

ESTONIAN ENTREPRENEURSHIP UNIVERSITY OF APPLIED SCIENCES

International Business Administration

Dharshana Soundha Raja

**IMPACTS OF SOFTWARE AS A SERVICE (SAAS) ON SALES OF FOOD  
RESTAURANTS**

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Supervisor: Marleen Kedars, MA

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## RESUME

Information technology is the pillar of the current world and it has millions of followers around the world. It has thousands of concepts within itself with more advanced techniques. Cloud computing is one of the topics which has a broader view from Technology perceptions towards users. Under cloud computing, the Service model has taken a great place which acts through softwares as service. In This study, Author initially has given an idea about Cloud computing and how the models have been derived under it to make the audience understand that Software as a Service (SaaS) is a new pathway to develop any type of business. Also Author has discussed various concepts in this study. Such as Definition of SaaS with existing approaches and frameworks, Types of SaaS, Characteristics of SaaS model which has been identified by previous studies's authors, Selling methods of Food restaurants which initially would give an exploration about the differences between Traditional Selling method and Modern selling methods, How SaaS has been adopted into the business which would broadly cover the all of advances tools and softwares, How the Business operations has been led by SaaS and Comparison between the Food restaurants which has taken SaaS whole time and partially.

The aim of study is to evaluate both positive and negative impacts in Sales with the use of SaaS. The Author has found as a problem that there are millions of users who have been engaging with Software services in their business but if they are really aware of how much they pay for Operational or Maintenance costs and Does it exceed the sales which are being increased by SaaS. Accordingly Author made respondents aware that the Sales through SaaS are far higher than the amount they pay for Software services. To achieve the research tasks, Food Restaurant business owners have been interviewed with at least one or more than year experience in restaurant businesses. In this, The author tried to highlight that Every business owner has different types of perspectives about Softwares and its advantages and disadvantages. Also Author was able to find that Respondents have been encouraging the SaaS concept into Future owners positively. To support the framework of this study have been discussed with the help of previous studies i.e Jack Collison, Chavan, V., Jadhav, P., Korade, S., & Teli, P, Banerjee, Sarbojit, Widagda, I & Yasa, Ni & mia, Sha & Saputra, Kadek and etc..,

Accordingly Author will discuss the literature review as a first chapter of this study with the discussions of Choi, Hunsinger, and Medlin, 2016 work on Cloud computing, Virayo, 2020 to

highlight the SaaS concept. In this chapter, terms i.e cloud computing, SaaS and Sales would be discussed frequently.

The Second Chapter of this study will move with Research methodology. Author has used a Qualitative research method to retrieve the experienced and detailed responses from Food restaurant owners. Followingly Author has conducted Eight semi-structured Interviews and the respondents have been selected with specific measurement. All the interviews have been conducted face to face and respondents were asked fifteen open questions to share their thoughts and experiences about the concept. Also Using thematic analysis has been given specific themes as findings of this study.

The Final chapter of this study has been identified as Results and Analysis. Author has given her extreme efforts to find the themes and found that respondents strongly agree that Impact of SaaS can be positively found in their Food restaurant businesses. They also encouraged that SaaS has to play more important roles in different units of future business and through that Sales can be constant.

Keywords: SaaS, Food Restaurants, Sales, Growth, Online food delivery software

**ABSTRACT**

Infotehnoloogia on praeguse maailma tugisammas ja sellel on miljoneid järgijaid üle maailma. Sellel on tuhandeid kontseptsioone ja täiustatud tehnikaid. Pilvandmetöötlus on üks teemadest, millel on tehnoloogia arusaamadest laiem vaade kasutajatele. Pilvandmetöötluse all on suurepärase koha võtnud teenusemudel, mis toimib tarkvara kaudu teenusena. Selles uuringus andis autor esialgu ülevaate pilvandmetöötlusest ja sellest, kuidas selle alusel mudelid on tuletatud, et anda publikule arusaam, et tarkvara kui teenus (SaaS) on uus tee mis tahes tüüpi äri arendamiseks. Ka autor on selles uurimuses käsitlenud erinevaid kontseptsioone. Nagu SaaS-i definitsioon olemasolevate lähenemisviiside ja raamistikega, SaaS-i tüübid, SaaS-i mudeli omadused, mille on tuvastanud varasemate uuringute autorid, Toidurestoranide müügimeetodid, mis esialgu annaks ülevaate traditsioonilise müügimeetodi ja kaasaegsete müügimeetodite erinevustest, kuidas SaaS on ettevõttesse kasutusele võetud, mis kataks laias laastus kõiki arendustööriistu ja tarkvara, kuidas SaaS on äritegevust juhtinud ja Toidurestoranide võrdlus, mis on võtnud SaaS-i kogu aja ja osaliselt.

Uuringu eesmärk on hinnata nii positiivseid kui ka negatiivseid mõjusid müügile SaaS-i kasutamisel. Autor on leidnud probleemina, et on miljoneid kasutajaid, kes on oma äritegevuses tarkvarateenustega tegelenud, kuid kui nad on tõesti teadlikud sellest, kui palju nad maksavad kasutus- või hoolduskulude eest ja kas see ületab müüki, mida suurendatakse SaaS. Sellest lähtuvalt teavitas autor vastajaid, et SaaS-i kaudu müük on palju suurem kui tarkvarateenuste eest makstav summa. Uurimisülesannete täitmiseks on intervjueritud Toidurestoranide ettevõtete omanikke, kellel on vähemalt üks või enam kui aasta kogemus restoraniäris. Selles püüdis autor rõhutada, et igal ettevõtte omanikul on tarkvara ja selle eeliste ja puuduste kohta erinevat tüüpi vaatenurki. Samuti võis autor leida, et vastajad on SaaS-i kontseptsiooni tulevasteks omanikeks positiivselt julgustanud. Selle uuringu raamistiku toetamiseks on arutatud varasemate uuringute abil, nt Jack Collison, Chavan, V., Jadhav, P., Korade, S., & Teli, P, Banerjee, Sarbojit, Widagda, I ja Yasa, Ni & mia, Sha & Saputra, Kadek jne.,

Sellest lähtuvalt käsitleb autor kirjanduse ülevaadet selle uuringu esimese peatükina Choi, Hunsingeri ja Medlini aruteludega, 2016. aasta pilvandmetöötluse töö, Virayo, 2020, et rõhutada SaaS-i kontseptsiooni. Selles peatükis käsitletakse sageli termineid, st pilvandmetöötlus, SaaS ja müük.

Selle uuringu teine peatükk liigub koos uurimismetoodikaga. Autor on kasutanud kvalitatiivset uurimismeetodit toidurestoranide omanike kogenud ja üksikasjalike vastuste hankimiseks. Järgnevalt on autor läbi viinud kaheksa poolstruktureeritud intervjuud ning vastajad on valitud konkreetse mõõtmise järgi. Kõik intervjuud viidi läbi näost näkku ja vastajatele esitati viisteist avatud küsimust, et jagada oma mõtteid ja kogemusi kontseptsiooni kohta. Ka temaatilise analüüsi kasutamine on antud uurimuse tulemustena konkreetseid teemasid.

Selle uuringu viimane peatükk on määratletud kui Tulemused ja analüüs. Autor on teinud tohutuid pingutusi teemade leidmisel ja leidnud, et vastajad nõustuvad täielikult sellega, et SaaS-i mõju on nende toidurestoranide äris positiivselt leitav. Samuti julgustasid nad seda, et SaaS peab tulevase äri erinevates üksustes mängima olulisemat rolli ja selle kaudu saab müük olla pidev.

Märksõnad: SaaS, Toidurestoranid, Müük, Kasv, Online toidu kohaletoimetamise tarkvara

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## ABBREVIATIONS

- Application Services Provision (ASP)
- Application Programming Interfaces (APIs)
- Customer Relationship Management (CRM)
- Enterprise resource planning (ERP)
- Human Resource Management (HRM)
- Infrastructure as a Service (IaaS)
- Platform as a Service (PaaS)
- Point-of-Sale (POS)
- Software as a Service (SaaS)



## **Introduction:**

Over recent decades, the rise in the field of Information Technology largely transformed the entire business sector. Many industries started to adopt various IT solutions to increase their sales and revenue (Asia R. Locket, 2018). The most important sector that acquired a large impact from the digital evolution was the Food and Restaurant Industry (Vivica I Kraak, 2020). Before this internet era, the Food business model was very specific and bound to limited customer boundaries. To expand business operations, restaurant owners started their restaurants in different locations.

The business expansion not only required huge costs but also involved various other aspects such as proper Human resources, better location to build their infrastructure, separate expenses to promote the business and attract customers. Traditionally, the food industry was completely manual (Matthew N. O. Sadiku, Sarhan M. Musa , Tolulope J. Ashaolu, 2019) , and the data were entirely managed in physical notebooks. The information technology and the internet network introduction in the early 1990s transformed the practice of various business operations (Mohamed Zaki, Mohamed Khater, Mariam Helmy Ismail Abdelaal, 2018). This transformation did not happen in a single day, it happened periodically with upgrades in various sectors in the Food and Restaurant business model.

Digital Infrastructure and Connectivity are some of the important factors of modern development. These two factors are completely included in the entire economy of Estonia. Estonia is one of the market leaders and the most important key players in a digital SaaS ecosystem. It is a country with a population of 1.3 million people and it is also an economy with a home to unicorns of about 4 billion-dollar contribution. It is very honoured in producing the largest unicorns in the world such as Skype, Kuehne+Nagel, Wise, and other unicorns such as Pipedrive and Bolt. There are around 480 SaaS startups in Estonia.

Estonia is also highly advanced in SaaS and FinTech with the advantage of a cashless economy offering over 99% of its transactions online. Estonia is also a pioneer in various other sectors such as Cyber Security, Food Industry, Electronics, IoT, Automation, Blockchain, Logistics, AgriTech, E-Health, R&D.

In Estonia, the entire Food Industry is digitalized. The digital ecosystem offers various merits for the end-users. With about Food enterprises, Estonia employs around 13000 workers. Estonia's Food market utilises modern software and IT solutions to operate its manufacturing,

production, packaging, and logistics. Incorporating these advanced technologies greatly helps the business enterprises to provide faster delivery, good quality, and fresh food to the consumer.

