3.3 Philosophy Of The Research

There are a number of philosophies used for the purpose of conducting a successful research. In the context of current study of research, the researchers have mainly used the “philosophy of Positivism”, as it practices logical analysis of the information gathered. The philosophy of Positivism is defined as the verification of the data gathered for the current research with the help of observation, experiments and logical proof. By using this philosophy, the researchers will be able to interpret the collected data with the help of logic and reason. From the view of researcher, it can be said that the world can be understood, and it is considered as an independent reality and it is possible for the human mind to understand. Obtaining an objective knowledge is possible for the human mind and this is said to be a positivist thought. However, according to the researchers, the data that are collected can be considered if the research is conducted in a systematic way. Research philosophy is mainly described as the way in which the data is collected for the completion of a successful research. It mainly deals with the development of the knowledge required for the research. The researchers have selected the philosophy of positivism because it helps the researchers to collect specific data that is required for the success of this research.

3.3.1 Justification Of The Research Philosophy

In the context of current study of research, the researcher has opted for the philosophy of positivism. The philosophy of positivism will be able to help the researcher to proceed with the research with analyzing the gathered data logically for conducting the research effectively. The philosophy of positivism includes experiments, observation, and logical proofs to use the gathered data for a successful completion of the research. Positivism helps to identify the importance and the worth of the collected data and then the information are used for the purpose of conducting the research. Hence, it can be said that the selection of the philosophy of positivism is justified for the current study of research.

3.4 Research Approach

There are mainly two types of research approach, qualitative and quantitative research approach. They collect different types of data and use different methods of analysis. The quantitative approach of research is said to be the most common form of research strategy. The quantitative approach of data is said to be done by measuring the views of individuals. It is mainly done in the form of statistics. It is considered as effective in describing any kind of situation. On the other hand, qualitative approach, where the data is collected in the form of people's view. This form of research helps to explore a certain phenomenon. However, the combination of both the research is termed as Mixed Research.

This study has used the quantitative research method. This method of research helped the researchers in measuring the views of the entrepreneurs regarding the use of cloud for the purpose of expanding a business. The main reason for selecting the quantitative method of approach because it provides more practical and reliable data to the researcher that helps the research to be appropriate and successful. It even helped the researcher to gather information regarding the experience of the entrepreneurs regarding the cloud. According to the researchers, the quantitative method of approach is more objective than the qualitative method of approach (Hashem *et al.* 2015).

3.4.1 Justification Of The Research Approach

In the context of current research, it can be said that the researcher has opted for the quantitative approach of research. On the other hand, the researcher has also selected the qualitative approach for the research. The quantitative research method includes the view of every individual while gathering the required data for the research and mainly presented in the form of statistics. The quantitative approach is said to be an effective approach. On the other hand, the qualitative approach is said to be the view of different people on the particular topic of research. This helps the researcher to explore a certain phenomenon. The researcher has also included the qualitative approach of research for a better outcome. The combination of both the phenomenon is termed as mixed research and it can be said that in this case of research, the researcher has opted for a mixed research for a successful completion of the study.

3.5 Research Design

The research design that has been used for the current research is the Descriptive research. Descriptive method of research is considered as a more in-depth research. This is because; this research design provides specific answers to the questions for the research. This helps the researcher to gather more specific and prominent data for the research. They obtain an in-depth idea regarding the current topic of research and hence the researcher prefers descriptive research for a successful completion of the research. This method of research provides every detail regarding the current topic of research (Abdel-Basset *et al.* 2015).

3.5.1 Justification Of The Research Design

In the context of current research, the researcher has opted for the descriptive method of research as the research design for this case of study. The descriptive method of research helps the researcher for an in-depth study regarding the current topic of research. It helps them to gather more information about the research topic by using the descriptive method of research. This method helps the researcher to find specific answers to the topic of the current case of study. Therefore, by using this method of research, the researcher will be able to use prominent and valid data for conducting the research in an effective manner. This helps the researcher to have a clear concept regarding the topic so that they can effectively conduct the research. Therefore, it can be said that the selection of descriptive method of research is justified for the current study of research.

3.6 Data Collection

The current research used primary research for the collection of data. For this research, the researcher used survey for collecting proper data from the field of research. The survey is done based on the questionnaire the researchers prepared. The questionnaire mainly contains questions that are relevant to the current topic of research. This helps the researcher to collect prominent and required data required for the current research. The questions are all based on the research topic, on which the respondents will answer. The researcher even provides a set of questions to the respondents to fill it up, so that it becomes easier for the researchers to collect relevant data and helps them in understanding the nature of the research they are conducting.

This helped the researcher to collect valid data that are reliable in proceeding with the research. The data that is collected by using the quantitative method are generally considered as raw data, on which the researchers can rely and thus they do not use any secondary method of approach for their research. They have used raw data mainly because of the quality issues faced because of the secondary data. Raw data are valid and highly reliable for the completion of the research. The questionnaire is sent to the respondents via email and after filling it up; they send it back to the researchers. After this, it is presented in the form of tables and graphs in the research (Garrison *et al.* 2015). However, the respondents are required to fill the questionnaire properly in order to provide the researcher with appropriate information regarding the current study of research. This will lead to successful completion of the research.

3.7 Data Collection Strategy

The researcher used survey for the collection of proper data for the successful completion of the research. The researchers have used primary data collection method for collecting raw data for successfully completing the research. They prepare a questionnaire for the respondents. The respondents fill up the questionnaire and send it to the researchers. The questionnaire provides the researcher with an idea regarding the type of the research. They mainly use the method of survey to carry out the research successfully on the current topic. They even visit the field of the research in order to collect data that are more relevant on the current topic of research. The researcher also uses secondary method of research for gathering a concept regarding the current study of research. They gather an idea or concept regarding the topic of research and help them to conduct the research in an appropriate manner.

3.8 Data Type

The researchers mainly use two types of data, the first one is the primary data and the second one is the secondary data. The primary data is said to be the data collected from the field of research and the data that are collected using primary research are said to be raw and are considered as more valid and reliable for the research. On the other hand, the secondary data is generally said to be collected by secondary research method, which includes research from books or journals and in case of secondary data, the researchers cannot rely on the quality of the data and thus they preferably select primary data for a successful completion of any research. However, in case of this current research, the researchers have used both primary and secondary type of data. This will help them to gather relevant and valid data for the research (Chhabra and Dixit, 2015). Selection of a data type helps the researcher to decide the way in which the researcher is going to conduct the research. Therefore, the researcher is required to select a data type before starting the research so that the research is able to understand the process in which he will continue the research.

3.8.1 Justification Of The Data Type

In the context of the current study of research, the researcher has opted for both the primary and secondary data. Primary data is generally said to be the collection of raw data from the sources that helps the researcher to conduct the research with a successful completion. The researcher also selected the secondary data for getting a clear concept regarding the topic of research. With the help of secondary data, the researcher is able to know about the previous studies conducted on the current study of research. Therefore, for a successful completion of the current study of research, selection of both primary and secondary research is said to be justified.

3.9 Sampling Method

Sampling Technique

The sampling technique for the current study has been selected as ***Non-Random Sampling Technique***. The rationale behind the selection of the research sampling technique is that the researcher has engaged in inviting the selected participants based on the established criteria of the research and surveys. Therefore, the data collected will be in the form of transcripts of the managerial interviews and thus, it is relevant that the participants understand the research issue.

Thus, the researcher has opted for the non-random research sampling, as the construct of the list of participants exists in the current context (Botta et al. 2016).

Sampling Strategy

The Sampling strategies refer to the plan that is incorporated into the research setting in order to effectively select the research population concerning the research area. In the current context, the researcher has identified two relevant sampling strategies that include the non-probabilistic and probabilistic sampling strategy. For the current study, the research sampling strategy has been selected as ***Non-Probabilistic Sampling Strategy***. The rationale behind the selection rests with the fact that the sample for the study consisting of the managers has been selected for the current study considering non-random sampling techniques that may be based on convenience, quota and purposiveness of the data collected.

Sample Population

The population for the current study is found to be the entire population of Entrepreneurs with experiences of start-ups in the ICT or Cloud Computing Industries who are affected concerning the business processes. Additionally, the population for the current study also includes the academic researchers and the researcher himself (Minert, 2017).

Sample Size

In the current setting of the study, the sample selected as **20 Entrepreneurs** who have the experiences of working in startups. The sample of 20 has been selected to collect most of the data that will be used for the data analysis. This will help the researchers to gather more relevant information required for the research (Chang and Wills, 2015). It is important for the researcher to prepare a sample size before proceeding with the research so that the outcomes of the research are successful.

