Promotion Strategy and Service Quality of Universitas Terbuka in Increasing Student Satisfaction through Customer Value in the North Maluku Regional Office

Astri Dwi Jayanti Suhandoko[1]*, Ahyar Hanubun[2]

[1]*Elementary School Teacher Education, Universitas Terbuka, Indonesia
[2] Marketing Management, Universitas Khairun, Indonesia

***Corresponding author. Email: astri.dwi@ecampus.ut.ac.id**

Abstract

Customer satisfaction is one of the important factors in determining the future of an organisation. It needs to be continuously maintained and increased through various efforts. This study aims to analyse the socialisation and promotional strategies carried out by Universitas Terbuka at its Ternate regional office (UPBJJ-UT Ternate) to provide satisfaction to students as users of the institution's services. This study involves a mixed-method approach, through which quantitative data were obtained using an exploratory survey method. Meanwhile, a qualitative approach was used to carry out interviews and observations. The sample of this study was 326 students from a total population of 1,768 students enrolled in various study programmes within the last five years at UPBJJ-UT Ternate. The findings of the research analysis are as follows. (1) Promotional strategy has a positive and significant effect on student satisfaction, which means that as a whole, promotional strategies introduced by UPBJJ-UT Ternate is able to provide satisfaction to students. (2) Service quality has a positive and significant effect on student satisfaction, which means that as a whole, the quality of service provided by UPBJJ-UT Ternate is able to provide satisfaction to students. (3) Customer value has a positive and significant effect on student satisfaction, which means that the overall customer value is able to provide satisfaction to students. (4) Promotional strategy has a positive and significant effect on customer value, which means that as a whole, promotional strategies introduced by UPBJJ-UT Ternate is able to provide or shape customer value. And finally, (5) service quality has a positive and significant effect on customer value at UPBJJ-UT Ternate, which means that the overall service quality is able to provide or form customer value.

Keywords: *customer value, open education, promotion strategy, service quality, socialisation strategy, student satisfaction.*

1. Introduction

Distance education is largely a formal educational approach that provides space for interaction between educators/instructors and students in different locations. The use of communication technology systems and various information sources fully and continuously support distance education (Cacheiro-Gonzalez et al. 2019; Harizan & Hilmi, 2021). In several countries, such as Americas, Europe, and Asia, distance education is a mode of learning that was introduced over a century (Beuttler, 2021; Keegan & Rumble, 2018). Distance education is becoming increasingly popular because it provides opportunities for adult students to take responsibility for their own learning; with the use of multimedia technology, distance

ASEAN Journal of Open and Distance Learning
Vol. 14, No. 1, 2022, pp. 74 – 88

Promotion Strategy and Service Quality of Universitas Terbuka
in Increasing Student Satisfaction through Customer Value
in the North Maluku Regional Office

education gives students better flexibility in terms of time. These are some reasons for the increasing demand for distance education. Some of the institutions offering distance education have established reputations, and graduates have recognised qualifications in many disciplines.

As the sole university implementing distance education in Indonesia, Universitas Terbuka (UT) addresses 21st century issues in the education sector. UT has broken the national record under *Museum Rekor-Dunia Indonesia* (MURI) as the university with the highest number of enrolled students. This indicates that UT is not just a last resort for potential students, but the primary option for high school graduates, government employees, housewives, entrepreneurs and people from various other professions to pursue their degrees.

There are several reasons why UT is favoured by Generation Z (millennials). Among these reasons are flexibility of time and space in learning, availability of various learning programmes, and also the absence of age limit for enrolment. One other reason that has allowed UT to recruit so many students in Indonesia is the availability of the university's services in 40 provinces throughout the nation, both in cities and rural areas. It reflects the university's tagline that covers the 3T areas ("*terluar, tertinggal, terdepan*", or "the remote, the left behind, the outermost"), which demonstrates how UT "reaches the unreachable". Although the number of UT students is growing and has reached more than 346,584 (UT, 2021), this does not mean that UT is exempt from competing for students with other universities. With the rapid development of information technology, as well as the effects of the Covid-19 pandemic over the last two years, many public and private universities have also implemented long-distance education. This situation has had an impact on the number of new students who register at UT. Thus, this encourages UT and its regional offices to design socialisation and promotional strategies to help UT remain a top choice for the community.