Initially, Large food chain corporations optimised their business strategies by building a complete end-to-end software infrastructure on various parts of their business operations such as Order Management, Inventory Management, Finance, and Payment (Zhi Li, Guo Liu, Layne Liu, Xinjun Lai, GangyaXu, 2017). This software played an important role in boosting the revenue in terms of performing detailed analysis of customers' ordering patterns, proper inventory stock maintenance, effective payroll cycle for the vendors and the employees, and various tools to trace the transactions.

But after the economic fall and recession in the entire market, it became very important for the enterprises to decrease risks and adopt a safe strategy in their approach. (Then Htaik Aung, 2014). There was a huge cost directly involved to develop and manage the entire IT solution. So, the organisations started to innovate new technology to improve the business operations and to reduce the cost involved in the IT technology. Implementing various IT solutions offered leverage to expand their business globally. Cloud Service is one of the important advancements which favoured global expansion and the ability to manage the operational Ecosystem.

The Food restaurant Industry has been coming across through a new revolution that is greatly led by Information Technology around the globe (Balasubramanian, K., Balraj, A., Kumar, J., & Jaykumar, 2015). There are many opportunities are rising on the web due to speedy development in the usage of Internet and It has been undertaken by many Food Businesses with comfort (Chavan, V., Jadhav, P., Korade, S., & Teli, P. 2015). This study aims at encouraging the adoption of SaaS by Food Restaurant businesses and how it has given new revolution in their businesses with larger amounts of sales than earlier

This study aims to evaluate both Positive and Negatives sides of the Usage of SaaS on the Sales of Food Restaurants. It can be identified with fast growth to certain businesses and Slow development process to few restaurants. The other opportunities which SaaS offers such as level of customer gain and retention, business expansion, and much more. Software is always in the position to travel immediately out of the gate. Also, it gives access from anywhere to the end-users, Quick customer service, Backup, and Trusted service with Proofs.

Research Tasks:

- Identifying Level of Sales growth in the food restaurant business
- Exploring The Differentiation between Traditional and Modern method of selling food
- Encouraging the Food Restaurant businesses towards Adoption of Software as a Service for rapid growth in their sales
- Analysing Comparison between the sales of food restaurants that have undertaken Software service systems to deliver the orders and the sales of food restaurants that have not come across Software service systems to deliver the orders

## 1. LITERATURE REVIEW

This Chapter will cover the Broad view of Software as a Service (SaaS), Its Origin with Cloud Computing, Types of SaaS, Characteristics with Advantages and Disadvantages. As Author believes adding a concept of Cloud computing initially would provide some Primary background of SaaS and how It works through Cloud Computing model. Followingly, the next part of this Section has been explained with Selling methods of a Food restaurants Since Contemporarily, the businesses have grown into several methods to increase their Sales. Such as: Dining method, Online Ordering and Hybrid method which is a mix of Dining and Online ordering. Therefore, the Author believes Explaining the Current Practices on Selling food by restaurants would be one of the significant parts of this study and therefore the relationship between SaaS and Sales of Food businesses can be well explained and identified.

Followingly, End two section of the Literature review has focused on the Adoption of SaaS in the Food Restaurant business, and it explains if there any more Software services are being used for business to increase their sales. Such as Point of Scale, Inventory Management, Order management, Mapping solutions, Finance software. Finally, the author focuses on the Comparison between the Existence and Non-Existence of SaaS in Food Restaurant businesses and how it helps business operations to boost sales.

To explain these questions author will move further with Choi, Hunsinger, and Medlin, 2016 work on Cloud computing, Virayo, 2020 work on Usage Statistics of SaaS in businesses, Work on SaaS types of Andrey Saltan and Ahmed Seffah, 2018, Sarbojit Banerjee (2014) work on Characteristics of SaaS model, Saddam Fuad Hussein Al Qadami, 2018 work on SaaS platform in Restaurant business. These frameworks actively listed many factors which are related to this study. Such as: How far SaaS has been included in the restaurant business, how each type of SaaS platform is contributing to the Sales of a Business restaurant, Also Author strongly believes here that SaaS is not only about Online delivery services in the Restaurant business. But It's about Point of Scale software, Mapping solutions for tracking orders, Customer relationship management, and Enterprise resource planning (ERP) for accounting and Project management of the business.

The author will strongly discuss the Impacts of SaaS in the Food restaurant business by highlighting previous study works from other Researchers.

## 1.1 Definition of SaaS

Cloud Computing is generally known as the Information Technology services offered by providers through the internet. The services include storage, servers, network, and other applications. It also fulfils infrastructure requirements such as hardware and software. (Choi, Hunsinger and Medlin, 2016). Cloud Service is also divided into five different layers. They are the kernel, hardware, Cloud Software, Infrastructure, and applications. (Pasi Tyrväinen and Joonas Selin, 2011).

As per the National Institute of Standards and Technology (NIST), Cloud computing refers to a convenient, shared pool of computing resources that can be implemented with agreement from the service provider. The resources such as servers, networks, and databases can be utilised on-demand as per the requirement. Over these recent years, the technology has witnessed a complete upstream, the user started to become more concerned about the capabilities of the services rather than the technical methods involved in it. (Harshit Jhaveri, Mamta Agrahar, Hardik Jhaveri, 2014).

The Evolution of cloud computing eradicates the traditional CAPEX (Capital expenditures) to OPEX (Operating Expenditure) model. (Suman, Parminder Singh, 2016). The term cloud computing started its journey back in the 1950s with the shared capability of using mainframe computers. It was very popular because it was economical to share the resource rather than purchasing individual ones. The new milestone of using virtualization began in the 1970s, which offered the capability to run multiple OS in a single isolated environment. The virtualization concept provided the ability to run multiple OS in a single device.

The development journey continued with the initiation of VPN (Virtualized Private Network). From then the cloud computing journey became an important area in the field of Information Technology with varieties of services such as Grid computing, Utility computing, and the latest Software as a Service Model. And with Web 2.0, many Tech Giants such as Google commenced delivering their browser-based application with the Ecosystem of Google Apps. (Harshit Jhaveri, Mamta Agrahar, Hardik Jhaveri, 2014).

It is forecasted that the entire cloud computing market would witness immense growth at a CAGR (Compound Annual Growth Rate) of 17.5% from USD 371.4 billion in 2020 to USD 832.1 billion by 2025 (ResearchandMarkets.com).

Cloud Computing is categorised into two basic models as Service Model and Deployment Model. The Service Model is further divided into three such as Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS), and the deployment model is also divided into four different types: Public, Private, Community, and Hybrid.

Service Model:

Infrastructure as a Service (IaaS): With Infrastructure as a Service (IaaS), the service provider delivers various infrastructure services such as servers, storage, network, and operating systems. All these resources are offered on-demand basis. In this deployment model, the entire technology would be owned by the provider which includes running, maintaining. The client utilises these resources on a pay-as-you-go basis. (Suman, Parminder Singh, 2016).

Platform as a Service (PaaS): Platform as a Service (PaaS) helps the user to deploy required development applications such as development tools, programming languages, libraries, and other services which are needed. In PaaS, the customer holds strong control over the application offered, but the entire infrastructure would be managed by the service providers (NIST Definition).

Software as a Service (SaaS): Software as a Service (SaaS) lets the user access software directly using a web browser and delivers service on the web. It is largely implemented by enterprises to perform business-related tasks. The adoption of SaaS decreases the cost and improves the quality of the operations with rapid growth. SaaS is also defined as a service or as an application that is accessed from the service provider's centralised data centre through a network on a metric pricing structure. So, the SaaS model can be considered as an essential contributor to the application services provision (ASP) model. (Euripids Loukis, Marjin Jassen, Lanislav Mintchev 2019). According to Virayo 2020, SaaS applications are used by over 80% of businesses.

Deployment Model:

Private Cloud: In Private Cloud Deployment, the service provider offers exclusive cloud service to various users of a single organisation. It primarily uses the concept of virtualization to distribute the entire IT system to maintain isolation. It also provides entire public cloud services designed and dedicated to a single organisation. (Harshit Jhaveri, Mamta Agrahar, Hardik Jhaveri,2014). According to NIST, a private cloud can be owned, operated, and

managed by an organisation, a third party, or a combination of both. It can also be available on or off-premises. And to be more precise, the private cloud comprises both private(internal) and public (external) cloud computing. Any number of clouds with various functionalities and types can be present but they include a dedicated service to move data from one cloud to another. (Aliasghar Azma, Nima Kianfar, 2021)

**Public Cloud:** Public Cloud deployment is a more common type of cloud usage. In this type, the servers are accessed through VPN or over the internet. All the required infrastructure and areas of maintenance are directly provided by the service providers. This model helps IT companies to conveniently manage their IT expenses. One of the fundamental advantages of utilising the public cloud is to scale the service as per the requirements (Colin Ting Si Xue, Felicia Tiong Wee Xin, 2016 ). This type of cloud service is more suitable for loads that require a short duration. For Example: During the initial days of development, new start-ups can effectively implement public cloud to perform their processes. Some of the key players in the public cloud offerings are Microsoft Azure, Alibaba Cloud, Amazon Web Services, Google Cloud, and IBM. Also, there are other providers who provide varieties of services. (intel.com)

**Community Cloud:** The Community cloud fulfils the shared and common mission of multiple users who work on the same functionalities. In this kind of cloud service, the entire cloud infrastructure will be managed by the central service provider or by a group of multiple providers. Some of the important functionalities in using the Community cloud are distributed mission, security, and internal policies. It is mainly implemented on on-premises, at the provider's end, or on both. This type of service is primarily used by the marketing teams to target specific customers(Colin Ting Si Xue, Felicia Tiong Wee Xin, 2016). One of the examples of Community clouds is the Open Cirrus cloud testbed. (Ilango Sriram, Ali Khajeh-Hosseini,2010).

**Hybrid Cloud:** The combination of all the three deployment models is known as Hybrid Cloud. It brings necessary data and application communication across each cloud in the network. So, in hybrid cloud deployment, once the private cloud attains its maximum usage limits it can utilise the resources from the public cloud to perform the processes (Ilango Sriram, Ali Khajeh-Hosseini, 2010).