3.10 Data Analysis Technique

After the quantification of the data, the researcher will analyze it. The data that is used for this research purpose is mainly primary and secondary research has also been done for a successful completion of this project. It will help the researcher to analyze the matter that whether cloud helps the entrepreneurs in the expansion of business or not. The primary data that the researchers have used helped them to collect relevant data on the current topic of research. Secondary data was also used in this research, which is also helpful for the success of the current research. Both primary and secondary data helps the researcher to collect prominent and relevant data required for the current research and thus helps in a successful completion of the research. The researcher will compare the data with the sub-research questions and then they compare it with the secondary literature in order to allow it for a full discussion on the research questions. The quantitative data is developed by creating a statistical data and on the other hand, qualitative data is analyzed by developing transcripts of the answers received by the respondents in the questionnaire. (Maresova and Klimova, 2015).

3.11 Ethical Consideration

In the context of current research method, few ethics are required to maintain by the researchers. They are required to behave properly with the respondents who are helping the researcher with valuable information on the current topic of research. The researcher needs to assure the respondents regarding the safety of the information the researcher has collected from the

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respondents. The data cannot be used anywhere else other than for the purpose it was taken. If the researcher behaves properly with the respondents, then they will be free to provide the required data to the researcher. Another factor that is required to consider is that the names of the respondents will not be revealed. The researcher cannot ask any personal question to the respondents. The researcher cannot ask anything that might hurt the respondent.

On the other hand, the researcher needs to focus on protecting the collected data under the Data Protection Act (1998). The researcher needs to be careful about the information that is gathered from different sources. It is also required to assure that; the researcher need to be careful about this matter. The researcher needs to focus on the security and privacy of the gathered data.

3.12 Time Table

Activities	1st Week	2nd - 7th Week	8th- 11th Week	12th - 15th Week	16th - 19th Week	20th - 23st Week	24nd - 25rd Week	26th week
Topic selection	ü							
Secondary data collection	ü	ü						
Primary data collection	ü	ü						
Literature review		ü	ü					

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Methodology identification			ü					
Analysis and interpretation of primary data			ü	ü	ü			
Findings of the study and comparing them with literature					ü	Ü		
Conclusion					ü	Ü		
Draft formation							ü	
Submission of final work								ü

Gantt Figure

(Source- Self generated)

3.13 Summary

In the methodology, descriptive analysis has been used to conduct an effective approach in the research paper. The analysis evaluates a description of the methods. The two most important data have been implemented in the research paper. The two sources of data are primary data and secondary data. Primary data includes surveys, questionnaires and interviews. However, in the research paper, questionnaires have been sent through email and survey has been conducted to get relevant information on the subject matter. The secondary data includes journals, newspapers and previous reports, which were evaluated in the previous research. The paper has induced secondary data to encompass productive and relevant information based on past scenario. Cloud system plays an important role in enterprises to conduct strong competitive advantage through enforcing strong workforce.

Cloud system helps in providing relevant information to the organization, which will reduce the issues, which exists within an organization. The study mainly sheds light on the fact that whether cloud helps the entrepreneurs in scaling their businesses in an effective manner. A data analysis has been evaluated and illustrated in the research paper to identify issues and implement methods to resolve the problems. The data analysis, which has been used in the research, is quantitative. Quantitative analysis helps in providing information related to the topic through evaluating statistics and calculation in the research to conduct fruitful result. Thus, it can be stated that to conduct a strong research, it is important to execute proper data analysis and use data resources, which will give relevant information.

However, it can be said that, the entire discussion of the research methodology, the researcher has provided a detailed and a clear concept regarding the research methods concerning the current topic. This chapter has been flourished enough in order to get the advancements for progressing towards the next chapter of research.

Chapter 4: Data Analysis

4.1 Quantitative Data Analysis

1. What is the size of your enterprise in terms of employees?

Options	Response frequency	Percentage (%)	Total respondents
10 – 25	05	25	20
25 – 50	05	25	20
51 - 100	09	45	20
More than 100	01	05	20

Table 4.1: Size of your enterprise in terms of employees

(Source: Self-developed)

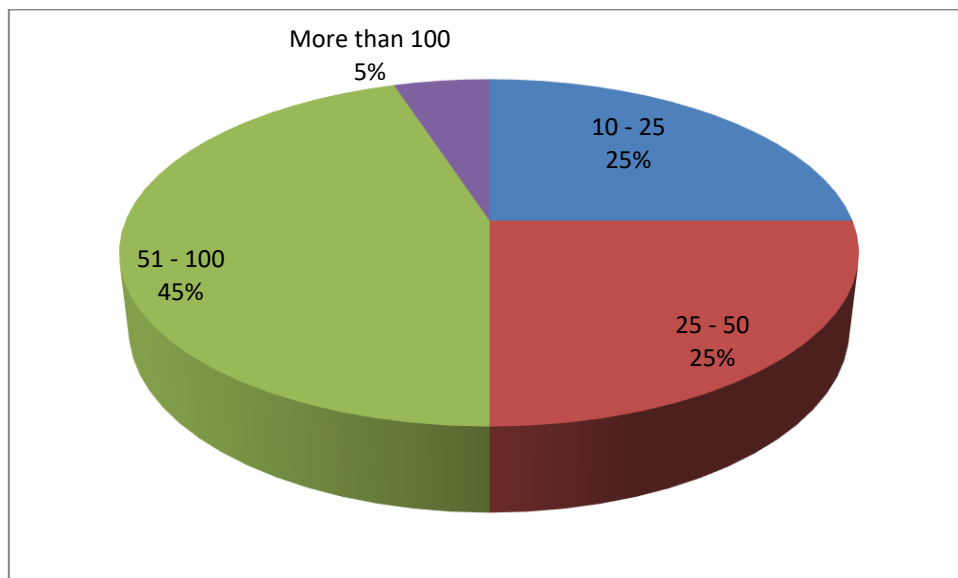


Figure 4.1: Size of your enterprise in terms of employees

(Source: Self-developed)

The respondents that have been included for collection of research data in the current research has been questioned upon the strength of employees in their organization. The research has therefore, integrated about 20 entrepreneurs in the research data collection. This question is highlighted in order to understand the number of employees the entrepreneurs are holding in their

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organization. The research results have shown that about 10 to 25 employees are held or supported by about 25% of the total respondents. That is about 05 entrepreneurs among 20 have responded that they include about 10 to 25 employees. On the other hand, about 05 among 20 respondents have stated that they include 10 to 20 employees in their organization. This amounts to about 25% of the total respondents. The greatest number of responses has been found to be including 51 to 100 employees in the organization. This amounts about 50% of the total respondents. The least number of responses have been found to be opting for the employee number above 100. Hence, this indicates that most of the respondents that is entrepreneurs run small or medium scale business.

Therefore, it can be comprehended from the research data collection; most of the respondents that have been chosen in the research are among the entrepreneurs who have been working with their own start-ups for a quite longer time. On the other hand, it can also be effectively understood from the research data that most of the entrepreneurs are working with minimal number of employees in the organization. Hence, it can also be comprehended from the data collected that most of the entrepreneurs are working with small or medium sized organization, which has not produced any international operations in business. This is likely to reflect on the fact that the entrepreneurs are operating on a local basis but have comprehended the use of cloud computing in the business. Therefore, the importance of the business cloud implementation in the business operations in Ireland can be understood from the gathered data.

2. In the strategic process, have you considered cloud computing to be effective?

Options	Response frequency	Percentage (%)	Total respondents
Yes	15	75	20
No	05	25	20

Table 4.2: Effectiveness of cloud computing

(Source: Self-developed)

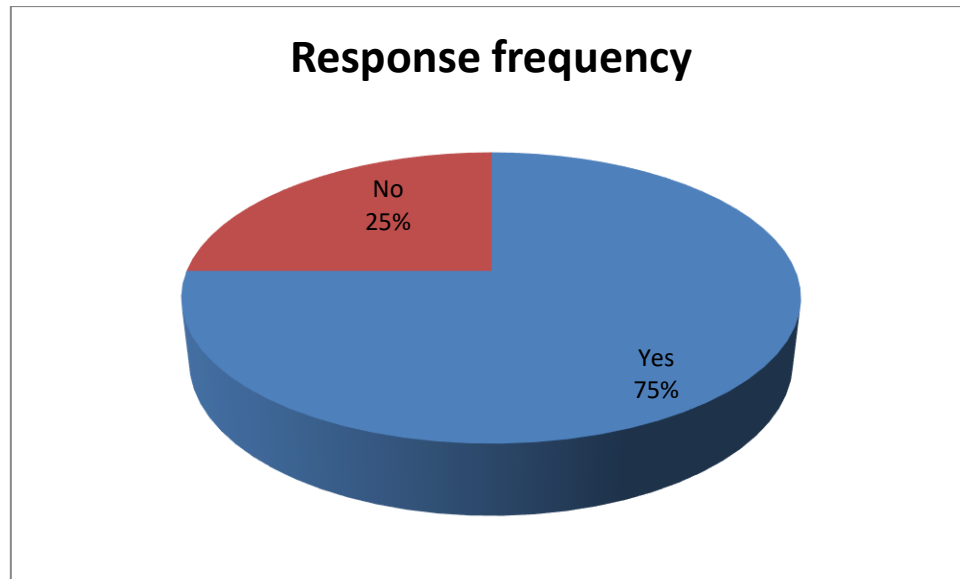


Figure 4.2: Effectiveness of cloud computing
(Source: Self-developed)

The second question has focused on developing an understanding of the effectiveness of cloud computing in the businesses conducted by the entrepreneurs. The question has focused on gathering the data about the likeliness of the entrepreneurs to implement the cloud computing system in their organizations or businesses. About 15 among the 20 entrepreneurs have been found to be agreeing with the fact that they are likely to implement the cloud computing in the business. This amounts to about 75 per cent of the total respondents in the research data collection. Hence, according to the complements the respondents in the research data collection that is the entrepreneurs considering variable number of employees in the organization has provided it can be seen that most of them agree with the development of functioning of cloud computing system in business operations. However, the left number of respondents that is about 05 of the 20 respondents have responded that they are not likely to agree with the fact that cloud computing is effective for business operations. This amounts for only 25 per cent of the total respondents in the research data collection.