The UT regional office in Ternate ("Unit Program Belajar Jarak Jauh-UT Ternate", or UPBJJ-UT Ternate) was established in 2003 in Ternate City, North Maluku, based on the UT Rector's Decree No. 478/J31/KEP/2003, dated 2 December 2003. The establishment of UPBJJ-UT Ternate is meant to provide the public and students in the North Maluku region wider access to open and distance higher education services. Currently, based on 2020 registration data, there are 1,768 students taking courses at UPBJJ-UT Ternate. However, this number is still below the target given by Central UT ("UT Pusat"), i.e., 5,000 people. To increase the number of students in Ternate, some efforts have been made through socialisation and promotional activities, recruitment, registration, and collaboration with partners. However, these efforts have not yielded optimal results. Socialisation and promotional activities have been carried out in various modes but have not significantly increased the number of students.

Table 1. Sources of information for UT students

No	Source of Information	2018		2019		2020		Total	
		Number of students	%	Number of students	%	Number of students	%	Number of students	%
1	Friends	187	40.65	362	54.85	304	62.68	853	53.15
2	Families/ Relatives	126	27.39	130	19.70	86	17.73	342	21.31
3	Banners	51	11.09	109	16.52	18	3.71	178	11.09
4	UT Website	65	14.13	31	4.70	27	5.57	123	7.66
5	Others	26	5.65	16	2.42	27	5.57	69	4.30
6	Printed Mass Media	1	0.22	11	1.67	17	3.51	29	1.81
7	Leaflets	3	0.65	0	0.00	3	0.62	6	0.37
8	Digital Mass Media	1	0.22	1	0.15	3	0.62	5	0.31
	Total	**460**	**100**	**660**	**100**	**485**	**100**	**1605**	**100**

Source. UPBJJ-UT Ternate (2020)

Table 1 shows that from 2018 to 2020, the majority of students derived information about UT from friends (53.15%), families/relatives (21.31%), banners (11.09%), and UT website (7.66%), while the rest from other media such as newspapers, leaflets, and Internet news (lower than 10% in total). However, UPBJJ-UT Ternate has focused its promotional activities through print media such as newspapers, banners, and distribution of brochures in public areas. As such, UPBJJ-UT Ternate needs to design more effective promotional strategies that can better provide information to the public, especially prospective

Promotion Strategy and Service Quality of Universitas Terbuka
in Increasing Student Satisfaction through Customer Value
in the North Maluku Regional Office

ASEAN Journal of Open and Distance Learning
Vol. 14, No. 1, 2022, pp. 74 – 88

students who may want to enrol in UT, as well as senior students who should be prompted to re-register in the following semesters. Effective promotional activities could lead to increased enrolment of new students and better retention of senior students.

2. Literature Review

2.1. Marketing

Marketing is one of the most important efforts in any organisation, both profit-oriented and non-profit organisations. Through marketing activities, the public and consumers can get to know an organisation and its products and services. Marketing activities are basically meant to create, communicate, and deliver value to customers. Baines et al. (2017) state that marketing has an organisational function and a set of processes for creating, communicating, and delivering value to customers and for managing customer relationships in ways that benefit the organisation and its stakeholders. Furthermore, Rust (2020) defines marketing as the process of discovering customer wants and needs, and then providing goods and services that meet or exceed those expectations. Therefore, it can be understood that the purpose of marketing is to know and understand customers well so that the products or services offered are compatible with their needs. Ideally, marketing should be able to engage a customer who is 'ready to buy'.