### Brief Discussion on SaaS:

Some of the important challenges that were affecting the entire business industry such as changes in customer choices, enhanced technology, larger market expansion, and potential competition among businesses boosted the software premises to transform the cycle of development and delivery. (Oyepeju Oyekola, Lai Xu, 2020). In this section, let us briefly understand the initial journey of Software as a Service. The concept began to get its structure in 1961 when John McCarthy proposed the idea of SaaS at the Massachusetts Institute of Technology with the idea of utility computing. The 21st century was registered as an upstream for the development and implementation of the SaaS Cloud model. Some of the important factors which contributed to these expansions were the advancement of information technology, the boom of the internet, and the latest hardware capabilities (Software & Information Industry Association (SIIA), 2001)

The SaaS development and deployment with the essence of cloud computing features greatly transformed the operation of the entire software industry (Ibrahim Abaker Targio Hashem, Ibrar Yaqoob, Salimah Mokhtar, Nor Badrul Anuar, 2014) . Various IT service providers considered SaaS as a suitable option for the traditional on-premises software. But the enterprises hesitated to implement SaaS across various software applications. However, important factors which greatly attracted the end-user to consider SaaS-based solutions are attractive pricing models, Core computational capabilities, the ability to choose required software framework and technology, and the lesser availability of essential IT applications on the market. And SaaS predominantly attained the minds of both small and medium-range businesses which relies on the minimum requirement IT applications during the initial business journey (Alexander Benlian, Thomas Hess, and Peter Buxmann, 2009).

Over these years, the Licensing and Delivery model of SaaS-based solutions created a huge impact in B2B and B2C markets (Chung-Lin Tsai, Joon Mo Ahn, Letizia Mortara, 2021). And SaaS will closely compete with Cloud Advertising to rank in the second position in market capitalization. On a closer note, when we compare SaaS and the traditional software practices, the growth of SaaS increases six times exponentially than the on-premises delivery model. The applications that are delivered as SaaS provide lesser initial investment costs rather than the traditional software adoption process (Than Htaik Aung, 2014). The traditional and SaaS approach finds variation in three important sections: Remote hosting, Licensing practice, and IT outsourcing (Mutlaq B. Alotaibi, 2016). The Service-oriented



model also offers various advantages to the consumers right from revenue, profit as well as customer acquisition and retention. (Andrey Saltan and Ahmed Seffah, 2018)

The success of the SaaS model became completely possible with the entire spectrum of broader customers (Virginia Maria Araujo, José Ayude Vázquez, Manuel Perez Cota, 2014). According to Microsoft Research - 2018, the service providers who started to offer their services as SaaS were able to acquire new potential customers and provide necessary strategies and solutions through various value-added services, business intelligence, and analytics tools. This facilitated lower shipment cycles for developing new features, updates, and support for maintenance and management. (Intercept. Cloud). So, SaaS is basically a multilayer model which includes Infrastructure as a Service (IaaS), Platform as a Service (PaaS) developed and managed by various service providers. Some of the important components of SaaS are networks, servers, storage, and APIs (Application Programming Interfaces) which provide on-demand capabilities to the resources. Middleware with IaaS which connects application code to the run-time infrastructure compiles PaaS and the final combination includes infrastructure, various Operating Systems, and Hosted applications. (Inna Churakova Ramilja Mikhranova, 2010). The potential economic analysis of the SaaS pushed the developers and the consumers to change their interest in SaaS.

## **1.2 Types of SaaS Applications**

The SaaS model covers two types of companies. The first type of company is service companies that entered the SaaS market with offerings provided based on available software products. The second type of company developed new software products from scratch. But the adaption of the SaaS model involved larger expertise and efforts in implementing and changing the business model and redefining the purpose. (Andrey Saltan and Ahmed Seffah, 2018).

SaaS service providers offer various services to the user such as software, databases, and servers through the internet (Dr.Mahesh Kondraju, 2014). It also delivers the advantages to the users to utilise the software anywhere and on any device. The pricing for the software depends on the usage metric of the user. There are many types of SaaS application stacks available in the market. Under this section, various important SaaS application which is generally used in Food Industry are highlighted (Sarbojit Banerjee, 2014)

1. Customer Relationship Management
2. Enterprise Resource Planning
3. Delivery Management
4. Finance and Accounting
5. Human Resource Management

Customer Relationship Management (CRM):

CRM is basically an advanced tool to improve the interaction and relationships between the company and the potential customers. The primary goal of CRM is to enhance business conduct and maintain a closer relationship with the customers, organise and plan the processes to increase more productivity (Ronald E. Goldsmith,2012). CRM will become the largest revenue spending area in enterprise-level software. One of the important functions of the CRM is that it accumulates entire customer data from various channels and data mainly includes the complete purchase history of the customers, their interest, personal information, and the important purchasing behaviour ratio and relationship (Gartner, 2018). With the concept of SaaS, CRM received an advantage to become a ready-set-go platform, which helps the customers to build better customer relationships, strengthen customer retention and streamline the sales.

CRM is broadly divided into two different types. 1. Strategic and 2. Operational

Strategic CRM offers complete detail about the customers and helps to develop full-fledged customer data insights. It also helps the sales and the marketing team to maintain proper documentation about the customers, their journey, and their behaviour pattern. In the case of Operational CRM, the company processes the details of potential customers and develops a better relationship to boost sales (Albert Thor Magnusson, 2011).

Advantages of using SaaS-based CRM are

1. Low Installation cost
2. Cloud Connectivity to back up data
3. Live support
4. Ability to integrate various other business solutions.
5. Ability to target profitable customers
6. Run separate Ad campaigns for individual customers

### Enterprise Resource Planning (ERP):

ERP (Enterprise Resource Planning) is an information system specially used by organisations to streamline and connect various internal and external transactions (Ahmed Elragal, Ayman M Al-Serafi,2011). ERP covers solutions to fulfil goals and enhance the function of the entire supply chain and decrease the waiting cycle times. ERP is also the combination of various individual small systems into a larger working system. It is a complete system to analyse company information. ERP is a kind of software that companies use to perform everyday activities right from procurement, account management, risk, and compliance management including complete supply chain operations (Ahmed Elragal, Ayman M Al-Serafi,2011).

### Improved benefits of using Enterprise Resource Planning

1. The productive report can be generated from the real-time business information
2. It can completely decrease the operational cost to improve business processes and practices.
3. With ERP, all the different business sections can operate on a single user interface.
4. A constant association can be maintained between the back and front office to create a standard flow.
5. Integrated systems reduce management and operational costs.
6. Risk can be reduced with proper data integrity and financial controls

### Delivery Management:

According to a study by Grand View Research, Inc, (2019), the global delivery market is predicted to reach about 6.4 billion USD by 2025 with a CAGR of 15.4%. Various Food delivery tools help to manage doorstep delivery, payment features, discount, cashback, and proper driver management. The food industry is gradually shifting towards offering optimised and speed delivery services which would improve delivery speed and decrease operational costs. More advanced types of delivery methods such as robots, drones, and even parachutes are becoming more popular. It is expected that the technological improvements will increase the direct revenue (Linda Ferrell, Tracy Gonzalez-Padron, O. C. Ferrell, 2010).

By offering online delivery, customers can order food online and deliver it directly to the customer's doorstep. But traditionally in restaurants, ordering food involves customers exploring the paper-based menu card and notifying the waiter about the requirement. For this type of order, customers should visit the restaurants physically. Some restaurants also offer

options to Pre-order the menu prior to the visit. So, this enables the restaurant to make a proper arrangement. (Varsha Chavan, Priya Jadhav, Snehal Korade, and Priyanka Teli, 2015) Food delivery management works in aggregating the complete third-party delivery platforms together. It combines operational systems such as point-of-sale (POS), to streamline delivery automation.

Finance and accounting:

Cloud technology transformed the entire software practice. Using the Cloud and SaaS model, many new accounting tools are becoming more popular. In this type of accounting system, data is transferred directly to the cloud infrastructure, where it is analysed, processed, and sent back to the team. Instead of installing all the software on the local computer, the entire financial system is added to the cloud, which helps the user to access it using a browser over the internet (Mozhdeh Sadighi, 2014). So, the accounting solutions are getting advanced with this software method. This functionality offered an advantage by providing high-end technology to all three categories of businesses, small, medium, and large enterprises. It also reduces the investment cost largely with the subscription-based model. (Dr. Neelam Shaikh). It also offers various other important advantages such as cost reduction and saving time, data back-up, scaling, conversion, and recovery. (Yuliia Popivniak, 2019)

Benefits of using SaaS-based Finance Management

1. Digital transformation of innovative account management
2. Improving the efficiency of the accounting team
3. More collaborative working environment
4. More access to digital accounts
5. Informed decision-making and real-time insights
6. Competitive advantage over other enterprises

Human Resource Management:

In the Food industry, human resources are one of the important factors to boost success (Mariia Matviichuk,2021). A Proper and efficient team would greatly improve the business. Now the restaurant management is understanding the importance and the challenges associated with hiring good employees. Success in the Food business cannot be assured by a single person. It entirely depends on complete teamwork.

HRM completely compiles all these following functions

1. Human Resource Planning

2. Recruitment
3. Selection
4. Orientation
5. Training and Development
6. Compensation, benefits, and recognition
7. Performance management
8. Termination

It is strongly believed that the performance of the hotel relies on the human resource management decision to a great extent of increasing hotel efficiency or boosting the revenue.