Hence, the development of the results from the research data collection it has been found that most of the entrepreneurs in Ireland is likely to implement cloud data computing system in their business. This kind of result shows the effectiveness of the cloud computing implementation in the business. Therefore, the implication of the cloud computing is found to be profitable to the organizational holders as well as for the overall operations and management of the organization.

3. How far do you agree that using cloud for scaling is effective for business?

Options	Response frequency	Percentage (%)	Total respondents
Agree	05	25	20
Disagree	06	30	20
Strongly disagree	05	25	20
Not sure	04	20	20

Table 4.3: Using cloud for scaling is effective for business

(Source: Self-developed)

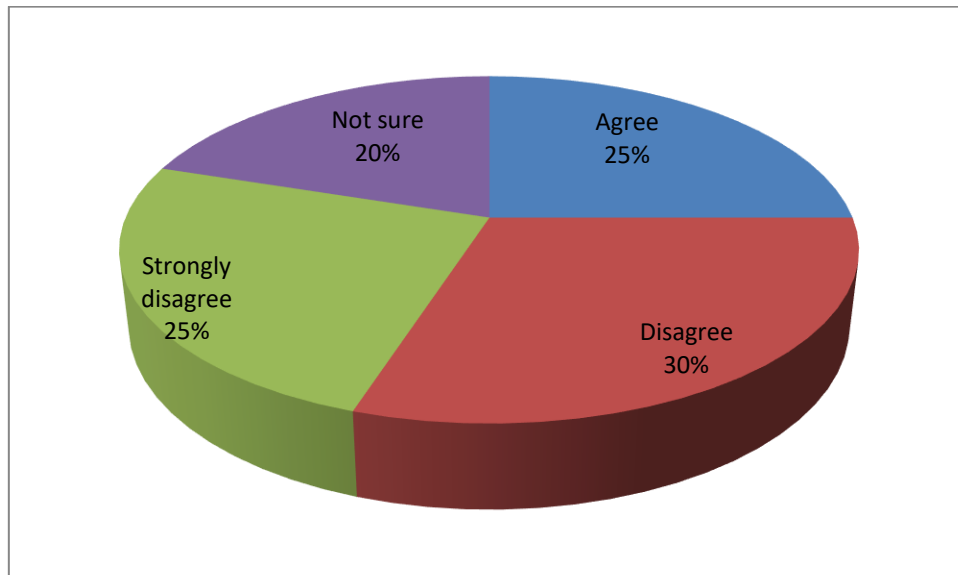


Figure 4.3: Using cloud for scaling is effective for business

(Source: Self-developed)

The third question of the research data collection survey questionnaire states about the implementation of the cloud computing in business in terms of implementation of the same in the scaling the business activities. Therefore, the respondents have been given the choice to answer the closed ended question in terms of agreeing, disagreeing as well as expressing their unsure stature as response to the question.

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The data collection has shown that about 05 among the 20 respondents have been found to be agreeing with the statement that cloud computing is effective for the scaling of a business. Hence, about 25 per cent of the respondents have responded on that they strongly agree with the statement that cloud computing is effective for scaling of their business. Besides, about 30 per cent of the respondents have been found to have opted for the second option that is disagree. This result shows that 05 entrepreneurs among the 20 have a negative idea about the scaling effectiveness of the cloud computing in business. About 05 respondents have strongly disagreed to the point that cloud computing can effectively scale the business operations. This amounts to be about 25 per cent of the total respondent strength. On the other hand, research data results have found that about 04 respondents among 20 entrepreneurs participating in the research data collection process are not sure about the scaling capacity of the cloud computing in the business. This amounts to be about 20 per cent of the total strength of the respondents in the research data collection.

4. According to you, what are the advantages of using cloud computing?

Options	Response frequency	Percentage (%)	Total respondents
Data backup and storage facility	06	30	20
Powerful server capability	07	35	20
SaaS	04	20	20
Sandboxing capabilities	02	10	20
Information technology	01	05	20

Table 4.4: Advantages of using cloud computing

(Source: Self-developed)

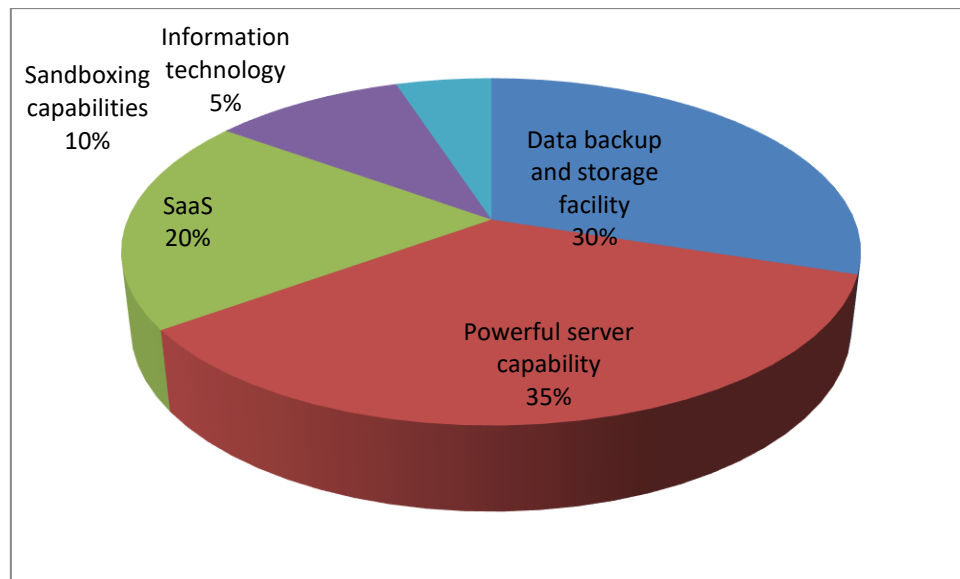


Figure 4.4: Advantages of using cloud computing
(Source: Self-developed)

The fourth question has emphasized on developing an understanding of the advantages associated with using the cloud computing system in the business. The question has emphasized on collecting the data about the advantages that is associated with the adoption of cloud computing in the business. In this regards the views of the entrepreneurs in context of the advantages of using the cloud computing system in the business has been evaluated through the particular question. About 7 respondents out of 20 respondents have agreed that one of the advantages of cloud system implementation is powerful server capability that helps the business. Hence, about 35 percent of the respondents have responded that they strongly agree on the advantage of powerful server capability.

The data collection has portrayed that about 2 respondents out of 20 respondents agrees that cloud computing provides the advantage associated with sandboxing capabilities that is 10 percent of the total respondents. In regards of the question it has been evaluated that 6 respondents out of 20 have agreed that data backup and storage facility is most important advantage that adoption of clouding computing provides to the business. Out of 20 respondents 4 entrepreneurs agreed that SaaS can provide advantage to the business in regards of adopting cloud computing that forms 20 percent of the total respondents. Out of 20 respondents only 1 entrepreneur agreed that information technology will provide advantage to the business in regards of cloud computing that is 5 percent of the total entrepreneurs.

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Thus, from the above research data collection it has been found that most of the Irish entrepreneurs considers powerful server capabilities the most beneficial option in regards of the advantage derived from the adoption of cloud computing in the business.

