Integrated Service Providers or SME: Business Consultation, Business Education and Business Promotion with Implementation of Quality Function Development

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Abstract

Advancing Small and Medium Enterprise's or SMEs with the use of digital technology such as e-commerce has become a solution during the COVID-19 pandemic so that the idea to create an integrated forum consist of consulting services, consulting education, and consulting financial that can help SME entrepreneurs manage both their business and their financial. The methods for the website creation process, is Descriptive Analysis with SPSS, and Quality Function Development (QFD) for the scaling and comparing between for rival companies such as Udemy or Skill Academy. Results from SPSS are respondents agree to have a consultation, business funding and online learning to grow their business for at least 1 year, with a little amount to spend. Results from QFD Method also gained that the most priority that customer wants is this website could helped to develop SME business, with the importance is 34%. Also, achieved the priority gained the most difficult to achieved and giving an online learning takes the highest cost and time. The use of the Wix website as a model in creating a website to ensure that every idea from consultation, online learning and business funding could be implemented to the customers.

Keywords
Quality Function Development, Website Development for SME, SPSS, Wix application, User Interface.

1. Introduction
A Business is one of the activities carried out between an individual and a group of people with individuals and a group of other people by creating something that provides value by making goods or services to gain profit while meeting people's needs. One of the biggest types of business is small and medium enterprises (SMEs). SME are the engine that drives world economies and the steppingstone to industrialization, both for developing and developed economies (Muriithi, D. S., 2017). Based on research by Samuel Muiruri (2017), SMEs contribute more than 50% of most African GDP and an average of 60% of employment. Today's problem is a COVID-19 pandemic, it's not affected only global health, but also economy. By looking at this problem, researchers plan to create a forum in the form of a website that accommodates entrepreneurs or businesspeople to provide motivation and provide consultation on how SME entrepreneurs manage their businesses properly and healthily. One of method that will be used for thus research was Quality Function Deployment (QFD). QFD is used to analyze what customer wants compared to the competitors. Based on the research of (Aman, et.al. 2017) to analyze customer requirements in maintenance management are truly dynamic in nature. The focus areas of attention for the customer (economic, social, safety driven, technical, maintenance efficiency and environmental issues) were adopted for estimating future customer requirements. Survey done by (Waseem Ahmed Abbasi, 2017) gain a fact that SMEs are backbone of economies, the government of each country should play vital role in protecting and creating such facilities for SMEs so that they can run the business in effective ways and grow to strengthen the economy. Government needs to help improved knowledge, financial

behavior, or alternative financial solutions. Angel investor also plays a vital role in SME financing by providing the small amount of loans to the firm in early stages of its growths.

1.1 Objectives
The objectives of the research process are first, analyze case that is happening in SME entrepreneurs in managing their business in the middle of pandemic. Secondly, providing features on the platform which greatly help the SME business to develop.

2. Literature Review

2.1. Quality Function Deployment (QFD)
QFD is a useful tool that can be applied to assist ordering and prioritizing a quality function implementation model (QFD). QFD approaches a team approach to help ensure that the "customer voice" in the final design. Its purpose is to define the requirements needed and translate those requirements into technical solutions. Customer requirements are defined and classified as attributes, which are then weighted according to their level. The QFD method provides the design team with an understanding of customer desires, refugees customers to prioritize those wants, and supports one design that approaches another (Fabrycky, 2011). Every customer attribute is fulfilled by a technical solution. The QFD process involves creating one or more matrices, the first of which is often referred to as the House of Quality (HOQ) (Shrivastava, 2011). Information can come from a range of sources. The most common data collection methods are observations, focus groups, ethnographies, oral history and case studies, documents and Records, and Experimentation.

2.2. Statistical Package for the Service Solutions (SPSS)
SPSS is used in processing and analyzing quantitative data, because it is interrelated and also falls within the scope of statistics. Initially SPSS was created for the purposes of processing statistical data for the social sciences, so SPSS stands for Statistical Package for the Social Sciences (S Zein, 2019). In accordance with the development of the times, currently the ability of SPSS is expanded to serve various types of users, such as for production processes in factories, scientific research, and others. Thus, the abbreviation of SPSS was changed to Statistical Product and Service Solutions. SPSS can read various types of data by entering data directly into the SPSS Data Editor.