(Human Resources in the Foodservice and Hospitality Industry)

Human Resource Management completely works with training, hiring, managing, retaining, and acquiring employees to manage the business operations. A proper HRM would contribute to proper workforce management to the business. The SaaS-based HRM market is estimated to reach 20.3 billion USD by 2023 from 11.93 billion USD with a CAGR of 10.2%. (researchnester.com)

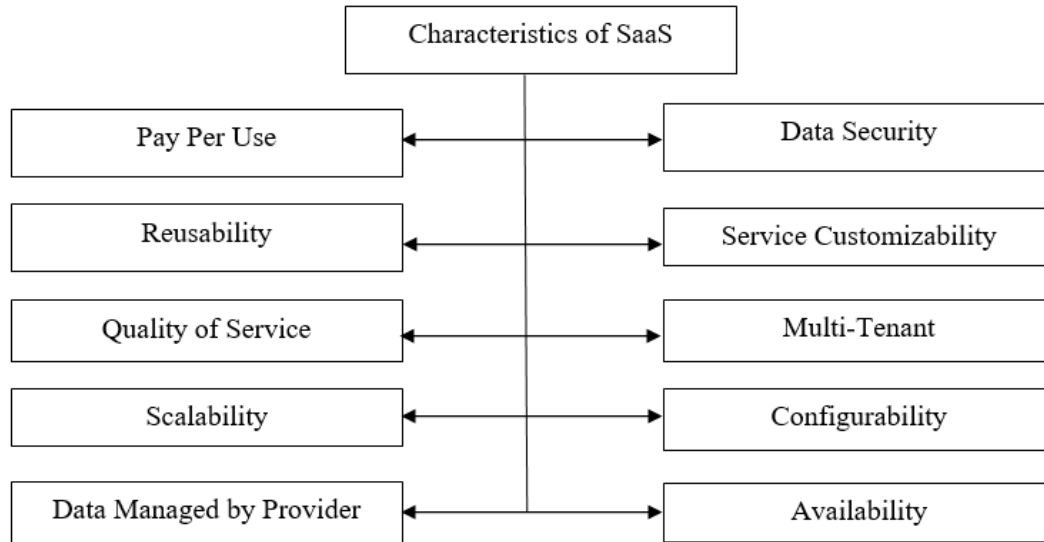
### **1.3 Characteristics of SaaS**

The concept of SaaS has by default possessed various important characteristics of Cloud computing. According to NIST (Mell and Grance, 2011), there are five important characteristics readily available on the concept of cloud computing:

1. Broad Network Access - All the resources are offered to the customer or the end-user through the internet. These resources can also be accessed on any type of device such as desktops, tablets, and even smart mobile phones.
2. Resource Pooling - These services are available to the customers on the model of multi-tenant architecture in which the applications are provided as both virtual and physical.
3. On-demand Service - Cloud providers help the users to access the resources without any human intervention.
4. Rapid Elasticity - As per the quantity and time, the computing services can be scaled up and down.
5. Measured service - A standard usage metric is used to calculate the resources such as storage, bandwidth, active user available, and the billing are fixed based on the usage.

Software as a service (SaaS) is also known as on-demand software or web-based model which runs directly on the servers of the provider. As per the plan and terms, the provider allows the user to utilise the resources by limiting performance, security, and availability.

Using the figure below, the key characteristics of SaaS are discussed (Sarbojit Banerjee, 2014).



**Figure 1:** Characteristics of SaaS

**Source:** Sarbojit Banerjee (2014)

Key Features of SaaS are as follows (Sarabjot Banerjee, Shivan Jain, 2014)

1. Reusability - The core concept of cloud computing is to reuse different kinds of services and resources over the internet. In software terms, the concept of reusability offers an ability to the software tools in constructing new innovative applications. This approach creates one-to-many relationships among the services. For example, Google map offers complete mapping operations to access various information that can be used by multiple customers.
2. Pay per use - The pricing for the usage of SaaS applications is calculated by considering various parameters such as duration or total services acquired by the user. With this pricing model, the user can access the service and as per their usage, the payment can be done.
3. Service Quality - SaaS service provider assures various measures to maintain the quality of services right from data security and the ability to regulate SaaS applications. Quality mainly depends on the level and capabilities of the provider. Availability, Performance, Usability, and reliability are some of the capabilities of the provider.

4. Multi-tenant - Under the concept of multi-tenant architecture, an instance of the software runs on a server to offer services to more than one client (tenants). In the Multitenant approach, all the users or the organisation get access to the same service and technology of the service provider such as servers, databases, and servers. Scalability, performance and service management, and proper upgrades are some of the advantages of the multi-tenant environment.
5. Availability - Availability is one of the important necessities of SaaS applications. All the resources are accessed readily from the server of the provider, so vendors maintain the high availability of their resources.
6. Scalability - To increase or decrease the load of the resources, the method of scalability provides the required capabilities. As the complete maintenance of the resources available on the provider's end, the resources can be scaled up or down depending on the requirement of the user.
7. Security - Data Security is one of the important challenges of adopting a SaaS model. But many security measures are followed by the service provider to offer a seamless journey to the users.
8. Configurability - Under this, SaaS software covers user interface, data, access control, and workflow.
9. Data Management - In the SaaS model, the service providers are responsible for managing entire back-end functionalities such as data management and service installation. But the user is not offered two different factors to choose where the data should be stored and how it should be managed. In this case, the customer should completely rely on the service provider and trust their security measures and reliability.
10. Customizability - This feature in SaaS offers the flexibility to the users to get more suitable solutions for their business operations. This also helps the owners to optimise and streamline their business more effectively.

In order to measure the quality of the SaaS applications and services, three main factors are taken into consideration as there are three roles (customer, platform, and application developer) available under SaaS architecture (Quality Metric of SaaS applications of Sarabjot Banerjee, Shivan Jain, 2014)

**Security Metric:** Security is one of the main factors of consideration before initiating or opting for any software application for both offline and online. To offer proper security, all

the three aspects under SaaS such as customer, platform, and developers must coordinate together. Under security, three categories of protection and prevention are developed.

1. Customer Security - As an end-user, the customer should undergo this mandatory process. There are four metrics that are involved under customer security:
  - i) Examining the Service Provider - Before adopting any kind of SaaS service, the customer must evaluate the service and the background of the provider.
  - ii) SLA (Service Level Agreement) - A proper agreement and contract should be agreed between the customer and service provider.
  - iii) Risk Management - To tackle any suspicious situation, a clear plan should be developed and maintained by the customer.
  - (iv) End-point security
2. Application Security- Application Security is a vital factor that should be analysed by the associated development team. Metrics under Application Security are
  - i) Secure Software Development Lifecycle - The various steps of the development lifecycle such as design, coding, and testing tools should be chosen securely to develop a secured application.
  - ii) Authentication and Access Control
  - iii) A proper roadmap should be created to manage the common security threats.
  - iv) Traceability and Non-Repudiation
  - v) Data encryption method effectively helps to tackle cyber data theft.
3. Network Security- According to ISO/IEC27001 and GB/T 22239, there are four metrics available under network security Physical, environmental, network, and host security.

Quality of Service (QoS) Metrics: Quality of Service is a serious issue for the end-user in measuring the usage of SaaS service. QoS focuses on Quality of Platform (QoP), Quality of Application(QoA), Quality of Experience (QoE)

1. Quality of Platform (QoP) - For both end-user and application developers, QoP is one of the key factors for the evaluation
  - (i) Transparency.
  - (ii) Location-aware capability
  - (iii) SLA management
  - (iv) Portability
  - (v) Data auditing.



2. Quality of Application (QoA) - QoA covers the important characteristics of SaaS
  - i) Multi-tenancy
  - ii) Configuration
  - iii) Interoperability
  - iv) Fault Tolerance
  
3. Quality of Experience (QoE) - To enhance the customer satisfaction
  - (i) Service availability.
  - (ii) Usability.
  - (iii) Performance.
  - (iv) Response timeliness.

#### **1.4 Selling Methods of Food Restaurants**

Food is always one of the important attractions for people all around the globe. Hotels and Restaurants are the business opportunities that serve quality food to the customers as per their interest. These are the places where people visit, dine and enjoy. To serve food, these restaurants have an on-premise kitchen set up to cater the food orders. So the customers are the important source of assets and factors for the business revenue.

To run a successful hotel business, customer satisfaction is an important necessity to sustain. (Sohrabi et al., 2012, p. 96). To increase the business and profitability, it is important to manage the customer properly. (Oh & Parks, 1997). In order to attract different customers, restaurant managers offer an innovative dining experience for better reach and success. Based upon the location, outlet infrastructure, preparation, and pricing the restaurants are broadly divided into many categories.

The restaurant industry is broadly divided into two categories: 1. Chain Restaurants 2. Independent Restaurants. (DeMicco et al., 2015).

1. Chain Restaurants - Chain Restaurants are a group of restaurants operated in different locations under common ownership or through common legal entities. Under Chain restaurants, food can be prepared on or off-premise of the outlet. (Wyckoff and Sasser, 1978, p. xxiii)
2. Independent Restaurants - Independent Restaurants are the ones that are operated by an individual person without any legal partnership (Pizam, 2005).

Based on the level of services, Restaurants are divided into various types such as quick-service restaurants, fine dining, casual dining and cafes, bars, and pubs. (DeMicco et al. (2015))

1. Quick Restaurants - Quick service restaurants offer a very limited number of food varieties in a very short period of time. In this type of restaurant, Customers order their food on the counter and can collect their order right after paying. (DeMicco et al., 2015)
2. Casual Restaurants - Actually casual restaurants were designed with the concept of offering services to middle-class customers who were planning to dine out with the family at a minimal cost.  
(DeMicco et al., 2015 p. 5)
3. Fine dining restaurants - These are also known as white-tablecloth restaurants. In this type of restaurant, premium-level services are offered by the patron. It is usually decorated with superior infrastructure and dining experience with a high price tag (DeMicco et al., 2015).

Café, Fine dining, Casual dining, Quick serving Restaurants, Food Trucks, or Concession Stands are grouped under "brick-and-mortar" which refers to a traditional face-to-face business offering services to the customers. (Shivam KR. Singh, Huzefa Saifee, 2020)

Technical Advancement greatly enhanced the restaurant business. Operation of restaurant businesses witnessed a drastic change with the improved computer and IT technology, more customised software to ease the business. (Buhalis, 1998; Olsen and Connolly, 2000). These developments commenced a new phase in the restaurant industry by offering food online.

Online Food Restaurants (Shivam KR. Singh, Huzefa Saifee): In this type of restaurant, the customers can order their food on the restaurant's online website and it can get delivered directly to the customer's doorstep. These types of services have also changed with the concept of food aggregators. These food aggregators tie up with various restaurants on a single platform to offer combined categories and varieties of cuisines. The cloud kitchens also boosted the concept of online food aggregators.

