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Department of Computer Science

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Business Information System Management

----- Exploring, analysing, proposing, and designing a prototype application system to improve policy management in the restaurant industry. -----

by

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ABSTRACT

The development of a restaurant prototype will be the focus of this project. It analyses the case of Leadbelly's and Drunch's existing systems to illustrate how company-wide issues can be resolved and how a restaurant's process can be structured to improve performance. This is done by comparing and contrasting the similarities and differences between the two.

The case studies of the restaurant monitoring system have provided a helpful implementation structure as well as a locally tailored model for restaurants to use when developing their primary system for their management system. Both the requirements for operating successfully as a restaurant and the infrastructure needed to do so are deliberated upon and decided upon.

In order to acquire a more in-depth comprehension of the concept of system development and to triangulate these factors, the following three studies were carried out on the research subject that was selected:

- The Executive Interview Survey

This study examines the executives', or in this case, the general managers', perspectives on the success of the company as well as the technological value that is produced. When it comes to maintaining both organisational progress and competitiveness, many experts believe that a centralised system is one of the most important factors to consider.

- Observation

This provides the primary investigator with the opportunity to monitor the flow of public information as well as the utilisation of innovation to achieve the appropriate flow and utilisation of the existing cutting-edge technology.

- The Staff questionnaire Survey

The experiences of staff members working in restaurants are analysed in this study. It demonstrates an essential point that the development of a system is significantly influenced by the use and participation of a team, as well as the manner in which the system lessens the workload of the personnel.

The findings of the three surveys and the case studies are used to construct the administration system for the dining establishment. This model provides a practical execution prototype, which is made up of three main parts: team management, product and inventory administration, and a communication system for restaurants. as well as a structure to support the continued development of the system. This study needs to provide material that is not only helpful but also important in terms of making recommendations regarding the expansion of the system for various other restaurants.

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1 INTRODUCTION

It has been determined, on the basis of the findings of an initial investigation, that restaurants and clubs in the UK have issues with policy monitoring. The plans ultimately ended up being dispersed as a consequence of these circumstances, which made it difficult to get access to them and to maintain them as up-to-date as possible. As a direct consequence of the process of producing several iterations of the plan, members of the staff identified out-of-date plans, inefficient communication, low collaboration, an insecure system, and a lack of responsibility amongst stakeholders as difficulties that were caused by the situation.

For the purpose of this study, two case studies, “Leadbelly’s bar and restaurant” and also “Drunch,” will be researched in order to produce a sufficient system that is suitable for eating establishments to employ for the management of their plans and also the growth of their enterprises. In addition, one can devise a plan that will unquestionably assist in avoiding the vast majority of the difficulties that were experienced by the facilities and in duplicating the successes that were accomplished by both establishments by conducting an analysis of the processes that were used in both of those establishments.

1.1 PROJECT AIM AND OBJECTIVE

Rethink the way in which business tasks are managed by recommending and developing a model with a flexible system to assist with the company’s policy monitoring. This model needs to be able to perform well in a wide variety of circumstances and should be accomplished by analysing the workplace principles of business that come from within the company. Perform an in-depth analysis of their strategies for establishing technological leadership, effecting transformational changes, ensuring the long-term viability of their firm, and effectively delegating tasks in order to improve organisational success and performance.

2 BACKGROUND/ LITERATURE REVIEW

Concerns about safety and security were first confined to single-time-sharing mainframe computers of the 1960s and were the primary subject of the very first service policy. This policy was developed in the 1960s. After some time, these issues were expanded to encompass private venture boundaries, and after some more time, they were adjusted to concentrate on multi-network environments (Boutaba as well as Aib, 2007). The years between 1972 and 1975 were characterised by an increase in the range of protection modelling efforts. This trend continued after 1975 as well. This was done as a response to the safety concerns that arose as a consequence of the widespread success of time-sharing technology, the continuously decreasing cost as well as the dimension of computer systems, as well as the astounding success of computer-security professionals such as “tiger groups” in swiftly attacking and seizing control of systems (Anderson, 1972). A safety and security policy outlines the (high-level) guidelines that must be adhered to in order to govern accessibility control in an effective manner. “Access control” refers to the process of determining whether or not an individual’s request for access to the system’s managed resources and data should be granted or denied. This determination is made by analysing the nature of the request. A system that is responsible for enforcing the laws that were established by a safety policy is responsible for carrying out the selection process that is related to access control. It is possible to make use of several access-control policies, each of which corresponds to a given set of criteria for determining what should and should not be enabled. This

is something that may be done. These guidelines, as a result, provide a degree of specificity on the different methods by which one might ensure their own safety and security (Samarati and di Vimercati, 2000). A protection model contributes to the implementation of safety and security policy by providing a formal description of a security plan and also the characteristics it is intended to carry out. This helps put safety and security policies into action.

Through the process of formalisation, it is now feasible to display properties about the degree of safety and security provided by the access control system that is now under design. The security mechanisms more precisely specify the low-level functions (both software programmes and equipment) that apply the controls that are prescribed by the plan and are formally stated in the design. These controls may be found in the official specifications (Samarati and Vimercati, 2000).

Although there has been significant initiative in the business world as well as the academic community since the 1990s regarding the specification and application of plans and, much more recently, Solution Level Agreements (SLAs), there has been little emphasis given to the development of high-level objectives into low-level plans, and the investigation of policy development and evaluation has just recently obtained interest (Boutaba and Aib, 2007). This is a result of the fact that a large amount of work has been put into the implementation of Service Level Agreements (SLAs). The development of low-level management plans should be the end result of efforts to enhance policy. These plans should be derived from higher-level requirements. The method of reviewing policies and then afterwards making improvements to such policies nearly always goes hand in hand together. It entails analysing a group of policies in order to determine whether or not they conform and are suitable in relation to the high-level policy.

The concept that a policy-based solution needs to offer, in addition to the appropriate behaviour, appropriate efficiency in order to warrant its fostering in real-scale administration systems has actually been emphasised. This is because the idea has the potential to significantly impact the future of administration (Aib and Boutaba, 2007). This is a related concept to policy assessment, which has been emphasised in order to draw attention to the fact that plan optimisation has really been emphasised. This is a matching notion to policy evaluation. The definition of a set of policies that are successful in their execution is not sufficient on its own. There is a need for careful deliberation to be given to the question of whether or not a new set of policies may result in increased productivity. In addition, even when applying the identical collection of plans, the way in which those policies are organised during runtime may have an influence on the total commission that is provided. Analytical designs, despite the fact that they are beneficial, are not relevant to every circumstance. The primary explanation for this is due to the intricate nature of the actual case circumstances. In this regard, a simulation is an important method for verifying the consistency and performance of a plan remedy that has already been constructed. Case in point:] According to the findings of (Aib and Boutaba, 2007), it is not always possible to increase a company's business profit by taking into consideration a policy-based solution in which all aspects of policy spec as well as behaviour are dealt with in advance during an initial offline refinement process. This is because such a solution requires a great deal of preparation as well as preparation. This was shown by the fact that there are times when it is not feasible to raise the profit that the service provider's business makes.

2.1.1 COMPUTER-BASED POLICY MANAGEMENT SYSTEM

“Policy monitoring” refers to the process of developing, disseminating, and maintaining an organisation's norms and procedures in accordance with established standards. An efficient plan management system may lessen the likelihood of adverse outcomes in a couple of different ways. To begin, it makes it easier for workers who provide direct care to get coverage, which in turn enables them to provide higher levels of

care while simultaneously improving their ability to protect themselves. Second, it may protect a company against legal action by ensuring that the company continues to comply with the most current certification standards and by producing an audit trail in the event that legal action is taken. In this way, the company will be better able to defend itself. Because the process of managing plans may be both time-consuming and expensive, hospital boards need to make the deployment of an efficient plan monitoring system a priority in order to save money and make better use of their time. A comprehensive and efficiently managed set of plans can support GRC tasks in the same way that restaurants do by connecting limits and assumptions, cultivating a culture of compliance within the organisation, shielding the organisation from legal action, and contributing to the accomplishment of the organisation's goals (PolicyMedical, n.d.).

The process of managing plans may be broken down into the following iterative cycle of step-by-step operations:

After an organisation has determined the presence of a need, the next step is to formulate a policy, which is then followed by an approval process. After a strategy has been developed and validated, it is disseminated to the workforce to ensure that everyone is on the same page about how to execute the plan (PolicyMedical, n.d.). This includes not only the distribution of the policy but also the supply of training and the verification that the policy has been followed. Monitoring ensures that the plan is followed in an unwavering manner throughout its entire life expectancy and that any kind of appropriate exceptions is dealt with in an appropriate manner. In addition, monitoring ensures that any kind of appropriate exceptions is handled in an appropriate manner.

Maintenance: Policies are assessed on a regular basis, revised as necessary, and shelved when it is determined that they are no longer relevant (Open up Conformity & Ethics Team, 2012).

The potential for danger at an eating place may be significantly mitigated via the use of efficient plan management. When plans that direct the treatment of clients and also the safety of personnel are easily accessible, they will be consulted a lot more regularly, which will ensure that staff members are adhering to the proper procedures. Plans that direct the treatment of clients and also the safety of personnel can be found here. As a direct result of this, situations that may have been hazardous for both the group and the people involved have been eliminated.

Any new eating restaurant really has to have a dining establishment management system (RMS). These technologies guarantee that the restaurant will continue to run properly by monitoring not only the personnel but also the goods and the customers. Depending on the lauserst of the institution, a conventional RMS installation may generally contain both software and hardware components, such as a cash register, barcode scanner, and invoice printer. Other components may also be included depending on the lauserst of the business. An RMS is a comprehensive tool that gives personnel a bird's-eye view of the restaurant as well as its requirements, which may make day-to-day operations far less stressful. This is the single most important benefit that comes from having such a system (Kurniawan, Zulfikar and Valentina, 2019).

It is intended for a number of restaurant surveillance systems to have seamless integration with a variety of different software programmes. This provides management employees and staff with the flexibility to tailor a system that is beneficial for the company and the way it does business in order to meet the specific needs of the company. A dining establishment monitoring system is a subcategory of point-of-sale (POS) software programme that is developed especially for organisations in the friendliness market, such as restaurants, bars, food trucks, and other facilities of a similar nature. POS software programmes are developed specifically for businesses in the hospitality industry. A retail management system, sometimes known as an RMS, is distinct from point-of-sale (POS) software in that it manages everything behind the scenes, including monitoring employees and ensuring adequate supply levels. Due to the fact that the needs of each

restaurant are unique, a wide variety of Restaurant Monitoring Systems (RMSs) are now on the market (Olszak, Bartu, and Lorek, 2018). In order to find the layout that is most appropriate for each bar and eating institution, it is necessary to take into account the aspects of the usage of the dining establishment, in addition to the significance of each component. There are many different kinds of restaurant software, such as Point-of-Sale Systems, Restaurant Appointment Software Application, Table Management Systems, Stock Monitoring Solution, Stock Monitoring Systems, Waiting List Software applications, Restaurant Bookkeeping Software Program, Dining Establishment Analytics Software applications, Dining Establishment Menu Home Builder Software application, as well as a lot of other kinds of software.

A policy monitoring system may be used to regulate practically every important aspect of a dining facility; however, the kind of RMS chosen will determine the specific controls that are available—having complete access to the following functions and features in the event that the end-to-end strategy is implemented: employee routines, including every day, holiday, and sick time; payroll; financial statements; stock; audit; reporting and analytics; core point-of-sale; customer relationship management; menu; and reservations (Kurniawan, Zulfikar as well as Valentina, 2019).

2.1.2 ADVANTAGES OF COMPUTER-BASED POLICY MANAGEMENT SYSTEM IN A RESTAURANT

1. Accounting for purchases and taxes

The RMS should capture all of the pertinent sales information in order to aid users in making important choices for the organisation. This information should include the most popular menu items, the busiest selling times, the team members who perform the best, and profits. In addition to this, the programme has to provide thorough data that may be used for the purpose of submitting tax returns.

2. Order management

The restaurant management system (RMS) that customers use should make it simple for staff members to do tasks like taking care of tables, reservations, bills, and food orders, among other things. Comps, spaces, and reimbursements should all fall under the control of both the and the supervisors, and people should be able to track the status of their orders at all times. If a person owns a bar, the point-of-sale system (RMS) the person uses to open tabs at the bar must allow for the pre-authorisation of credit cards.

3. The management of stock inventories

Customers will have a lot better understanding of when they need to reorder from the suppliers as well as how much they need to acquire if they are aware of the exact quantity of a product that they already possess. Some RMS software applications provide functionality for stock management, while different other RMS software applications might call for the incorporation of software from a third-party company in order to assist persons with this job.

4. Reporting and information on customers

If the dining establishment monitoring system that folks choose tracks and filters the data related to the sales and clients, consumers will have access to a great deal of information that will assist customers in expanding the company and making better decisions about marketing.

5. Promotional activities, gift certificates, and incentive programmes

Consider making use of a platform that provides marketing tools such as discounts and programmes that encourage customer loyalty or provide incentives and think about using that platform. It is conceivable that

the RMS comes with built-in advertising and marketing tools; however, even if this is the case, users will still be required to include software from a third party. Check to see whether the management system for the eating place can also help clients with the monitoring of gift cards in the event that people are contemplating supplying the company with gift cards.

Having an effective restaurant management system makes all the difference in the world when it comes to how smoothly the restaurant operates. Even if there are a lot of factors to take into consideration, it is still vital to take the time to figure out how the system needs to provide for the company and what consumers want to accomplish as a consequence of utilising it. Individuals are well on their way to having a restaurant administration system up and operating smoothly in the company when they have a definite aim in mind, along with a list of tasks that are non-negotiable. When consumers have both of these things in mind, they are well prepared.

2.2 TOOLS AND TECHNOLOGY

Because of the limited amount of time and the overall scope of the project, the only stage that will be feasible over the course of the project will be the modelling stage. This is especially important to bear in mind if the product or service in question in any way makes use of contemporary electronic technology, such as a brand-new web application, electronic publications, or landing pages.

This is the fundamental rationale behind why rapid prototyping is such a significant improvement. Within the sphere of manufacturing, the phrase “rapid prototyping” is one that is often brought up for discussion. “a collection of procedures utilised to quickly create a scale design of a part or assembly utilising three-dimensional computer-assisted design (CAD) information,” is one definition of the term “quick prototyping.” Another definition of the term “quick prototyping” is “a collection of techniques utilised to create a scale design of a part or assembly quickly.”

2.2.1 Adobe XD

Adobe XD, to tell you the truth, is capable of doing everything. It is necessary to make use of a single application so that all of the criteria for creating and prototyping may be readily met. Adobe XD allows for the creation of key items such as wireframes, mockups, screen lausersts, production-ready materials, and fully interactive prototypes in a very time-efficient manner. Some of the significant things that can be developed using Adobe XD include: In addition, Adobe XD is a wonderful tool for the development, management, and maintenance of transitions and communications of all kinds.

2.2.2 Marvel and Figma (Support)

Due to the simplicity with which it integrates with a variety of different style solutions, a Wonder is an option for the layout process that should definitely not be overlooked. It has excellent compatibility with applications from other parties, such as Google Drive and Dropbox.

No matter what kind of gadget users are developing, Wonder makes it incredibly simple for them to take their ideas from the illustration stage all the way up to the prototype level. Because Wonder stipulates that there should be roughly eight different models, individuals are able to carry out the design with any sort of

equipment easily. Because of this, Wonder is most suited for use in the process of preparing presentations, which significantly profit from the use of interactive mockups rather than fixed ones.

Figma is a tool that is not only straightforward and simple to use but also provides seamless transitions that can be applied across various frameworks. Customers will not be required to purchase a separate tool such as Marvel in order to construct simple models since the slideshow-style prototyping capability that is now included in Figma is already available. When all that is required is a straightforward presentation with shifts, there is no need to export the production in order to inspect the devices. This gets rid of a problem that both tools had in the past, which strengthens the relationship between the two tools by eliminating a problem that they had in common. In addition to offering Adobe XD the necessary assistance, we are here to help.

2.2.3 COMPARISON BETWEEN EXISTING SYSTEMS

Posist Restaurant POS

Posist is a B4B (Business-to-Business) company that collaborates with international restaurant chains to boost their digital development using its eating establishment technology platform as a catalyst. More than 10,000 restaurants all around the globe use Posist as their backend restaurant management system. It makes it possible for owners of venture eating establishments to expand their businesses, enhance their operational efficiency, and provide customers with a consistent dining experience, all while maintaining the same level of quality in their offerings (Posist, 2022).

Users

- Manager
- Restaurant Manager

Toast

Toast is an innovation management platform that is all-encompassing for restaurants. Toast is a mobile, cloud-based point-of-sale system that was developed with the specific purpose of satisfying the requirements of restaurants and other food service businesses. It offers a number of features, some of which include integrated online purchase, gift card and loyalty programme options, as well as reporting on sales and labour data. Toast supports users in optimising their processes, expanding their profitability, and gaining a deeper understanding of their businesses. Toast's mission is to provide the greatest possible experience for restaurant patrons by working in partnership with our clients to overcome the unique challenges that are specific to the environment of eating establishments (Toast POS, 2022).

Users

- General Manager
- Owner

NCR Aloha POS

The NCR Aloha System is a complete point-of-sale (POS) and management service for restaurants. It allows restaurants to maximise sales and operations both on- and off-site, control variable costs for labour and inventory, streamline system management, and quickly adapt to quickly changing trends with a growing list of APIs and partnerships. The NCR Aloha Platform was made and improved over time by brilliant people from the hospitality and food service industries. We make sure that people who use Aloha can learn it faster, finish their work faster, and make fewer mistakes than they could with any other system on the

market right now. We do this by working with our customers, market experts, and some of the most well-known usability experts (NCR, 2022).

Users

- Servers
- Bartender

	A	B	C	D
1		NCR Aloha POS	Posist Restaurant POS	Toast
2	Criteria	G2 Rating	G2 Rating	G2 Rating
3	Largest Market Segment	Mid-Market (43.0% of reviews)	Small-Business (53.6% of reviews)	Small-Business (64.4% of reviews)
4	Total Number of Reviews	173	713	194
5	Meets Requirements	8.3	9.4	8.4
6	Ease of Use	8.2	9.5	8.7
7	Ease of Setup	6.5	9.2	8
8	Ease of Admin	6.9	9.3	8.3
9	Quality of Support	7	9.5	7.7
10	Has the product been a good partner in doing business	6.6	9.4	8.1
11	Product Direction (% positive)	5.8	9.4	8.3
12	Menu Building	8.8	9.5	8.8
13	Inventory Management	8.4	9	7.9
14	Employee Scheduling	6.8	9.3	7.9
15	Accounting	8.3	9.4	8.1
16	Reporting & Analytics	8.4	9.5	8.6
17	Loyalty Management	7.5	9.4	8
18	Reporting	9	9.5	8.5
19	Interoperability	8.6	9.4	8.3
20	Credit Card Payments	8.9	9.6	9
21	Partial Payments	8.6	9.6	8.6
22	Split Payments	8.5	9.4	8.7
23	Discounts	8.6	9.6	8.7
24	Voided/Refunded Payments	8.4	9.4	8.5
25	Store Credit Allocation	8.3	9.3	7.6
26	Tip Adjustments	8.8	9.5	8.9
27	Offline Payments	7.8	9.5	8.1
28	Multidevice Payment Acceptance	8.1	9.5	8.6
29	Next Day Deposits	9.5	8	
30	Payment Gateway	8.8	9.5	8.8
31	Table Management	8.8	9.6	9
32	Check Adjustment	8.8	9.5	8.8
33	Kitchen Tickets	9.1	9.6	8.8
34	Takeout & Delivery	9.1	9.5	8.5
35	Accounting	9.3	9.5	8.7
36	Employee Management	8.5	9.3	8.3
37	Analytics	9.2	9.4	8.9
38	Inventory Management	9	9.1	8.2
39	Employee Accounts	8.3	9.4	8.7
40	Permissions	8.3	9.5	9.1
41	Commission Tracking	8	9.5	8.7
42	Tab Allocation	8	9.5	8.9
43	Log/Shift Notes	7.8	9.5	
44	Staff Scheduling	6.3	9.6	7.6
45	Floor Plans	8	9	8.9
46	POS	9.6	9.6	9.2
47	Table Management	9.3	9.5	8.8
48	Kitchen Ticketing	9.3	9.6	9
49	Reservations	9.5	7.6	
50	Loyalty Membership	7.6	9.5	7.8
51	Customer Profiles	7.3	9.5	7.9
52	Credit Card Filing	7.5	9.7	7.9
53	Dashboard	8.3	9.5	8.9
54	Track Inventory	7.8	9.2	7.3
55	Inventory Notifications	7.5	9.2	7.2
56	Product Organization	7.9	9.3	8.4
57	Multilocation Inventory Tracking	8.3	9.3	7.9
58	Accounting Integrations	7.4	9.6	8
59	Inventory Management Integrations	7.6	9.5	8.2
60	E-Commerce Integrations	6.9	9.6	8.7
61	Sales Tracking	8.7	9.6	9.2
62	Guest Counts	8.6	9.5	8.9
63	End of Day Reports	8.9	9.6	9.3

Figure 1 Comparison of the three systems (NCR Aloha POS, Posist Restaurant POS, and Toast) www.g2.com

2.2.4 CHALLENGES OF EXISTING APPLICATION AND SUMMARY

The NCR Aloha Platform is an end-to-end restaurant POS and also monitoring remedy that enables restaurants to optimise on- and also off-premise sales and procedures, control variable costs of labour as well as supply, simplify system management, and rapidly adjust to swiftly expanding fads with an increasing list of APIs and also collaborations.

The NCR Aloha System was developed and improved throughout time by great minds plucked directly from the hospitality as well as food service markets. We make certain that those who make use of Aloha have the ability to discover the system more quickly, finish their work faster, as well as make fewer errors than they would have the ability to with any other system currently offered on the market by functioning together with our consumers, industry veterans, as well as several of the most popular functionality specialists (NCR, 2022).