2.2. Promotional Strategies

Chandler Jr (2018) says that a promotional strategy is the determination of a company's long-term goals and objectives through the implementation of actions and allocation of resources needed to achieve those goals. Meanwhile, Chen and Li (2020) describe it as a pattern of goals, objectives, and general policies/plans to achieve set goals, which the latter defines what business the company is running, or what the company should be doing. Meanwhile, Aguilar-Barrientos et al. (2021) state that promotions are a communication tool between companies and consumers, as well as a tool to influence consumers to make purchases. From this explanation, it can be concluded that promotion is an effort to inform or offer products (goods or services) to the public with the aim of influencing, and attracting potential consumers to buy or consume them, and maintaining consumer loyalty. With promotions, companies can attract new customers, influence customers to try new products, encourage customers to buy more products, downplay promotional activities by competitors, and increase consumer purchases.

2.3. Service Quality

Quality is a dynamic condition that affects products, services, people, processes, and the environment that meet or exceed expectations (Gupta & Kaushik, 2018). Thus, service quality can be defined as an effort to fulfil the needs and desires of consumers. Service quality can be known by means or the acquisition of the service actually expected by the consumers. If the service received or perceived is as expected, then the service quality can be considered good or satisfactory. Conversely, if the service received is poorer than expected, then the service quality can be considered bad or incompatible with consumer expectations. There are three elements closely related to customer service as a focal point. First is service strategy, which details how an institution can provide services of the highest quality in accordance with established standards (Panwar et al., 2019). The service strategy must be formulated and implemented as effectively as possible so that the services provided by an institution/company can be differentiated from those of its competitors. The second focus entails human resources that provide services. The people who are oriented directly or indirectly with customers must provide services that are sincere (i.e., with empathy), responsive, friendly and focused. They must also realise that customer satisfaction is everything (Ahrholdt et al., 2019). Service is not only for external customers but also internal customers too. The third focus is the service system, which is a service procedure for customers that covers all facilities including human resources (Jiménez-Zaragoza et al., 2020). A service system redesign is required if the standard of services becomes no longer relevant to customer expectations.

ASEAN Journal of Open and Distance Learning
Vol. 14, No. 1, 2022, pp. 74 – 88

Promotion Strategy and Service Quality of Universitas Terbuka
in Increasing Student Satisfaction through Customer Value
in the North Maluku Regional Office

2.4.   Customer Value

According to Abadi et al. (2020), creating loyal customers is the core of every business. The only value a company can create is the value that comes from the customers it has now and ones they can secure in the future. A business is considered successful if it manages to get, retain, and grow customers (Abadi et al., 2020). Customers are the only reason companies build factories, hire employees, or do business. Gogoi (2021) explains customer perceived value as the difference between a prospective customer's assessment of all the benefits and costs of an offering against its alternatives. Another concept related to customer value is total customer benefit, which describes the monetary value of a collection of economic, functional, and psychological benefits that customers expect from a market offering caused by the products, services, personnel, and image involved (Ahmed & Sarma, 2018). In contrast to these two concepts, total customer cost is a collection of costs that customers expect to incur in evaluating, obtaining, using, and/or getting rid of a market offer, including monetary, time, energy, and psychological costs (Kusumadewi, 2019). From the description of the three concepts, it can be understood that customer value is well-developed when consumer expectations for goods and services can be fulfilled. In other words, the benefits and functions of products and services are in accordance with customer expectations, and commensurate with the costs, time, and effort they spend to obtain these goods and services.

2.5.   Customer Satisfaction

Companies must act wisely by regularly measuring customer satisfaction, as one of the keys to retaining customers is maintaining customer satisfaction (Otto et al., 2020). A very satisfied customer will usually remain loyal for a long time, make another purchase when the company introduces a new product and/or updates an old product, say good things about the product and company to others, not pay too much attention to other companies' brands, is unconcerned with price, and offer product or service ideas to the company. In this case, the service fee involving old customers is cheaper than for new customers because old customer transactions can become routine.