Cloud Kitchen: New innovations and high technology impacted the food industry largely. Using high-end technology, the new trend of cloud kitchens is becoming more popular. (Looma, 2019). This cloud kitchen is known as a virtual kitchen, shared kitchen, and ghost kitchen. It is just a commercial space which offers the facility to prepare food and deliver it directly to the customers without any dine-in facility.

Cloud kitchens only focus just on online orders so this helps these types of restaurants to operate from any location without any ambiance or infrastructure.(Colpaart, 2019)

## 1.5 Adoption of SaaS in Food restaurant Businesses

Adoption of CRM in the Food Industry: The Food Industry is always a challenging market because the same type of services is offered to the customers in different restaurants. To compete and retain potential customers, various restaurant owners offer premium quality services in the best possible ways. To attain this success, restaurants need to streamline their entire operational cycle right from purchasing to production and focus on sales. (Carl R. Oronsky, Prakash K. Chathoth, 2007)

Features and Benefits of using CRM in restaurants

1. Reward points for every penny spent - Using CRM, the restaurants can store the purchase history of the customer and can offer reward points for the amount spent. This makes the customer revisit the restaurant to redeem the points (Albert Thor Magnusson, 2011).
2. Loyalty Program and rewards - It is an effective way to attract customers and pull back them by offering exclusive services to subscribed customers. The restaurants possibly make custom-based meals for these customers. And CRM also helps to send warm wishes to loyal customers during celebrations.
3. Coupons or Stamp cards - Restaurants can also design a customised program in which the customers can use the dedicated cards at any outlet which accumulates special bonuses and points.
4. Cashbacks - The owner can offer direct discounts and cashback on the most popular food item served.
5. Target Marketing - Special offers and menus can be shared with the customers to boost sales (Ghazi Al-Weshah, 2019)

Adoption of ERP in the Food Industry:

Implementing ERP in restaurants helps the owners to maintain and operate the operational processes right from purchasing, accounting, finance, human relations, and production to logistics. To be more precise, ERP solutions provide a strong foundation to manage the business. Sending a purchase order to the raw material vendors, managing the orders, organising recipes, customer billing, and production cycle (Ahmed Elragal, Ayman M Al-Serafi, 2011). The complete stack of product management, production intelligence,

commerce creates a vital block for industry 4.0 in the restaurant industry. Some of the benefits of using ERP (justfooderp.com)

1. The exponential decrease in operational cost
2. More Flexibility
3. Complete End-to-end Management
4. 360 access reporting
5. Centralised database
6. Improved security measure
7. Better User Experience

Adoption of Delivery Management tools in restaurants: The important feature of implementing this tool is to reduce the hurdles in the process of ordering on both the customer and restaurant end. Delivery tools also include an end-to-end system to store the order details, delivery details, and driver management (Linda Ferrell, Tracy Gonzalez-Padron, O. C. Ferrell, 2010). So, this helps the restaurant organisers to process the orders more quickly without any confusion.

1. To optimise on-time delivery
2. Maintain Menu and process promotion activities.
3. Speed up delivery and improve accuracy
4. Loop customer retention
5. Improve service speed
6. Proper real-time analytics

Adoption of Finance and Account Management in the Food Industry (Mozhdeh Sadighi, 2014): From Traditional to SaaS-based account management tools, there are many advantages that these services provide. It includes inevitable and important business values.

1. Option to process accounts from anywhere
2. Ability to view real-time data
3. Compatible with the Food management ecosystem\
4. Live Bank support
5. Power to work with the latest software version
6. Distributes data sharing
7. Integrated Online payment
8. Develop more insights from business data

## 9. Flexible to work remotely

Using HRM in the Food Industry (Mariia Matviichuk,2021): Utilising HRM applications in restaurants develops various impacts in managing the workforce. In the hotel industry, customer feedback and satisfaction boost sales to a greater extent. Adopting HRM eases the problems involved in managing the employees. Some of the important benefits of adding HRM into the restaurant business

1. Accelerate hiring the right talent
2. Perform Training and Development
3. Develop customised plans and reduce costs involved
4. Common Platform to increase collaboration among employees.
5. Optimising global workforce with a single dashboard
6. Proper Payroll and Onboarding processes.

### **1.6 How SaaS in Business operations leads to Sales?**

In this technology era with the potential boom of the internet, the traditional business method is becoming outdated and new advanced methodologies and strategies are being implemented to boost the ROI and customer retention. The advancement of Social Media greatly impacted the sales of restaurants. The target marketing strategies mainly consider the younger generation audiences to increase the sales. Various data analytics and business intelligence tools are becoming more popular with advanced reporting and insights analysing techniques. The Food industry faces a lot of struggles as the market is very competitive. The latest concept of cloud kitchen offers Made to Order(MTO) food without a physical dine-in outlet. IT software plays a significant role in connecting the customers with the restaurants. To streamline more business, normal traditional outlets are also implementing online SaaS-based tools to perform online ordering platforms or join with food aggregators. These aggregators provide an online platform for restaurant owners to showcase and list their menu items to the customers. By using these online tools, customers can place their orders and get delivery through the associated delivery workers. These Food Aggregators generate their revenue through the commission charges from the restaurants or through delivery charges collected from the customers. To reduce the operational cost and dependency on these food aggregators, SaaS-based applications promote the restaurant owners to develop their own food delivery application as per their requirement and offer their service directly to the end

customers. Restaurants offering services only to the local market started to deliver their food and services to another part of their locality using these tools. (Anitta Abraham, Jan 2021)

Business Intelligence and Data Analytics : Technology improvements transformed traditional business operation methods such as service, customer attraction and retention, and also delivery. Business Intelligence is a combination of technology, tools and processes required to proceed collection of data, analysing it, and creating visualisation to plan business processes and decisions. For Duncan(2019), The data from both internal and external hotel operations provides an ability to develop BI.

According to Mariani et al. (2018), BI in hotel organisations is composed of various intelligent systems such as : Decision Support System, Artificial Intelligence, Data Mining. Descriptive Analytics, Predictive Analytics 6. Big Data

In Decision making, computer-based intelligent systems favour collecting various data, insights, and information as per the requirement of the organisation. Big Data focuses on storing raw data of all sizes. With Data mining and other AI tools, these large chunks of raw data are categorised and processed to develop business insights. This provides the ability to forecast and plan business operations. According to the Gartner survey, almost one-third of the Business Intelligence platform users are ready to transform to cloud infrastructure. (Gartner, Wisdom of Crowds Cloud Business Intelligence, 2012)

Some of the important features that highlight SaaS-based BI tools are

1. Easy to use and Operate - SaaS-based BI applications are easy to set up and also able to access from any location.
2. Ease of implementation, Scalability and Elasticity - SaaS-based BI tools can be accessed with any hardware infrastructure set up. This advantage favours the organisations to focus on resources steadily. As per the demand, the capacity of BI tools can be altered.
3. Effective adaptable solutions - SaaS BI providers frequently update their platform to offer new and upgraded functionality to the end-users. (Sameer S Patil, 2020)

### **1.7 Comparison between Existence and Non-Existence of SaaS in Restaurant businesses**

According to Oronsky and Chathoth(2007), the information technology transformation in the restaurant industry includes the integration of various SaaS applications in the operation of the entire business. Right from Social Media Integration into CRM platform, Customer Feedback System, Business management software tools, POS for entire order management, Revenue management, Human resource management. The SaaS-based applications improve the functionality of each and every business process of the restaurants. As an outcome, the restaurant would witness a greater impact on the ROI and also the restaurant would become a part of the IT-oriented business cycle. (Oronsky and Chathoth, 2007, p. 942).

It is observed that implementing online food services creates a tremendous rise in the number of orders. It is actually due to the tight schedule of the customers. (Rajeshree S Pol(2019))

According to Ahmed Tausif Saad (2019), The revenue of the business has been identified separately with Food restaurants which work with SaaS and which are not working with SaaS. If the Business has a SaaS concept in their business, then the discounts and rewards can be included in the application or website system whatever the business uses. On another hand If the business does not have any software services for them, then it would be really difficult to handle the sales growth since they could not provide any advantages through platforms Ahmed Tausif Saad (2019). Also Writer strongly believes the ERP and CRM are most significant tools in SaaS which need to be used for every business for their constant growth in Sales. If the customer relationship faces any drawbacks it would directly lead to bad experience for customers and the issue with customer retention in business Ahmed Tausif Saad (2019).

## **2. RESEARCH**

In this Chapter Author will cover the Type of Research Paper and the Strategy used for Conducting Research, the Plan of Data collection, the Questionnaires that are being used for collecting the data from respondents, and the analysis part of the Data.

### **2.1 Research Design**

This study aims to evaluate both Positive and Negatives Impacts of the Usage of SaaS on the Sales of Food Restaurants. It can be identified with fast growth to certain businesses and Slow development process to few restaurants. There, the Author has planned to conduct this Paper with a Qualitative Research Strategy. Conducting an Empirical Type of study with Semi-Structured interviews from the respondent has made more sense to this paper to evaluate the Impacts of SaaS on the Sales of Food Restaurants. This type of Research Strategy has allowed the management people of the restaurants to share their experiences on How much sales they are having by Using SaaS on their business, how far have businesses seen the growth in their sales with the periods, How they have been encouraged to have SaaS methods on their Food Restaurant businesses, How was the first experience while Adopting the Software as a Service for rapid growth in their sales and differentiation between Traditional and Modern method of selling food on Restaurants businesses.

The type of research would be conducted with qualitative research analysis. The Empirical Data collection has been used for evaluation of Both advantages and disadvantages in Food Restaurant's Sales growth. Analysing the data would clearly give an idea of How far Food restaurant businesses have benefited from SaaS (Software as a Service). Comparison between Two types of Food restaurants would encourage Food restaurants (Which are not having online ordering systems) to adopt Software as a service to maintain Growth in Sales.

### **2.2 Data Collection**

The author has focused on people From Banana leaf, Chakra, Puffid Bakery, Café Lyon, Poke Bowl, Wrap´N´Roll, Chi Restaurant, Tokumaru from Ulemiste City who are conducting Food restaurants business by Using Software as a service for their business process. Also In some points, Qualitative interviews have been conducted on people who are conducting Food restaurants business with the Dining methods without having any kind of Software as a service for their businesses. The reason behind this is to identify and analyse the Comparison



between the sales of food restaurants that have undertaken Software service systems to deliver the orders and the sales of food restaurants that have not come across Software service systems to deliver the orders. The author believes that the outcome of this study would contribute to her working on empirical research in the upcoming times to identify and analyse deeply the Importance of Software as a Service in various types of business and how it is making the biggest growth in every part of the businesses.