3 METHODOLOGY

My previous work experience in the hospitality industry, namely in the restaurant industry, as well as my commitment to lifelong education, were major inspirations for this project's concept. The process of developing one's knowledge is an ongoing quest for inquiry that continues throughout one's whole life. Most importantly, it has to have the ability to evaluate and improve the teaching and learning process constantly.

My professional expertise has been put to use both via direct experience gained while working in the hospitality industry and through collaboration with industry veterans, during which time I was able to benefit from their years of service-related expertise. It is a rare chance for a person to put their working experience to use while also gaining the professional knowledge necessary to create something that they can use in conjunction with their job at the same time. In order to finish this project, I started working at the restaurant that served as the case study (Leadbelly's restaurant and bar) as a member of the staff and worked my way up to a manager position within six months. This allowed me to gain a comprehensive understanding of the industry from the back of the house (BOH) to the front of the house (FOH).

The primary goal of this project was to investigate and then make a recommendation for a new system to replace the current management of the plan. This new system should help simplify business operations across a variety of important constructs included in the version, including the cash register, payroll, and personnel management. This chapter describes the utilisation of human subjects, the study style, the research population, and an example, as well as the data collecting, study instrument, and data assessment methods that were used for this study.

3.1 USE OF HUMAN SUBJECTS

The Computer Science REC Evaluation Board at Middlesex College reviewed the questionnaire and found it to be satisfied before approving it. An accompanying cover letter to the online survey provided participants with an explanation of the purpose of the study, as well as assurance that their responses would be kept anonymous and confidential.

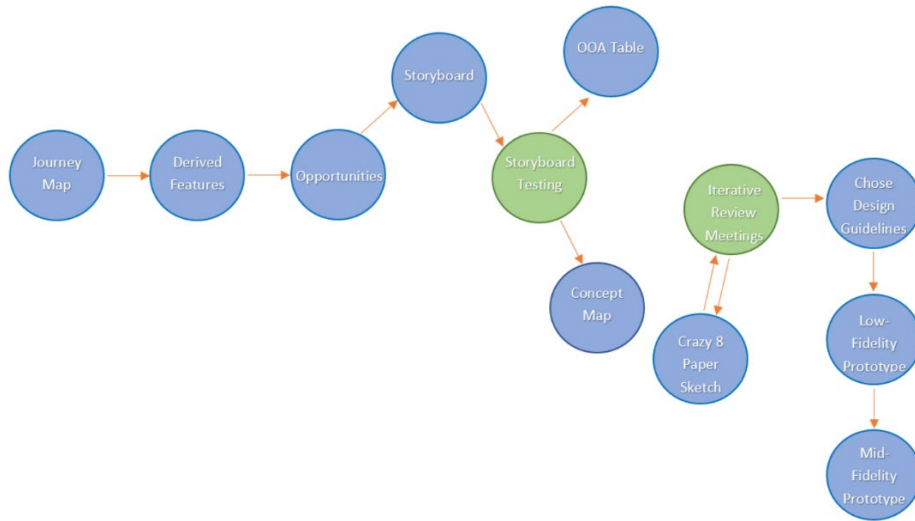


Figure 2 Design and prototyping stage

3.2 RESEARCH DESIGN

During the course of this inquiry, a survey was carried out. In quantifiable and also non-experimental research designs, surveys are often employed, and also it is thought that they may be utilised to check the link between variables in the planned research version (Leedy & Ormrod, 2005). The principal scientist will ask a representative from two big eating establishments a series of questions, then summarise and index their responses to reason about the restaurants' characteristics, attitudes, current systems, or practises (Leedy & Ormrod, 2005).

3.3 CASE STUDY

This study combines two different research approaches, namely a survey and a case study. According to Hakim (1987: 69), doing research on companies and also organisations operating in the private as well as the public markets using a case study is an efficient method of conducting research. The case study method can include research studies of businesses (including small and medium-sized businesses), institutions, trade unions, research of ideal methods, policy application as well as examination, market connections, management and organisation concerns, organisational societies, as well as processes of change and adaptation. The methodology of the study was developed so that it could provide answers to a number of different research questions. The difficulties are a reflection of how interested individuals who represent an organisation are in their jobs (Yin, 2003: 31-32). Yin (1994: 13) defines research as an empirical inquiry with the purpose of investigating a current feeling within the context of its practical use. This is particularly important when the boundaries between the phenomena and the setting are not easily discernible. According to the author Zikmund (1994), the objective of the research methodology is to collect information from one or more situations that are analogous to the issue that the researcher is attempting to solve. According to

Cohen et al. (2000: 181), the emphasis of a case study is on the facility's dynamic and developing interconnections of events, human relationships, and other aspects of an individual instance. Research topics may include one or more specific instances of a company that are going to be investigated using a number of different information-gathering strategies. In point of fact, the focus of both Leadbelly's and Drunch's study is only on a single instance. There are several restrictions placed on the case study research (i.e., the special nature of different cases, the validity and also integrity of private cases, or observer bias). In addition, in order to put into practice the relatively new "Western" management theory of finding business in dining establishments, we need a lot more regionally specific cases and research. Case studies of changed companies may benefit from a more comprehensive and natural perspective when they make use of a variety of methodologies and procedures for data collecting (such as sets of questions, surveys, and even interviews) (Yin 2003: 144-163). Surveys were used in this research study to provide the key to searchings for other restaurants, which is why this research study was conducted. This research made use of a qualitative study (the exec meeting study) in addition to a quantitative survey. Both of these are considered to be the main survey approaches (the personnel learning communication survey).

3.3.1 Data collection within the case studies

Research conducted via interviews may provide more in-depth data than can be obtained through the use of surveys. In this particular investigation, the significance of an executive interview lies in gaining an understanding of the experience that the fundamental managers of the case studies society have garnered from working in a variety of other businesses, as well as the lessons that they have drawn from that experience. The interview research was supplemented with inquiries about the executive's background, priorities, and goals. It was noticed that when people's actions are seen in the context of their own lives as well as the lives of others around them, it is much simpler to comprehend the motivations behind such behaviours and how they affect others. It is difficult, if not impossible, to determine the significance of an event when there is no context to do so. Schuman (1982) defined the three areas of meeting inquiries and also characterised this approach. This method enables the meeting and the participants to delve deeper into the experience as well as to set it in perspective. The first section of the interview is responsible for establishing the background of the participants' experiences. The second one enables people to re-construct the particulars of their experiences by placing them in the settings in which those experiences took place. The final prompt requests that participants reflect on the relevance that the encounter has had for them personally.

3.3.2 DATA COLLECTION

The primary researcher used "Meetings" and "observation" as two of the many methods of information collection in order to acquire adequate qualitative data from clients about what it is that they want and need. While doing so, they asked users a series of questions in order to collect quantifiable data for the purpose of conducting a comprehensive survey of the general population in order to validate the research study. The purpose of the investigation is to make use of more than one question pertaining to the viewpoint in order to broaden the scope of the plan and to raise the likelihood of deciphering the results that they provide.

The scope of the research study is the primary consideration in determining how participants were selected for the meeting. They wanted to speak with the primary supervisors of the case study, so after the preliminary phone call, they emailed an authorisation form that had been created with Qualtrics to the managers so that they could confirm the information about the meeting and sign the approval form. Their target audience was the primary supervisors of the case study.

The lead investigator started off working as a food runner at the restaurant that was being used for the research, which was Leadbelly's Bar and Dining establishment. During the course of his employment there, he worked his way up through the ranks, and at the end of it, he worked his way up to the position of manager in order to be able to investigate how technology was used in the organisation. As a result of the size of the restaurant, the investigator was able to collaborate not only with the kitchen staff but also with the wait staff and hostess staff as well in order to solve the case. This method took six months in order to aid with contact with all members of the staff, and the detective was fortunate enough to be there throughout the movement of power from the chefs to the managers. This was a privileged enough position for the detective to be in. The long-tenured cooks at the restaurant were replaced with new chefs, and a new management team was created so that it could better oversee the changes that were taking place there. In addition, after working there for a period of six months, I left for a new location in order to take a position as a waitress in a space that is shared by two restaurants that specialise in different cuisines. The first restaurant, "Leadbelly's," is a bar and American-style dining establishment, and the second restaurant, "Drunch," is a coffee and brunch dining establishment, respectively. I was hired to work in the space that separates these two restaurants. The observation was a subjective method of collecting data because it relied on the primary researcher's sensory organs. Additionally, in this situation, the primary scientist ends up becoming a natural part of a team in order to gain a much better understanding of the individuals or phenomenon that is being researched. Given that this is a public setting, persons who are being monitored should be expected to be seen by people they do not know; therefore, it is important that they are being monitored in an honest manner.

For the purpose of this research project, an online survey was conducted. Because it enables them to collect exceptionally trustworthy data from the relevant target groups, web-based surveys that make use of verified panel groups have gained popularity among academics, experts, and international firms in recent years (Evans & Mathur, 2005; Goodman, Cryder, & Cheema, 2012; Zikmund & Babin, 1999). Qualtrics were used to distribute the study and collect the responses. By employing its email lists, Qualtrics was able to send invitation emails to the managers of eating establishments. As soon as the participants agreed to take part in the research, they were given access to a link on the internet that would take them to the informed consent form as well as the online questionnaires. After they had finished reading the informed permission form and given their approval to take part in the survey, they were required to respond to two screening questions about their current environment and their years of experience using various technological means. Those participants in the example who did not match the selection criteria were screened out and removed from consideration; those participants who did meet the standards were allowed to continue. Participants who finished the test in less than five minutes or who did not answer the attention filter questions sufficiently were removed from the example in order to prevent low-quality responses. The use of interest filters, which is recommended by Qualtrics, is one way to ensure that participants are genuinely paying attention to the questions and providing thoughtful responses to them. Within the research itself, there were also two focus filter questions included ("Answer this line with the number No, as well as "Select the primary for this declaration"). As a result, around 12 out of the approximately 59 activities were eliminated.

The supervisor in charge of the work was requested to review the soft copy of the set of questions for clarity, legitimacy, and simplicity of understanding in order to boost the questionnaire's face validity. This was done so that the questionnaire would seem to be more credible. Modifications were made to the survey in response to the feedback that was provided. For instance, definitions of concepts such as "communication" and "team stability" were provided right at the beginning of the survey. "Provides workers training on technological challenges" was reworded as "Implements staff member technical training programmes" in the statement of interaction approach.

4 ANALYSIS OF DATA

In order to gather information, the investigator used qualitative analysis of the data. After the investigator had gathered the material, the investigator worked on reviewing the interviews in order to get a better understanding of the participant's practices as well as characteristics. Both SPSS version 20.0 and AMOS version 20.0 were used in order to analyse the data (Arbuckle, 2011) (George & Mallery, 2001). To elucidate the market accounts of the respondents and compute the ways as well as the standard deviations of technical methods and approaches, detailed statistics were used. In order to compare and contrast approaches based on restaurants' characteristics, a one-way Analysis of Variation (ANOVA) and an independent example t-test was used. Structural equation modelling (SEM) was used in this research investigation to evaluate the postulated structural correlations. The structural equation model (SEM), a multivariate analytical technique, investigates the causal links between several variables. This method had the advantage of being able to evaluate several design-construct relationships all at once, which was a significant gain. The structural equation model (SEM) has been used for a variety of issues in the literature on friendliness (Kang, 2012) (Lee, 2014). In accordance with the two-step procedure described by Anderson and Gerbing (1988), a confirmatory factor analysis (CFA) was carried out in order to assess a dimension design, and then a structural equation modelling (SEM) analysis was carried out in order to analyse the proposed design. The dimension design was found to be 43. (RMSEA). Composite reliability, convergent credibility, and discriminant legitimacy were used to evaluate the dimension design's level of efficacy. In addition, Cronbach's alpha was applied as a tool to assess the reliability of each build. After the measurement model had been validated, structural equation modelling (SEM) was used to investigate the hypothesised connections between the six components. The optimal chance approach was used to conduct an analysis of both the measurement model as well as the architectural model. As a result of its excellent statistical properties, such as having approximately normal circulations and a small standard error, the optimum probability is a method of estimation that is generally and commonly used. Its excellent statistical properties make it a reliable tool (Kline, 2005). The information that was gleaned from the interviews, as well as the questionnaires, were analysed, and it was discovered that all of the participants have similarities in the things that the investigator do, such as the manner in which the investigator carried out tasks, the things that the investigator want, and so on. After undergoing all the reactions, a style was produced from the note that was written down from the meetings, like a general idea or central suggestion that the notes comply with, for example, payroll management, staff management, and so on.

4.1 SELECTING THE TARGET ENTERPRISES

The following questions were requested for the survey because the primary information for the creation of the system was going to be gathered through the use of a monitoring strategy and an interview that was going to be conducted with the general supervisor of the restaurant that was being studied in order to get the perspective of other stakeholders (the staff):

- Have you worked or currently working in a restaurant / Bar
- How long have you worked in the restaurant industry
- Has staff training been conducted at your job?
- Has the training affected the coordination and communication between staff and the management team at your current job? If yes, how?

- Have you participated in such training
- How effective is the current coordination and communication between the staff and the management team in your current or last restaurant job?
- Is there is system or method used to pass across information from the (Management Team to Staff, Between Management Teams, and Staff and Management Team.), e.g. (Meeting Scheduling, Time Sheet placement and more)
- How effective is the current system in passing across the information
- How effective is the current system to pass across the information
- how useful is the technology and smart devices in your day-to-day job? (E.g., Pad to put orders through, the till system, the inventory system)
- The current till system (used to place orders to the kitchen or bar) How easy is it to use?
- How useful is this technology in the restaurant industry based on your experience

4.1.1 Interviewing

The Executive Meeting Survey was completed in its whole during the month of September 2022. Two weeks prior to the persons being spoken to, the questionnaire was emailed to the respondents in order to get facts from them in preparation for the individuals' sneak look. When we first started off with the interview. I briefly explained the purpose of the survey and the questions that would be asked, and then I assisted them in beginning the interview. The length of each meeting study ranged from thirty minutes to one hour, and both the audio and videotaping, as well as the recording of the meeting's discussion, were carried out. A list of reasonings (i.e., background experience, company's process and also effective elements, future growth for the business, and also firm specifics) was created for each executive based on the meeting transcriptions. This list included information about the corporation. Each executive was responsible for creating a recap of the connections made. All of the fundamental ideas and concepts that were discussed throughout the interview were included in the summary in some way. Every critical place that the executives identified as either a cause of the good outcome or an impact, together with all of the connections between the two, was also presented. This summary was sent back to the executive so that they could assess its reliability. It was requested that the executive adjust each checklist according to the requirements, and the scientist was tasked with resolving all of the information to guarantee that the task was comprehended and finished.

Table 1 The Selected Enterprises for the Executive Interview Survey

Name of Enterprises	Name of Interviewee	Title of interviewee
Leadbelly's Bar and Restaurant	Mr Andrea Antenucci	General Manager
Drunch (Mayfair)	Mr Przemek Osowski	General Manager
Drunch (Regent Street)	Mr Francesco	General Manager

4.2 FINDINGS

The encounter was broken up into two parts: the first was an interview with the executive, and the second was a semi-structured questionnaire. The survey was conducted with the intention of determining and gaining an understanding of the critical factors that play a role in the success of a firm. After they had completed the first half of the semi-structured series of questions, I started having a conversation with the executive. The respondents identified the following aspects as critical to the success of their companies:

The basic manager is responsible for the first technical change the company will make. This is a request made to the proprietor of the restaurant. The restaurant's continued success may be attributed to the fact that they have maintained its dedication to the achievement of its primary business objective, which is to provide "Good Service," "High quality," as well as "Excellent Preparation and Promotion," respectively. They also promised to continue improvements in order to keep up with the standards set by their technical contemporaries.

All of the questions that were asked opened up a conversation for a bigger vision, which included everything from the formulation of policies to the administration of teams. In addition, it was found that the training programme for teams is an independent but unnecessary endeavour. For example, Mr Francesco said, "As a result of my ability to manage and monitor everyday activities in addition to keeping a close eye on market trends, I am in a position to react quickly to shifts in both the existing body of knowledge and the market. In addition to that, I effectively serve as a model for the whole crew. In addition, the training programme, which is based on my experience working in a small restaurant, is unnecessary, and its high cost should be waived, if it is even possible for it to be appropriate "Based on the systems that have been used previously with the currently integrated system in the dining establishment where the study was conducted

After compiling and analysing the pertinent information (Appendix I: Interview), it was discovered that all of the interviewees were making an effort to improve the system in more than one area, such as the management of inventory, staff training, cost recovery and reduction, and payroll systems.

5 PROPOSED IMPLEMENTATION

Using all the research data gathered, a few implementations of a platform could be taken into consideration.

5.1 RESEARCH TIMELINE

There has been a significant amount of research conducted on the various aspects that are affecting an organisation's choice of cost-cutting and also tailoring it in the direction of financial investments, either as emergency funds or the improvement of the dining establishment. This research has been refined over the course of the past year to comprehend the psychology of people as well as their use of technology in the restaurant industry in relation to employee timetables. This helps them target their customers by knowing what it is that their customers demand to motivate them. Several studies have been produced on the topics of variables that impact the expenses of a dining establishment, as well as investment patterns and behavioural goals with regard to investing. In several of the publications, surveys were carried out, and a variety of features were discovered as well as presented.

5.2 PROTOTYPING MODEL

The prototyping model is a system development approach in which a prototype is produced, tested, and then revised as required until an acceptable result is attained, from which the whole system or product may be developed. This process continues until an acceptable outcome has been reached. This model performs very well in the given situation in which not all of the project needs are understood in great detail in advance.

The primary investigator and the people who will be using the system participate in a process that is iterative and based on trial and error.

5.2.1 Steps of the Prototyping Model

In this particular scenario, the actions that are carried out by the prototyping model are as follows:

The requirements for the newly developed system are specified in as much detail as is practically possible. In most cases, this involves conducting interviews with a number of candidates standing for all of the different divisions or components of the current system.

For the brand-new system, an initial blueprint with a straightforward format is developed. Following the completion of the preliminary design, the first working model of the brand-new system is fabricated. This is typically a reduced version of the system, and it provides an estimate of the characteristics that will be included in the final product. The users give the initial model a thorough examination and make notes about its strengths and weaknesses, as well as what should be included and what should be eliminated from the model. The statements made by the customers are gathered by the primary investigator, who then performs an analysis on them. In addition to incorporating the feedback from customers into the development of the initial model of the new system, this leads to the creation of a second model of the product in question. Examining the second prototype in the exact same way as the first model was done in the past. The steps that came before it is repeated as many times as necessary until all of the individuals are satisfied that the model accurately represents the desired end product. The complete system is being built, with the completion of the final prototype serving as a guide. The completed system is subjected to rigorous analysis and testing. Continuous preventative maintenance is carried out in order to reduce both the amount of time spent offline and the likelihood of catastrophic failure.

The “Rapid throwaway” prototype was chosen from the various types of prototypes available because it was most appropriate for the constraints faced by the primary investigator. This method of prototyping involves rapidly developing a model based on initial requirements, which is then modified based on the responses of potential customers. The concept of rapid offhand derives its name from the fact that each model is completely thrown away and does not contribute in any way to the end product.

5.2.2 Advantages of the Prototyping Model

The “Rapid throwaway” prototype was chosen from the various types of prototypes available because it was most appropriate for the constraints faced by the primary investigator. This method of prototyping involves rapidly developing a model based on initial requirements, which is then modified based on the responses of potential customers. The concept of rapid offhand derives its name from the fact that each model is completely thrown away and does not contribute in any way to the end product.

5.2.3 Disadvantages of the Prototyping Model

The biggest disadvantage of using this strategy is that it is much more expensive in terms of both time and money when compared to other methods of expansion, such as the spiral or Falls model. This is the fundamental drawback of using this method. When you consider that the model is thrown out in the vast majority of instances, some companies may not see the advantage in adopting this strategy. In addition, the practise of soliciting input from customers at such an early stage in the product’s lifespan may give rise to problems. One of the problems is that there can be an excessively high number of alteration requests, which might be difficult to accommodate. In the event that, after seeing the prototype, the customer requests an earlier final release or decides they are no longer interested in the product, this poses an extra risk. Despite

this, this is the most effective method for completing this assignment since it involves the clients in each and every step of the process.

5.3 USER STORIES AND USER SCENARIOS:

Following the completion of the data analysis, the primary investigator created a user tale that defines the kind of system the clients will definitely need, i.e., what they require as well as the reasons why they require it. It is helpful in creating a clear characterisation of the needs of the user. While a user scenario is only a made-up story about a consumer who managed to achieve their goal while carrying out a certain activity, a user circumstance really exists. The scenario has to explain not just where it started and where it finished but also the problems that the individuals were facing that led to their decision to utilise the suggested software, as well as the steps that were necessary to resolve the issue.



Figure 3 USER STORIES AND USER SCENARIOS

5.4 CONCEPT MAP

Based on the findings, a concept map was developed, in which the results of the survey were used to map down the concepts that were formed from users' requirements in order to have a clear grasp of what the users desire in the "restaurant management" system. A customer account, payroll, notice, transactions, customer review and booking, and other systems are some of the concepts represented by the idea map's eight individual items. Each of them has distinct activities that can be done on them, such as notification: it may be archived, snoozed, deleted, dismissed, and marked as read if necessary. The concept map contains

a number of essential objects, one of which is a notification. This object contains all of the attributes that are associated with notifications, such as their title, category, message/description, and so on. Additionally, this object is linked to operations such as being able to be snoozed, marked as read, deleted, and so on. While using the system, each of these actions represents a possible operation that may be performed on the notification. There are five operations and five characteristics that make up the “Notification” objects. The dark blue boxes represent the “Notification” objects, while the light blue boxes represent the attributes, and the yellow boxes represent the operations.