5. What is the major reason behind inclusion of cloud in business?

Options	Response frequency	Percentage	Total respondents
Increased productivity	07	35	20
Cost effective	08	40	20
Time saving	03	15	20
All of the above	02	10	20
None of the above	00	00	20

Table 4.5: Major reason behind inclusion of cloud in business

(Source: Self-developed)

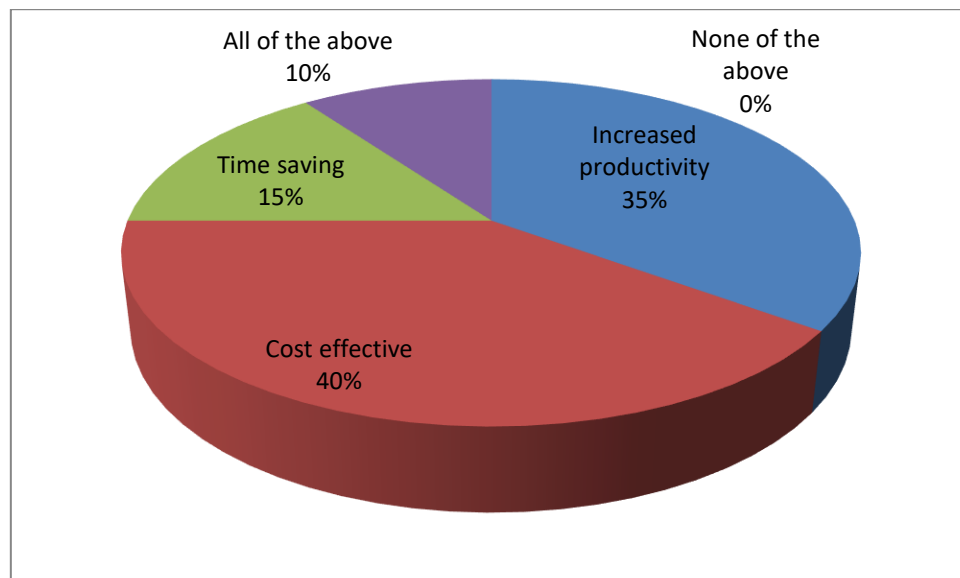


Figure 4.5: Major reason behind inclusion of cloud in business

(Source: Self-developed)

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The fifth question of the research data collection survey questionnaire states about the major reasons in regards of adopting cloud computing system in the business. In this context the respondents have been provided with some options to answer the closed ended question. The data collection has portrayed that 8 respondents of the 20 entrepreneurs have given the cost effectiveness as the reason of adopting cloud computing in the business that comprises 40 percent of the total respondents. Besides, 35 percent of the respondents have given increased productivity as the reason of adopting cloud computing system in the business. In this regards out of 20 respondents 7 people agreed that increased productivity is the reason behind adopting the system. Out of 20 respondents 3 agreed that time saving can be the reason of adopting the system in the business that forms 15 percent of the total respondents. Some of the respondents also agreed that all of the above person could be the reason behind adopting the cloud computing system in the business, as it will be very beneficial. In this regard 2 entrepreneurs out of the 20 respondents have agreed that all the above reasons are valid, and it forms 10 percent of the total respondents. However, none of the respondents agreed that the given reasons are not valid.

6. Mention the platform that you prefer for large-scale cloud computing?

Options	Response frequency	Percentage (%)	Total respondents
Apache Hadoop	11	55	20
MapReduce	09	45	20
None	00	00	20
Not sure	00	00	20

Table 4.6: Platform that you prefer for large-scale cloud computing

(Source: Self-developed)

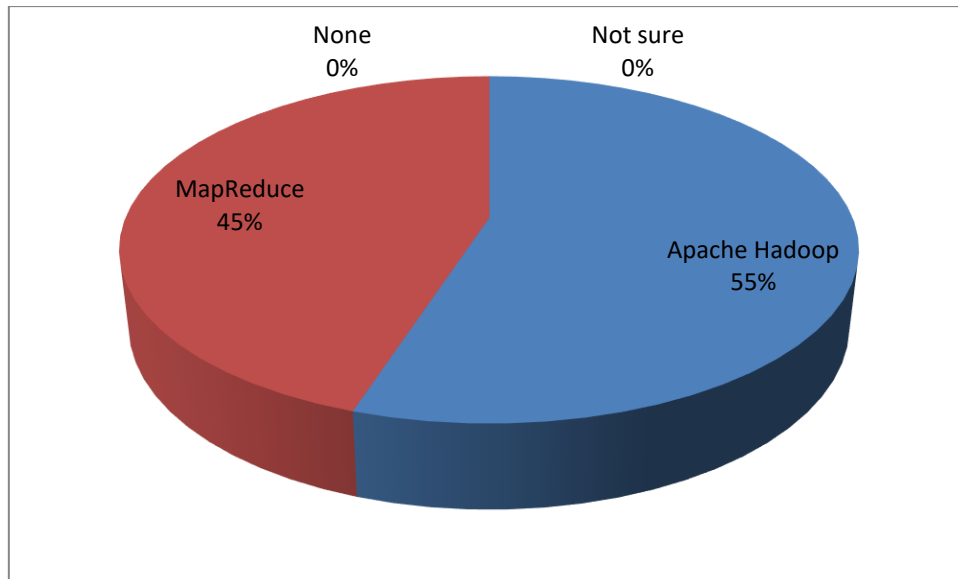


Figure 4.6: Platform that you prefer for large-scale cloud computing
(Source: Self-developed)

The sixth question has focused on the platform that can be preferred for large scale cloud computing process in the businesses conducted by the entrepreneurs. This question also focused on the different technologies as well as the well-built platform that can help the organisation to evaluate the cloud computing process. Among 20 respondents, it has been seen that 55% of people or approximate 11 people have chosen Apache Hadoop as a large cloud-based computing platform. On the other hand, it has been seen that 45% of people have chosen MapReduce platform as a cloud-computing platform. Hence, according to the complements the respondents in the research data collection that is the entrepreneurs considering variable number of employees in the organization has provided it can be seen that most of them Apache Hadoop as a large cloud-based computing platform in business operations. Hence, the development of the results from the research data collection it has been found that most of the entrepreneurs is likely to implement Apache Hadoop cloud data computing system in their business. This kind of result shows the effectiveness of the cloud computing implementation in the business.

7. How far do you agree that hybrid strategy is the most effective one for gaining utility out of cloud computing?

Options	Response frequency	Percentage	Total respondents
Strongly agree	06	30	20
Agree	08	40	20
Disagree	03	15	20
Strongly disagree	01	05	20
Not sure	02	10	20

Table 4.7: Hybrid strategy is the most effective one for gaining utility out of cloud computing
(Source: Self-developed)

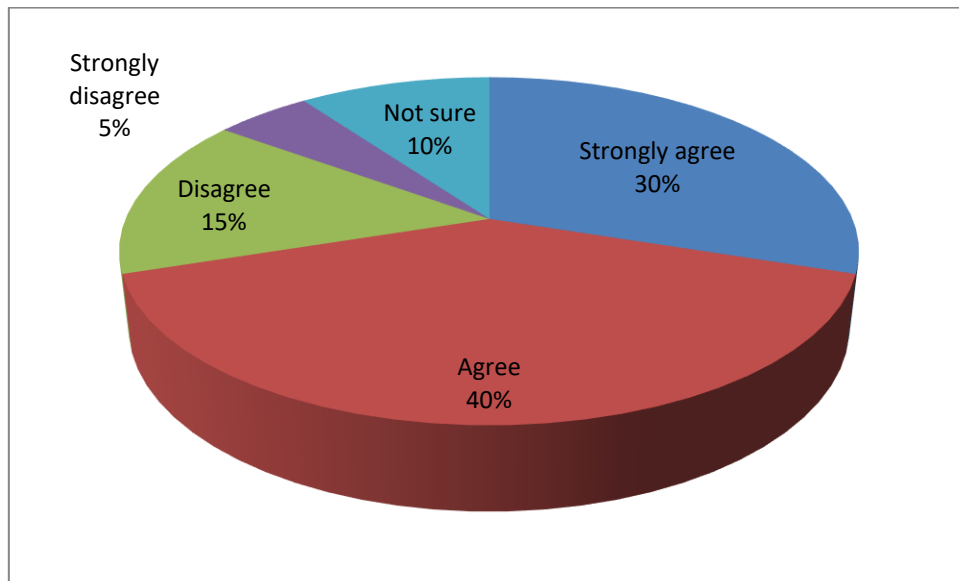


Figure 4.7: Hybrid strategy is the most effective one for gaining utility out of cloud computing
(Source: Self-developed)

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The seventh question of the research data collection survey questionnaire states about the hybrid strategy is the most effective one for gaining utility out of cloud computing. Therefore, the respondents have been given the choice to answer the closed ended question in terms of agreeing, disagreeing as well as expressing their unsure stature as response to the question. After evaluating the data analysis process, it has been seen that from the seventh question prospective out of total 20 respondents only 6 person or approximately 30% people have strongly agreed that hybrid strategy is the most effective one for gaining utility out of cloud computing. Along with this out of 20 people more than 8 persons as well as approximate 40% people have strongly agreed hybrid strategy is the most effective one for gaining utility out of cloud computing. This amounts to be about 20 per cent of the total strength of the respondents in the research data collection.

However, the left number of respondents that is about 03 and the percentage is 15% people out of the 20 respondents have responded that they are not likely to agree or disagree with the fact that hybrid strategy is the most effective one for gaining utility out of cloud computing. Along with this out of 20 people 5% as well as 10% respectively have responded that they are strongly disagreed and also not sure that hybrid strategy is the most effective one for gaining utility out of cloud computing or not. Therefore, the implication of the cloud computing is found to be profitable to the organizational holders as well as for the overall operations and management of the organization. Along with this it can be said that the importance of the business cloud implementation in the business operations in Ireland can be understood from the gathered data.