According to Eckert et al. (2022), satisfaction is a person's feelings of pleasure or disappointment arising from a comparison of the perceived performance of the product (or result) against his/her expectations. If performance fails to meet expectations, customers will be dissatisfied. If performance matches expectations, customers will be satisfied. And, if performance exceeds expectations, customers will be very satisfied and happy. In addition, Emmanuel and Priscilla (2022) explain that satisfaction is the extent to which the performance provided by a product is commensurate with the expectations of the buyer. If the product's performance is lower than expected, the buyer will be dissatisfied. Therefore, it can be concluded that customer satisfaction is a feeling or emotional assessment of customers for the use of a product or service based on whether or not their expectations and needs are met.

This research study was conducted with the aim of determining the impact of promotional strategies and service quality implemented by UPBJJ-UT Ternate during the period of 2018 to 2019.

3.   Research Method

This research was conducted at UPBJJ-UT Ternate for nine months from March 2021 to November 2021. During the first three months of this study, the researcher conducted instrument testing, validation and refinement. Data collection and analysis were conducted in the next five months. Based on the research objectives, the research design utilised a mixed method (Harrison et al., 2020).

The quantitative approach was carried out using an explanatory survey method by drawing a sample from the population using a questionnaire as a data collection tool (Wipulanusat et al., 2020). The researcher collected and processed data obtained from questionnaires by providing an assessment weight for each question using a Likert scale (Mirahmadizadeh et al., 2022). Attitudes, opinions, and perceptions of individuals or groups regarding social phenomena are measured using this scale. The variables to be

Promotion Strategy and Service Quality of Universitas Terbuka   ASEAN Journal of Open and Distance Learning
in Increasing Student Satisfaction through Customer Value   Vol. 14, No. 1, 2022, pp. 74 – 88
in the North Maluku Regional Office

measured were translated into variable indicators, which were then used as a reference for developing instrument items/questions in the questionnaire.

The qualitative component of the research was carried out using the interview/Focus Group Discussion (FGD) method (O. Nyumba et al., 2018) and observation (Katz-Buonincontro & Anderson, 2020). These two processes were carried out at four districts in North Maluku. The researcher made observations on the following activities: primary data observation from socialisation and promotional activities carried out by UPBJJ-UT Ternate, as well as student academic and non-academic activities.

The population of this study involved students at UPBJJ-UT Ternate who registered and were active students for the last five years. The researcher used a probability sampling technique with the Yamane formula. From a total population of 1,768 students, 326 samples were obtained from 10 urban districts. From the samples' responses, the researcher discovered four incomplete questionnaires, thus only 322 questionnaires could be processed and analysed. The researcher chose 16 students as FGD informants, who represented different batches and city districts. The FGD was carried out in four stages in four districts, consisting of five students from different batches/years.
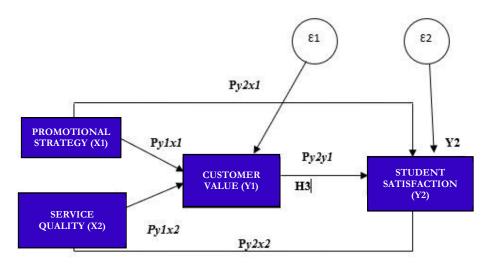

Figure 1. The Flow of Causal Relationship Among Variables

Diagram 1 shows that this research has two independent variables, i.e., promotional strategy (X1) and service quality (X2), and two dependent variables, i.e., customer value (Y1) and student satisfaction (Y2). The following are the structural equations that were constructed:

$$Y1 = P_{y1x1}\ X1 + P_{y1x2}\ X2 + \varepsilon 1$$
$$Y2 = P_{y2x2}\ X1 + P_{y2x2}\ X2 + \varepsilon 2$$

To analyse the quantitative data, the researcher used multiple linear regression, which is a statistical method commonly used to determine the relationship between dependent and independent variables. The following are three statistical tests used in this study, i.e., (1) R^2 test, Correlation Coefficient, (2) F-test, and (3) t-test. For the F-test, calculations were made by comparing the F-table and F-count; if F-count > F-table, then H_0 is rejected.