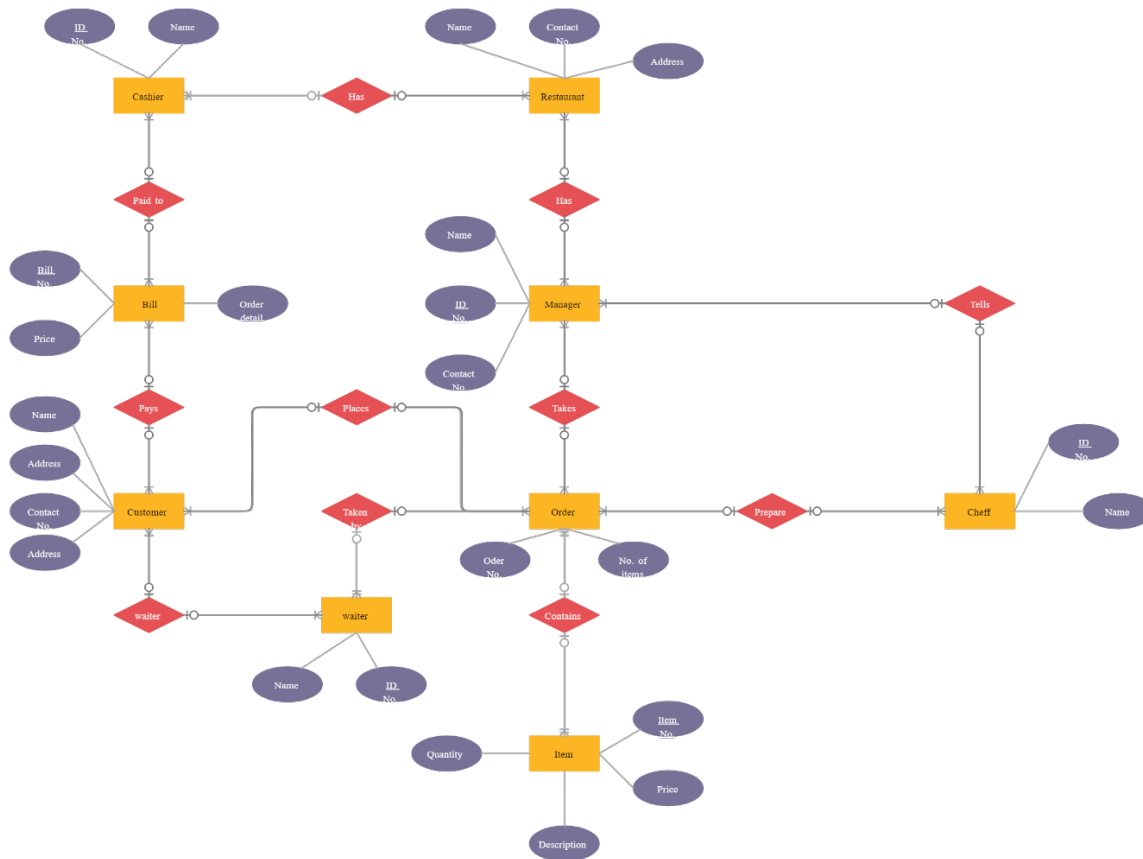


Figure 4 CONCEPT MAP

5.5 SKETCHES

The primary investigator was responsible for developing a variety of drawings, each of which depicted a different component of the application by making use of the theoretical map. The primary investigator chose the illustration method because it enables the rapid progression of ideas; more specifically, it enables the principal investigator to draw down the ideas before they are forgotten. After outlining everything on paper (see Appendix E), the primary investigator decided to create the graphics using a programme called “Adobe XD,” which serves as the low-fidelity prototype. See Appendix F. (Landay and Myers, 1995).

5.6 JAKOB NIELSEN'S PRINCIPLE

Before the main investigator may go on to the Mid-Fidelity prototype, it is essential to have a solid understanding of the ideas that go into making a prototype that is functional in order to establish the rules that should be adhered to. These ideas are crucial not just to the actual execution but also to the process of designing an efficient prototype. The principles are regarded as the interface's shared characteristics, and they are implemented throughout all of the parts. When developing the "restaurant monitoring system," the primary investigator came to the conclusion that it would be beneficial to make use of Jakob Nielsen's heuristic.

The main investigator's standard design pattern consisted of unambiguous primary activities, overlays of notification, and also careless registration. This pattern was described in the previous section. In contrast, the Jakob heuristics that were followed were Visibility and Responses, Uniformity and Affordability, Individual Control and Flexibility, and Flexibility.

5.7 DETAILED MOCKUP

In-depth, The purpose of the mockup is to demonstrate to the client how the application will assist him in documenting his objectives and requirements, in addition to demonstrating how the application will operate. The following is an in-depth overview of and walkthrough of the key functionalities that a client may use to their advantage when using the restaurant management system to meet their requirements. The location where the blue circle appears shows that the user has clicked on a certain feature.

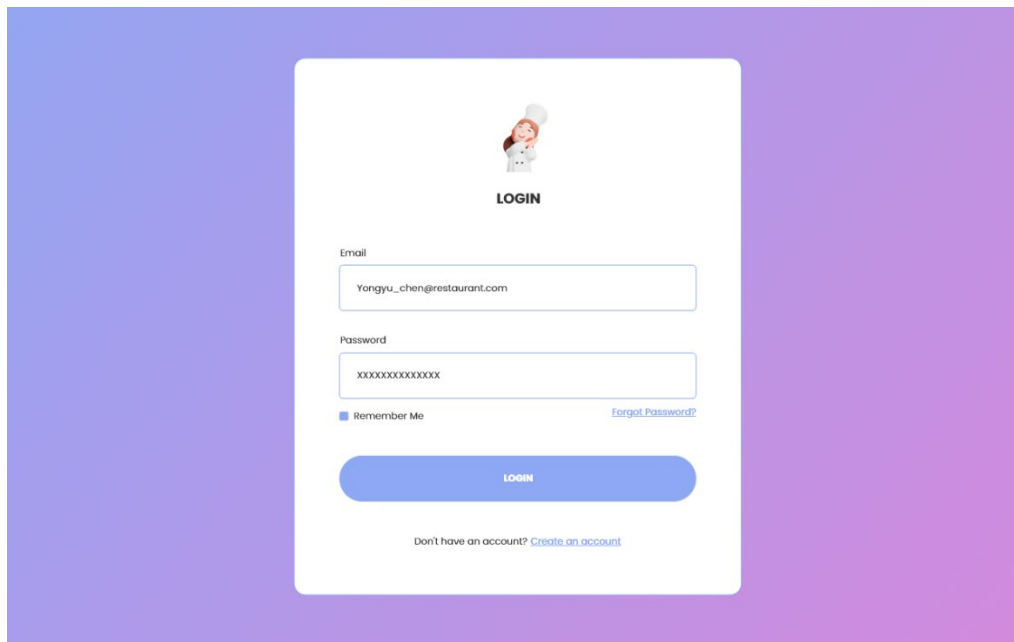


Figure 5 Live Login

FIRST TIME USER?
Enter the given access code and create your account

Account Code
@856ldSC8wa?wIW

Email
Yongyu_chen@restaurant.com

Password
xxxxxxxxxxxx

Confirm Password
xxxxxxxxxxxx

☒ I accept the [Terms & Conditions](#)

LOGIN

Already have an account? [Login](#)

Figure 6 Live Sign-Up

The product began to take shape as the models became significantly more rational and the aspects became significantly more structured. When transitioning to electronic models, the level of fidelity can be determined by the amount of interactivity, visual layout, and content included in the model. A model's fidelity can be decreased or increased independently in each of these locations; however, high-fidelity models integrate all three to the greatest degree, as can be seen above.

Regarding meeting the requirements of the customers, the pecking order was a factor that was taken into consideration. Each illustration is connected to a specific individual circulation and story, and the sketches are the initial step toward figuring out the format and structure of a product. With each new cable and iteration, two important questions were asked, including, "Does this page represent its function in the larger individual circulation?" and "Is there a connection between this page and the larger individual circulation?" In addition, does the interaction make sense (in the sense that the person understood how to carry out the activity)? . Each brand-new iteration has a greater chance of bringing the prototypes closer to a final draught the more we do, so it is essential that we continue to work on this.

Digital prototypes are also significantly simpler to test than physical ones because, in addition to being simpler to comprehend, they are also much quicker to duplicate and iterate in large numbers. UX prototyping tools, such as Adobe XD and Figma, come in very handy at this point because they make it possible to create prototypes that users can interact with. When it's clickable, it becomes simple to evaluate the use of various elements, from individual buttons to entire circulations. This applies to everything from the website to the app.

6 CONCLUSIONS

6.1 DISCUSSION AND IMPLICATIONS

This study's objective was to investigate and then suggest a system that would include the findings of top supervisors' technical values and the administration of restaurant systems. Following that, the research study investigated the impacts of stakeholder participation on the technical designs and systems, as well as the influence of technological sustainability on the effectiveness of restaurants. In order to investigate the connections that exist between these factors, a conceptual model that is founded on the theories of value, leadership, and stakeholder engagement was developed.

The investigation's results showed that each of the theorised routes was plausible, with the exception of those concerning the gizmos that were included in the overall budget for each restaurant. The top technical values do not have an immediate influence on the interaction of stakeholders or the technological sustainability of the eating establishment, but they will undoubtedly bring about a benefit in the long run. On the other hand, the technical leadership of the leading administration had a substantial impact on the participation of stakeholders and the performance of restaurants in their application of technology sustainability. It was also established that the interaction of stakeholders had a major impact on restaurants' commitment to the expansion of technical sustainability performance, which resulted in differences in the restaurants' financial as well as nonfinancial performance. The results of the arbitration investigation showed the significant moderating roles played by management as well as stakeholder participation in the links between values, technical practices, and restaurant performance. This study makes a contribution to the body of previous research on the topic of technically sustainable practices in the context of eating establishments. This research identified the underlying systems that are responsible for the connections between monitoring values and also the technical sustainability of restaurants: administration technical worths were shown to impact technical sustainability through management and stakeholder involvement indirectly. Previous research on the sustainability of technology has paid a lot of attention to the function of each technological system's values; however, the system that explains how those values have been translated into organisational and technical methods has been almost never investigated. This is despite the fact that a lot of attention has been given to the function of each technological system's values. The indirect effect of technical worths explains that top supervisors with higher technical worths have a tendency to demonstrate more effective technology management actions as well as engage with a greater number of stakeholders, which ultimately results in significantly improved technical efficiency.

This study also emphasised the responsibility of leading management leadership in the implementation of technological sustainability in the restaurant company. There is very little research on administration leadership in the context of technical sustainability. It was found that the management system technically accountable for management had a positive direct effect on the restaurants' technological sustainability as well as a positive indirect influence on technological sustainability via the use of stakeholder engagement. This result is in line with the findings that De Hoogh and Den Hartog (2008) found, which indicated the significant influence that leadership has on the execution of system socially responsible duties. This research study may serve as the framework for more research as it takes the first step in highlighting the managerial traits required to drive technological sustainability in the restaurant sector. This research brought to light the importance of stakeholders' active participation in the technological sustainability of eating venues. It has not been given enough attention in the empirical research that has been done, but the influence of stakeholder participation on the creation of technological sustainability plans has been

investigated. According to the findings of this research, stakeholder involvement not only plays an important role as a direct contributor but also as a conciliator in the process of altering the technical sustainability of a corporation. This study contributes to a better knowledge of the impacts of stakeholders in technical management literature, and it suggests the need for doing much more in-depth research investigation into the responsibilities of stakeholders.

In the end, this research included nonfinancial variables such as stakeholder (customer/employee) satisfaction; they are arguably more important as well as longer-term indications such as those shown in the questionnaire. Prior studies have really been limited to using financial factors for the purpose of measuring efficiency outcomes from technological sustainability, a topic on which previous studies have produced rather ambiguous conclusions.

The system has significant implications for management overall. To begin, the findings demonstrated that the administrative-technical worths had a significant impact on management and that they had a significant direct and indirect impact on the participation of stakeholders as well as technical sustainability. Management that places a higher emphasis on technical values is more likely to have a heightened sense of technological responsibility and, as a result, will place a greater emphasis on resolving stakeholder interests in addressing technical problems by concentrating on technical problems when developing strategies and operational methods. This study also investigated the role of leading monitoring system technology, and the researchers came to the conclusion that management technology had a direct influence on the level of stakeholder involvement as well as the technical sustainability of an organisation's operations. This indicates that leaders with more effective technology management more frequently take into consideration attending to stakeholder requirements connecting to technological security, create sincere relationships with them, and make efforts to integrate their technological demands into company techniques as well as techniques such as "waitress notepads, automated chef screens, and so on."

These results show that businesses should thus accept that in order to achieve their technical sustainability objectives, strategic management of human resources is required (Jabbour & Santos, 2008). According to Jurovski and Liburd (2001), one of the most important factors in determining the success of an organisation's efforts to foster technical sustainability is the selection and placement of its workforce. Therefore, human resource management should make efforts to recruit and retain individuals with the skills required for the growth of system sustainability, and they should maintain encouraging employees to acquire such traits in order to encourage system technological sustainability (Boudreau & Ramstad, 2005). The findings of this study demonstrated that systems that qualify for the improvement of system sustainability should assume greater technological values by exhibiting greater responsibility for technological problems, more significant concern for the technological interests of key stakeholders, and more cooperative behaviours engaging the key stakeholders in the process of making decisions regarding technological advancements. Therefore, those in charge of human resource management should devise management evaluation criteria that include the leadership qualities necessary for technological sustainability in corporations, recruit and select people based on such criteria, and provide continuous education to reinforce those qualities (Jabbour & Santos, 2008).

6.2 LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

This study has a number of shortcomings, any one of which could be an opportunity for further investigation in the future. The research study was selected because of the principal investigator's prior experience working in the hospitality industry, and because of the limited reach of the study, it is possible that the findings will not be applicable to the hospitality industry as a whole in the United Kingdom. It's possible that in future studies, researchers will collaborate with restaurant associations in order to obtain more

representative examples of restaurants in the UK. In addition, the supervisors' assumptions were used in this research study to evaluate the effectiveness of the systems used in restaurants. In the future, researchers may choose to incorporate both perceptual and objective variables into their evaluations of the technical performance of dining establishments; this should lead to more credible findings. The research study's dimension items are subject to one more restriction as a result of their inclusion in the study. Items such as Account managing and stakeholder engagement; however, there was very little empirical testing done with regard to these dimension things. Therefore, further studies might look into screening the proposed system more thoroughly and validating it. In conclusion, further studies could express the system's technical structure by including various other system-based constructs (such as the till system setup, in-depth team sight, and kitchen display screen system). This would contribute to the development of a friendly, straightforward structure before moving on to the development of the project.

6.1 PROPOSED FUTURE SYSTEM ARCHITECTURE

Architecture design models that fall between the sensible and the physical The development of the system with the use of a rational model as an intermediate version in order to assign the aspects of the design of the logical architecture to the system elements of potential physical design versions (Maleki, Elaheh & Belkadi, Farouk & Bonjour, Eric & Bernard, Alain, 2018).

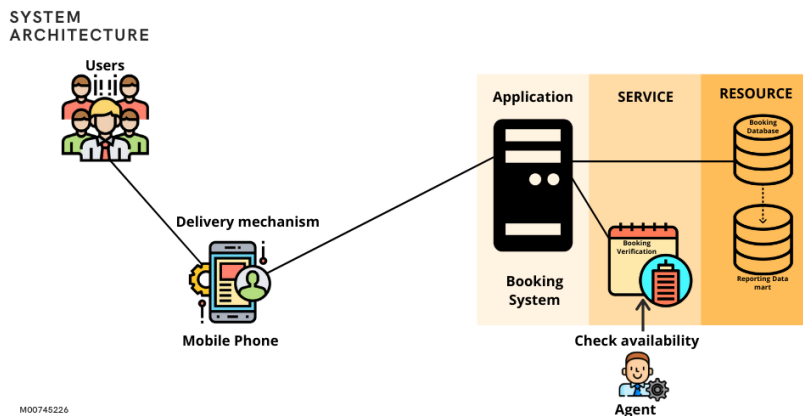


Figure 7 Proposed Future System Architecture

6.2 PERSONAL DEVELOPMENT

6.2.1 Work-based Project Experience in Leadbelly's

In the course of my employment at Leadbelly's bar and dining establishment, which has lasted for seven months, I have been responsible for managing and interacting with the management team as well as completing in-house training assignments. I learned how to identify potential clients precisely, comprehend their consultancy and requirements, as well as effectively manage projects and deliverables. According to Charles Handy's (1995) understanding, the process of discovering can be broken down into four distinct phases: questioning, theorising, investigating, and presenting one's findings. Each component is interconnected with those of the others. He referred to this method of discovery as the wheel of understanding when he explained it. The essence of his idea was that it had an influence on the expansion

of my expertise as well as the development of the design in the process application of the restaurant system. My job not only teaches me how to do my job, but it also teaches me how to teach and learn continuously from work practice, which I then put into practice. I learned and applied the work-based principle from my job.

6.2.2 Module Design and Development in the restaurant system

Even though I had developed a number of monitoring systems previously, the restaurant system was an essential experience for me. The comprehensive analysis performed on a company in its capacity as an expert was exhaustive in terms of both the content and the structure it employed. Over the course of three stages, I created a total of five different systems. My involvement in the design and development of the programme, which was a fundamental management training course, consisted of two stages of research: the first stage, which was a pre-component stage (Detailed view of company administration), and the second stage, which was a private project that was based on work. Both locations provided me with valuable work experience.

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APPENDIX A ONLINE SURVEY INSTRUMENT

Informed Consent

Thanks you and Welcome to my Survey

1. Project/Study title: Exploring, analyzing, proposing, and designing a prototype application system to improve policy management in the restaurant industry.

2. Invitation paragraph You are being invited to take part in a research project that is investigating improvement of policy management in the restaurant industry. This research is being carried out as part of an MSC project. It is important for you to completely understand why the research is being conducted, and what is the research scope and purpose. Please take time to read and understand all the information, if you have any problems or questions, you can contact the researcher via the email given below. Take time to decide whether or not you wish to take part in the study.

3. What is the purpose of the project/study? This research will reinvent how business activities are handled by suggesting and designing a prototype with a flexible system to help with their policy management that will work great in most situations.

4. Why have I been chosen? You are being chosen because you own a smart home device; your participation can help in contributing knowledge concerning policy management and the creation of a . Your responses will be beneficial for fulfilling the purpose of this research.

Figure 8 Consent Form Survey I

5. Do I have to take part? It is up to you to decide whether or not to take part. You can withdraw from the study at any time during or after the study. If you have already completed the study and wish to withdraw consent at a later date then please contact the researcher via the email below.

6. What will I have to do? You are asked to answer a series of questions based on entrepreneurship skills. The questionnaire should be completed within 15 minutes.

7. What are the possible risks or benefits of taking part? There is no risk involved in participating. Your information will be kept safe and secure. The study will be conducted with consideration of all the ethical practices.

8. Data Protection and Confidentiality Personal data is any data that can lead to the identification of a specific (living) person. It can be obviously identifiable data such as name or ID number, but it can also be a combination of "innocent" data such as age, height/weight, wealth, job position, company, city, etc. that when combined can lead to the identification of a person. Personal data (e.g., your name, email address, voice or any data that can identify you) WILL NOT be collected by this study and your confidentiality will be protected.

9. What will happen to the results of the research study? The outcomes of the research will be used as a part of a postgraduate dissertation. After analyzing the data, the results will be presented in the dissertation.

10. Who has reviewed the study? The study has been appropriately reviewed and received ethical clearance from the Computer Science Research Ethics Committee.

11. Contact for further information If you require further information or have any questions then please contact

Name: Shammah Omoniyi
Email: so814@live.mdx.ac.uk

CONSENT STATEMENT I have read and understood the participant information above and I freely and voluntarily give my consent to participate in this project/study.

Powered by Qualtrics

- ☐ I consent, begin the study
- ☐ I do not consent, I do not wish to participate

Block 1

I am 18 or above?

- ☐ Under 18
- ☐ 18 - 24
- ☐ 25 - 34
- ☐ 35 - 44
- ☐ 45 - 54
- ☐ 55 - 64
- ☐ 65 - 74
- ☐ 75 - 84
- ☐ 85 or older

My highest level of Education is

- ☐ Less than high school
- ☐ High school graduate
- ☐ Some college

Figure 10 Consent Form Survey III

- ☐ 2 year degree
- ☐ 4 year degree
- ☐ Professional degree
- ☐ Doctorate

Select the number One for this statement

- ☐ 36
- ☐ 72
- ☐ 6
- ☐ -60
- ☐ 1
- ☐ 62

Block 2

Have you worked or currently working in a restaurant / Bar

- ☐ No
- ☐ Yes

How long have you worked in the restaurant industry

- ☐ 6 months or less
- ☐ Over 6 months, up to 1 year
- ☐ Over 1 year, up to 3 years
- ☐ Over 3 years, up to 5 years
- ☐ Over 5 years

What was your role in the last or current job in the restaurant industry?

- ☐ Bartender
- ☐ Chef
- ☐ Waiter
- ☐ Runner
- ☐ Manager
- ☐ General Management
- ☐ Others

Answer this line with the number Zero

Staff coordination and communicaton

Has staff training being conducted at your job?

- ☐ False
- ☐ True

Have you participated in such training

- ☐ No
- ☐ Yes

Has the training affected the coordination and the communication between staff and the management team at your current job? If yes how?

- ☐ No

☐ Yes

How effective is the current coordination and communication between the staff and the management team in your current or last restaurant job?

- ☐ Not effective at all
- ☐ Slightly effective
- ☐ Moderately effective
- ☐ Very effective
- ☐ Extremely effective

Is there is system or method used to passed across information from the

Management Team to Staff,
Between Management Teams, and
Staff and Management Team.

e.g. (Meeting Scheduling, Time Sheet placement and more)

- ☐ No
- ☐ Maybe
- ☐ Yes

How effective is the current system to pass across the information

- ☐ Not effective at all
- ☐ Slightly effective
- ☐ Moderately effective
- ☐ Very effective
- ☐ Extremely effective

How effective is the current system to pass across the information

- ☐ Not effective at all
- ☐ Slightly effective
- ☐ Moderately effective
- ☐ Very effective
- ☐ Extremely effective

Technology use

how useful is technology and smart devices in your day-to-day job?
(E.g. Pad to put orders through, the till system, the inventory system)

- ☐ Not at all useful
- ☐ Slightly useful
- ☐ Moderately useful
- ☐ Very useful
- ☐ Extremely useful

The current Till system (used to place orders to the kitchen or bar) How easy is it to use?

