

Sociotechnical Synthesis

STS 4600

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My research paper introduces the proposed reservation system application that I wish to develop for the restaurants' industry in Ghana. The technical project and STS research focus on different areas of the project but are very related. They work together to aid in achieving positive results stated in the technical project by analyzing the technology used, trends of business operations, and addressing some challenges regarding the implementation of the restaurant reservation from reports of similar failed projects in a socio-technical perspective. I will bring to light the details of both the technical project and STS research and how beneficial it has been working on the two projects simultaneously in subsequent paragraphs.

To achieve efficiency and effectiveness in the restaurant industries in Ghana, the technical project outlined some statements that can serve as guidance in developing the reservation system application. It reviewed the subject area, past trends of business operations and current technologies, issues that are associated with it, the general system architecture of existing, and proposed system for the reservation system application. The technical project also stated some benefits the proposed reservation system will contribute to the operations of the restaurant business and customer satisfaction and these advantages include speeding up the food ordering processes which will eliminate long queues, automating daily operations which will help reduce restaurants' food waste and increase the efficiency of the restaurants' staff by enabling the business to know the food orders in advance.

STS research focuses on the model (M) view (V) controller (C) architecture design and the spring framework to be used in the development of the application. It describes the various stages that a request from a user goes through before a response is generated and return to the user. A similar and successful reservation system like Grubhub was analyzed for ideas using

locations or zip codes to suggest nearby restaurants to the customer to place an order. Again, the STS research provided information on the agile method and incremental software model as the methodology to collect useful information from stakeholders and users and incorporate them into the application. This helps developers to meet the changing needs of users per version of the application released and reduce cost of reimplementing the entire application since the stakeholders are involved in the developmental stages. The STS research gave an insight into the system analysis and design, which made it possible to differentiate between what we want the system to do and what we expect the system to perform.

Working on the technical project and STS research simultaneously was of great essence to finish the paper successfully. Despite their differences in the scope of the problem, they work hand in hand to achieve efficiency and effectiveness in the restaurant industry. The technical problem reviewed some existing implementations, benefits, and challenges of the implementations and trends in the industry, which helped me to predict the directions for future online restaurant reservation systems. However, STS research helped in finding the best practices and methods such as frameworks, agile method, looking into existing applications like Grubhub and system analysis and design of the reservation system I wish to build for restaurants in Ghana. These two viewpoints served as a guide and helped me in designing the reservation system by not repeating similar mistakes and implementations in the past. This advantage of working on the two projects at the same wouldn't have been possible if the technical project and STS research were done individually.