Accordingly, the Author reached ten Owners who have been doing business in Food restaurants for many years. Among Ten owners there are some owners, who are doing business with the help of SaaS in their business for Sales and other parts of the business. Also, the rest of the owners have been interviewed for the purpose to know how they maintain their business without the help of SaaS and are there any challenges on that which are being faced by them or If it is convenient to run the business without the help of SaaS and Finally if they have any idea to initiate SaaS concept in their business in future or in present to have a Good sales of the month and Profitable revenue of the year. All the respondents are residing in Tallinn but their businesses are being done in Ulemiste city by them.

For the research, certain characteristics have been used to choose the target population and bring out valuable responses from them.

- Their businesses should have not aged less than a year.
- They should have a basic knowledge of Software concepts in Information Technology. This is to make sure they understand the concept of Software as a service.
- They must have a clear idea about their sales through SaaS or Dining method or Hybrid method. This is to make sure how far they have been differentiating the outcome of the sale from their businesses through three ways.

Specifically, all the sizes of restaurants have been considered in the analysis. The main reason to adapt all the restaurants is to know the sales level of various restaurants with respect to their size and operation capabilities. The effectiveness of Business and Growth on Sales of Food Restaurants have been analysed clearly after conducting Interviews to authenticate details and to correlate with the Aim of the study.

The author has chosen Fifteen questions for the study from the respondents to evaluate the business growth with the help of SaaS, The Selling method is being used by them, Number of years operations, owning platform or aggregating with certain SaaS firms, the Pricing structure for the SaaS system, Impact of Online orders through Applications and Comparison between different two periods of sales. These questions have been structured with the help of previous studies by ChihChien Chen & Yang-Su Chen (2017), S Khurram Khan Alwi (2019), Xiaoyan Jiang & Yong Zhang & Shijun Liu (2010), Habeebullah Hussaini Syed (2018), David ng & Teck-Chai Lau (2019), Jack Collison (2020), Muhammad Izzuddin, Varsha Ganatra, Rishikaysh Kaakandikar, Daisy Mui Hung Kee (2021), Ramesh Babu (2019), McKinsey & Company (2015), Ni Nyoman Kerti Yasa, I Gusti Ngurah Agung Jaya Widagda, Sha mia, Kadek Leon Saputra (2020), Takeshi Shimmura, Takeshi Takenaka, Motoyuki Akamatsu (2010) and YashChawla, GrzegorzChodak (2021).

The author has tried to compile more relevant information with these questions from respondents to reach the Aim of the Study.

The Questions which were used for the Interview.

**Table 1 : List of Questions**

Sr. No	Questions	Study
1.	Please tell us the name of the restaurant?	
2.	How many restaurants do you operate? If many, kindly let us know the count and the place where it is located?	S Khurram Khan Alwi (2019)
3.	What is the Type of restaurant Do you have? Dining restaurant or Online ordering or Hybrid method (Mix of Dining and Online ordering)?	ChihChien Chen & Yang-Su Chen (2017)

4.	How long have you started to provide online services?	Jack Collison (2020)
5.	How do you operate your online food delivery or ordering whether through your own platform or through online aggregators such as Bolt, Wolt, or any other service partners?	Xiaoyan Jiang & Yong Zhang & Shijun Liu (2010)
6.	On average, how many orders do you get online and from offline?	Ramesh Babu (2019)
7.	If you maintain your own platform, what type of software model does it works - Own website, application, own maintenance sites, or outsourced apps	Habeebullah Hussaini Syed (2018)
8	If it is tied up with aggregator software, do you pay for that?	David ng & Teck-Chai Lau (2019)
9.	How much do you spend on our operational cost for maintaining or managing the software, it can be its own apps or with aggregators?	David ng & Teck-Chai Lau (2019)
10.	Do you believe that implementing new advanced tools such as data analytics, customer market insights, discounts would help to increase your sales?	McKinsey & Company (2015)

11.	To what extent does the online presence boost your sales? If yes, how does it impact your revenue? If not, what kind of challenges do you face?	Jack Collison (2020)
12.	Could you please share your thoughts on Which side gets strengthened in Restaurant businesses as of this SaaS? Customer retention or Market expansion	Muhammad Izzuddin, Varsha Ganatra, Rishikaysh Kaakandikar, Daisy Mui Hung Kee (2021)
13.	Do you believe, Encouraging SaaS in Food restaurants' business for Future Restaurant owners would impact their business? Any Reason for Yes, or No?	Ni Nyoman Kerti Yasa, I Gusti Ngurah Agung Jaya Widagda, Sha mia, Kadek Leon Saputra (2020)
14.	Do you use any other software to manage your operations such as Point of Scale, Inventory Management, Order management, Mapping solutions, Finance software	Takeshi Shimmura, Takeshi Takenaka, Motoyuki Akamatsu (2010)
15.	How do you promote your services, through offline marketing or through online social media marketing or ads?	YashChawla , GrzegorzChodak (2021)

Before the Interview, the Author visits the target restaurants in Ulemiste and asks for permission if they are willing to be a part of this study through the Interview process. Once the Respondents have confirmed from their end regarding time, date, and the place. Ten out of Ten Interviews have been conducted face to face as Author believes Face to Face interview process would be more convenient, informative, and more communicative than Online mode

interviews. As the author believed, the interview process has given good experience to the respondents to share their experiences and relevant information without any hesitation. Interviews were recorded and transcribed and it was done to make sure not to miss any relevant information from respondents. The Questions have been shared on the Interview spot and the Author believes that would be an opportunity to have more practical answers from the respondents.

### **2.3 Data Analysis**

The Data Analysis part of this study has been conducted by Author with Thematic Analysis. Deductive approach has been used in Thematic analysis as Author expects to receive the related theme from the data based on existing theory or Framework. Firstly, Author is familiarised with all of the data which has been collected through Interview and through that Author has got to know about the background of the data. Later, Author has moved to Coding part of the data which was helpful to highlight the sentences and phrases which had been delivered by respondents. Followingly, the list of codes has been compiled to prove the finding of the study and to complete the following research tasks:

- Identifying Level of Sales growth in the food restaurant business
- Exploring The Differentiation between Traditional and Modern method of selling food
- Encouraging the Food Restaurant businesses towards Adoption of Software as a Service for rapid growth in their sales
- Analysing Comparison between the sales of food restaurants that have undertaken Software service systems to deliver the orders and the sales of food restaurants that have not come across Software service systems to deliver the orders

Total Sample method has been conducted from seven people who are currently maintaining their food restaurant business with SaaS concept and without SaaS concept. Author believed that she had received enough findings through Seven interviews as it was clearly understandable and informative with much information to move further with this study though it was a small sample method. Also, the information which was shared by respondents has clearly contributed to study for its completion of research tasks and Author believes the study would be a significant part of future research.

After Thematic analysis from the Coding of Interview, following themes have been identified:



**Figure 2:** Identified Themes from Data Analysis

**Source : Author**

Furthermore, Author requested approval from respondents to identify their information regarding Restaurants. Such as Business's Name. Initially, Respondents were not convenient on that since they believed Mentioning the business names would disclose the sales level of the business and how much they are paying for SaaS platform and their own platforms are confidential and Respondents requested author to use their Pricing information and Details as anonymous and not to disclose any of confidential information regarding the business at any time except their shared information through interview. Followingly, they were able to understand the purpose of this study. Therefore, respondents responded to the First question with their business names.

## 2.4 Results

According to Sarbojit Banerjee (2014), we can describe that SaaS is a service model and It runs as a software to provide necessary services to its consumers or end-to-end users. Here the consumers have been mentioned as Service consumers who have benefited from the SaaS model. Also the quality of the SaaS model should be tested with a customised quality model for its outstanding outcomes to the consumers. Also as per Sarbojit Banerjee (2014), Quality and Security are the most predominant features of a Modern SaaS model as Traditional SaaS model does not contain the above mentioned features. According to Lee, Jae Yoo & Lee, Jung & Cheun, Du & Kim, Soo. (2009), accessibility worldwide and Compatibility are the

most significant advantages from the SaaS model as the authors believe SaaS has been already evaluated with Quality model and Through that they have found that SaaS has played above mentioned roles predominantly.

Overall, the results from the respondents for this study have given the meaning and helped the author to achieve the defined research tasks. Followingly, Author was able to identify and prove that SaaS is the Extreme pillar of a Food Business and It has proved its existence throughout the years and specially in Pandemic situations as well. Sales growth of the Food restaurant business has depended completely on the SaaS model to make their sales high and to improve their profit every year.

*I can say that mostly we have online delivery software services in our business. So, which means we are having orders or we are just delivering our food items to the online delivery. So we can say, we have two timings. The first one is online delivery timing and other orders are offline delivery timing, but when it comes to online delivery timing, it really gives more sales than offline delivery or takeaway. So I really prefer online delivery services (Puffid Bakery)*

Author had an informative conversation with the responses while in the Interview. As Author was able to find, most of the owners have been relying on Online-delivery services, and Some have Financial software solutions, and few are having CRM software solutions. Owners of Food restaurant businesses believe that their sales are completely dependent on Online method and They emphasise that customers are preferring Online orders only than Take away. The Traditional Food Restaurant industry has been drastically changed by Online delivery Services and It escalated the sales of Business (Jack Collison, 2020). The owners were able to see that it is an easy and convenient option for customers. Accordingly, It helps directly to the growth of sales. Also Respondents are comfortable with operational and maintenance costs as well with aggregator softwares. Such as Bolt and Wolt.

Task 1: Identifying Level of Sales growth in the food restaurant business

Author believes this study helps to improve the approach that Sales growth of Food restaurants has been taken over by Softwares (eg:Online Ordering software, Financial Accounting Softwares, Customer Relationship Management Softwares) than Traditional method of Selling (Jack Collison, 2020).