8. Do you think cloud can enhance business scaling without security issues?

Options	Response frequency	Percentage (%)	Total respondents
Yes	15	75	20
No	05	25	20

Table 4.8: Cloud can enhance business scaling without security issues

(Source: Self-developed)

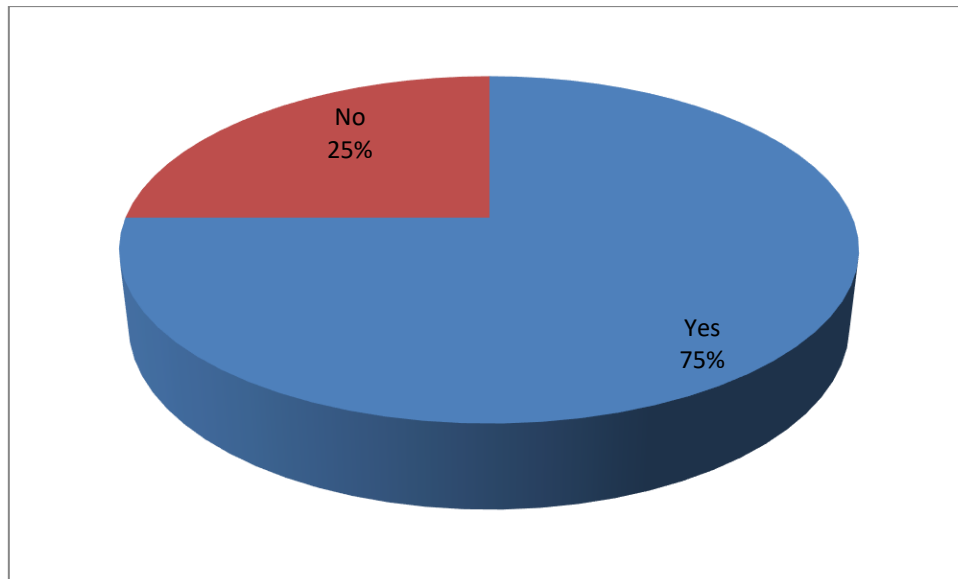


Figure 4.8: Cloud can enhance business scaling without security issues
(Source: Self-developed)

The data collection has shown that about 05 of the 20 respondents have been found to be agreeing with the statement that cloud computing is useful for the scaling of a business. Hence, about 25 per cent of the respondents have responded that they strongly agree with the statement that cloud computing is useful for scaling their business. Besides, about 30 per cent of the respondents have been found to opt for the second option that is disagreeing. This result shows that 05 entrepreneurs among the 20 have a contrary idea about the sealing effects of the cloud computing in business. Hence, the 75 per cent of the respondents thinks that cloud computing is very vital for performing the different operation of the company as it helps to develop the efficiencies of the business by resolving the security issues.

However, the 25 per cent does not agree with the fact that cloud computing fixes the security issues in the organisation. Therefore, from the majority, it has been analysed that cloud computing is beneficial for reducing the security issues in the organisation as to help to define the business functions in which the business can run or perform their operation smoothly. Entrepreneurs of Ireland are much focused for implementing the cloud computing techniques for the growth and development of the organisation.

9. Do you consider using cloud to scale business to be safe?

Options	Response frequency	Percentage (%)	Total respondents
Yes	15	75	20
No	05	25	20
Do not know	00	00	20

Table 4.9: Cloud to scale business is safe

(Source: Self-developed)

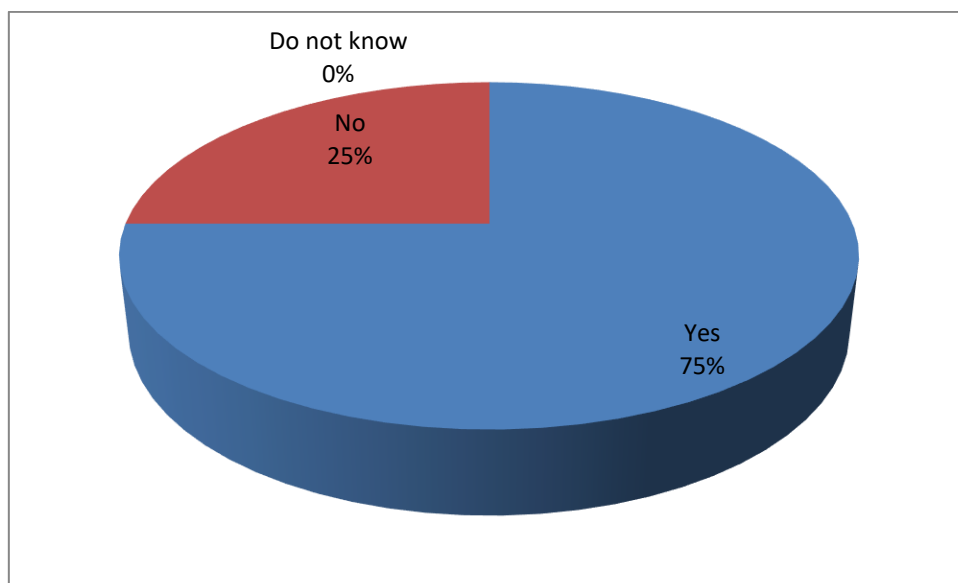


Figure 4.9: Cloud to scale business is safe

(Source: Self-developed)

In the above data analysis, it has been included to develop an understanding of the effectiveness of cloud computing. Hence, the questions have been focused on gathering the sufficient data by focusing on the likeness of the entrepreneurs. Among the 20 respondents, numbers of respondents have agreed on the fact that the cloud computing provides effectiveness to the organisation. Hence, the 75 per cent of the total respondents were used in the research data. Which has agreed on the fact that cloud users to access the data for gaining connection which has learned to change the business climate? Hence, cloud computing is an umbrella for maintaining the cloud services which generally includes the cloud storage, cloud backup and software for proving the excellent service.

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Five of the entrepreneurs says that the cloud computing is not safe to be used for the business purpose. Hence, they 25 per cent of them have denied that the cloud computing creates the benefits to the small-scale business. Therefore, the complements the respondents on the research data collection has generally agree with the development of the cloud computing business in the organisation. It can be seen that construction of the cloud computing is essential for providing the smooth operation to the company. Hence, the five of the entrepreneurs has not agreed on the fact that c they do not accept cloud computing give effeteness to the business

Therefore, due to the development of the results from the collection of the research data, it has been found the entrepreneurs in Ireland has likely to implement the tool and techniques of the cloud computing system for the effectiveness of the business. Hence, they think that it is essential to achieve the cloud computing technique, which will help to provide the profitable atmospheres for performing the overall operations to maintain the smooth operations.

Hence, the entrepreneurs feel that the delivery of the computing services enhances the functions for playing the different set of action, which tends to eliminate the cloud computing the capital expense for generating the behaviour for setting up the process, which manages the infrastructure, which will help the growth and development of the organisation.

Most cloud computing g service is thus provided for the self-service for generating the demand of the business. Hence, it enhances the speed for maintaining the flexibility by taking the pressure of the capacity planning. Therefore, the implication of the cloud-computing tool is very required for performing the different aspects of the business, which will help to manage the business operation, and it will enhance in maximising the profit organisation.

10. Far extensively, do you consider cloud to be implemented in the business strategy for scaling up business?

Options	Response frequency	Percentage	Total respondents
Very strongly	05	25	20
Strongly	09	49	20
Moderately	06	30	20
Not at all	00	00	20

Table 4.10: Cloud to be implemented in the business strategy for scaling up business

(Source: Self-developed)

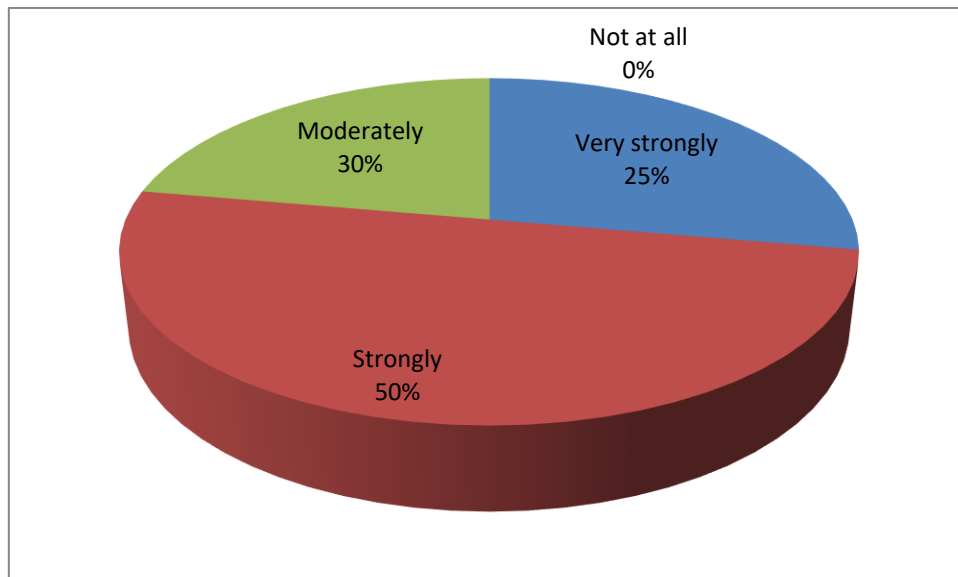


Figure 4.10: Cloud to be implemented in the business strategy for scaling up business

(Source: Self-developed)

The tenth question of the research data collection survey questionnaire states about the implementation of the cloud computing in store regarding the application of the same in the scaling the business activities. Therefore, the respondents have been given a choice to answer the closed-ended question regarding agreeing, disagreeing as well as expressing their unsure stature as the response to the subject.