Interview/FGD data were collected, transcribed and then coded for each informant's answers. This coding process is based on rhetorical propositions by considering the equivalence of words from variations of statements expressed by the informants (Miles et al., 2018). Subsequently, the researcher developed a category from a set of predefined codes/code patterns (Belgrave & Seide, 2019).

ASEAN Journal of Open and Distance Learning
Vol. 14, No. 1, 2022, pp. 74 – 88

Promotion Strategy and Service Quality of Universitas Terbuka
in Increasing Student Satisfaction through Customer Value
in the North Maluku Regional Office

4. Finding and Discussion

4.1. Hypothesis Testing

The following hypothesis testing was carried out to determine whether or not promotional strategy (X1), service quality (X2), and customer value (M) have a positive and significant effect on student satisfaction (M).

4.1.1. Effect of Promotional Strategy on Student Satisfaction at UPBJJ-UT Ternate

Hypothesis testing based on the results of path coefficient calculations and t-count using the IBM SPSS statistical programme v.22 is presented in Table 2.

Table 2. Results of Testing the Effect of Promotional Strategies on Student Satisfaction

Sample	Path Coefficient ($\varrho_y X1$)	t-count	t-table ($\alpha=0,05$)
322	0.064	2.432*	1.97

Notes. * Path coefficient is significant, t-count=2.432 > t-table=1.97.

Table 2 shows the path coefficient of the promotional strategy variable on student satisfaction ($\varrho_y X1$) was 0.064, with t-count = 2.432. This is greater than the value of t-table ($\alpha=0.05$) = 1.97 at a significance level of 0.016. Since t-count > t-table, H_0 is rejected, which means that "promotional strategy has a positive effect on student satisfaction at UPBJJ-UT Ternate." Promotional strategy has a direct effect of $(0.064)2 \times 100\% = 0.40\%$ on student satisfaction. The results of this study provide empirical evidence that promotional strategies are able to create or increase student satisfaction at UPBJJ-UT Ternate. The results of this study are in line with the statements of Fisher et al. (2019), i.e., promotion is a marketing function that focuses on communicating the components of a marketing programme in a persuasive manner to the target audience to support exchanges between marketers and consumers, and help achieve the goals of both parties. This means that the results of the study can provide an overview of the current emotional state of students who feel satisfied with the promotions introduced by UPBJJ-UT Ternate. In other words, the promotions carried out by the UPBJJ-UT Ternate in North Maluku is able to provide a sense of satisfaction based on the students' interests, and assist them in obtaining information according to their needs.

4.1.2. Effect of Service Quality on Student Satisfaction at UPBJJ-UT Ternate

Hypothesis testing based on the results of path coefficient calculations and t-count using the IBM SPSS statistical programme v.22 is presented in Table 3.

Table 3. Results of Testing the Effect of Service Quality on Student Satisfaction

Sample	Path Coefficient ($\varrho_y X2$)	t-count	t-table ($\alpha=0,05$)
322	0.338	11.327*	1.97

Notes. * Path coefficient is significant, t-count=11.421 > t-table=1.96.

Table 3 shows the path coefficient of the service quality variable on student satisfaction ($\varrho_y X1$) was 0.338, with t-count = 11.421. This is greater than the value of t-table ($\alpha=0.05$) = 1.97 at a significance level of 0.000. Since t-count > t table, H_0 is rejected, which means that "service quality has a positive effect on student satisfaction at UPBJJ-UT Ternate." Service quality has a direct effect of $(0.338)2 \times 100\% = 11.42\%$ on student satisfaction. The results of this study provide empirical evidence that service quality is also able to create or increase student satisfaction at UPBJJ-UT Ternate.

Promotion Strategy and Service Quality of Universitas Terbuka   ASEAN Journal of Open and Distance Learning
in Increasing Student Satisfaction through Customer Value   Vol. 14, No. 1, 2022, pp. 74 – 88
in the North Maluku Regional Office

The results of testing hypothesis 2 (H_2) indicate that service quality (X1) has a positive and significant effect on student satisfaction because the t-count value was greater than that of t-table, and the significance value was lower than alpha (α) 0.05. The results of this study are in line with the statement by Gupta and Lee (2020), i.e., quality is a dynamic condition that affects products, services, people, processes, and the environment that meets or exceeds expectations. Thus, the results of this study can provide an overview of how public services at UPBJJ-UT Ternate as a whole could have a positive contribution, or able to serve its students well.