In this, Task Respondents strongly agreed that their Sales have been seeing rapid Growth while their using multiple Software solutions as service. Also It has helped them in unexpected world crisis situations too. Such as the Pandemic situation. Accordingly, Respondents have believed that their business would not be able to achieve a positive level of revenue without using Software solutions and They completely depend on Software applications to make their business more convenient and easy towards the customers.

**Table 2 : Responses from Respondents for research Task 1**

To what extent does the online presence boost your sales? If yes, how does it impact your revenue? If not, what kind of challenges do you face?	
Banana Leaf	It is actually present. It helps to boost our sales it's like the convenient in the services and also customers are really comfortable with online delivery so it means like they are actually ordering again and again. So our sales are getting higher.
Chakra	I can say we have online delivery most of the time and mostly everyone knows that online deliveries are very convenient for the customers as well. So we had some pandemic situations, but we had good sales because of the online delivery. And it is actually impacting our revenue or sales. I can say because it is quick delivery and easy for the customers as well. So most of the customers are depending on the online delivery.
Puffid Bakery	It's really helpful for our sales. It's actually giving a good sales amount in our business. Like we can see the growth as well. It has a rapid growth that actually maintains a good level of sales in every month. I would prefer an online delivery presence in our business.
Café Lyon	It actually gives a fast growth to sales and we can see it actually in reality that if we are just not having any kind of online orders for a day then our sales are not having any growth. But when it comes to online orders, the sales are really having good growth.
Poke Bowl	Yes, it is actually impact our revenue. I can say it's actually a booster for our growth of sales.
Wrap N'Roll	Yeah, I can say online deliveries are really mandatory for our business. I cannot prefer offline or take away all the time because the growth of sales or the improvement in the sales amount, it actually depends on the online
Chi Restaurant	Yes because it's a good level of growth or development in the sales
Tokumaru	It's a positive impact on our sales growth.

Author was able to find two significant themes from the responses of Task one. Respondents understood that their Sales have been seeing a rapid growth with the help of SaaS. Also they



have specifically mentioned that One of the biggest tools from SaaS is Online Delivery Softwares which made the business easier to climb up in their revenue root (Jack Collison, 2020). The main reasons for the respondents to emphasise Online food delivery software as an important one in SaaS are Quality of Service, Availability and Easy to use for users Banerjee, Sarbojit. (2014). This helps the author to find two main themes through Thematic analysis by the repeated codes. Such as Rapid Growth and Online Food Delivery Software.

Task 2: Exploring The Differentiation between Traditional and Modern method of selling food

Author was able to find different types of Selling methods in the food restaurant business. Also It helps the author find what are the most dominant selling methods in the business and if owners are really looking forward to keeping the same methods or they would like to change in a timely manner. This task mostly focused on Traditional and Modern selling methods of Food business. Such as Dining (DeMicco et al., 2015) and Online ordering system (Shivam KR. Singh, Huzefa Saifee). Author was able to identify that The sales are higher with Online Food delivery software which is part of SaaS and the reason behind this is, respondents have strongly agreed that they and customers are really preferring for online order software and therefore owners are able to go through more sales in the times of Online orders though they have dining method (Looma, 2019). Also, respondents believe that it completely depends on customers' choices. According to contemporary changes in the world, most of the customers would like to have online orders as they are gaining types of advantages too. Such as discounts, coupons for next orders (Jack Collison, 2020). Followingly, Author finds the Higher sales with SaaS is a one of another themes in this study and this task has contributed well to find the related theme on this.

**Table 3 : Responses from Respondents for research Task 2**

Banana Leaf	It is both which is like dining restaurant and online ordering but we usually close the time for online orders in the evening
Chakra	We have online ordering and dining method as well which means take away so I can say it is actually good for us as well because most of the times we are having good sales in online ordering and most of the time so we do have good sales in the take away as well so but it's I can say it depends on the customer choices
Puffid Bakery	Yes, we have a hybrid method. It is take away and online ordering

Café Lyon	We have a mix method, means take away and online delivery but most of the customers are preferring for online order
Poke Bowl	We have certain timings, the Evening Times which is for only take away and there are certain timings which is for only online ordering so we we actually have both types of methods
Wrap 'N' Roll	It's online ordering and Take away
Chi Restaurant	We have mostly online ordering, but we do have take away but we actually prefer online every time. As I can say it is actually good for us as well customers preferences are mostly depending on online ordering
Tokumaru	It's mix with Dining and Online Ordering.

Respondents have agreed that they could see a huge difference between the Dining method and Online ordering since It impacts directly in the sales of businesses. Therefore, they look forward to keeping the online orders more than offline as they believe it would boost the annual revenue (James, S. , 2019, November 5). From this task, Author believes that Higher sales of the business can be seen in online orders and Sales of a business has the view for the future improvements in the business.

Task 3: Encouraging the Food Restaurant businesses towards Adoption of Software as a Service for rapid growth in their sales

Carl R. Oronsky, Prakash K. Chathoth (2007) mentioned that the Restaurant business has to keep potential customers to have a constant growth on their sales. But It's quite tricky as the customers' preferences can be different to each restaurant and it always depends on how a specific restaurant provides services towards their customers. Accordingly, Owners can find if they have stable sales or fluctuation in their sales. To achieve this point, the Food industry must need advanced technology for premium quality services and it would lead to constant growth in sales (Carl R. Oronsky, Prakash K. Chathoth, 2007).

From this task, Author was able to find that Adoption of Software that respondents believe is Delivery management Software in their business. Also Respondents strongly believe that there is more importance for this management software and it helps their services in an easy process. Therefore, the customer retention has been stable since owners started to adopt this Software into their business. (Linda Ferrell, Tracy Gonzalez-Padron, O. C. Ferrell, 2010). Also few of respondents have been encouraging other SaaS tools as well. Such as ERP and

CRM and Financial softwares and They made statements that it helps them to develop and maintain other business units properly (Ahmed Elragal, Ayman M Al-Serafi,2011) .

**Table 4 : Responses from Respondents for research Task 3**

Banana Leaf	I encourage that because it is actually helping on the sales and the customer side and everything about sales
Chakra	Yes, definitely I would actually encourage this even if it is not with any other softwares I would say it for online delivery because I can see the future business is always depending on the IT softwares.
Puffid Bakery	Yes, I would actually recommend For the future restaurant owners because I would say I'm using online delivery and some financial software as well which actually helps us for the accounting and the financial calculations and the maintaining the financial records. so I would really encourage to the future owners.
Café Lyon	We actually use kind of ERP software and the CRM as well which is really helps us for the customer relationship and the enterprising management and as well but I will say yes that at least we must have online delivery services for our future restaurant owners to have a good growth in their sales
Poke Bowl	Yes because the reason is if they need really good sales definitely they need to come up with the online delivery software services
Wrap`N`Roll	I can say yes to the online delivery software tool
Chi Restaurant	Of Course yes, because the sales of restaurant is nothing without online delivery services in this current world
Tokumaru	For sure, future restaurant owners need more advanced software tools to have a positive outcome on their sales

Moreover, respondents were able to deliver some of their knowledge on different types of SaaS tools and It makes the author understand that this study has more broader views. Also Author found this study to give an opportunity to respondents to improve their knowledge on different types of SaaS tools and Its impacts on their Sales of Business. Followingly, respondents agreed that they would indeed encourage the adoption of SaaS to Future business owners too.

Task 4: Analysing Comparison between the sales of food restaurants that have undertaken Software service systems to deliver the orders and the sales of food restaurants that have not come across Software service systems to deliver the orders

The final task of this study has been conducted with the same respondents and followingly, Author was able to identify that there is no Food restaurant business without SaaS tools on their business. But some owners have limited time for their usage on SaaS. Such as daytime for Online orders specifically and Evening time is specifically for Take away or dining methods. Respondents have agreed that the outcome from using SaaS for their orders and other parts of business have a greater impact on their Revenue than without the SaaS system (Oronsky and Chathoth, 2007, p. 942).

**Table 5 : Responses from Respondents for research Task 4**

Banana Leaf	In real, we can't get any numbers but we can say like around frequently we have online orders in daytime and later evening we will have take away or pick up.
Chakra	It is actually sometimes tricky to calculate like how many orders we are getting online and offline but most of the orders are online than offline
Puffid Bakery	I can say in the percentage wise if it is possible, for example 70 percentage of orders are like online like other orders are like take away or offline we can say
Café Lyon	Oh yes most orders are from online only because people prefer online orders mostly than offline
Poke Bowl	We have online mostly, I want to say if it is for example if I have like 50 orders in a day then I will have almost 35 to 40 orders are in online and rest of those are offline yes.
Wrap`N`Roll	I can say that's actually easy to answer because online orders are really high than offline
Chi Restaurant	It is completely neutral like it is; actually we get online orders and the same times as offline equally so it is like I can't actually measure how much it is online and offline. It is equal to both.
Tokumaruru	Well, offline orders are really less in our business but online orders are like really more. so it Actually helps us to have good sales. As everyone knows, definitely people really like to have the online orders than the takeaway.

Accordingly, Author believes that comparison between two types of users in this study has been fulfilled with the approach that both users have a SaaS system on their business but among them, one of users has limited usage for SaaS (Ahmed Tausif Saad, 2019). Also, the owners who have limited timings for Online ordering software have agreed that they would like to make it complete online orders in their opening hours of Restaurant.

### **Rapid Growth in Sales**

Every business in the Food industry is being contributed with rapid growth from the SaaS model and It has been seen as an essential contributor to the Sales of the business with affordable maintenance costs and operational costs (Euripids Loukis, Marjin Jassen, Lanislav Mintchev 2019). The Global food restaurant industry has been depending on Online delivery management for their rapid growth and It is predicted to have around 6.4 billion USD within couple of years and It has been confirmed that SaaS has been providing the immense support and its contribution towards the Sales of Food restaurant Businesses (Grand View Research, Inc, 2019). The main reasons behind these have been identified as Easy delivery, Simple Payment options, Discounts and Quality of Services through the Online software applications and It helps businesses to go through the rapid growth in their Sales part of business. Also previous studies also found that The SaaS model is being transformed with more advanced tools. Such as Robots and drones and It is strongly expected that it would impact directly to the revenue of the year and It would be constant (Linda Ferrell, Tracy Gonzalez-Padron, O. C. Ferrell, 2010). Another significant tool is CRM which is really helping businesses to manage the communications and interactions with customers. It allows businesses to gain loyal customers with stable sales (Carl R. Oronsky, Prakash K. Chathoth, 2007).