- ☐ Extremely difficult
- ☐ Somewhat difficult
- ☐ Neither easy nor difficult
- ☐ Somewhat easy
- ☐ Extremely easy

How useful are this technology in the restaurant industry based on your experience

	Not at all useful	Slightly useful	Moderately useful	Very useful	Extremely useful
Waiter Ordering Touchscreen Pad	☐	☐	☐	☐	☐
Receipt Printer	☐	☐	☐	☐	☐
Order and Pay at the Table with QR CODE	☐	☐	☐	☐	☐
Contactless Payments	☐	☐	☐	☐	☐
Self-Ordering	☐	☐	☐	☐	☐
Kitchen Display Screens	☐	☐	☐	☐	☐

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Figure 15 Consent Form Survey VIII

APPENDIX B. COVER LETTER

Hello there, I could like to invite you to take part in a research study titled: “Analysing and designing a prototype policy management system in the restaurant industry.”, which focuses on helping with policy management that will work great in most situations by evaluating the workplace ethics of business from the inside of the company.

Your participation involves answer a questionnaire based on your experience in the restaurant industry.

Before agreeing to take part in the evaluation study, you will need to complete a Consent Form given in the link below. This is especially important as part of data protection requirements since your personal data will be processed by this study. The Consent Form contains further information about the study and a consent statement. You will need to read the information given and consent to taking part in the study. You will also be asked to give your name and email so that you can be contacted to make arrangements for the evaluation study.

Consent form link: <https://mdxl.eu.qualtrics.com/jfe/form/SV_aaDl0kRbTCRvXee>

If you need any further information about participation in the study, then please contact me using the email below.

Best Regards,
Shammah Omoniyi
Research Student
Middlesex University
Faculty of Science and technology
Computer Science Department

Email:

APPENDIX C. INTERVIEW CONSENT FORM

Invitation

Thanks you and Welcome to my Survey

1. Project/Study title: Exploring, analyzing, proposing, and designing a prototype application system to improve policy management in the restaurant industry.

2. Invitation paragraph You are being invited to take part in a research project that is investigating improvement of policy management in the restaurant industry. This research is being carried out as part of an MSC project. It is important for you to completely understand why the research is being conducted, and what is the research scope and purpose. Please take time to read and understand all the information, if you have any problems or questions, you can contact the researcher via the email given below. Take time to decide whether or not you wish to take part in the study.

3. What is the purpose of the project/study? This research will reinvent how business activities are handled by suggesting and designing a prototype with a flexible system to help with their policy management that will work great in most situations.

4. Why have I been chosen? You are being chosen because you own a smart home device; your participation can help in contributing knowledge concerning policy management and the creation of a . Your responses will be beneficial for fulfilling the purpose of this research.

Figure 16 INTERVIEW CONSENT FORM I

5. Do I have to take part? It is up to you to decide whether or not to take part. You can withdraw from the study at any time during or after the study. If you have already completed the study and wish to withdraw consent at a later date then please contact the researcher via the email below.

6. What will I have to do? You are asked to answer a series of questions based on entrepreneurship skills. The questionnaire should be completed within 15 minutes.

7. What are the possible risks or benefits of taking part? There is no risk involved in participating. Your information will be kept safe and secure. The study will be conducted with consideration of all the ethical practices.

8. Data Protection and Confidentiality Personal data is any data that can lead to the identification of a specific (living) person. It can be obviously identifiable data such as name or ID number, but it can also be a combination of "innocent" data such as age, height/weight, wealth, job position, company, city, etc. that when combined can lead to the identification of a person. Personal data (e.g., your name, email address, voice or any data that can identify you) WILL NOT be collected by this study and your confidentiality will be protected.

9. What will happen to the results of the research study? The outcomes of the research will be used as a part of a postgraduate dissertation. After analyzing the data, the results will be presented in the dissertation.

10. Who has reviewed the study? The study has been appropriately reviewed and received ethical clearance from the Computer Science Research Ethics Committee.

11. Contact for further information If you require further information or have any questions then please contact

Name: Shammah Omoniyi
Email: so814@live.mdx.ac.uk

CONSENT STATEMENT I have read and understood the participant information above and I freely and voluntarily give my consent to participate in this project/study. Powered by Qualtrics

- ☐ Yes, I consent
☐ No, I do not Consent

Block 1

Please enter your name.

Please enter your email address.

Powered by Qualtrics

Figure 18 INTERVIEW CONSENT FORM III

APPENDIX D. INTERVIEW TRANSCRIPTION

MR PRZEMARK

Principal Investigator 0:00

Perfect. So I'm just okay, this is Shammah recording interview three, for drench method. Sessions, I'll just start with first question, which is about the policy management. So when you get when the policy of the restaurants that were created, yeah, yeah, so how exactly do you guys go about the question of policy.

Mr. Przemark 0:22

So, basically, what we started was the past how, basically how busy we gonna be another thing, so then we create a policy of the place. I mean, you mean that policy for the customers or business. So obviously, everyplace is have some rules, house rules for politics. So, like, everyone else, we got got the same idea. Which is so so it has to be the kind of understanding for the for the staff to be the policy to be people following some ask some standards and rules, which all the staff has to follow it. So it's, it's quite simple policies, which, regarding uniform, everyone has to wear the uniform. Regarding breaks, small cigarette breaks, for example, resting breaks, or food breaks, kind of like this one. So So,

Principal Investigator 1:29

and policy policies themselves are created all way to the hospital, an equation or the policies.

Mr. Przemark 1:36

So obviously, the management and the owners sit together, and they create the policy.

Principal Investigator 1:41

So it's all the management or just the general manager,

Mr. Przemark 1:43

basically, the general manager, Assistant General Manager. So basically talks as obviously, we all try to create the policy to be to be fit for the place. So it's always good to have some opinions. Always second person, person, but but mostly generic denominator is approved the policies at the end, basically, so when we when we when we got spots.

Principal Investigator 2:10

Typically, there's a new policy that has been created, it's already been created, we've gone through the whole process of trying to eliminate every single procedure, is that, right? If you want to push out this policy, is there like a system that's used to push it out? Or is it like a trial and error first place in places,

Mr. Przemark 2:26

I mean, like, obviously, the policy has to be always been appointed. So every staff has to follow the policy. So like I say, wherever you have an average new staff be hired, have an induction day, which is basically all the policy been presented and properly explained it, and it has to be followed. So so this is the basically general manager job to be made. Sure, it's on point. And it's been applied by the staff. So obviously, if the general manager is not on the house, AGM, for example, or any other manager on duty, as to make sure that the policy is being followed

Principal Investigator 3:08

any means of communication between like is it just isn't like a system in place to pass a message across to go?

Mr. Przemark 3:16

Absolutely, yeah. So obviously, we have like a management group on WhatsApp, for example. So also, by calls, we can try to communicate it. So if basically, manager on duty is working on the slack, you can see that some of the staff doesn't follow the route or something like that. He just pass the message to the GM, which we and obviously, there will be some courts have consequences for that, which has got warnings and stuff like that.

Principal Investigator 3:40

That makes sense. That makes a lot of sense. And when it comes to conflict resolution complaint, so is there like a way in which steps as to is there a system whereby the officer can drop off? The complaint? Is that because the staff have to go to do manager next in line? Or do they cross over the manager and go sometimes their manager directly to report like conflict,

Mr. Przemark 4:02

sexual assault? This is no small company. So basically, the stuff can go straight away to the manager, but a manager or something like that, so, so yeah, so it's come directly to GM, but also they don't feel comfortable to feel uncomfortable to speak, they can always speak to the duty manager, and then our different department message.

Principal Investigator 4:24

So when it comes to start stringing out exactly those staff training committees training as a trainee exactly how to.

Mr. Przemark 4:31

So like I say, members, basically it's been having like an induction day which we will process all the house rules, all of the basically, service steps. The rules, which works works in the house, also basically it's like training shift base. So basically, the way basically a new member is always following coasting. them oldest waiter for example so can learn from the oldest

Principal Investigator 5:06

to basically learn on

Mr. Przemark 5:09

the most experienced persons okay

Principal Investigator 5:12

is there like a Korean system used to track flow of cash now can you like a application you guys used to try

Mr. Przemark 5:19

we don't use application I mean like well we have the our ecosystem which which will work more because the quality code it's it so so believed this was also split and tibialis so so basically this is like Echo system which was supposed to be our kill systems it's how we how we manage regarding the flow of money and money payments and payment history which is like a front of house which is the bill of the opposing bills and stuff like this and backup house to follow reports and update

Principal Investigator 6:25

speaking back of house humans are exactly those the kitchen keeps track of the amount of food that is used in restaurants and when after a personal amount of food is finished like the assistant or the chef himself will go to put the truth

Mr. Przemark 6:41

regarding kitchen obviously there we have a prep shop which is doing all the prep for daily one and wherever is needed for the next days and we ran out is already the message being passed to the head chef butcher price and order okay so basically it's like a daily or every two days we place an order for the for the kitchen so okay so your subscription is responsible for basically informed the head chef regarding what we needed to work with

Principal Investigator 7:12

and stuff the rest of the stuff about the chef's or the staff point of focus right yeah, I always have to redo the place.

Mr. Przemark 7:21

So basically we do so we the hours being calculated being signing sign out during the shift basically then the manager the general manager is calculating all the total hours the hours been put it on the basically Excel sheet sheets and and send it to the accountants so again the accountant basically it's all this magic calculation and sending the pay slips so then we regarding the

Principal Investigator 7:56

Excel sheets the easy thing is any application that

Mr. Przemark 7:58

we don't do application at the moment I mean like it's a small small small business small events we we used to do in the past but don't really really works with us this kind of applications are good for kind of good big business small business like a small place where as we are which is like 15 people for example it's it's honestly spent money which unnecessary money which I can say for the moment it's that's how it flies to its neck

Principal Investigator 8:30

and when it comes to reducing costs, do you guys factor in the equipment to use tivities

Mr. Przemark 8:37

Absolutely. So everywhere else that we have to cut the cost compared to the to the sales so there is one it's a busy time obviously we need more staff and everyone is a big star to be quiet. We reducing registering grata. So basically we make up hours of the stuff we we got the orders to obviously all the items like our bars for the bar we got the amount of coffees we used to order this one we cut out all the chemicals and stuff like this also depends of the busy periods. So if it's start to be quiet we can't we reduce basically amounts

Principal Investigator 9:23

because of course and when it comes to the online books this is a particular reason why we don't the restaurant does not do reservations and

Mr. Przemark 9:33

so as basically drawn Shabbat replaces yeah this this May for one we are very small place so we have only lock arms and put in tables. We don't we don't do reservations we used to do we don't do anymore as it's more we can more customers from working as depends on our location where it is we are located in the bay so it makes more sense for later In which yeah it makes more more sense and we can be more customer be more happy with with all the bookings because yeah so just working space and there's housing mixes

Principal Investigator 10:16

and when it comes to art because we noticed last time you did all the software's you give someone a give a beer especially one it's then in like loyalty and record implementation put in place or is this like a one time thing? Like the beer the little beer that someone want oh yes, it's like a one time

Mr. Przemark 10:40

well we do this once once a while obviously. So basically people can put some nice they can basically they can win some free free for brunch or so I've noticed if they post pictures from our Instagram or social medias wherever so many likes, or like very good reviews, very good reviews from same the same the same person constantly we can invite them for like a free brunch. We can offer some soft drinks and also lately the teddy bear in the payments that goes to the customer Yes.

Principal Investigator 11:25

Right. So basically so when it comes to the in the loyalty and the incentives is just more like marketing strategy, it's marketing the marketing strategy Yeah, that's it. You guys will definitely love this from this one. So I said it

Figure 23 INTERVIEW TRANSCRIPTION MR PRZEMARK V

MR ANDREA

Principal Investigator 0:17

Right. So based on what I said previously, policy management, right? Who exactly creates, the policies for the organization?

Andrea 0:31

So obviously, when I moved here five years ago, this policy was already in place. So I'm not the one who actually create them. So this was made by Annemarie because she, she's been working here for 10 years. So she actually opened this business. So she moved here when this was used to be a construction site. So then when Paul, the owner with Anne Marie, they sat down, and they

Principal Investigator 0:59

Basically the owners and the general manager at the time.

Andrea 1:03

Yeah, so basically, I just took the over from there

Principal Investigator 1:06

And as any policy be made after you took over, any policies that was removed second, ever since you joined,

Andrea 1:19

No, everything stayed the same.

Principal Investigator 1:21

All right. All right. So so just three people that are involved in the policy, there's the Annemarie, this general manager, and the two owners summary and poll, basically, another important poll is the owner. Yeah. Okay. So that's, that's the policy management, I don't read anything else from that danger staff management. When it comes to conflict resolution, conflict resolution, I was at least the process in which the requests happen now, there's a conflict between stuff and of course, like an issue an issue exactly how is the conflict resolved? Okay, let's not use let's not because I know that cost man and stuff normally goes to the manager and the manager resolves X, Y between staff and staff. So two steps as literally say, for example, now, you start with a staff a hockey

Figure 24 INTERVIEW TRANSCRIPTION MR ANDREA I

Andrea 2:12

fight. So, the procedure is to have a one to one with both of them. And ideally, would happen before ideally you also want to schedule like a meeting between the management and the member of staff. So what I what I would do other non champion so if for example, if two people had an issue, so you also want to first of all you want to hear for fashions, and then ideally, you don't want to create the but you do want to you want to stop the tension, which is why it's very important to actually have a meeting with both of them or to treat them the way

Principal Investigator 2:56

whatever they are in nomograms.

Andrea 2:58

And ideally also want to find a way to make this work because obviously, it can possible to find a workplace where everyone gets each other so you also want to be we are manager but sometimes we have psychologists as well, like you it's like it's like you want to be the visitor yeah that's the way you deal with an issue between a member of staff all right so let's see for example now that depending on the situation because maybe you know that there are cases hopefully never happened here but there could be cases where it's it's about you know, someone personalities and everyone has the same issue with that person. So in that case it is something very serious and something which affects the environment of the of the place then of course you need to take further steps which could also be you know, like termination of employee that's that's the worst that's the worst case.

Principal Investigator 4:05

So it didn't say he does get right now that personality and start a company now personality out today exactly the complaint is that they come face to face come meet you or is there like a system where they can log in their complaint or this person is always like dislike this

Andrea 4:21

or usually now usually it's day two complaint will come to me and or they can go to any other duty managers and then the duty manager will pass that on to me, okay, that's how they usually do. They could also send me a private email, if it's something very personal, that I could also because everyone has has my personal email address so they can also you know, send an email just sharing that with you. Yeah.

Principal Investigator 4:51

And stuff strings don't the management of stuffs and Achilles stop coming into your organization right now. And you give them x access to an online portal. Okay, this is how we're going to go

through the, the organization itself. And we're going to see from the step a to step Z of the exam itself, how do you

Andrea 5:11

stop training, there are different ways to do it, you can eat, like to start lack of training training pack. So to give to everyone, so everyone goes through the training part, because the results are different training, which are made by that third part, which could be for example, I've done it for the coffee machine. So for next week, we're going to start the coffee machine training. Coffee Machine training, which is not gonna be here, it's gonna be on on my mom's coffee site. So we're gonna do like different groups to go there and do the training. Also, that's another training related to the allergens, which is basically it's done on online. So you will be asked questions like, it's like a question.

Principal Investigator 6:07

Okay, yeah, so just you to get to know, you give them the materials they need before the extraction. Yeah,

Andrea 6:13

we used to, again, we used to do that before AnnMarie was here. So when everyone actually had the training with the food alert, and because this is very important, so you need to know, you need to be, you know, confident and comfortable with all the type of allergens, you want to know the difference between a gluten free or a celiac disease. So this kind of thing. And then obviously, after our sets of surveys, like, you know, what, you ought to approach to a customer, which this is going to be more like, like a one to one, you know, it's, it's more like, you can start from a coffee chat. So you get to know the manager who is in charge on the coffee, which I get to know, the employee. And then you know, you can do like a small section, and then you can show them the steps of survey. So it's more like something which is done during the service.

Principal Investigator 7:05

Basically, it's a manual service where

Andrea 7:06

they actually so when it's about when it's about like allergens, like more specific stuff, then yes, we have a system, like a food alert, where you can log in, and everyone gets a login details, and they can do it themselves. And then at the end of the day, at the end of the questionnaire, they get they get the results of whether they passed or not. They didn't pass

Principal Investigator 7:28

it, obviously, they had to do it again. And it's an online questionnaire. Yeah, it's

Andrea 7:32

an online, it's a light, it's cold. I think it's called food, Allah 56, something like that. I'm not I don't remember exactly how it was called. But we've done it before. And I'm actually thinking to do it again. Because you know, we change the menus and new stuff. So everyone actually was a, you actually won't realize how much you can learn from these questionnaires. But there are things that you might want to think about. Yeah. And, and with that pressure, actually, it's very important. Okay, so

Principal Investigator 8:01

for that, I will check it out. So that's on the stats, about the tracking on cash flow. So what system do you guys use to track? What assets cash flow? Stocks, checking out? inventories? Our system itself?

Andrea 8:20

Okay. So for the stock? We don't have we unfortunately, we don't we don't do a stock count on foot. Okay, like many places do we should do this? Well, but we've never done it. So I cannot help you with that. Like, we don't have a system in place. Unfortunately. Because we can't wait. We don't really know how much we're actually losing. Dreams. Yes, we do a stock count every Monday. So the park manager comes in every Monday morning at that end does the count. And that way, you can actually keep track of how much we actually go through during the week. So when doing the order, you actually have an idea better understanding how much stuff you need to order. That's why stock count is also important. And also, it's important because you want to know exactly how much you sold and how much you lost. If there is something we just send the bottle missing on the on the Chef, thank you now happened before?

Principal Investigator 9:21

Yeah, I know. Yeah. Okay, that makes a lot

Andrea 9:25

of food for the food now, unfortunately.

Principal Investigator 9:30

Okay, that's okay. And the system what system is called receives a manual system? Or is it an online base

Andrea 9:36

where you input the data into? Yeah, we do use some touch, some, some touch as a m, touch, touch. Perfect. Yep. So basically, we use that it's a programming system that I use myself when I need to program the tools when I want to add new products to the test. So I use that and also sometimes back Coffee. So you can also do the stock. So basically, yeah, so I'm talking about I'm talking about drinks items. So drinks height, and they are linked to every drinks item as a PLU, which is basically it's like an ID. So every every drink title has an ID. And this idea is linked to the stock. Okay, so when you sell it, for example, if I sell a pint of Amstel and I punched through the tail, yeah, the saints that will tell me at the end of the day, regenerated itself, you can check the report to see how much is how many arms that you sold today. And obviously, that that's linked to the stock. So it's a cross reference, it's coming out from the stock

Principal Investigator 10:46

outlet. And when it comes to expand sales, do you integrate with social media itself, as you get online to help create awareness for the restaurant itself? Is there any system in place for creating our wins? Only like advertise advertisement?

Andrea 11:08

Yes. So we do use I mean, our main found is Instagram yet. So that's what we're using at the moment. To like, advertise, for example. Now, we went live with a new beard, the portfolio for citrus IPAs and UPL started from last week. So we advertise that. To let customers know obviously that we do a new tap there are new and yeah, so mainly is Instagram and

Principal Investigator 11:33

I was doing engagements with posting making on Instagram, how is the engagement, including posting on Instagram, to create awareness to customers that we have? So So bear in place, obviously, engagements with this?

Andrea 11:47

So the engagement? It can it depends because obviously, before as a leak, so before COVID, we used to have a social media manager, so like a lady who was in charge on a daily basis on posting, you know, pictures and videos, and etc. Back in the days, the engagement was very high. Very good, because obviously, the more you engage in the bear the exam. Unfortunately, with COVID, we had to make a few people redundant, so she was one of them. So for a certain period, Instagram was like, abandon it. Yeah, so obviously, we have lost some of that engagement. And now within we have a new guy who's looking after the social who is trying to get that business back. Okay. And yes, so at the moment, it's, again, it's really it really depends. Because, you know, in order to get more engagement, you also need to invest money, you guys Yeah. So basically, what you what you need to do, you need to boost the post, okay, you do that you need to pay to pay more money. We're not doing that just yet. But we obviously, we going to go back to do that as well. Not for every single cost, of course, the main ones, especially for the main ones, for example, if you want to advertise a new menu, if you want to advertise Christmas menu, if you want to advertise like a private function, food packages, like the main, the main thing, main message that you want to pass, not just people,

then it's very important to actually invest a bit of money to boost that post. In order to add more audience more engagement.

Principal Investigator 13:43

And sales, expanding search costs inventory is talked about that. Accounts and management markets. And of course, also the current system used for markets. And when he wants to, like you mentioned that you you when he wants to take sales stocks and stuff like that, for example, the app, so you use that you take rental apps to it was my family's from stock. Yeah, exactly. So what system exactly do you use? For the accounting of payrolls of staffs? How is it affecting the business profits itself? For example, I have stops, right? Is the company making enough profits to also generate enough money to help staff itself and also keep the business running and still live in sufficient profits for the owners themselves?