The data collection has shown that about 05 of the 20 respondents have been found to be agreeing with the statement that cloud computing is useful for the scaling of a business. Hence, about 25 per cent of the respondents have responded that they strongly agree with the statement that cloud computing is useful for scaling of their business. Besides, about 30 per cent of the respondents has given the moderate answer on the fact that cloud computing should be implemented for providing effectiveness in the organisation. This result shows that 05 entrepreneurs among the 20 have a contrary idea about the sealing effects of the cloud computing in business. About 05 respondents have strongly disagreed to the point that cloud computing can effectively scale the business operations. This amounts to be about 25 per cent of the total respondent strength.

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Hence, the entrepreneurs think about the fact that cloud computing helps to determine the success of the company which help to develop the success of the business which helps to analyse the performance of the market. On the other hand, research data results have found that about 06 respondents among 20 entrepreneurs participating in the research data process are not sure about the scaling capacity of the cloud computing in the business. Therefore, for scaling up the market for generating the business perspective, it has been analysed among the 20 respondents 25 per cent of the entrepreneurs have agreed on the fact that entrepreneur should need to be implemented for generating the benefits. Hence, 74 percent of the respondents thinks on the fact cloud computing is an effective tool, which enhances the productivity of the organisation and it is need d to be implemented so that it will help ca provide future benefits.

11. Would you recommend cloud for business scaling?

Options	Response frequency	Percentage (%)	Total respondents
Yes	15	75	20
No	05	25	20

Table 4.11: Recommend cloud for business scaling

(Source: Self-developed)

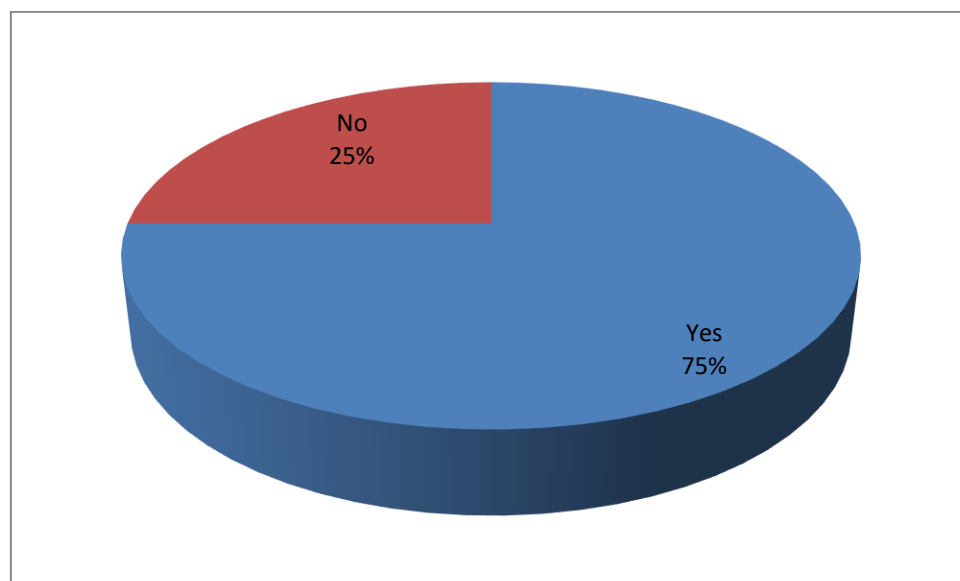


Figure 4.11: Recommend cloud for business scaling

(Source: Self-developed)

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From the 20 respondents, it has been analysing that 75 per cent of the respondents have agreed on the fact that cloud computing should be recommended for performing the business cloud computing should need to be implemented for evaluating the different business functions. 75 percent, of the respondents have agreed on the fact that the cloud computing provided the flexibility to the organisation which helps to improve the business functions for generating the business of the services. Therefore, the flexibility has helped to develop the business functions. Hence, from the review of the respondents, it can be analysed that the cloud computing benefits to recover the data for improving the business functions. Cloud computing reduces the high cost of hardware by implementing the automatic software updates for the maintenance of the system.

Therefore, for the growth and development of the business, it is essential for the implementation of the cloud computing techniques in the organisation, which will help to maximise the profit. Among the 20 respondents still, 25 per cent of the entrepreneurs were not agreed on the fact that the cloud computing should be recommended for the improvement of the business functions. This is because they might think that the cloud computing concern with the security problems. Hence, according to the 5 entrepreneurs their view is that cloud computing could not be recommended for the improvement of the business scaling which might create the problem for running the smooth operation. Therefore, the majority claims that the cloud computing techniques should be recommended in the organization, which will help to define the business structure.

Chapter 5: Findings And Discussions

5.1 Introduction

In the context of this current study of research, this chapter focuses on the findings and the discussions related to the topic of the current research. The previous chapters of this research help to identify the findings of the current study of research. Through the findings, the researcher intends to identify that whether the study of the current research is able to meet the objectives or not. The main aim of this research is to identify that whether cloud is useful for the entrepreneurs in scaling up or expanding their business. The findings of a research are provided mainly based on the methodology of the current study of research. The researcher is required to state the findings of the current research without any interpretation or biasness; rather it needs to be arranged in a logical sequence. This section is mainly said to be generating result of the entire research for a successful completion of the current study. This chapter also includes a part of discussion, where the researcher intends to discuss regarding the findings and the objectives of this current study of research. The discussion part mainly helps in demonstrating the original thinking regarding the entire topic of the research.

5.2 Key Findings

Questions	Findings	Data collection method
<i>Key findings on the size of the enterprise in terms of employees</i>	It is shown in the survey result that the majority of the entrepreneurs belong to the enterprise having strength of 51-100 employees in the organization. If the strength of the enterprise is 51-100 then it is considered as a small or medium sized organization. Therefore, the survey is justified as most of the entrepreneurs belong to a small or medium sized organization. Therefore, it can be said that the entrepreneurs work on a local	The data is collected with the help of primary data collection method.

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	basis and implemented cloud in their business for its growth and further expansion of their business.	
<i>Effectiveness of cloud computing in the strategic process</i>	In the strategic process, cloud computing is considered as effective, which is evident from the survey results. Cloud computing helps the entrepreneurs in scaling up their businesses and expanding their businesses. Out of 20 entrepreneurs, 15 agreed with the fact that cloud computing helped them in scaling up their businesses. Therefore, majority of the entrepreneurs agreed to the fact that implementation of cloud computing in the businesses is effective. Implementation of cloud computing is also said to be profitable to the organizational holders.	The data is collected with the help of primary data collection method.
<i>Effectiveness of cloud for scaling of business</i>	According to the survey result, it is found that scaling is not effective for businesses. This is because, only 5 out of 20 entrepreneurs agreed to the fact that implementation of cloud is effective in scaling of businesses. However, 5 respondents agreed that cloud computing helps in scaling of businesses effectively. Therefore, it cannot be said that cloud is effective in scaling of businesses. However, according to those 5 respondents, cloud computing can effectively scale the business operations. Few of them are not even sure of the	The data is collected with the help of primary data collection method.