2.3. Descriptive Analysis
Descriptive analysis is a data processing method aimed at managing raw and rigid data into more concise data and can also be analyzed easier to understand. Descriptive methods are used to describe the management of a data that is more concise and conclusions that can be understood in general or general for readers (Bela Harum Ashari, 2017). [8] The Likert scale is a measurement of an attitude, opinion, and a respondent's perspective in dealing with a problem and opinion (Prasetyo et.al 2019). The Likert scale is usually used in questionnaires and is the most widely used method, this is due to the large number of variables described in a statement, this is making Likert scale data processing more detailed but still firm and easy to understand (Edi Suwandi, 2019).

2.4. User Interface
A user interface (UI) refers to a system and a user interacting with each other through commands or techniques to operate the system, input data, and use the contents. User interfaces range from systems such as computers, mobile devices, games, etc. to application programs and content usage. User Experience (UX) refers to the overall experience related to the perception (emotion and thought), reaction, and behaviour that a user feels and thinks through his or her direct or indirect use of a system, product, content, or service. UX is a HCI, hardware computer interface-related concept that is widely applied not only in software and hardware development, but also in services, products, processes, society and culture.[10] UI/UX is an interface through which a person can interact with a system or application in a computer and communication environment, which is classified into a software interface and a hardware interface (Joo, H. (2017). Depending on how the user access does, User Interface can be broadly classified into two categories i.e., Command line or text base user Interface (CUI/TUI) and Graphic User Interface (GUI) (Debasmita Saha, 2015). Both the interfaces have their relative advantages, limitations, and related issues.

3. Methods

Step of Research
a. Determining the SME requirement of integrated website, through collecting fulfilled questionnaire with Likert scale, from forum discussion group of 20 SME in Jakarta area.
b. Find out questionnaire result through quantitative analyzing using SPSS.
c. Determining house of quality using QFD method, the SPSS results of what customer wants including competitor's website comparation.
d. Creating website using Wix application, based on QFD result

The research method used uses a Likert scale with an assessment of 1-5 and uses a Guttman scale to determine whether the respondent agrees or not with the information or features to be applied. the midpoint of whether the features on the website will be used or not. Questionnaires were distributed to 15 respondents who own SME businesses. Fifteen respondents were selected to avoid invalid statements and help to process data towards making QFD so that the assessment becomes more effective.

4. Data Collection
An online questionnaire through Google form addressing to a forum discussion group of twenty SME in Jakarta area. The questionnaire is shown on Table 1

Table 1. Questionnaire details

No	Question
1	How much do you know about business?
2	How much do you know about business consultants?
3	Do you agree that business consulting services to help you develop a company?
4	Do you agree that business consulting services are sufficiently influential to the current economy?
5	How interested are you in trying to use a business consultant service?
6	Do you agree that using the services of a business consultant can help advance your business?
7	Are you interesting a website which could help advance your business by consultation & financial funding?
8	Do you agree that the main objective of a business consultant is the result obtained, not from the process?
9	How much do you want to invite your friends to use business consulting services in developing the business entity you want to run?

The Figure 1, show SPSS result from data collection:

Statistics		P1	P2	P4	P3	P5	P6	P7	P8	P9
N	Valid	15	15	15	15	15	15	15	15	15
	Missing	0	0	0	0	0	0	0	0	0
Mean		3.5333	3.1333	3.8667	3.9333	3.8667	3.8667	4.2000	4.2000	4.0000
Median		4.0000	3.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000	4.0000
Std. Deviation		.91548	.99043	.74322	.79881	.91548	.63994	.67612	.86189	.53452
Minimum		1.00	2.00	3.00	3.00	2.00	3.00	3.00	2.00	3.00
Maximum		5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00

Figure 1. Respondent Data Processing.