Andrea 14:39

Okay, do you mean cuz you mentioned about the payroll system. So the payroll system that we use is zero me? Yeah. So everything is there. So on zero mean, we can obviously get the report of the cost on the wages on all the invoices, all the costs that the company basically goes through every week. So every week I do receive. So what happened is every week, I receive an email from the accountant with a weekly report. And on this email, it shows how much the company needs to spend on wages for March needs to spend on holiday. Because you know, people go to go know this, they need to pay for that how much we spend for deliveries. That's why, you know, invoices and everything. So we we have a basically this spreadsheet where we see every costs coming from the kitchen or bar stuff. I can tell you that, for example, the for the wages specific, we should be looking at 25 26%. So basically, the wages should be shouldn't be higher than 25 26%. Of the of the weekly takings. Yeah, it's very hard to be on top of that, because also that depends on the size of the venue, this is a very big venue. So it's, I must say it's impossible, but it's very hard to get that percentage is usually higher than that. Because, because the band is big. So you want to allocate enough staff to each section. Because imagine, imagine, you used to work here. So imagine if I have only two people on the floor, looking after terrorists member like Bob, that's impossible. For example, I have a sister venue Mayflower Sesia. Because I don't know if you've been there. So if you go there in so much smaller and you don't need you don't need us or Dustin as much as US media. So that's where we are, I would say that's where we struggle the most in terms of obviously, profit, because of you, we are spending a lot of wages. And you also want to make sure that these wages are covered by conflicts that has been gathered by the company, which is something that at the moment, we are struggling a little bit, but hopefully also depends on the on the period. So you know, this, this venue doesn't really make much monitoring summertime. It's more like a winter climbing, paint boards. And print. Titanic is coming back in January and also Christmas season. Yeah.

Principal Investigator 17:34

That makes sense. That makes currently

Andrea 17:37

Figure 29 INTERVIEW TRANSCRIPTION MR ANDREA VI

what you wanted to know, oh,

Principal Investigator 17:38

yeah, it's amongst along the line, the rest of the ones I can figure it out myself. So reducing costs that reminds me, so what direct method did you guys use to reduce costs? How do you, for example, now you're, you know, you don't understand you don't track the food that is being used in the kitchen? Right? Well as in a pathetic situation, you guys are tracking food right? Now like we used for? Let's just be right, you know that amSCO is meeting a lot of money for you guys. It's making way more compared to the order? What strategy used to increase the price? Or do you keep it at a certain price? Or do you reduce it? What do you think is the appropriate senior situation to do in that scenario? This is to reduce the price increase the price or limit disease to new at cost? price range?

Andrea 18:35

So do you mean is this related just to the

Principal Investigator 18:39

food? Not starting off with drinks? Food as a product? Is making a ton of money? Right compared to other products that are out there? Right? Do you increase the price? Because it's making a lot of multiple wants products? Be with that disease?

Andrea 18:56

That's a very good question. We usually we we usually increase the price when for example now is as from next month, because the introduction So price is going up. So obviously we need to put the price up like this. But usually, as far as I remember, we don't actually increase the price depending on how good the product is selling. We follow the the opposite. To basically it's a product is selling good, then we want to keep that as a best seller. So you don't want to put the price up otherwise you're gonna you're gonna make customers accept basically. So no, actually what we're working on is if it's a if it's a best seller, if it's somebody that it's working for us that we took it as it is, okay. For example for the menu. It's a different thing because the menu it's because so now we just moved to a new A new type of cuisine. So because we want to get the customer back because the previous menu wasn't really performing, so obviously, we had to keep the price down. So people get to know us. And they see that we change the menu, the menus better food is better. So they come back. After that. You see which one is selling better. Because basically with the foods, we we wanted to keep the price down. Because we want people to come back. Yeah, of course, we then move into new menu, then some of the prices might go up. Why not? Not because they're selling, but because we we kept it very low,

Principal Investigator 20:41

very low compared to the other places.

Figure 30 INTERVIEW TRANSCRIPTION MR ANDREA VII

Andrea 20:45

But other than that, now, we don't actually put the prices up just because it's Alisha, in August, if at the end of the day you will be making profit, then we rather leave it as it is. So you can still make profit, because ideally we should be making about 78% profit.

Principal Investigator 21:05

Okay, yes, good. Okay. Well, if there's a product doesn't accumulate in profit, very academically loss. Do you cut it short?

Andrea 21:12

Yeah. So if that product, that's why every Monday when I sit down with her chef, and we check all the products that we're trying to sell it better. So if we, if we have if we see that, like an item from the food menu, or even on the drinks menu to see that it's not selling, then of course we replace it replace? Yeah, so we drop it. But obviously, we don't keep time. Now like you're ideally you want to give them like four weeks to see how he's performing every week. If you see that it's actually not going even after a long time. You just cut too short. Yeah, yeah, that's what that's what we do. If the if an item is not performing, then we just

Principal Investigator 21:50

dropped it. Right. So just a few more questions. correctly, you guys are using this using using two system now? Are you thinking of implementing the food alert system back, which would make it three? That is the sum towards zero, me and the food alerts. So if you were to say there was a system that can do all these things, in one with us, that's what systems are saying like, for example, engine three, you're going to use three systems, three different systems that we have to train, if you, for example, are going to have a lab work, right? Maybe someone else knew now you have been using this standard for so new, you have to learn and train for this stuff again. Right? So maybe there's a system that will provide all this solution. In one

Andrea 22:37

way, that would be amazing. But I'm not sure whether there is such a system as

Principal Investigator 22:41

a Tinder. That's what I'm trying to do. Right. That's what I am trying to do. So it feels like though, that would be amazing, right?

Andrea 22:47

I just, I'm sure there are better system that but at the same time is that assistant means no more money, no cost. So this is unfortunately, this is not my call. So this is the owner deciding where to go for. Okay, so yeah, because at the moment, you know, it'd be like, it could be it could be organized, better. Okay. But again, it's also money. So

Principal Investigator 23:18

it's really, okay, I get you, and adware capability. For example, the system is all online based, right? So you don't really need problems when it comes to what kind of systems you use laptop. Computers. There's no problems with that. So I'm what I know the range on costs that you spend on adware. How much is it per year? I don't know. I'm not sure. If we'll see, I'm familiar with Cisco laptops. This is a couple of millions. How familiar are you gonna scale one to 10? One being no doubt good. 10 being very good.

Andrea 23:59

But is this about the laptop?

Principal Investigator 24:02

Yeah. How good are you like, say for example, now? I want to what I want to know is what kind of system capability do you need to run this application using right now? Is it like a Windows 10? I would say eight Windows eight is good. Yeah. Anyway, it's under RAM. Yeah, like four gig RAM. Yeah, yeah. That's like, so basically local political system is enough. Perfect. And okay, then one more question, loyalty and reward permutation. So basically, customer loyalty makes a system whereby they can buy stuff. They get points for this stuff. I noticed that previously Tom was going to implement something like possible good card system where they pay money on the card to card for their set amount of inside the card, basically. by Jamie Foxx. So I wanted to let you know, for example that customers use on gifts. Right? All right. Yes, the Catholic veil is good. Yeah, this is only upon inside this card. If you go there, you can spend 20 pounds or you get some discount for using the card. I know that's one way to implement this, whatever implemented, I don't know, why are you thinking of still implementing it or is it going to be discontinued?

Andrea 25:21

I personally wasn't aware about like, I mean, I know that we have like a Boucher's Yes. Yeah, we do. Yeah, that's still in place. But yeah, we do have different amount of vouchers. So yes, we a customer can either decide to buy that. Or we could give that to the customer as as a reward. For example. If there is if there been like, an issue with the table, then you just have them a voucher to come back. Okay. Yeah, that's what we use.

Principal Investigator 25:55

So it's not discontinued, it's just

Andrea 25:57

we have the vouchers to offer to customers that can either decide to buy as a gift can I can I buy a voucher to give to a friend of mine here and then they will have different amounts like 10 pounds voucher 20 5100.

Principal Investigator 26:13

Okay. Perfect. Perfect. I'm gonna get started all the questions. Yeah, very much. Are you happy with my very happy to answer your boy, this is gonna help me. Good. Thank you so much. Perfect, it's in minutes.

Figure 33 INTERVIEW TRANSCRIPTION MR ANDREA X

MR FRANCESCO

Principal Investigator 0:00

Alright, so basically just about five to 10 questions. So, the question is just answering these on your knowledge on what you know, so far. And we'll go from there. So the company management system, the policy manual, it's the policies that are created to company restaurant itself, I wasn't created or were you around Linzess predicted,

Francesco 0:23

I wasn't around, but I've been taking the place after like, an incident there was a vision system and sort of the vegetable system was really good. I don't really know something about what training like say diver, the sun itself does up pretty easy. And you know, our in our generation we catch in the way the arcing also automatically, Okay, which one is the main point and the new one gets

Principal Investigator 0:53

us know, always involves integration of the policies itself? Like, which record is like a uniform, right? Like the rules and regulation of the company itself? Okay.

Francesco 1:06

For the services Absolutely, no, basically read the policy on the restaurant is reading by the manager with the advice of management. Like let's say the man or the owner want to have the best people without being the manager advice, you know? Brings the rules good to the line and make the balance with remote and unwanted what a possibility, you know,

Principal Investigator 1:47

I guess

Francesco 1:50

this is basically as the manager job to go to Google the owner needed staff members.

Principal Investigator 1:57

Okay, it's perfect, perfect. So when it comes to the training our staff is there like a system that is being used when that's when when a new staff comes into the restaurant and you want to train the staff? Is it Amazon? And our training? Or is it

Francesco 2:14

select a procedure? From the word from many plays in place there is no like main decision because it's not like that cafe Shabbat so in let's say, in our place, there is a word from you standing to the

door, there is as you see, there is only one answer. So you know, everybody's standing there waiting for the world come to me or my codec. So you know, to the world consider you under the bus, we have the QR code menu on the frame. So you will show what is the menu then, you know, many people you know, follow the training and follow the procedure. Like let's say there is an avid restaurant where you work in this I don't know in any restaurant where I work I always try to bring like an a Bible to put everybody on the same day. So you come into the restaurants you know that you have this one there if I'm here if I said somebody said that is standard that you know the constancy of things is something that you need to get but then you went to the extra service very much the standard that this is the you know, there are standard step of step by step of standard service that not everybody needs to follow them but they need to be on the same level so

Principal Investigator 3:47

it's it's a hands on kind of training that we put it through it to let you know I've experienced directly

Francesco 3:53

then there's the events of the garden the gameplay itself Oh, we follow the procedure.

Principal Investigator 4:00

Okay, so let's talk about the track of flow of cash in the restaurant is there like is it a manual system in which you count the money that you send it to the bank or is there like a system already in place that automatically calculates that just flow based on where to the US

Francesco 4:15

Do you want to do your own agenda report this was a show you're gonna have to make understand

basically this you can you're gonna have to two main reports one is the the collapse of the system rebuilt on the one you know all the input to the new is gonna include the you know, the cash floating, the car the the takings or colada and the you know, the any discount or you know, you can even include in the back walls of the system at a discount avoid multiple was the discount and then you have a petri dish and you have this total then they show you basically all the things and then the second main things is the video machine that is it for the building a machine that is I don't know many restaurant we have in my restaurant and this basically be the view machine at the table so they want to go straight away to the bank or the owner. So basically each payment each each card payment is like in the middle of the transaction the owner against if the transaction flow then depends on which next few days and then two to three days that's why many plays many restaurants allow time experiment Oh

Principal Investigator 5:51

Figure 35 INTERVIEW TRANSCRIPTION MR FRANCESCO II

that's good. I needed that. So when it comes to expanding sales is there like a strategy you guys normally use there? So for example you have a program that you're gonna like for example the nine year that the parts they did is it like a when you do to expand the view of people like maybe more aware of what's going on? Is it like a hands on poster or is it social media use

Francesco 6:14

visie that ties in the main things is always the word of mouth word of mouth. This is done in any non any restaurant you go in the word of mouth is the most successful marketing then the nowadays you know the results the power of social media is cigarette is important social media is powerful but it can mirror that many many patient in place like this with a higher price and a little gain or fat Shana you know, I have a lot of expectation so you know our unit to follow your expectation as the guest sometimes is not okay, so but nowadays basically everything's based on social media you have a full powerful social media so that we have somebody like Google CEO then take time, you know, social media, you know, it's called social media that they want to use your Facebook Facebook This is uh this one other quick

Principal Investigator 7:28

maintenance and the cost of inventory i You mentioned previously that when's it products be used in the back of the house that is automatically put through to the till Yeah. Which now shows the report itself or what's to be used and what's not being used

Francesco 7:43

basically showed one at least in our report this is what I always been used to Devil is our eyes on two very good system they show straight away basically like net their grand total minus the VAT on each product because each product are different but yeah, you know why in this year percent so everything is gonna be a you know that and then there is even a graded system then you input I don't know. Like for example, not Caucasian is maybe like 50 Oh yeah. So you input these one and they calculate in the cost of you know, is that all together back of our system together putting together the invoice of the payment for the supplier, you know, when when you when, you know, the cost of how much you spent in that day that

Principal Investigator 8:50

okay, I see you know, how much it's meant to be left and certain stories

Francesco 8:55

that come out of the workforce system or like for example that I need for this stuff. You have even you know, everything online so you have even the cost of stuff still the way in each day so you know, if there's a restaurant system or they're very grateful if you combine all of them you know, you're gonna track here every single one days, how much money basically like mine was a little expensive for them to

Principal Investigator 9:27

stuff and the reasons okay, get you so you said that it says that it's this supplier so that was automatically so once the product is already in the supply, so I didn't know that you guys need more of this.

Francesco 9:40

This is no no no, it's not together with us. So basically, I don't know the one I did before. manually. You will put the one like you do them like the

Principal Investigator 9:56

normal event trees and stuff.

Francesco 9:58

All this play it or send it to you from the invoice you know, you guys have petronia to visit this one, yeah by explore the URL and then the system automatically do that.

Principal Investigator 10:12

I see. That makes sense. Okay. So Aki says so, based on your experience it is meant to be a manual system which you tell us

Francesco 10:21

that exists, but there are many many like online or digital there are some uses the manual manually or this is for my knowledge or maybe the restaurant was upgraded on web

Principal Investigator 10:44

three. So when it comes to accounting as the payroll of the stuff is there like is it a manual system whereby you send the timesheets to accountants or is it like an online

Francesco 10:58

place? Yes, but there is even no lead system like like I was saying for some force basically is automatic when you come into the work they will they log in with a picture yeah. And you know, and then you do the lockout, again put the brake brake you know, and this is automatic and you go straight away to the payroll system and then I automatically and then the manager you know, going through the Bucha you got

Figure 37 INTERVIEW TRANSCRIPTION MR FRANCESCO IV

Principal Investigator 11:23

it workforce workers All right. On the payroll so I want you to think about a possibility right you mentioned that there are different types of

systems like the team system the backup hours inventory system, the payroll system in order to give where to find a way to combine all those systems into one system how would you see that happening?

Francesco 11:53

is already happening and is already the result as it was similarly to do it right still at the moment is not like let's say the Small Business

Principal Investigator 12:03

small business

Francesco 12:06

corporation like Mario tivacay They already make sense to have it this because it's an expenses you know each contract you sign I don't know we do they count that either their buddies we pay fee basically each show no no no monthly fee This is dependent on monies each time and basically there is M for a small business like I don't know it's not really needed this one

and expenses as this is mainly for the big corporation you know what way does not have you know, is abroad I don't know it's you know

Principal Investigator 12:51

make sense? Just just for like it's useful for big restaurants and large corporations

Francesco 12:58

for like for a large corporation and I love Corporation style you because this

Principal Investigator 13:03

is what it's for small companies to get the system because it doesn't want to

Figure 38 INTERVIEW TRANSCRIPTION MR FRANCESCO V

Francesco 13:09

get on track with some issue I see black likes most resist against this because they own and maybe he's not involved but you know, is involved somehow capital V meeting or a couple of datings banking see is always a little bit involved even if he's not involved but I don't know whether 10 restless okay, no no you don't ever excess pounds of 5000 pound whether or not like to like be blind of your business when I see abroad for example, this might be the solution

Principal Investigator 13:50

would you classify drones as a small business or is a family business and family business was a small and

Francesco 13:57

family business

Principal Investigator 14:01

difference perfect. When it comes to the customer service like the customer review system, how do you guys try to improve yourself based on the feedback of the customer? And how do you gather this data?

Francesco 14:14

This is a seen these are like like I say the the power of branches the little things so it's already advertising me many people and without Kurian on the best of customer service, they don't come for them for this advertising

Principal Investigator 14:38

for these solid drinks and for the product for the

Francesco 14:41

product itself. So we already like let's say we already advantage advantage on this. You're gonna have a you know, a little lack of service. And, you know, let's say to progress on Normally I don't know to the only way basically to increase our positive review

is I don't know sometimes we have coffee as our very low cost so this is going to be something new when do it anyways people appreciate this stuff we're gonna get to customer customer customer retention

Figure 39 INTERVIEW TRANSCRIPTION MR FRANCESCO VI

of course we'll keep it in your face for the one Parliament let's say for let's say there are many, many seats you can get famous is a father Oh favor you're gonna find you're gonna use fiber for them basically, at the moment everything is a you know, is the power of community. Let's say

Principal Investigator 16:13

that, that is it. So when when it comes to your tier system, this is the last question how do you see the way the system is being made or they'll be made this opinion

Francesco 16:34

the opposite of Abu Ghraib downgraded ah I don't know this system basically is mainly automatically about is, you know, does not have does not get the things easier. To prove in terms of programming. I see levers because it's easier now you know, logic using that make things harder when you're on a program and things easier

Principal Investigator 17:05

is basically when it comes to usability from the input from the customer. So it's not like I just write it down

Francesco 17:16

the human copy for the rest of the product. Each product, or maybe this one might be my luck. But

Principal Investigator 17:28

basically budgetary experience when it comes to editing was perfect. Thank you very much.