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	effectiveness of cloud computing in scaling of a business.	
<i>Advantages of using cloud computing</i>	<p>There are a number of advantages of using cloud computing in business. One of the major advantages of cloud computing is Powerful server capability, according to the survey result. Other advantages are, cloud computing provide data backup and storage facility, as it provides backup in case the data is lost and provide a large storage facility. Another advantage is SaaS. Sandboxing capabilities and information technology are said to be other two advantages. However, majority of the entrepreneurs voted for data backup and storage facility, as it is the most important factor that a business requires.</p>	<p>The data is collected with the help of primary data collection method.</p>
<i>Reason behind inclusion of cloud in business</i>	<p>There are a number of reasons for implementing cloud in businesses. One of the major reasons for the inclusion of cloud in business is because it is cost-effective. It helps in eliminating the capital expenses that is required for buying hardware and software and for the setup of the business. There are other reasons as well, such as, it saves a lot of time by helping in the activities of the business. It increases productivity in the business and more. However, according to the survey result it is observed that most of the entrepreneurs</p>	<p>The data is collected with the help of data collection method.</p>

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	use cloud computing because it is cost-effective.	
<i>Preferred platform for large scale cloud computing</i>	In accordance to the survey result, it is found that the most preferred platform for large-scale cloud computing has been selected as Apache Hadoop. Another platform is MapReduce. However, majority of the entrepreneurs has opted for Apache Hadoop and the rest of the entrepreneurs selected MapReduce as the platform. According to 11 respondents out of 20 respondents opted for Apache Hadoop as their preferred platform for the purpose of large-scale cloud computing.	The data is collected with the help of primary data collection method.
<i>Effectiveness of hybrid strategy for gaining utility out of cloud computing</i>	It is agreed by most of the respondents that hybrid strategy is considered as the most effective strategy for gaining utility out of cloud computing. Hybrid cloud is termed as a combination of private and public clouds that allows data to be shared between them. Hybrid strategy helps in gaining utility out of cloud computing provides greater flexibility and more options for deployment to the businesses. Thus, according to most of the entrepreneurs hybrid strategy is effective in gaining utility out of cloud computing.	The data is collected with the help of primary data collection method.
<i>Enhancement of business scaling by</i>	In accordance to the result of the survey, it is found that cloud is capable of	The data is collected with

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<p><i>cloud without security issues</i></p>	<p>enhancing business scaling without any security issues. Inclusion of cloud for enhancing scaling of business does not cause any security issues. Therefore, it can be said that cloud can enhance business scaling without any security issues. Only 5 out of 20 respondents disagreed to the fact that cloud can enhance business scaling without security issues. They might have faced any security issue after including cloud computing for enhancing scaling of a business.</p>	<p>the help of primary data collection method.</p>
<p><i>Safety of cloud in scaling business</i></p>	<p>According to most of the entrepreneurs, inclusion of cloud in scaling business is safe. Only 5 respondents out of 20 disagreed to the fact. Using cloud in for the purpose of scaling business is safe. It is beneficial as well for the businesses. However, cloud computing does not cause any harm to the businesses if implemented for the purpose of scaling a business. The construction of cloud computing is essential for providing flexibility and a smooth operation to the businesses.</p>	<p>The data is collected with the help of primary data collection method.</p>
<p><i>Importance of implementing cloud in the business strategy in scaling up business</i></p>	<p>It is recommended by a number of respondents that cloud is strongly required to be implemented in the business strategy for scaling up business. Therefore, according to the survey result, it is important to implement</p>	<p>The data is collected with the help of primary data collection method.</p>

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	<p>cloud in the business strategy in scaling up of business. It helps the business in scaling up of business properly. It is important to implement cloud in the business strategy as it helps in scaling up business. Scaling of business is generally required for generating the business perspective and it is also important implement cloud computing for generating the benefits.</p>	
<p><i>Recommendation on cloud for business scaling</i></p>	<p>It is recommended by the majority respondents to implement cloud for business scaling. It is important to implement cloud for business scaling, as it will help in the growth and development of the business. Therefore, it is preferred by most of the respondents to implement cloud computing for the purpose of scaling up business. This is because, cloud offers a number of flexibilities to the business and this flexibility helps in the development and the growth of the business and thus helps in the expansion of the business.</p>	<p>The data is collected with the help of primary data collection method.</p>

5.3 Discussion

In the context of the current study of research, this chapter provides a discussion on the research topic. The researcher intends to identify whether he is able to meet the objectives of the current study or not. The discussion is mainly based on the objectives of the study. The discussion helps the researcher to achieve a clear concept regarding the current topic of research that helps in the successful completion of the research.

Theme 1: Role Of Cloud In Expanding The Businesses

Cloud computing is referred to as an Information technology. Cloud computing requires no human association as it is electronic. It helps in the development of the businesses and the new start-ups. As cloud computing helps the businesses to save more time, they decide to implement cloud computing in their system. This helps to expand their business in many ways. It is said to be a new technology in the world of business. However, it is evident from the previous chapter that the evaluation of cloud computing has been increased and the technology is improved. Technologies like Internet and Grid system, IT resourcing like infrastructure development process and security monitoring process of the network are also associated with cloud computing.

Cloud computing helps the businesses in many ways. Cloud computing helps to create new apps and services in order to help in the development of the businesses and the start-ups. Cloud computing helps in storing important data required for the development of the businesses. It also provides backup of important data, in case they are lost and also enables the systems to recover the data. On the other hand, cloud computing cost-effective as it eliminates the requirement of the capital expenses for buying hardware and software and setting of them. Besides, most of the cloud computing services provide self-service.

Therefore, major amount of computing resources will be able to provision in a shorter period of time. It provides the businesses with a number of flexibilities that helps in the growth of the businesses effectively. Therefore, it can be said that cloud computing provides a number of facilities to the business sector and hence helps in the expansion of the businesses. It helps the entrepreneurs to scale their businesses. Cloud computing is able to scale the businesses elastically. Moreover, businesses can rely on cloud computing in running a business successfully and hence can decide on expanding their business. Cloud computing is reliable because cloud computing provides disaster recovery, data backup and helps in the continuation of the business in a much easier and less expensive way. The cloud provider's network has a number of sites that helps to recover data. Thus, from the above discussion it can be concluded that cloud computing plays a vital role in expansion of the businesses and helps the entrepreneurs to scale their businesses. Therefore, it can be said that the researcher was successful in accomplishing the objective successfully.

Theme 2: Capacity Of Cloud In Helping The Growth Of The Start-Ups

The modern businesses are especially associated with the implementation of cloud computing in their businesses. Cloud computing has helped the startups in moving forward in order to match the pace of the big industries in terms of technology. One of the major factors for considering cloud hosting services is that it is highly scalable. This actually means that the cloud computing services helps in the growth of the businesses as per the requirements, be it temporary or permanent. In the context of promotion of the businesses, cloud can help in promoting a business with a few clicks, but this might increase the website traffic. However, cloud will help to cope with the demand in this case and will be able to help it from crashing.

On the other hand, cloud computing is also said to be cost -effective. Therefore, for startups, cloud computing is highly beneficial as it reduces the cost required for IT that helps in the setup of the business without the requirement of capital. There is no requirement for investing on hardware by using cloud and hence the cost required for the onsite storage, cooling, energy and maintenance are not required. Therefore, cloud computing is cost-effective for the startups. The providers even provide some extra benefits, such as 24*7 onsite technical support and backup power supply, which is actually very expensive and difficult to afford and maintain by a startup.

Another factor to be considered is Restoration. If a business is shifted to cloud, it has a tendency to fail faster, but the benefit of implementing cloud is that it can be restored easily and are able to launch quickly. The services provided by the cloud hosting mainly offers flexibility to the businesses and it is said to be highly beneficial for the startups. The accessibility requires an internet connection only and it is capable to access globally through any device. The business can be managed from any distant location with the help of cloud computing.

Along with cost and convenience, cloud computing offers a number of facilities to support the startups. This helps the startups to match their pace with the bigger companies in order to achieve success and develop their business. They will be able to compete with more established competitors in the market without the requirement of any extra capital. In case of the traditional approach towards businesses, their growth is promoted gradually, whereas, cloud computing helps the startups to grow dramatically in the market.

Therefore, from this discussion, it can be concluded that cloud computing is capable in helping the growth of startups. Hence, the researcher is successful in accomplishing this factor.

Theme 3: Effective Strategies For Implementing Cloud For The Growth Of The Businesses

The cloud paradigm is constantly improving. It is said that innovative cloud solutions will be able to help the businesses of any size in order to gain competitive edge in the industry they are existing. Businesses are required to consider cloud computing as a strategic tool in order to meet the further business goals within the organization. 37% of small businesses in America opted for cloud computing in their business, but the percentage is likely to double to 80% by 2020. Cloud computing helps in the growth of the businesses and helps in scaling of the businesses; thus, it is said to be used as a strategic tool in order to expand businesses. When cloud computing works best in a business, it is said that a major perception shift is going to take place there.

The infrastructure built by cloud on the latest server technology mainly supports for the growth of the business, besides reducing the operational cost. Cloud computing is capable of scaling and expanding business. The cloud solutions offer automation and flexibility to the businesses, which allows them to give faster response to the changing digital requirements. This makes the IT resources to focus on the customer-centric services. The business environments, which are tightly regulated, are able to get easy access to the solutions of cloud that are flexible and even cost-effective.

The businesses having more employees and working remotely through different mobile devices, then it is important to have access over the company data for 24*7 for the purpose of effective time management and enhance productivity in the business. In such cases, implementation of a secure cloud storage solution for the business assures that the staffs can get the access from anywhere at any time to the documents and the required resources. This helps in the improvement collaboration irrespective of timing and proximity. It also helps in achieving better business outcomes. In order to implement cloud computing in the businesses, a proper business strategy is essential for the development of the business. However, Cloud is used for the growth and expansion of business. The strategies of cloud need to be aligned properly with the business goals of the organization it is implemented on. Therefore, it can be concluded from this discussion that, the researcher is successful in accomplishing this factor.