5. Results and Discussion

5.1 Numerical Results
The initial stage is quantitative analysis of questionnaire result shown in Table 2:

Table 2. Respondent data decision.

No	Statement	Result
1	Use of Consultant Services	Agree
2	Consultation Duration	1 Year
3	Consultation Price	IDR50.000 – 100.000
4	Use of Seminar Services	Agree
5	Investment Learning	Agree

The questionnaire is made in Google Form to 15 respondents. The questionnaire method is quantitative analysis, where most of the respondents are 21 to 25 years old. Most of the respondents (SME's business owners) very interesting with consulting service website. The provision of consulting services will be carried out for approximately 1 year in accordance with the cooperation between service providers and entrepreneurs or maybe the duration will be longer if they need it. For the price of this services, 53.3% of respondents wants the price of these services cost IDR 50.000 to IDR 100,000 per participant and will be distributed 80% for consultants and 20% for service providers. The creation of this website also provides seminars and education about business investment for SME entrepreneurs to advance future of their business. Business investment seminars and education are also subject to the same fees and the same distribution as consulting services. For the last services which is an investment funding services, 80% of the respondents would like to find investors to gain funding and to develop their business higher. Based on all the results from the questionnaire, that is a reason why we wanted to develop all services in one website platform. Some bigger platforms such as Udemy and Coursera only provides online learning and most of the multi-finance company only provides startup capital, but not the consultation and online learning. Therefore, combine all these 3 services would be one of the greatest values, especially in Indonesia.

5.2 Graphical Results - House of Quality
Based on the results of QFD processing, it is found that there are 5 features that customers want, where the desire to develop their own business entity ranks first, while attending business seminars ranks last. The next step is to compare the strong relationship between customer desires and functional requirements. The correlation process uses 4 types of values, 1 for low correlation, 3 for moderate correlation, 9 for highly correlated relationships, and empty if not at all related. The results of the correlation are then multiplied by the customer importance rating for each customer requirement, and summed with the correlation with the functional requirements, so that a technical importance score is obtained for each functional requirement. The highest importance score is on requirements to help business development, with a score of 65 and the percentage is 30%, so the priority rank is ranked first. The table above in the form of a triangle is a correlation table between each of the functional requirements. The "+" sign indicates that the correlation between the functional requirements is highly related, the "-" sign indicates that the correlation between the two is very small, while the "." indicates that there is no correlation between the two functional requirements. From the five functional requirements, it is found that there are only three functional requirements that correlate very well. The rightmost table is a list of companies that are part of this website platform, including skillacademy.com, kitabisa.com, and ukmindonesia.id. Of the three list of competing companies, none of them has all the features that our platform has, including skill academy which only provides online course features and sometimes online webinars, kitabisa.com provides a donation service platform but can also be used as fundraising if you want to start a business or research. new, and ukmindonesia.id which provides business consulting services for several sectors, business investment services, and online learning but does not provide online webinars. The next step is to assess the level of satisfaction of each customer requirement against the three rival companies and our website platform where later the total assessment will be added up for each company. The final assessment results found that the level of satisfaction between our platform and ukmindonesia.id is the same, which is worth 19.