Figure 40 INTERVIEW TRANSCRIPTION MR FRANCESCO VII

APPENDIX E: SKETCHES

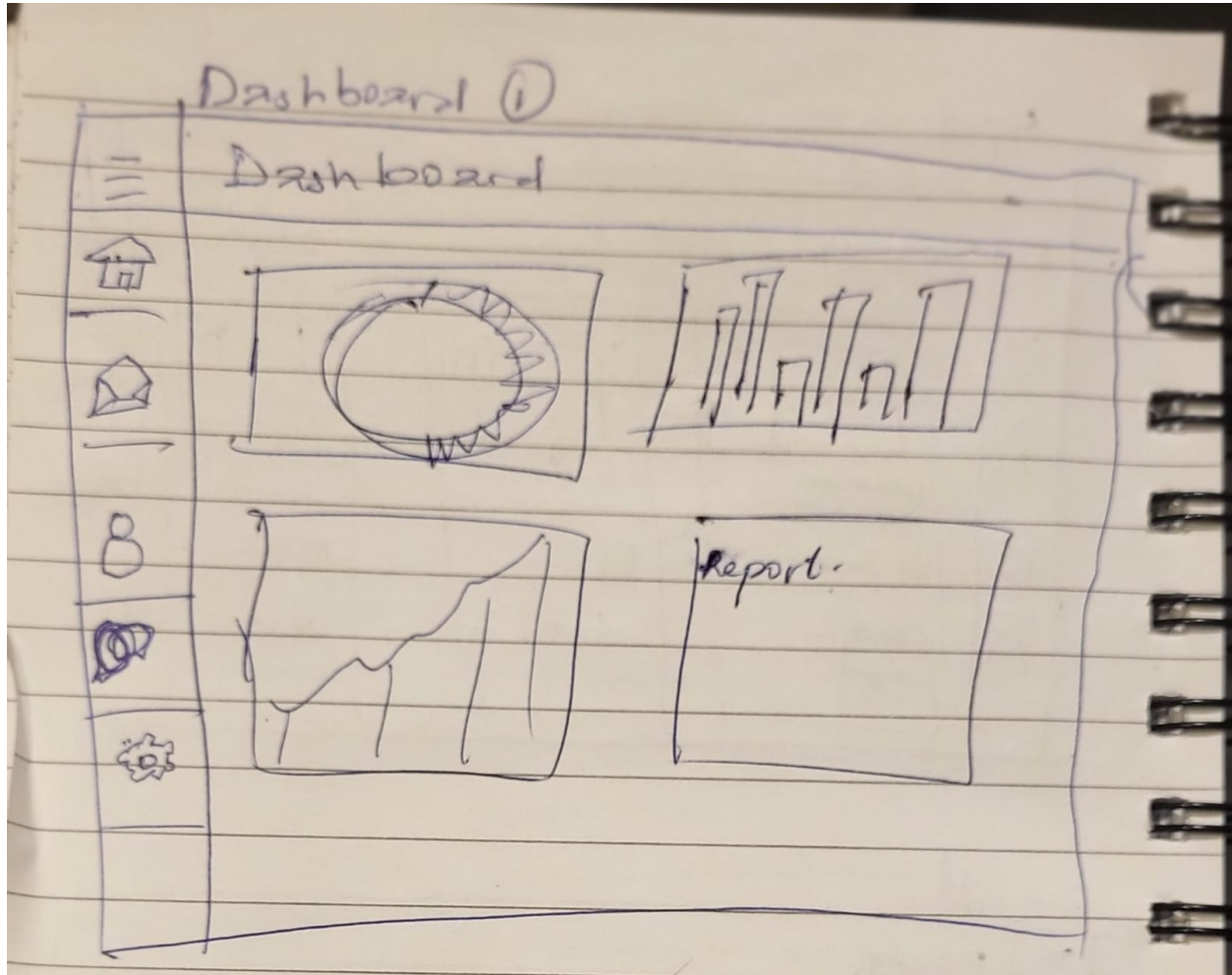


Figure 41 SKETCHES DASHBOARD

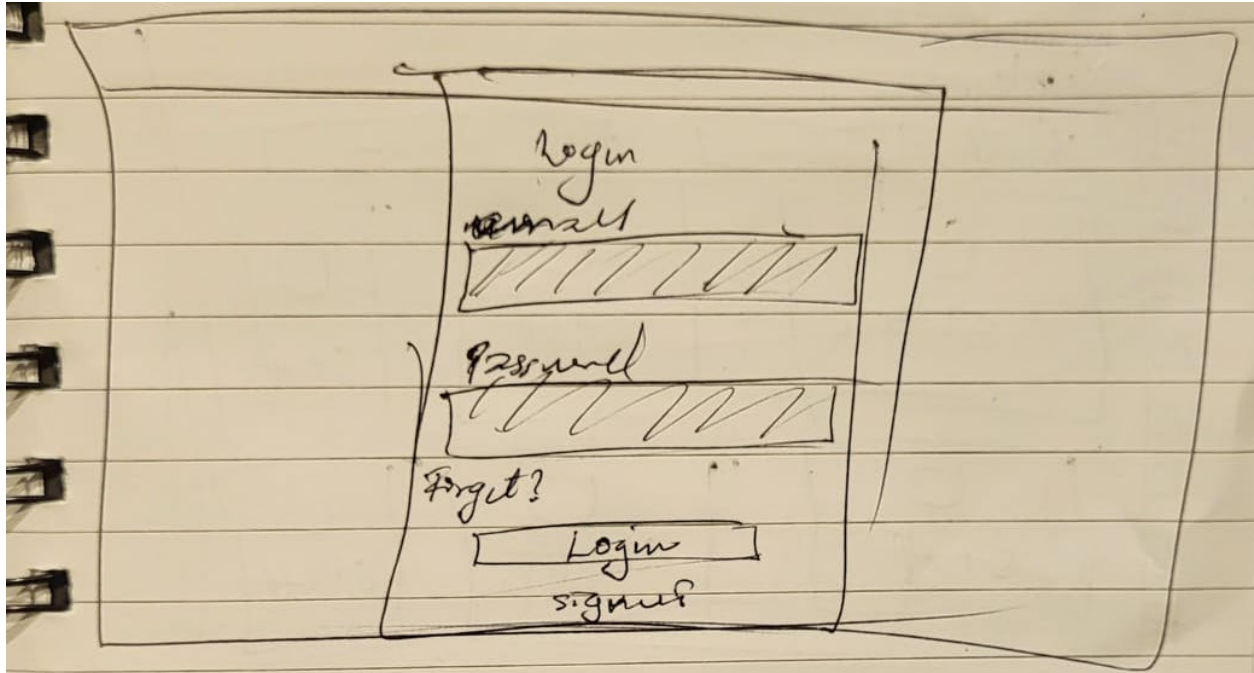


Figure 42 SKETCHES LOGIN

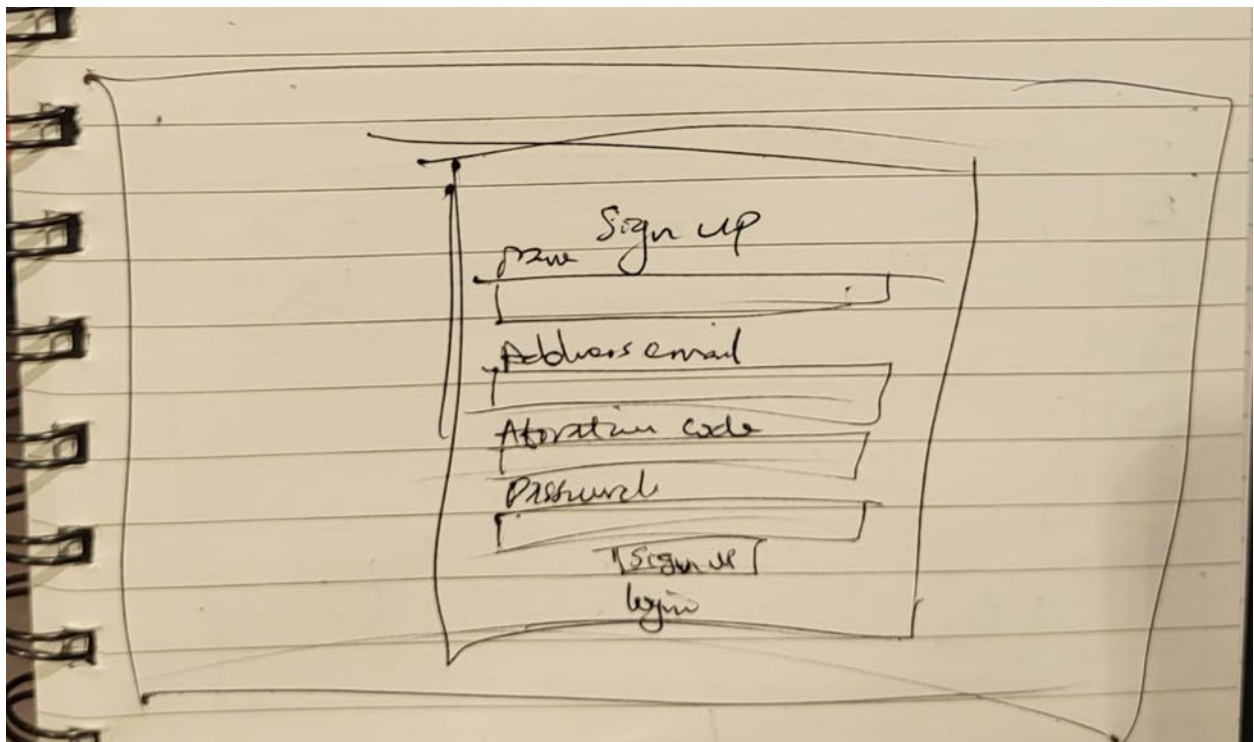


Figure 43 SKETCHES SIGNOUT

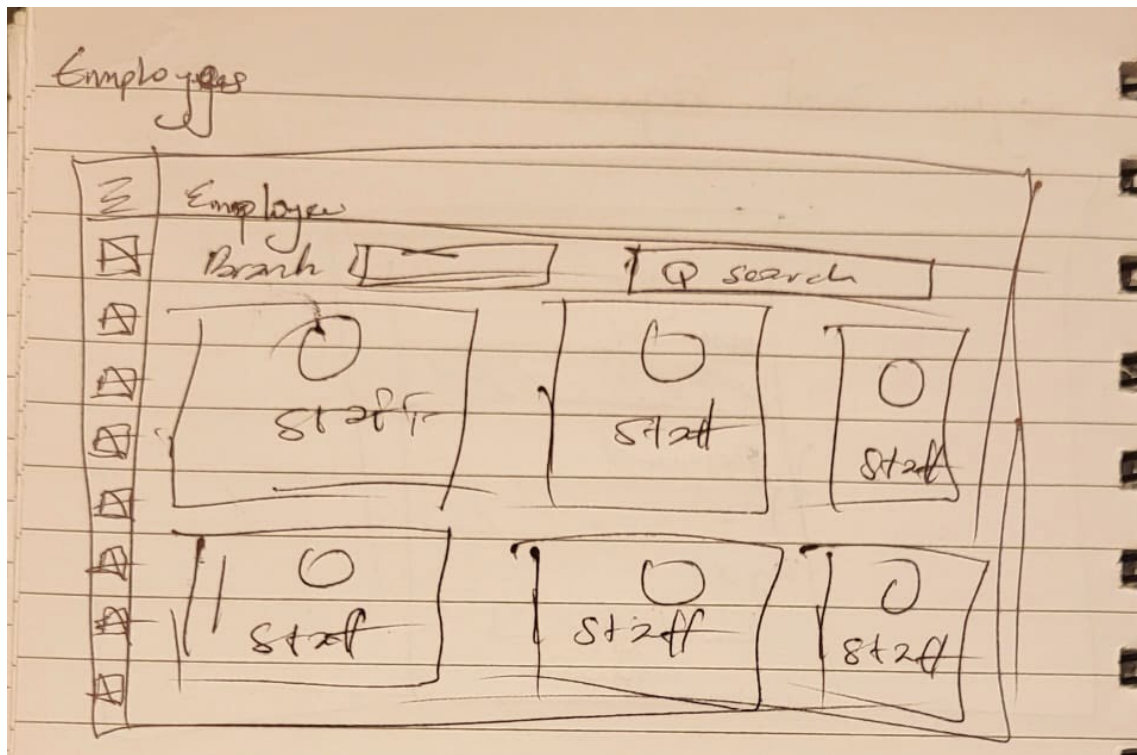


Figure 46 SKETCHES EMPLOYEES

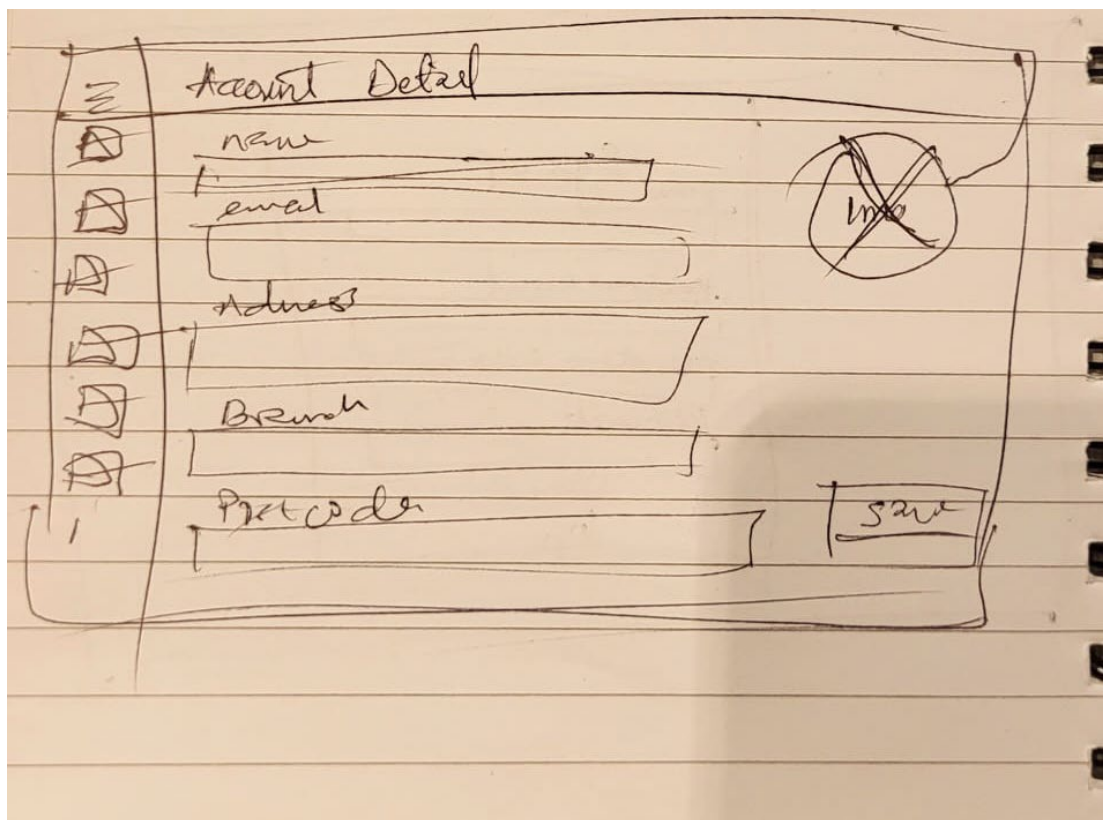


Figure 47 SKETCHES ACCOUNT DETAILS

[illegible][illegible]

Search medical records

Emilia Clarke

Overview

63
Front of house

340
Back of House

460
Managers

460
Managers

60
Branches

30
Customers

40
Accountnts

40
Accountnts

2601
Foods

958
Drinks

108
Events

108
Events

Branches Report

LONDON

Brent Cross

42,9000.00

Colindale

25,5000.00

Bond Street

15,6000.00

Canada Water

36,500.00

CAMBRIDGESHIRE

Cambridge

42,9000.00

Huntingdon

25,5000.00

Sawston

15,6000.00

Sawtry

36,500.00

Worldwide

World

Search medical records

Emilia Clarke

XXXXXXXXXX

Branch

London

SORT BY

Date Joined

Search Staff by name or title

ALL

FOH

BOH

MANAGER

SUPERVISOR

Shata Tikka

TIMESHEET

VIEW

Ebuka Kelechi

TIMESHEET

VIEW

Kemi Olowojeye

TIMESHEET

VIEW

Dr. Michael Stewart

TIMESHEET

VIEW

Dr. Michael Stewart

TIMESHEET

VIEW

Scut Tom

TIMESHEET

VIEW

Antina Ahmed

TIMESHEET

VIEW

Barabas Paul

TIMESHEET

VIEW

Ayo Jones

TIMESHEET

VIEW

Ayo Jones

TIMESHEET

VIEW

© 2020 MedSoft

© 2020 MedSoft

© 2020 MedSoft

Xxxxx 10 v

ALL

DAY

WEEK

MONTH

MONDAY

TUESDAY

WEDNESDAY

THURSDAY

FRIDAY

SATURDAY

SUNDAY

 Jhon Doe

 Jhon Doe

 Rukshana Shaikh

 Rukshana Shaikh

 Jhon Doe

 Jhon Doe

Branch London ▼

This Month: October

ALL

DAY

WEEK

MONTH

Employee Name

 Jhon Doe

 Rukshana Shaikh

Jhon Doe

 Rukshana Shaikh

Jhon Doe

 **Rukshana Shaikh**

 Jhon Doe

 Iben Doo

Then Dec

 Rukshana Shaikh



Search medical records



Emilia Clarke



Account Details

First Name

Last Name

Email Address

Gender

Account Type

Street Address 1

Street Address 2

Postal Code

Branch

Create Account



Add to



Johnny



Angela



Miley



Adam



David



Abraham



Xerus



Nomad



Naveen

30 Days Performance

VIEWS

7,482,120

FOLLOWS

54,364

LIKES

125,685

Analytics



Statistics

Montly Target

50% acheived



Events Distribution

Last 30 Days Performance



Hi Clarke

Good Morning!



Emilia Clarke

Owner
Admin

298
Work Days

15
Holiday

🔍 Search Staff by name or title

ALL

FOH

BOH

MANAGER

SUPERVISOR

[illegible]

Upcoming Events

Filter | Sort by Recommended

Sort by Recommended

Lorem ipsum dolor sit amet,
 consetetur sadipscing elitr.

■ Lorem Lorem

■ Lorem ipsum dolor sit amet

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■ Lorem

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Lorem

Lorem ipsum.

lorem.

Lore

APPENDIX G: MID FIDELITY WIREFRAME

A mid-fidelity wireframe of a login page. The page has a light gray background. In the center is a white rounded rectangle representing the login form. At the top of this rectangle is the word "LOGIN" in bold black text. Below it are two input fields: "Email" with the text "Yongyu_chen@restaurant.com" and "Password" with masked text "xxxxxxxxxxxx". Below the password field is a checkbox labeled "Remember Me" and a link "Forgot Password?". At the bottom of the form is a dark gray rounded button with the word "LOGIN" in white. Below the button is a link "Don't have an account? Create an account".

LOGIN

Email
Yongyu_chen@restaurant.com

Password
xxxxxxxxxxxx

☐ Remember Me [Forgot Password?](#)

LOGIN

[Don't have an account? Create an account](#)

Figure 49 MID-FIDELITY WIREFRAME

A mid-fidelity wireframe of a sign-up page. The page has a light gray background. In the center is a white rounded rectangle representing the sign-up form. At the top of this rectangle is the text "Sign Up" in bold black, followed by the instruction "Enter the given access code and create your account". Below this are four input fields: "Account Code" with the text "@856ldSC8wa?wIW", "Email" with "Yongyu_chen@restaurant.com", "Password" with masked text "xxxxxxxxxxxx", and "Confirm Password" with masked text "xxxxxxxxxxxx". Below the password fields is a checkbox labeled "I accept the Terms & Conditions". At the bottom of the form is a dark gray rounded button with the word "LOGIN" in white. Below the button is a link "Already have an account? Login".

Sign Up
Enter the given access code and create your account

Account Code
@856ldSC8wa?wIW

Email
Yongyu_chen@restaurant.com

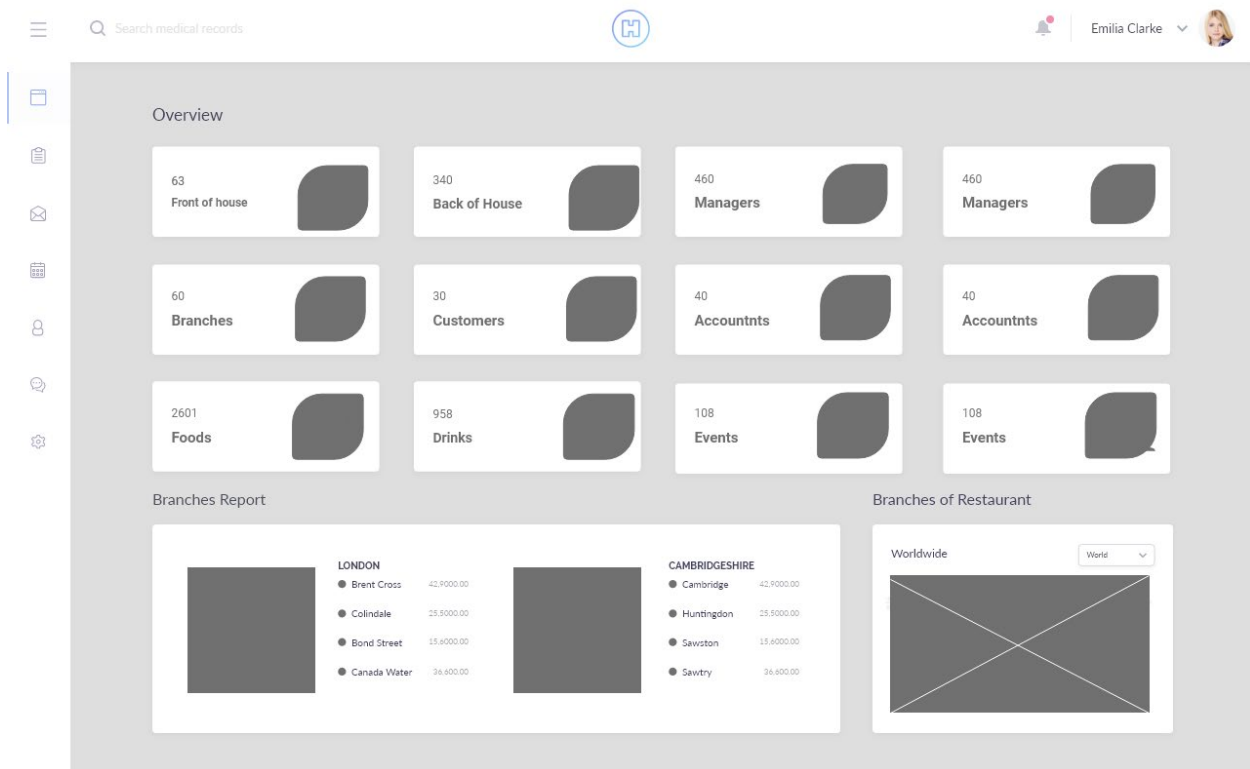
Password
xxxxxxxxxxxx

Confirm Password
xxxxxxxxxxxx

☐ I accept the [Terms & Conditions](#)

LOGIN

[Already have an account? Login](#)



CAMBRIDGESHIRE

Cambridge

42,9000.00

Huntingdon

25,5000.00

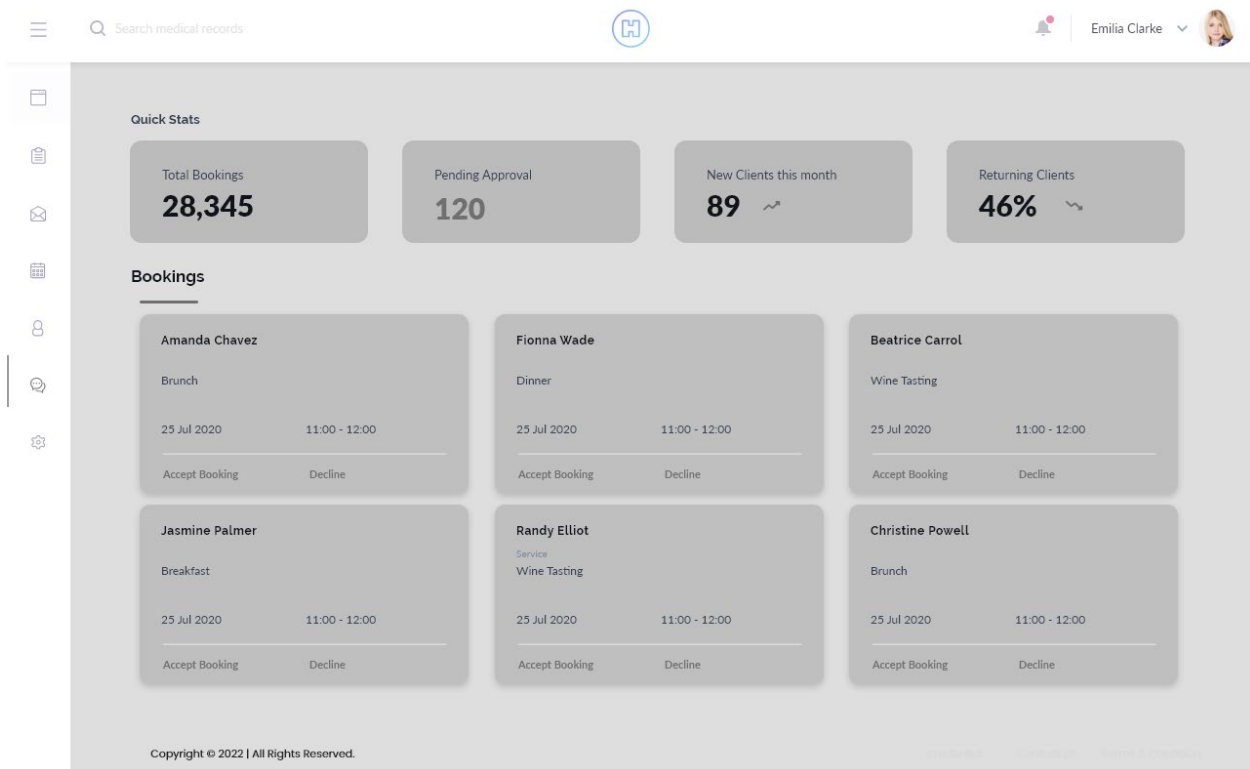
Sawston

Sawtry

Branches of Restaurant

Worldwide

World



SUPERVISOR

90 Items Listed

MONTH

Employee Name	
Jhon Doe	
Rukshana Shaikh	
Jhon Doe	
Rukshana Shaikh	
Jhon Doe	
Rukshana Shaikh	
Jhon Doe	
Jhon Doe	
Jhon Doe	
Rukshana Shaikh	

MONTH

SUNDAY

Jhon Doe

SUPERVISOR

VIEW

VIEW

[illegible][illegible]

Add to

Johnny

Angela

Mikey

Adam

David

Abraham

Xienus

Nomad

Naveen

30 Days Performance

VIEWS

7,482,120

FOLLOWS

54,364

LIKES

125,685

Analytics

Sales

2021

Events Distribution

Last 30 Days Performance

750k

Total sales

Statistics

Montly Target

50% acheived

50%

Hi Clarke

Good Morning!