5.4 Summary

In the context of the current study of research, the researcher intends to identify the importance and value of cloud in expansion of businesses and startups. This chapter of the current research sheds highlight on the importance of cloud computing in expanding businesses or scaling up businesses. Implementation of cloud computing is considered as a business strategy in the businesses. The discussion part of this research discusses the capacity and the role of cloud helping in the growth of startups and the businesses. Cloud computing helps the startups to match their pace with the bigger enterprises, in order to compete with an established competitor. This portion of the study also discusses the effective strategies for the implementation of cloud for the growth of startups. Cloud offers a number of flexibilities to the businesses that help them to move forward and expand their business. There are certain advantages and disadvantages of cloud computing in business. However, the advantages are more than the disadvantages. Therefore, it is evident from the previous chapters that cloud computing helps the businesses in many ways and most of the businesses adopted cloud computing for developing their businesses. It can be said that, implementation of cloud in the businesses is very important for the growth of the businesses.

Chapter 6: Conclusion

6.1 Conclusion

Completion of the study has availed the researcher to have a clearer understanding of the impact of using the cloud computing system in regards of scaling the business by the entrepreneurs in Ireland. Theories related to the relationship between entrepreneurial traits and adoption of the cloud computing system has been emphasized in the stud in regards understanding the impacts of the traits. The theories and conceptual frameworks have helped the researcher to gain generalized understanding of the factors associated with entrepreneurial traits and adoption of cloud computing. The generalized information is used in regards of evaluating the primary as well as secondary data in the fourth chapter of the research. Through the completion of the above five chapters, the researcher has been able to complete the research in the successful manner. The discussion on the existing literatures has supported in regards of understanding the variables related to the topic in the proper manner. This chapter will also emphasize on providing recommendation in regards of the adoption of cloud computing in businesses in Ireland.

6.2 Linking With The Objectives

In this section of the chapter, findings related to the research in the context of comparison with the objectives of the study have been emphasized. The focus is to evaluate if the factors associated with the study have been able to achieve the objectives of the research on the appropriate manner. This is considered to be essential in regards of evaluating the success of the research.

Linking With The Objective 1: Evaluate Of The Importance Of Cloud For Expanding The Business

It was very essential for the researcher to assess the factors related with adopting cloud computing in regards of expanding the business. **Question 1, question 2, question 3** and **question 4** in the quantitative section has direct link with the objective of the research. In the literature review chapter, the startup environment in Ireland has been emphasized in order to understand the effectiveness of adopting cloud computing in the business in Ireland. In the literature review the factors associated with the cloud computing evolution process has been discussed in regards of understanding the importance of cloud computing system in regards of expanding the business. The importance of cloud computing in the context setting up the business and stabilizing it in the effective way has been emphasized in the literature review chapter. Based on the findings it can be asserted that the adoption of the cloud computing

system is effective as it provides various kinds of benefits in regard of operating the company. Thereby it can be mentioned that the researcher has been able to accomplish the objective successfully in compliance with the data findings of the study in the effective way.

Linking With The Objective 2: Evaluation Of The Capacity Of Cloud In Helping The Start-Ups To Grow

The researcher has intended to examine the aspects related to the capacity of the cloud computing system in regards of supporting the startups to grow in the Irish market. **Question 5, question 6** as well as **question 7** has direct link in regards of the objective of the research. In the literature review the factors associated with the cloud architecture process in regards of the evaluation process of startups has been emphasized. The study has helped in regards of understanding the impact of the cloud architecture process in regards of helping the startups to grow in the Irish market. In the literature review the cloud computing adoption in regards of the business frameworks has been emphasized in the context of understanding the methods that help in developing and stabilizing the startups. In the literature review chapter, it has been discussed that the cloud system in regards of the startups provides the support of rapid elasticity process. In this context the small investors of the startups will be able to communicate with the stakeholders within the given short time. Thereby, the researcher has been able to accomplish this objective with the support of the gathered evidence in the previous chapters of the research.

Linking With The Objective 3: Gaining A Significant Understanding Of The Strategies That Can Be Used In Implementing Cloud Effectively For The Growth Of The Business

Evaluation of the **question 8, question 9, question 10** and **question 11** of the quantitative data analysis has enables the researcher in regards of understanding the strategies that will be effective for implementing cloud in the business. The methods are analyzed in regards of developing the business in the Irish market. In regards of growing the business in the Irish market the effective implementation of the cloud computing system has been emphasized in the study in the effective manner. Thereby, the researcher has been successful in reducing the aspects that will be beneficial in regards of implementation of the system in the businesses in Irish market. In this regards the recommendation have been developed that are based on the understanding of the researcher of the shortcomings that are evaluated in the following section.

6.3 Recommendation

The following recommendations are provided in regards of the proper implementation of the cloud computing system in the Irish businesses. These recommendations will help in regards of growing the business in Ireland.

Recommendation 1: Ensuring Proper Selection Of Cloud Service Provider

In regards of incurring the obtaining benefits from the implementation of cloud computing system in the business, the entrepreneur needs to ensure that the proper cloud servicer is selected. This will help in regards of implementing the system in the appropriate way. This will be beneficial as the business will be able to incur the maximum benefit from the system. The business will be able to ensure the factors associated with security as well as cost effectiveness in the proper way. In this regards the entrepreneur needs to ensure that the service [provider is certified as well as reliable. The entrepreneur's needs to take care of the factors associated with data security, data governance as well as business policies in the effective way.

Recommendation 2: System Management And Operation For Cloud Computing System

In the context of system management as well as operation in the business cloud computing plays an important role. In this regards the entrepreneur's needs to emphasize on the factors associated with cloud operations management as well as technologies in the context of incurring the maximum benefits. The entrepreneurs need to incur information as well as communications technology and the related cost that will help- in regards of the implementation in the appropriate way. The entrepreneur's needs to emphasize on the factors associated with the shift from the infrastructure monitoring to service monetization as it will be beneficial for the business

Recommendation 3: Strategic Plan In Regards Of Adopting Cloud Computing

In regards of the implementation of the cloud computing system in the Irish business, the entrepreneurs are required to emphasis on the strategies that will support in regards of the inclusion of the system in the effective manner. The entrepreneurs need to ensure that the strategic planning associated with the system is in accordance to the basic business strategies. The strategic planning is required to be closely associated with cloud computing. An integrated strategic plan will ensure that the business will be able to maintain competitive advantage in the market.

6.4 Research Limitations

During the completion of the study, the researcher had to face issues that created limitation in the process. The researcher has faced the hurdle that restricted the achievement in regards of the knowledge that is related to the issues of the research in the considerable manner. The researcher has faced limitation in regards of time which restricted the researcher from taking large sample size that would have given more appropriate data and information. The researcher also faced limitation in regards of the financial budget as well. The limited financial budget for the research has restricted the researcher in regards of the sample size and more expensive research method for the study.

6.5 Future Scope For The Study

Availability of more time as well as financial budget in regards of researching about the topic will be beneficial in regards of the future study. This will enable the future researcher to take large sample size as well as expensive research methods that will help in gathering more reliable and valid data and information for the research. This will be beneficial; for the researcher as it will provide outcome of the research.

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Appendix

Consent Form

PARTICIPANT CONSENT FORM

Will demonetization in India carve a better future for the nation? Its objectives and impacts on the Indian people, business and the economy of the country.

Consent to take part in research

By signing and returning this consent form you are indicating your agreement with the following statements:

- I ___ voluntarily agree to participate in this research study.
- I understand that even if I agree to participate now, I can withdraw at any time or refuse to answer any question without any consequences of any kind.
- I have had the purpose and nature of the study explained to me in writing and I have had the opportunity to ask questions about the study.
- I understand that I will not benefit directly from participating in this research.
- I have received enough information about this study.
- I have received satisfactory answers to all my questions, where I have had a query.
- I understand that all information I provide for this study will be treated confidentially.
- I understand that if I inform the researcher that myself or someone else is at risk of harm they may have to report this to the relevant authorities - they will discuss this with me first but may be required to report with or without my permission.
- I understand that I am free to contact any of the people involved in the research to seek further clarification and information on request.
- I give my permission for information collected about me to be stored or electronically processed for the purpose of research and to be used in related studies or other studies in the future but only if the research is approved by a Research Ethics Committee.
- I agree to take part in this study.

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- Participant's Signature:
- Date:
- Participant's Name (Block Capitals):
- Contact Email:

To be completed by the Researcher:

I, the undersigned, have taken the time to fully explain to the above participant the nature and purpose of this study in a way that they could understand. I have explained the risks involved as well as the possible benefits. I have invited them to ask questions on any aspect of the study that concerned them.

Name (Block Capitals)

| Signature

| Date

HOW CAN IRISH ENTREPRENEURS CAN USE THE CLOUD FOR SCALING THEIR BUSINESS?