At the bottom of the QFD is the target to be achieved. In terms of providing business consulting services, we are given a target of 10 which means having a minimum of 10 consultants on our platform, to help with business development we are given a target of 2 years for clients to develop their business, providing online learning is given a score of 15 which means there are at least 15 learning videos that can be used. Provided for clients, the webinar hosting platform is given a target of 2 organizations or companies that have collaborated with our platform to provide a webinar, and places for investment are given legality targets where we want our company to get legality and support also for the government so that investors do not hesitate to invest here. Next is the level of difficulty or difficulty in realizing the target, where the highest level of difficulty gets a value of 5. The highest score is obtained on functional requirements to help business development, while the highest cost and time is in providing business consulting services and providing online learning. (Figure 2)
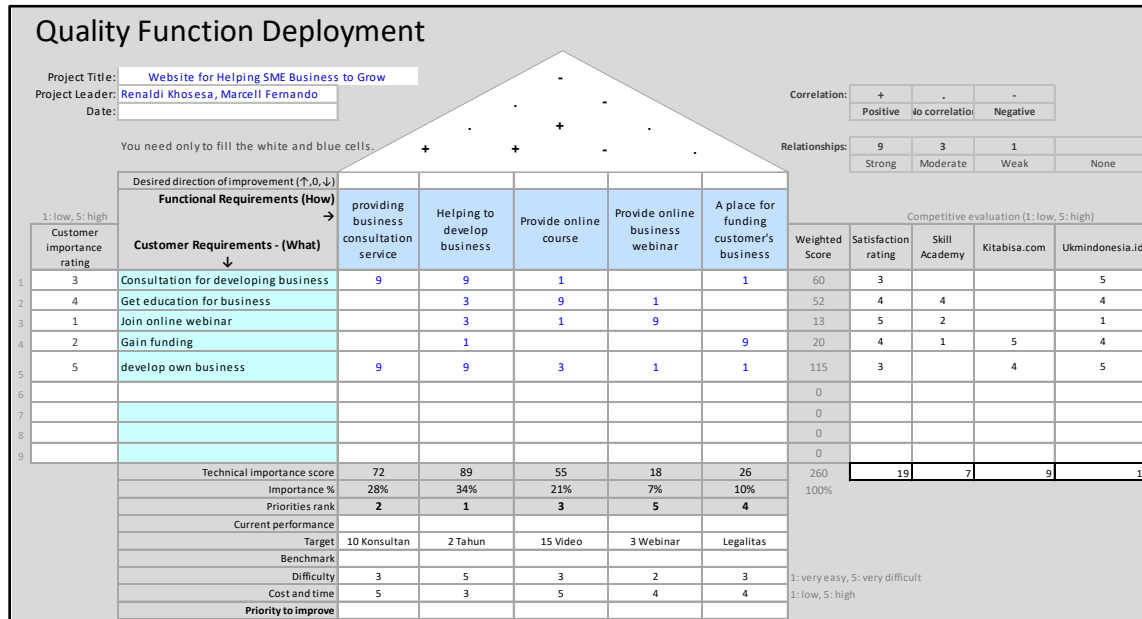

Figure 2. House of quality result

5.2 Proposed Improvement - Website development use Wix application

Based on the results of house of quality (Figure 2) use QFD and analyzing the questionnaire, a website created website platform name https://up-ukm.wixsite.com/business. UKM is Indonesia abbreviation of SME. The reason to choose Wix app, because Wix provide free-of charge package, among others paid plan. Wix apps providing cloud-based web development services. It allows users to create HTML5 websites and mobile sites through the use of online drag and drop tools.Users can add social plug-ins, e-commerce, online marketing, contact forms, e-mail marketing, and community forums to their web sites using a variety of Wix-developed and third-party applications. The Wix website builder is built on a freemium business model, earning its revenues through premium upgrades. The appearance of the website shown on next figure. Figure 3 shown home menu of https://up-ukm.wixsite.com/business
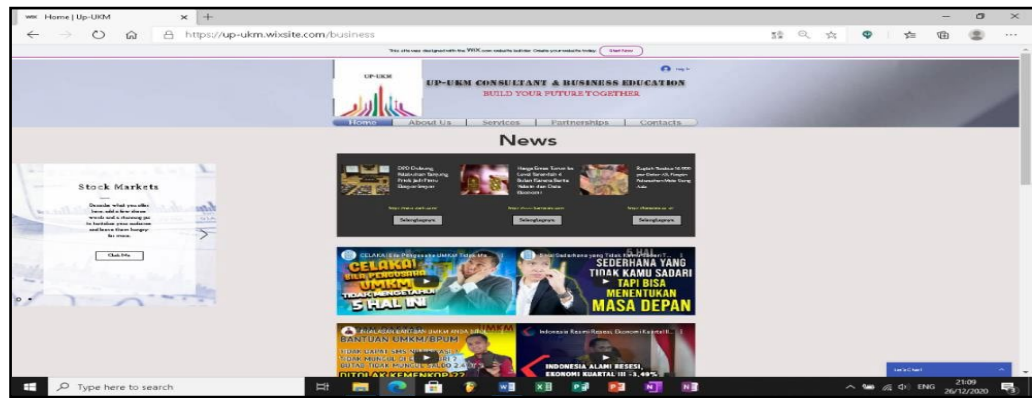
Figure 3 Home Menu