Emilia Clarke

Owner Admin

298

Work Days

15

Holiday

Edit

Event

Event Name

Event Link

Event headline

Event Image

Upload Logo

JPG, GIF and PNG

Color Palette

Primary

Price

Street Address 1

Street Address 2

Branch

Postal Code

Create Event

Filter Events

Location

London

Name

Model

Date

From

To

Event Type

Type

Event Type

Paid Event

Q

Apply Filters

- ≡

Dashboard

HR

Reports

Events

Employees

Customers

Settings

Apps

▼

▼

- 
-  Dashboard
-  HR
-  Reports
-  Events
-  Employees
-  Customers
-  Settings
-  Apps



-  Accounts
-  Payroll
-  Policies
-  Timesheet
-  Training



-  Dashboard
-  HR
-  Reports
-  Events
-  Employees
-  Customers
-  Settings
-  Apps



-  Back of House
-  Front of House
-  Managers
-  Supervisors

APPENDIX H: HIGH FIDELITY WIREFRAME / LIVE



Figure 50 HIGH FIDELITY WIREFRAME / LIVE



LOGIN

Email

Password

☐ Remember Me [Forgot Password?](#)

LOGIN

Don't have an account? [Create an account](#)



FIRST TIME USER?

Enter the given access code and create your account

Account Code

@856ldSCBwa?wIW

Email

Yongyu_chen@restaurant.com

Password

XXXXXXXXXXXX

Confirm Password

XXXXXXXXXXXX

☐ I accept the [Terms & Conditions](#)

LOGIN

Already have an account? [Login](#)



Search medical records



Emilia Clarke



Overview

63

Front of house



340

Back of House



460

Managers



60

Branches



30

Customers



40

Accountnts



2601

Foods



958

Drinks



108

Events



Budget Report

London Branch



Quarter Budget

\$350,604.00

Branches Report



LONDON

Brent Cross	42,9000.00
Colindale	25,5000.00
Bond Street	15,8000.00
Canada Water	38,800.00



CAMBRIDGESHIRE

Cambridge	42,9000.00
Huntingdon	25,5000.00
Sawston	15,8000.00
Sawtry	38,800.00

Branches of Restaurant

Worldwide

World



- ☰
- 📅
- 📄
- ✉
- 📅
- 👤
- 💬
- ⚙



Add to



Johnny



Angela



Mikey



Adam



David



Abraham



Xenus



Nomad



Naveen

30 Days Performance

VIEWS

7,482,120

FOLLOWS

54,364

LIKES

125,685

Analytics

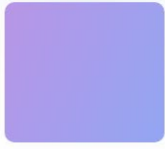


Events Distribution

Last 30 Days Performance

750k

Total sales



Statistics

Montly Target

50% acheived



50%

Hi Clarke
Good Morning!



Emilia Clarke
Owner
Admin

298 Work Days
15 Holiday

Edit

- ☰

🔍 Search medical records



🔔 Emilia Clarke ▾ 

- 📅
- 📄
- ✉
- 📅
- 👤
- 💬
- ⚙

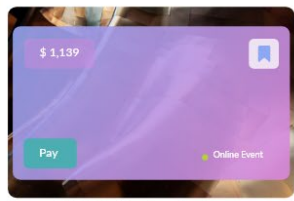
Upcoming Events

Past Events

Statistics

Create Event

Filter | Sort by Recommended ▾



Broomfield Youth Symphony Fundraiser

From 13th Jan 2023 To 14th Jan 2023

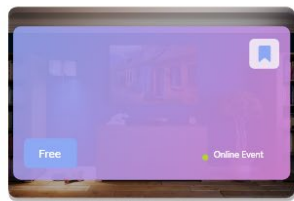
Location Bozeman, Bond ST C1, London

Rating 50%

Recommended 100%

Upcoming 29

Past 134



Broomfield Youth Symphony Fundraiser

From 13th Jan 2023 To 14th Jan 2023

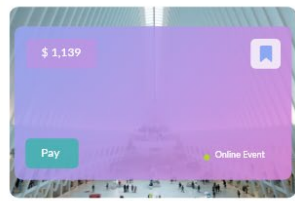
Location Bozeman, Bond ST C1, Cambridgeshire

Rating 60%

Recommended 100%

Upcoming 29

Past 134



Broomfield Youth Symphony Fundraiser

From 13th Jan 2023 To 14th Jan 2023

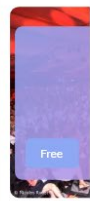
Location Bozeman, Bond ST C1, London

Rating 50%

Recommended 100%

Upcoming 29

Past 134



Broomfield Youth Symphony Fundraiser

From 13th Jan 2023 To 14th Jan 2023

Location Bozeman, Bond ST C1, London

Rating 50%

Recommended 100%

Upcoming 29

Past 134

Filter Events

Location

London 

Name

Model 

Date

From  To 

Event Type

Type 

Event Type

Paid Event 



Apply Filters

Event

Event Name

Event Link

Event headline

Event Image

Upload Logo

JPG, GIF and PNG

Color Palette

Primary

Price



Street Address 1

Street Address 2

Branch

Postal Code

Create Event

ADD •

SUPERVISOR

90 Items Listed

	Name	Title	Hours	Holiday	Week	Pay/H	Total	
1.	Jhon Doe	Waiter	0	18	12 - 20 - 2021	55	3	 
2.	Rukshana Shaikh	General manager	0	18	12 - 20 - 2021	55	3	 
3.	Jhon Doe	Supervisor	0	18	12 - 20 - 2021	55	3	 
4.	Rukshana Shaikh	Runner	0	18	12 - 20 - 2021	55	3	 
5.	Jhon Doe	Cheff	0	18	12 - 20 - 2021	55	3	 
6.	Rukshana Shaikh	Waiter	0	18	12 - 20 - 2021	55	3	 
7.	Jhon Doe	Bartender	0	18	12 - 20 - 2021	55	3	 

Page 1 of 9

EDIT •

WEEK MONTH

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
 Jhon Doe							
 Jhon Doe							
 Rukshana Shaikh							
 Rukshana Shaikh							
 Jhon Doe				 OLA BOULA GENERAL MANAGER  9:38 AM  ROUTINE CHECKUP  STOCK CHECK			
 Jhon Doe							

Search medical records

Emilia Clarke

STAFFS

ADD +

SHOW 10

SORT BY Date Joined

Search Staff by name or title

ALL

FOH

BOH

MANAGER

SUPERVISOR



Shela Tikia
Nurse

TIMESHEET

VIEW



Eduka Ketele
BOH

TIMESHEET

VIEW



Kemi Olowoje
FOH

TIMESHEET

VIEW



Dr. Michael Stewart
Manager

TIMESHEET

VIEW



Dr. Michael Stewart
Supervisor

TIMESHEET

VIEW



Scut Tom
FOH

TIMESHEET

VIEW



Ayoma Ahmed
General Manager

TIMESHEET

VIEW



Banabas Paul
Manager

TIMESHEET

VIEW



Ayo Jones
FOH

TIMESHEET

VIEW



Ayo Jones
BOH

TIMESHEET

VIEW

Showing 1 to 8 of 40 items

<

1

2

3

...

10

>

Search medical records

Emilia Clarke

STAFFS

ADD +

SHOW 10

SORT BY Date Joined

Search Staff by name or title

ALL

FOH

BOH

MANAGER

SUPERVISOR



Ibrahim Yekeli
FOH

TIMESHEET

VIEW



Eduka Ketele
BOH

TIMESHEET

VIEW



Kemi Olowoje
FOH

TIMESHEET

VIEW



Dr. Michael Stewart
Manager

TIMESHEET

VIEW



Dr. Michael Stewart
Supervisor

TIMESHEET

VIEW



Scut Tom
FOH

TIMESHEET

VIEW



Ayoma Ahmed
General Manager

TIMESHEET

VIEW



Banabas Paul
Manager

TIMESHEET

VIEW



Ayo Jones
FOH

TIMESHEET

VIEW



Ayo Jones
BOH

TIMESHEET

VIEW

Showing 1 to 8 of 40 items

<

1

2

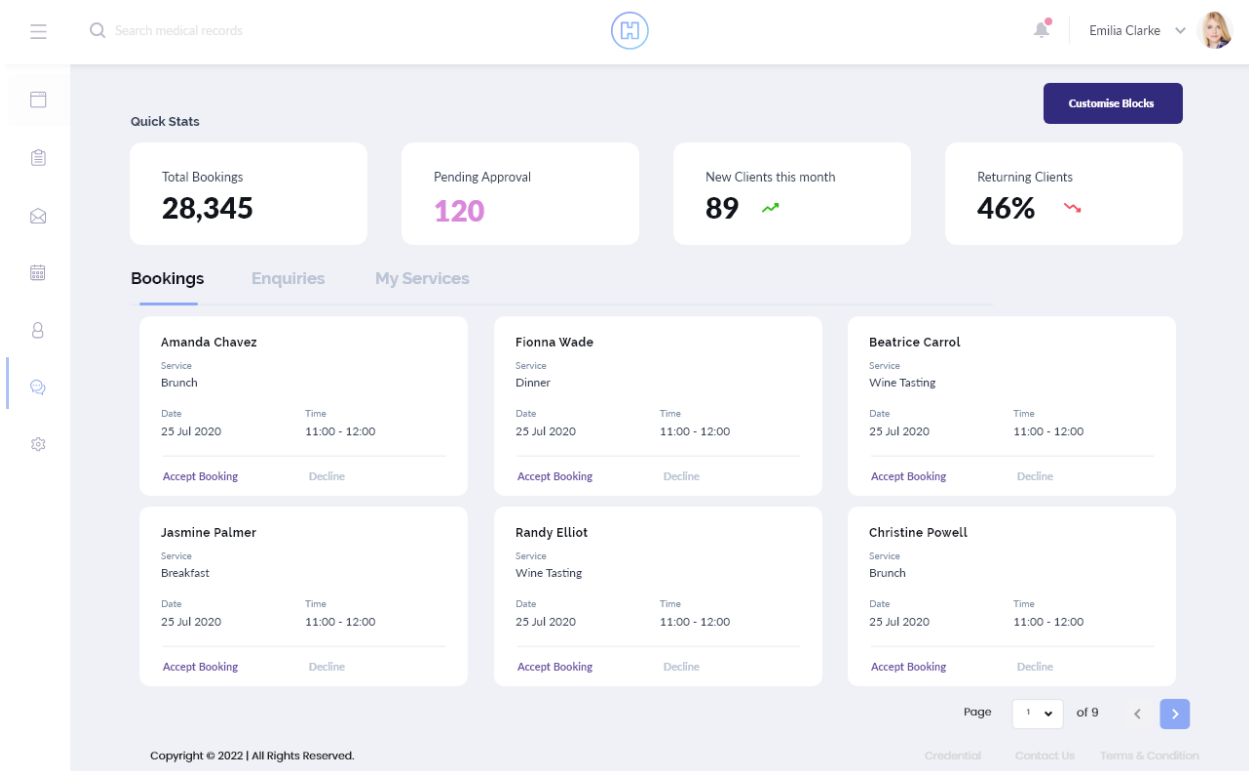
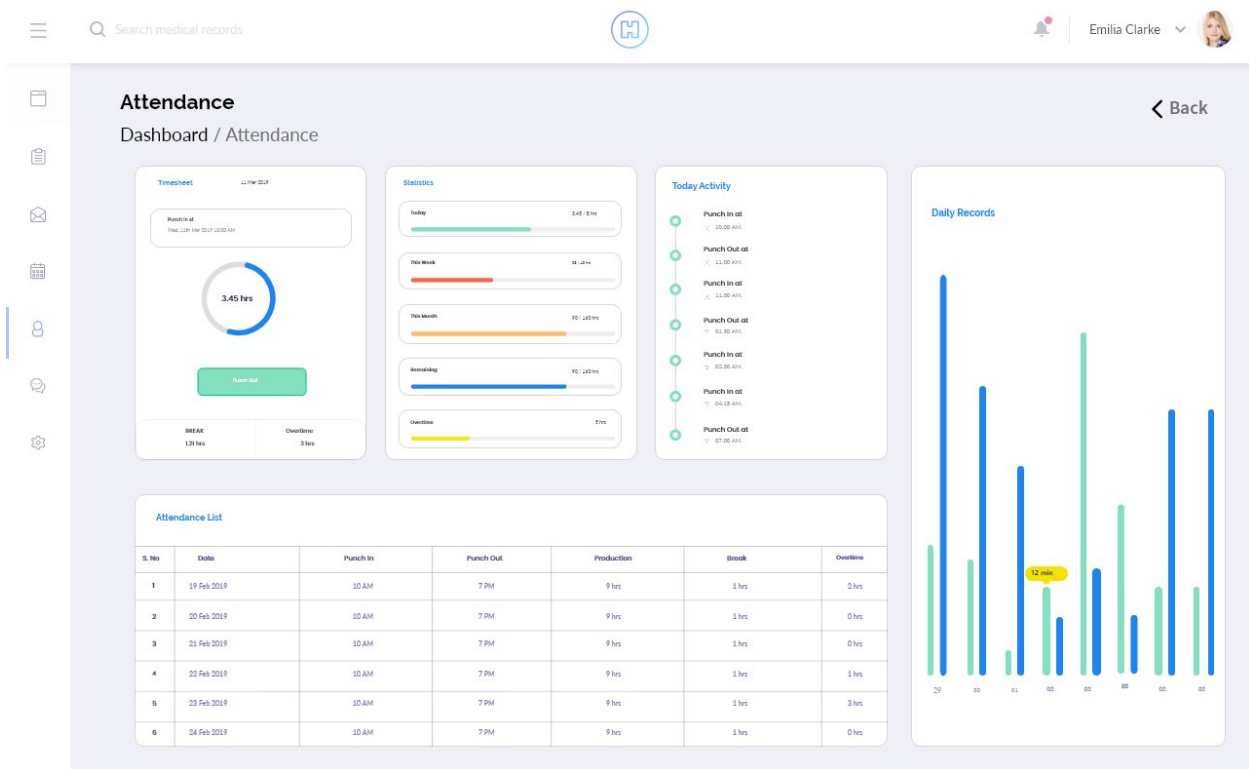
3

...

10

>





Customise Blocks

28,345

120

89

46% 

My Services

Service
Brunch

Date
25 Jul 2020

Time
11:00 - 12:00

Accept Booking

Decline

Service
Dinner

Date
25 Jul 2020

Accept Booking

Service
Breakfast

Date
25 Jul 2020

Time
11:00 - 12:00

Accept Booking

Decline

Service
Wine Tasting

Date
25 Jul 2020

Accept Booking

🔍 Search Staff By Name Or Title



Moovly



Heyzine
Flipbooks



Powtoon



Simplebooklet



Search medical records



Emilia Clarke



Overview

63
Front of house



340
Back of House



460
Managers



60
Branches



30
Customers



40
Accountnts



2601
Foods



958
Drinks



108
Events



Budget Report

Cambridgeshire Branch



Quarter Budget **\$350,604.00**

Branches Report



LONDON

Brent Cross	42,9000.00
Colindale	25,5000.00
Bond Street	15,6000.00
Canada Water	36,600.00



CAMBRIDGESHIRE

Cambridge	42,9000.00
Huntingdon	25,5000.00
Sawston	15,6000.00
Sawtry	36,600.00

Branches of Restaurant

Worldwide

World





Dashboard



HR



Reports



Events



Employees



Customers



Settings



Apps



Dashboard



HR



Reports



Events



Employees



Customers



Settings



Apps



Back of House



Front of House



Managers



Supervisors



Dashboard



HR



Reports



Events



Employees



Customers



Settings



Apps



Accounts



Payroll



Policies



Timesheet



Training

APPENDIX I: SURVEY FINDINGS

1

Q1 - Thanks you and Welcome to my Survey 1. Project/Study title: Exploring, analyzing, proposing, and designing a prototype application system to improve policy management in the restaurant industry. 2. Invitation paragraph You are being invited to take part in a research project that is investigating improvement of policy management in the restaurant industry. This research is being carried out as part of an MSC project. It is important for you to completely understand why the research is being conducted, and what is the research scope and purpose. Please take time to read and understand all the information, if you have any problems or questions, you can contact the researcher via the email given below. Take time to decide whether or not you wish to take part in the study. 3. What is the purpose of the project/study? This research will reinvent how business activities are handled by suggesting and designing a prototype with a flexible system to help with their policy management that will work great in most situations. 4. Why have I been chosen? You are being chosen because you own a smart home device; your participation can help in contributing knowledge concerning policy management and the creation of a . Your responses will be beneficial for fulfilling the purpose of this research. 5. Do I have to take part? It is up to you to decide whether or not to take part. You can withdraw from the study at any time during or after the study. If you have already completed the study and wish to withdraw consent at a later date then please contact the researcher via the email below. 6. What will I have to do? You are asked to answer a series of questions based on entrepreneurship skills. The questionnaire should be completed within 15 minutes. 7. What are the possible risks or benefits of taking part? There is no risk involved in participating. Your information will be kept safe and secure. The study will be conducted with consideration of all the ethical practices. 8. Data Protection and Confidentiality Personal data is any data that can lead to the identification of a specific (living) person. It can be obviously identifiable data such as name or ID number, but it

can also be a combination of "innocent" data such as age, height/weight, wealth, job position, company, city, etc. that when combined can lead to the identification of a person. Personal data (e.g., your name, email address, voice or any data that can identify you) WILL NOT be collected by this study and your confidentiality will be protected. 9. What will happen to the results of the research study? The outcomes of the research will be used as a part of a postgraduate dissertation. After analyzing the data, the results will be presented in the dissertation. 10. Who has reviewed the study? The study has been appropriately reviewed and received ethical clearance from the Computer Science Research Ethics Committee. 11. Contact for further information If you require further information or have any questions then please contact Name: Shammah Omoniyi Email: so814@live.mdx.ac.uk

CONSENT STATEMENT I have read and understood the participant information above and I freely and voluntarily give my consent to participate in this project/study.

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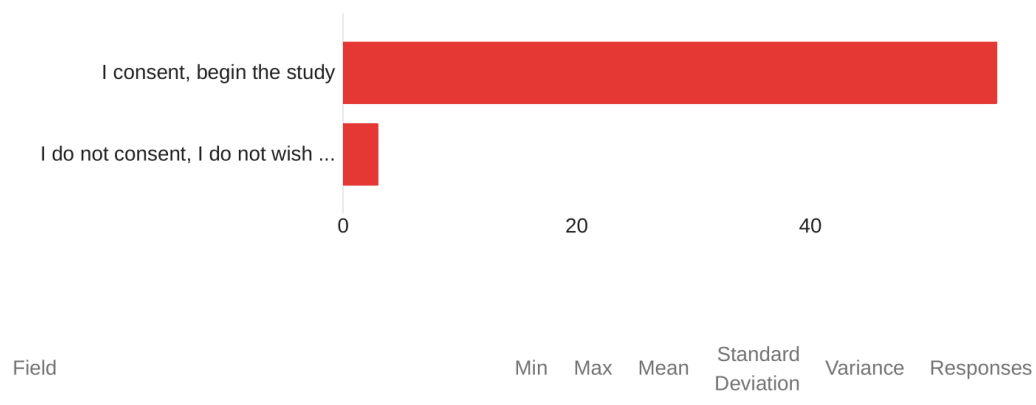


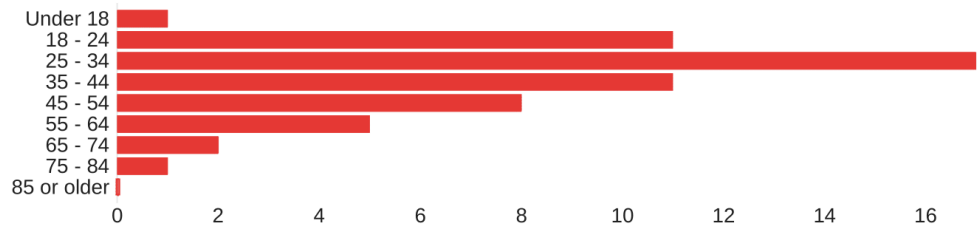
Figure 52 SURVEY FINDINGS II

Thanks you and Welcome to my Survey 1.	1	2	1	0	0	59
Project/Study title: Exploring, analyzing, proposing, and designing a prototype application system to improve policy management in the restaurant industry. 2. Invitation paragraph You are being invited to take part in a research project that is investigating improvement of policy management in the restaurant industry. This research is being carried out as part of an MSC project. It is important for you to completely understand why the research is being conducted, and what is the research scope and purpose. Please take time to read and understand all the information, if you have any problems or questions, you can contact the researcher via the email given below. Take time to decide whether or not you wish to take part in the study. 3. What is the purpose of the project/study? This research will reinvent how business activities are handled by suggesting and designing a prototype with a flexible system to help with their policy management that will work great in most situations. 4. Why have I been chosen? You are being chosen because you own a smart home device; your participation can help in contributing knowledge concerning policy management and the creation of a . Your responses will be beneficial for fulfilling the purpose of this research. 5. Do I have to take part? It is up to you to decide whether or not to take part. You can withdraw from the study at any time during or after the study. If you have already completed the study and wish to withdraw consent at a later date then please contact the researcher via the email below. 6. What will I have to do? You are asked to answer a series of questions based on entrepreneurship skills. The questionnaire should be completed within 15 minutes. 7. What are the possible risks or benefits of taking part? There is no risk involved in participating. Your information will be kept safe and secure. The study will be conducted with consideration of all the ethical practices. 8. Data Protection and Confidentiality Personal data is any data that can lead to the identification of a specific (living) person. It can be obviously identifiable data such as name or ID number, but it can also be a combination of "innocent" data such as age, height/weight, wealth, job position, company, city, etc. that when combined can lead to the identification of a person. Personal data (e.g., your name, email address, voice or any data that can identify you) WILL NOT be collected by this study and your confidentiality will be protected. 9. What will happen to the results of the research study? The outcomes of the research will be used as a part of a postgraduate dissertation. After analyzing the data,						

Field	Choice Count
I consent, begin the study	56
I do not consent, I do not wish to participate	3
Total	59

Figure 53 SURVEY FINDINGS III

Q2 - I am 18 or above?