The results show that indicators with a good level of validity and reliability are able to make a positive contribution to the independent and dependent variables. In other words, the implementation of indicators/instruments is able to form constructs of student satisfaction in relation to: (1) providing information clearly according to student needs, (2) facilitating the process of contracting officers at UPBJJ-UT Ternate, (3) responding to complaints quickly and accurately, (4) provision of service time according to customer expectations, and (5) accuracy of UPBJJ-UT Ternate officers in file verification. Furthermore, this is also in line with the statement of Biscaia et al. (2021), i.e., service quality has a significant effect on consumer satisfaction. Thus, it can be concluded that service quality at UPBJJ-UT Ternate as a whole is able to contribute to student satisfaction.

4.1.3. Effect of Customer Value on Student Satisfaction at the UPBJJ-UT Ternate

Hypothesis testing based on the results of path coefficient calculations and t-count using the IBM SPSS statistical programme v.22 is presented in Table 4.

Table 4. Results of Testing the Effect of Customer Value on Student Satisfaction

Sample	Path Coefficient (ϱyX1)	t-count	t-table (α=0,05)
322	0.495	8.434*	1.97

Notes. *Path coefficient is significant, t-count=8.434 > t-table=1.97.

Table 4 shows the path coefficient of the promotional strategy variable on student satisfaction (ϱyX1) was 0.064 with t-count = 8.434. This is greater than the value of t-table (α=0.05) = 1.97 at a significance level of 0.000. Since t-count > t-table, then H_0 is rejected, which means that "customer value has a positive effect on student satisfaction at UPBJJ-UT Ternate." Customer value has a direct effect of $(0.495)2 \times 100\%$ = 24.50% on student satisfaction. The results prove that customer value is able to create or increase student satisfaction at UPBJJ-UT Ternate.

The results of testing hypothesis 3 (H_3) show that service quality (X1) has a positive and significant effect on student satisfaction because the t-count value was greater than that of t-table, and the significance value was lower than alpha (α) 0.05. The results of this study are in line with the statement of Abadi et al. (2020), i.e., creating loyal customers is at the core of every business. This means that the results can provide an overview of the customers' emotional bond between students and UPBJJ-UT Ternate at this time, and signify that there is an opportunity for this bond to be maintained and improved.

The results of this study also show that indicators with a good level of validity and reliability are able to make a positive contribution to the independent and dependent variables. In other words, the implementation of indicators/instruments is able to form constructs of student satisfaction in relation to: (1) choosing to study at UT as the right choice, (2) customer word-of-mouth communication, (3) customer satisfaction, (4) the impact of academic/lecture services, (5) UT student recruitment system, (6) the uniqueness of UT's appreciation for the community, (7) lecturing system, and (8) flexibility of the learning system. Furthermore, the results of this study are in line with the statements of Ahmed and Sarma (2018) and Kusumadewi (2019), i.e., customer value has a significant effect on student satisfaction. Thus, it can be concluded that the customer value at UPBJJ-UT Ternate as a whole has been able to provide satisfaction to students.

ASEAN Journal of Open and Distance Learning
Vol. 14, No. 1, 2022, pp. 74 – 88

Promotion Strategy and Service Quality of Universitas Terbuka
in Increasing Student Satisfaction through Customer Value
in the North Maluku Regional Office

4.1.4. Effect of Promotional Strategy on Customer Value at UPBJJ-UT Ternate

Hypothesis testing based on the results of path coefficient calculations and t-count using the IBM SPSS statistical programme v.22 is presented in Table 5.