*It's really helpful for our sales. It's actually giving a good sales amount in our business. Like we can see the growth as well. It has a rapid growth that actually maintains a good level of sales in every month. I would prefer an online delivery presence in our business (Puffid Bakery)*

SaaS has proved that it could transform the Sales level of a business from lower level to high level with constant improvements

## **Online Food Delivery Software**

*“Online delivery is surging, and eating in is the new dining out. Online commerce reduced traffic in brick-and-mortar stores, which this year are closing at a record-setting pace... Meal-delivery companies are a symbol of what might be the most powerful force in business today: convenience maximalism.” Derek Thompson, The Atlantic (2019)*

According to Jack Collison, (2020) online food delivery software is the new online sales channel for the Food restaurant business to increase their Revenue. It can be understood completely that Online food delivery software is the significant software under SaaS model in contemporary times. Respondents have agreed upon the statement that they would be able to find now how far the sales have been seeing a growth with the help of Online Food Delivery Softwares. There are many reasons that respondents have agreed that convenience and Quality of services are the most important factors which help the sales to be increased. Most Food restaurants are completely dependent on Online orders to increase their orders and through that reach a good revenue level of the year (Espadas, Javier & Concha, David & Molina, Arturo, (2008).

*I can say we have online delivery most of the time and mostly everyone knows that online deliveries are very convenient for the customers as well. So we had some pandemic situations, but we had good sales because of the online delivery. And it is actually impacting our revenue or sales. I can say because it is quick delivery and easy for the customers as well. So most of the customers are depending on the online delivery (Chakra).*

Previous studies state that Online delivery software services are transforming the food restaurant business into new normal (Lau, Teck-Chai & ng, David, 2019). Also apart from Sales growth of the business, there are a couple of more advantages too while adopting SaaS model into the business. Such as Customer loyalty and customer Satisfaction (Kian Yeik, Koay & Cheah, Henry & Chang, Yi, 2022).

*“Yeah, I can say online deliveries are really mandatory for our business. I cannot prefer offline or take away all the time because the growth of sales or the improvement in the sales amount, it actually depends on the online (Wrap 'N' Roll)”*

### Use of Different SaaS tools

Usage of SaaS can be seen in various ways. Such as in the model of Software, Storing the datas in the databases and The Physical Servers which is being used storing, sending and receiving the datas. These are the main usages in the contemporary IT era for users from SaaS (Dr.Mahesh Kondraju, 2014). The advantages from the Different types of SaaS tools vary from each one. As a Software, There are three types of people who are related to it. First one is Provider who provides the software with the licence agreement on a monthly subscription basis. The Second is, The Clients or Customers who buy the software from the provider and provide it as a service to their users. Also, the meaning of Users and Customers are always different in the SaaS concept. Finally, The users can be named as the people who actually experience the service from the software or they can be called as End-users as well. The pricing for the software depends on the usage metric of the user. As per the market, There are multiple SaaS tools which exist for the development of Food Restaurant businesses. Such as various important Such as CRM, ERP, Delivery Management, Finance and Accounting, Human Resource Management (Sarbojit Banerjee, 2014).

According to this study, SaaS has been providing its dominant place on Online Delivery Management and other than that Author was able to find it from CRM and ERP as well.

*“ We actually use kind of ERP software and the CRM as well which is really helps us for the customer relationship and the enterprising management and as well but I will say yes that at least we must have online delivery services for our future restaurant owners to have a good growth in their sales (Café Lyon) ”*

The different SaaS tools provide the impact directly to the Sales of Food restaurant business and It has been mostly identified as Positive impact. Accordingly, Characteristics of SaaS are equal to each and every tool. Such as Broad Network Access, Resource Pooling, On-demand Service, Rapid Elasticity, Measured service (Mell and Grance, 2011). These Characteristics have been proved by the author by receiving related responses in real from the respondents who have engaged with at least one of the tools of SaaS in their business.

*“Yes, definitely I would actually encourage this even if it is not with any other softwares I would say it for online delivery because I can see the future business is always depending on the IT softwares (Chakra) ”*



## Higher Sales in restaurant with SaaS

As mentioned by Jack Collison (2020), Online delivery services which are a significant tool under SaaS model have been providing zero signs in slow process in their impacts towards the Sales of Food Restaurants (Jack Collison, 2020). The results of this study can be related to the Pandemic situation in which everyone has been affected extremely and then the demand for Easy and Convenient services has been growing higher. The opportunity of that has created a pathway to Food Restaurants to involve completely into SaaS model in their business and therefore they chose it clearly Online delivery management software as a booster for their sales growth.

*“I can say we have online delivery most of the time and mostly everyone knows that online deliveries are very convenient for the customers as well. So we had some pandemic situations, but we had good sales because of the online delivery. And it is actually impacting our revenue or sales. I can say because it is quick delivery and easy for the customers as well. So most of the customers are depending on the online delivery (Chakra)”*

According to Dr. Mitali Gupta (2019), Customer comfort also one of the reasons where SaaS is able to provide its complete service into the business and there directly it has led to the Higher Sales. As the preferences from the customers have been taken as an important factor why the Food restaurant business comes up with a SaaS model to generate their sales and increase it day by day.

*“It is actually present. It helps to boost our sales it's like the convenient in the services and also customers are really comfortable with online delivery so it means like they are actually ordering again and again. So our sales are getting higher (Banana leaf)”*

As explained by Oronsky and Chathoth(2007), the rise of Information technology into the Food restaurant business has given the opportunity to participate in the integration with types of SaaS softwares. Accordingly, It has been identified that The software makes the business into a development path and their income.

*“It's really helpful for our sales. It's actually giving a good sales amount in our business. Like we can see the growth as well. It has a rapid growth that actually maintains a good level of sales in every month. I would prefer an online delivery presence in our business (Puffid Bakery).*



## Conclusion

Information Technology provides services through the internet as it is mainly known as Cloud computing. Servers, Storage, Broad network and Other Softwares and applications can be identified as the main services which are being provided by Cloud computing and Its impacts into the world business market is huge (Choi, Hunsinger and Medlin, 2016). Service model and Deploy model are the main types of cloud computing which predominantly impacts on business with its unlimited resources. The SaaS model has basically fallen under the Service model of Cloud computing and it takes and plays the role heavily into the IT era. Author has tried to relate and research the SaaS and its impacts on particularly in Food restaurant business as Author believes that Customers of SaaS (Restaurant owners as per this study) must need to know that how far they invest on Software and how much they have been involving into Maintenance and operational cost for SaaS and if it is higher than the sales which has been gained through SaaS softwares.

Accordingly, The study engaged with several Food restaurant owners who have been actively involved in SaaS softwares and with other Selling methods. Through this, the study has analysed firstly how extent the Sales has been seen with the growth, is it changed from earlier, is it an improvement or slow down towards revenue. Followingly, The study found that Online delivery Software is the predominant SaaS tool when it comes to Food restaurant business and its impacts on sales are unlimited. Also Author found it with the relation of the Pandemic situation as well as respondents agreed that they actually were able to see the growth when all the take away and offline methods have disappeared in the Pandemic situation. This is related majorly with the finding of the study conducted by Jack Collison (2020). As Jack Collison (2020) was able to find exact figures in the amount of the sales through his Quantitative research methodology.

The SaaS has not been seen with only Online delivery management software rather it is engaged with more softwares and application in the business. Such Financial softwares and Human resource management softwares. According to this study, Author was able to find majorly the usage of different SaaS with the relation of CRM and Financial softwares to as it were comfortable to business owners for making their management process in Accounting and Customer relationship as well. Exploring the different SaaS tools in the Food restaurant business has provided the effectiveness Kim, Sung-Bum & Kim, Kathleen & Kim, Dae-Young. (2016).

Followingly, The study was able to find if the Sales are reaching the higher level in real with the impact of SaaS in the Food restaurant business or is it a slow down process. The author was able to prove that it is actually higher Sales in restaurants with the help of SaaS as it can be seen through responses in the interview. The rise of SaaS is an actual impact into the business as it has never ended with negative impact except in some situations. Such as if the operational cost is highly paid for softwares, frequent downtime in the softwares.

Also the results of this study has been conducted through Thematic analysis by identifying the repeated or focused themes in the responses from the interview. Respondents also strongly agreed that the impact of SaaS in their Sales is never ending as it has huge sources and it has the quick solution in any situation. Accordingly the business has never seen the down process through the adoption of SaaS. Also respondents are strongly encouraging the SaaS model towards the future owners too at least with Online delivery Management software. There the future owners would be able to see how far the SaaS has been impacting their sales by its unlimited and configurable services towards the business. Finally the results of this study has been successfully related with the research tasks which have been created by the author and It helps the author to believe that more research on this topic can be researched in future with the help of Existing theoretical approaches and Primary resources.

To conclude, Author wants to emphasise that The impact of SaaS has been focusing on the positive side Sales of Food restaurant business. Also the author believes that SaaS is a broader topic with more parts and advanced developments but it can be separately researched with each part of a business. Such as Manufacturing, Marketing, Logistics and Operations. Author recommends more topics about SaaS in the relation of business units and its productivity and effectiveness are really important in future as the Information technology has never had an ending, rather it has been growing dramatically towards more advanced tools. Apart from the Sales part of Business, The SaaS topic can be researched with customer retention, customer loyalty and customer satisfaction as above mentioned are significant outcomes of a business.

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**APPENDICES**

## Appendix 1 - Data about Interviews

Name of Restaurants	Medium of Interview	Interview Length (Approximately)
Banana leaf	Face to Face	12 minutes
Chakra	Face to Face	13minutes
Puffid Bakery	Face to Face	10 minutes
Café Lyon	Face to Face	10 minutes
Poke Bowl	Face to Face	11 minutes
Wrap N`Roll	Face to Face	09-10 minutes
Chi Restaurant	Face to Face	16 minutes
Tokumaru	Face to Face	13 minutes