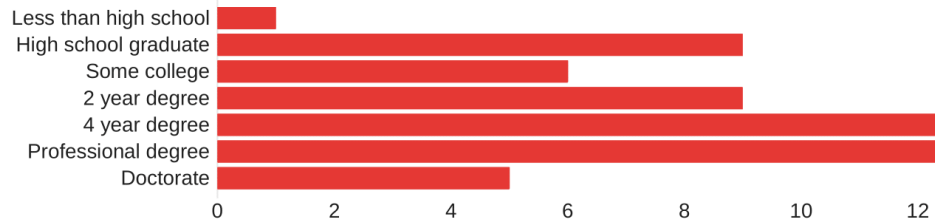


Field	Min	Max	Mean	Standard Deviation	Variance	Responses
I am 18 or above?	1	8	4	2	2	56

Field	Choice Count
Under 18	1
18 - 24	11
25 - 34	17
35 - 44	11
45 - 54	8
55 - 64	5
65 - 74	2
75 - 84	1
85 or older	0
Total	56

Figure 54 SURVEY FINDINGS IV

Q3 - My highest level of Education is



Field	Min	Max	Mean	Standard Deviation	Variance	Responses
My highest level of Education is	1	7	4	2	3	56

Field	Choice Count
Less than high school	1
High school graduate	9
Some college	6
2 year degree	9
4 year degree	13
Professional degree	13
Doctorate	5
Total	56

Figure 55 SURVEY FINDINGS V

Q18 - Select the number One for this statement

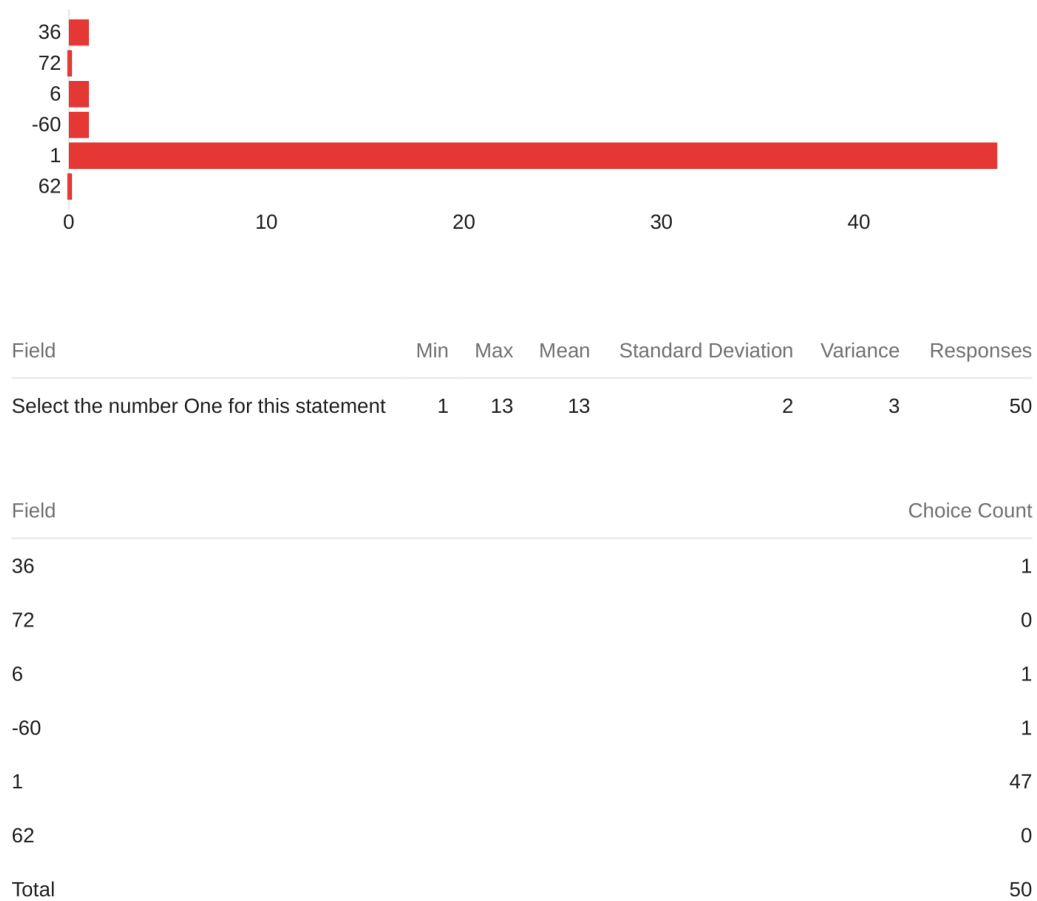


Figure 56 SURVEY FINDINGS VI

Q4 - Have you worked or currently working in a restaurant / Bar

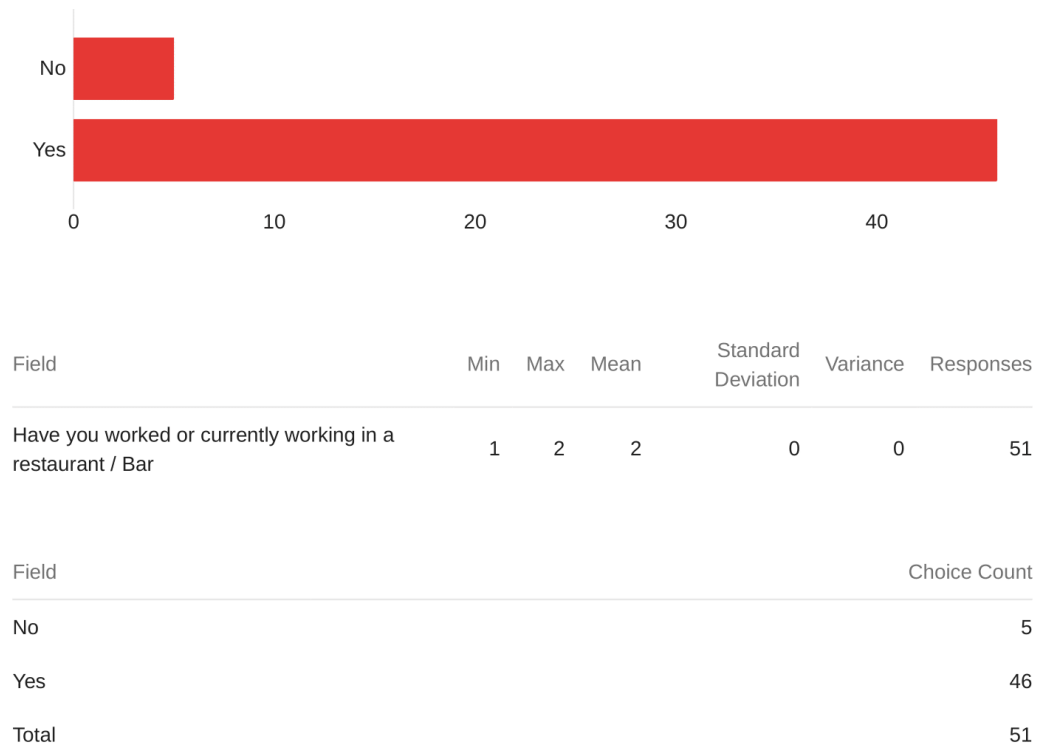
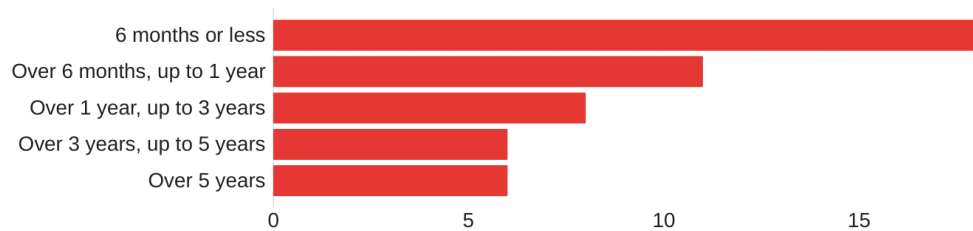


Figure 57 SURVEY FINDINGS VII

Q5 - How long have you worked in the restaurant industry



Field	Min	Max	Mean	Standard Deviation	Variance	Responses
How long have you worked in the restaurant industry	1	5	2	1	2	49

Field	Choice Count
6 months or less	18
Over 6 months, up to 1 year	11
Over 1 year, up to 3 years	8
Over 3 years, up to 5 years	6
Over 5 years	6
Total	49

Figure 58 SURVEY FINDINGS VIII

Q6 - What was your role in the last or current job in the restaurant industry?



Figure 59 SURVEY FINDINGS IX

Intern

Q19 - Answer this line with the number Zero

Answer this line with the number Zero

0

0

0

0

0

Figure 60 SURVEY FINDINGS X

Q7 - Has staff training being conducted at your job?



Field	Min	Max	Mean	Standard Deviation	Variance	Responses
Has staff training being conducted at your job?	1	2	2	0	0	48

Field	Choice Count
False	8
True	40
Total	48

Figure 61 SURVEY FINDINGS XI

Q8 - Have you participated in such training

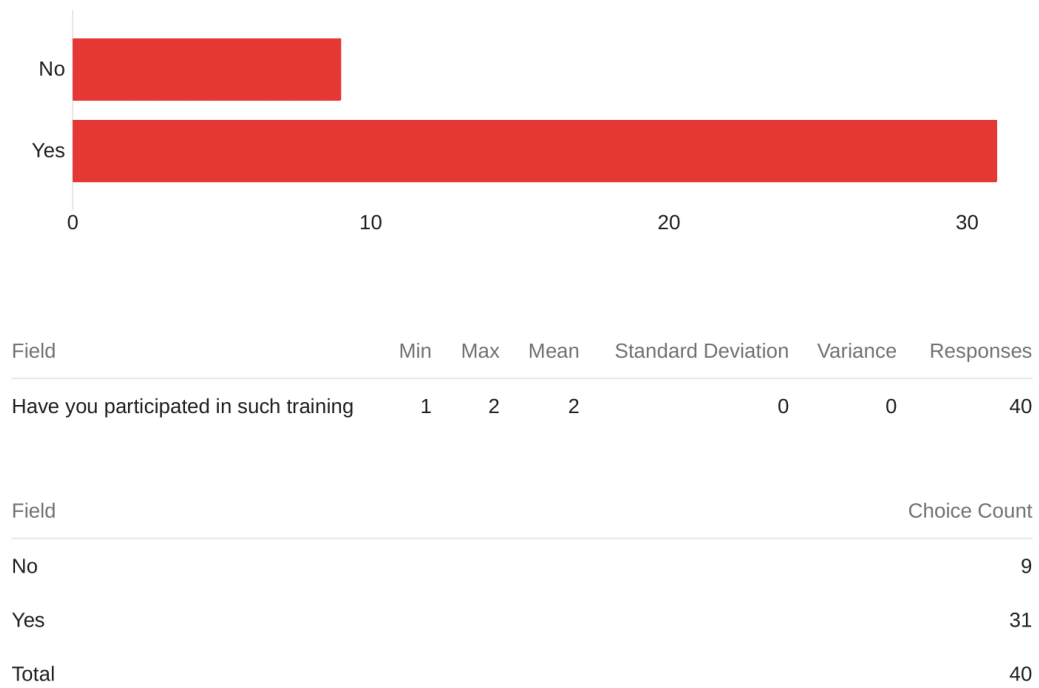


Figure 62 SURVEY FINDINGS XII

Q9 - Has the training affected the coordination and the communication between staff and the management team at your current job? If yes how?



Figure 63 SURVEY FINDINGS XIII

Q10 - How effective is the current coordination and communication between the staff and the management team in your current or last restaurant job?

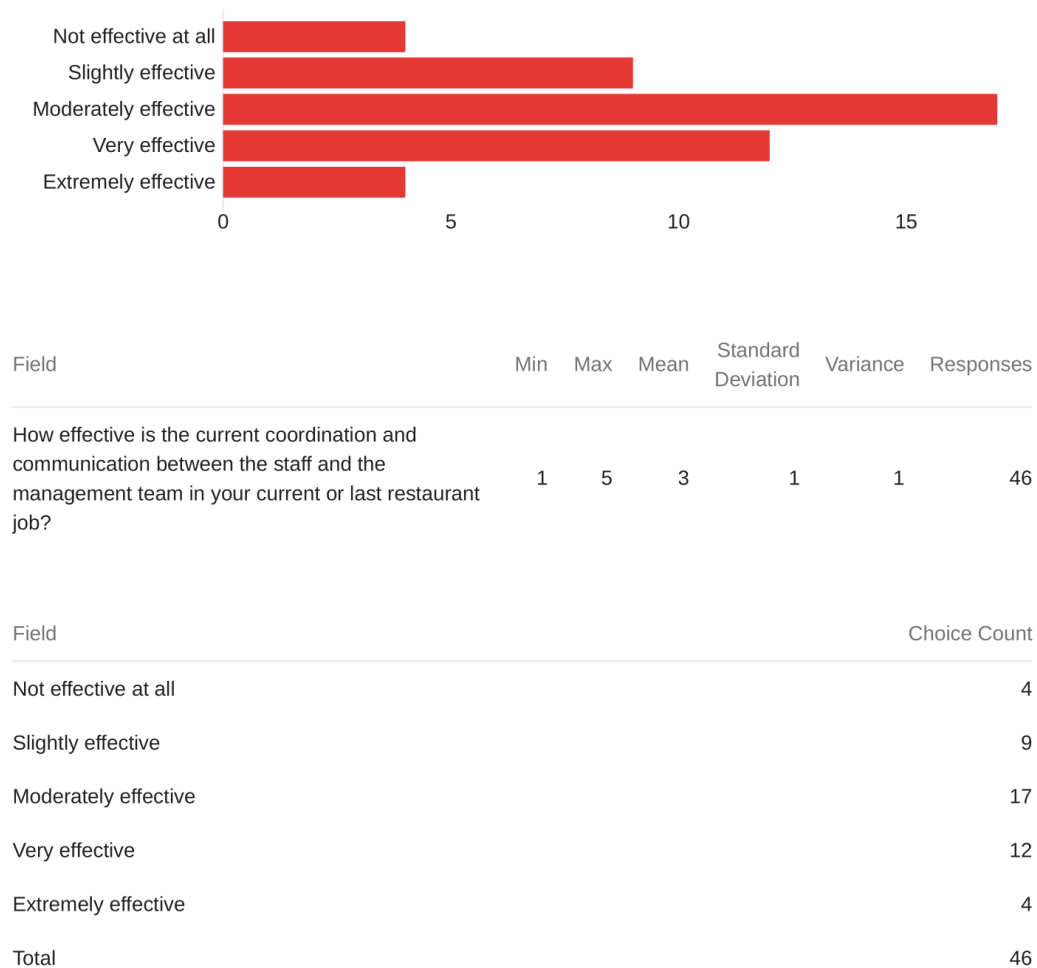


Figure 64 SURVEY FINDINGS XIV

Q11 - Is there is system or method used to passed across information from the Management Team to Staff, Between Management Teams, and Staff and Management Team. e.g. (Meeting Scheduling, Time Sheet placement and more)



Field	Min	Max	Mean	Standard Deviation	Variance	Responses
Is there is system or method used to passed across information from the Management Team to Staff, Between Management Teams, and Staff and Management Team. e.g. (Meeting Scheduling, Time Sheet placement and more)	1	3	3	1	1	47

Field	Choice Count
No	7
Maybe	7
Yes	33
Total	47

Figure 65 SURVEY FINDINGS XV

Q13 - How effective is the current system to pass across the information

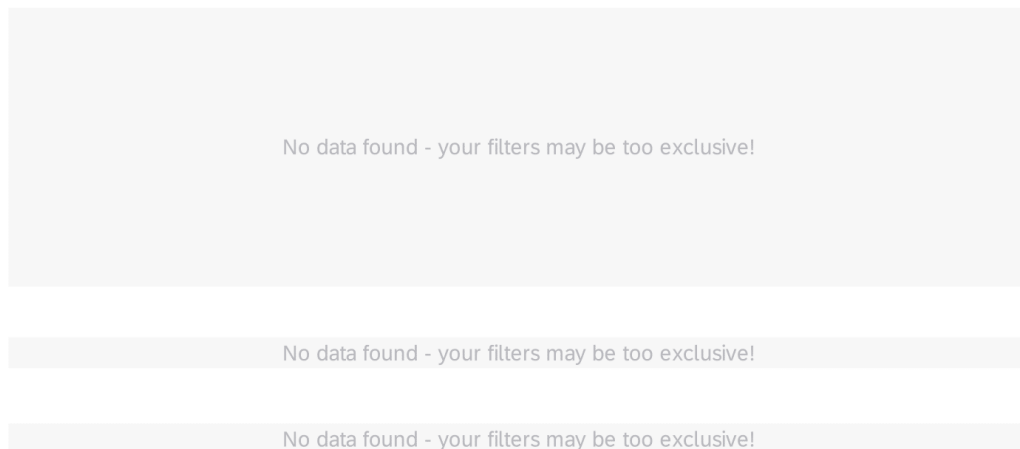
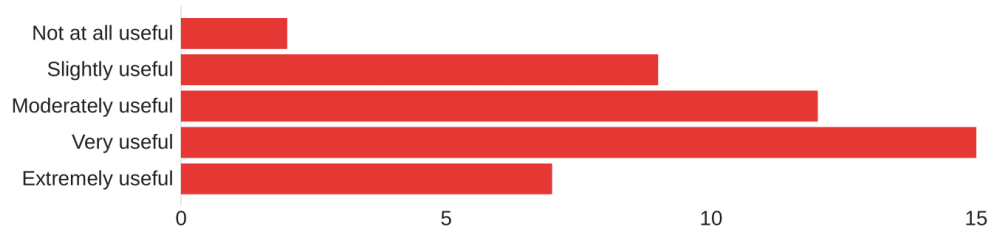


Figure 66 SURVEY FINDINGS XVI

Q14 - how useful is technology and smart devices in your day-to-day job? (E.g. Pad to put orders through, the till system, the inventory system)

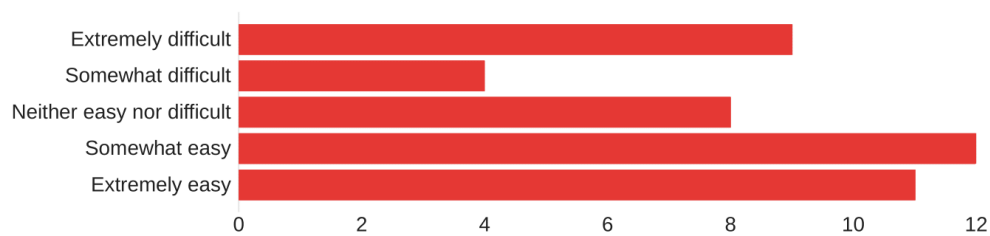


Field	Min	Max	Mean	Standard Deviation	Variance	Responses
how useful is technology and smart devices in your day-to-day job? (E.g. Pad to put orders through, the till system, the inventory system)	1	5	3	1	1	45

Field	Choice Count
Not at all useful	2
Slightly useful	9
Moderately useful	12
Very useful	15
Extremely useful	7
Total	45

Figure 67 SURVEY FINDINGS XVII

Q15 - The current Till system (used to place orders to the kitchen or bar) How easy is it to use?

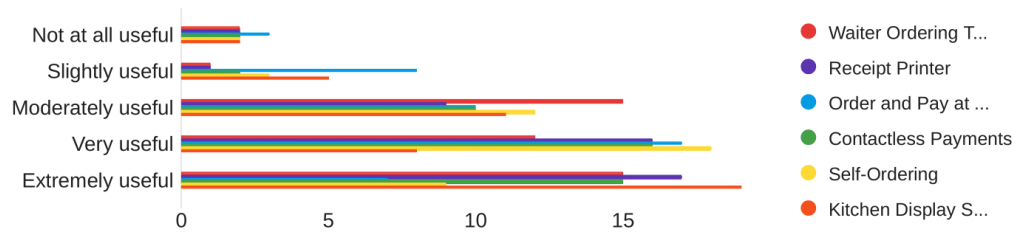


Field	Min	Max	Mean	Standard Deviation	Variance	Responses
The current Till system (used to place orders to the kitchen or bar) How easy is it to use?	1	5	3	1	2	44

Field	Choice Count
Extremely difficult	9
Somewhat difficult	4
Neither easy nor difficult	8
Somewhat easy	12
Extremely easy	11
Total	44

Figure 68 SURVEY FINDINGS XVIII

Q16 - How useful are this technology in the restaurant industry based on your experience



Field	Min	Max	Mean	Standard Deviation	Variance	Responses
Waiter Ordering Touchscreen Pad	23	27	26	1	1	45
Receipt Printer	23	27	26	1	1	45
Order and Pay at the Table with QR CODE	23	27	25	1	1	45
Contactless Payments	23	27	26	1	1	45
Self-Ordering	23	27	26	1	1	44
Kitchen Display Screens	23	27	26	1	1	45

Field	Not at all useful	Slightly useful	Moderately useful	Very useful	Extremely useful	Total
Waiter Ordering Touchscreen Pad	2	1	15	12	15	45
Receipt Printer	2	1	9	16	17	45
Order and Pay at the Table with QR CODE	3	8	10	17	7	45
Contactless Payments	2	2	10	16	15	45
Self-Ordering	2	3	12	18	9	44
Kitchen Display Screens	2	5	11	8	19	45

Figure 69 SURVEY FINDINGS XIX