Table 5. Results of Testing the Effect of Promotion Strategy on Customer Value

Sample	Path Coefficient (ϱ_yM)	t-count	t-table (α=0,05)
322	0.065	2.634*	1.97

Notes. *Path coefficient is significant, t-count=2.634 > t-table=1.97.

Table 5 shows the path coefficient of the promotional strategy variable to customer value (ϱyM) was 0.065 with t-count = 2.634. This is greater than the t-table value (α=0.05) = 1.97 at a significance level of 0.016. Since t-count > t-table, H_0 is rejected, which means that "promotional strategy has a positive effect on customer value at UPBJJ-UT Ternate." Promotional strategy has a direct effect of $(0.065)2 \times 100\%$ = 0.42% on customer value. The results of this study provide empirical evidence that promotional strategies were able to create or increase customer value at UPBJJ-UT Ternate.

The results of testing hypothesis 4 (H_4) indicate that promotional strategy (X1) has a positive and significant effect on customer value because the t-count value was greater than that of t-table, and the significance value was lower than alpha (α) 0.05. The results of this study are in line with the statement of Chandler Jr. (2018), i.e., a promotion strategy is a controlled and integrated programme of communication methods and materials designed to present the company and its products to potential consumers, conveying product characteristics that satisfy the need to drive sales, which in turn ultimately contribute to long-term earnings performance. This means that the results of this study can provide an overview that the promotional strategy introduced by UPBJJ-UT Ternate has been able to influence the purchasing decision of customers (students) through customer value. This means that the current benefits felt by UPBJJ-UT Ternate students are overall an objective assessment of UT from its customers.

4.1.5. Effect of Service Quality on Customer Value at the UPBJJ-UT Ternate

Hypothesis testing based on the results of path coefficient calculations and t-count using the IBM SPSS statistical programme v.22 is presented in Table 6:

Table 6. Results of Testing the Effect of Service Quality on Customer Value

Sample	Path Coefficient (ϱ_yX2)	t-count	t-table (α=0,05)
322	0.240	9.572*	1.97

Notes. *Path coefficient is significant, t-count=9.572 > t-table=1.96.

Table 6 shows the path coefficient of the service quality variable on student satisfaction ($\varrho yX1$) was 0.240 with t-count = 9.572. This is greater than the value of t-table (α=0.05) = 1.97 at a significance level of 0.000. Since t-count > t-table, then H_0 is rejected, which means that "service quality has a positive effect on customer value at UPBJJ-UT Ternate." Service quality has a direct effect of $(0.240)2 \times 100\%$ = 5.76% on student satisfaction. The results of this study provide empirical evidence that service quality was also able to create or increase customer value at UPBJJ-UT Ternate.

The results of testing hypothesis 5 (H_5) indicate that service quality (X2) has a positive and significant effect on customer value because the t-count value was greater than that of t-table, and the significance value was lower than alpha (α) 0.05. This means that officers or employees at UPBJJ-UT Ternate are able to provide consistent academic services to customers (students) so that the former are able to obtain positive perception or assessment from the students. This is also emphasised by Panwar et al. (2019), who stated that the provision of services and support to customers describes the ability of employees to carry out their duties to provide service and support with full commitment and the ability to solve problems

Promotion Strategy and Service Quality of Universitas Terbuka   ASEAN Journal of Open and Distance Learning
in Increasing Student Satisfaction through Customer Value   Vol. 14, No. 1, 2022, pp. 74 – 88
in the North Maluku Regional Office

when the service delivery takes place. This also means that service quality is related to the company's ability to provide the best quality service in comparison to that of its competitors.

4.2   Results and Discussion of Qualitative Data

This section focuses on promotional strategies and service quality provided by UPBJJ-UT Ternate for students in North Maluku. Through interviews conducted with 16 informants, the researcher found that customer value and student satisfaction are influenced by UPBJJ-UT Ternate's selection of strategies in conducting institutional publicity, as well as the quality of service provided by UT staff in collaboration with supporting partners. In this section, the researcher describes the findings in several categories based on these two dimensions.