The initial view of our platform, where in the initial view we provide various kinds of news or the latest videos related to the economy or others, besides that, there is a little explanation about the partnership and what our platform is like. Figure 3 shown home menu of https://up-ukm.wixsite.com/business

In the service menu, we provide a brief explanation of the 4 innovations that we provide. In this section, customers or clients can directly choose what service features they want, and later they will be directly directed to the website they want. Figure 4 shown Service menu of https://up-ukm.wixsite.com/business
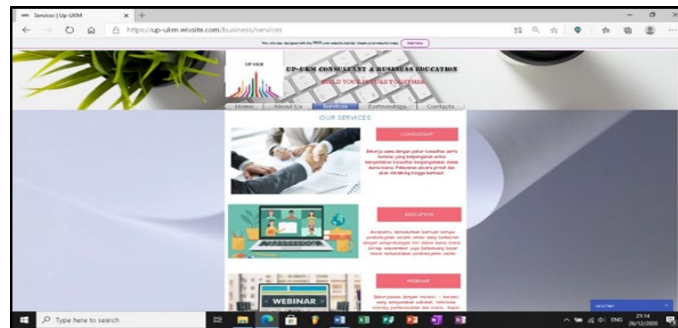

Figure 4. Display of Service menu

Figure 5 shown "about us" view, we introduce ourselves regarding our company, both our vision and mission, who are the members who play a big role in making the platform, and what is the basis for making the idea.
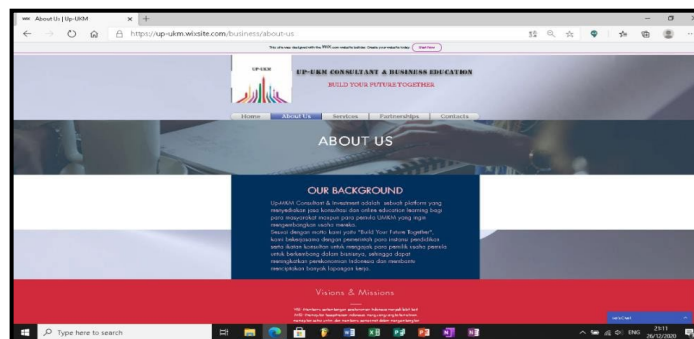

Figure 5. Display Menu About Us

In the service menu, we provide a brief explanation of the 4 innovations that we provide. In this section, customers or clients can directly choose what service features they want, and later they will be directly directed to the website they want. Figure 4 shown Service menu of https://up-ukm.wixsite.com/business

The display that we wanted to show is about news all around the world. This interface is not correlated with the results from questionnaire, but in the home screen where we put news about economy, business and even some YouTube videos, it may help businessman to find out what happened around the world.

5.4 Validation
Researchers develop a website that integrates three functions, namely business education, business consulting and SME promotion events to attract angel investors. Currently in Indonesia, it is common to find websites that have three separate functions each, namely: education web (such as a Ruang guru), a website for business consulting and a website for loan funds for SMEs from investors.

6. Conclusion
The first conclusion was based on the case analysis that occurred to SME entrepreneurs in managing their businesses during the pandemic from March 2020 until this research was conducted in July 2021, are most SMEs face declining incomes, lack of business knowledge of SME entrepreneurs, and difficulty in finding loan funds. The second conclusion is to provide solutions by creating a website which combines three functions, namely business consulting, online business knowledge training, and business promotion to facilitate capital loans from angel investors

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