4.2.1. Promoting UT by Publishing Information in Various Media

UPBJJ-UT Ternate advertises through various types of media. This advertising strategy has yielded a positive impact on the number of people who have expressed interest in continuing their studies at UT. In this context, the people of North Maluku are consumers of various media, both print and online. However, there were three major types of media that turned out to be the most influential, i.e., banners/print media, Facebook/online media, and door-to-door promotion carried out by learning groups ("*Kelompok Belajar*", or POKJAR).

In an era of great disruption in education, many institutions have chosen online media as the main approach in their promotional strategy. However, in archipelagic locations like Indonesia where Internet networks are generally unstable, the reality is that print media in the form of banners or billboards are likely to still provide the best impact. This has been described by Siqin et al. (2022) and Barik et al. (2019) who stated that print advertisements in the form of banners and billboards are still needed in remote areas as a form of promotion because these have better reach, especially if they are located in key places in such remote areas. In addition, the use of cellular phones with Internet connectivity by people in remote areas is still minimal. Moreover, the Internet network infrastructure is not well established, and this in turn encourages the use of print media in the form of banners and billboards as a major promotional option.

> P2.Q1.5 I saw last year or if I'm not mistaken at the beginning of this year that there were banners installed in the southern Weda sub-district. There is information on the admission of prospective new students. Besides, I have also seen stickers/brochures in the Veda harbour area. In my view, the use of social media only allows certain people to see these things, not everyone, especially children who have just graduated from high school. Thus, I think banners are the right option as an UT promotion media that is displayed in crowded places.

One promotional strategy that is considered quite effective and efficient in terms of cost and reach involves using social media such as Facebook. This seems contradictory to the previous description, but can be explained by the varying levels of economic and educational progress in different regions of North Maluku. A number of informants stated that they chose to study at UT because of the information they obtained through online media. Upon further examination, these informants constitute those who live in urban districts with excellent welfare in comparison to other less developed areas. Thus, this reason has implications for the availability of facilities and infrastructure to access the Internet that is quite supportive (Amin, 2018; Praditya, 2014). In addition, some of these informants are students who have worked and are accustomed to using information technology in their field of employment (Manca & Whitworth, 2018).

In contrast to the two strategies described above, several informants revealed that they had an interest in continuing their education at UT after receiving a visit from the POKJAR in their area. These face-to-face meetings were considered satisfactory because in addition to obtaining information on UT, people also had the opportunity to have their questions answered by the POKJAR. The expansion of POKJAR into each district and city has become a fairly successful strategy because its members are able to provide

ASEAN Journal of Open and Distance Learning
Vol. 14, No. 1, 2022, pp. 74 – 88

Promotion Strategy and Service Quality of Universitas Terbuka
in Increasing Student Satisfaction through Customer Value
in the North Maluku Regional Office

explanation that cannot be derived directly from print and online promotions.

From the variety of strategies that have been described, the researcher understands that it is necessary to present information about UT through various types of media. This consideration is intended to ensure that the information conveyed can reach people from different educational, economic, and regional backgrounds and interests (Bilro & Loureiro, 2020; Wu, 2020). However, as a matter of note, the three promotional strategies mentioned can be used as a reference point in disseminating information.

4.2.2. Alteration of Implementation of Learning Modes with Good Quality and Accompanying Academic Achievements

UT provides four study modes, i.e., Face-to-Face Tutorials ("*Tutorial Tatap Muka*", TTM), Online Tutorials ("*Tutorial Online*", TUTON), Webinar Tutorials ("*Tutorial Webinar*", TUWEB), and Course Assignments ("*Tugas Mata Kuliah*", TMK) (Meylina et al., 2021; Sugilar, 2020; Yustika & Iswati, 2020). Students can choose between the four modes. TTM are lectures presented in a meeting room/location designated by POKJAR and UT, and involves tutors and students. TUTON comprises asynchronous online lectures using Moodle as a learning medium. TUWEB comprises synchronous online lectures during which students and tutors can communicate directly using applications and links that are provided by UT. Finally, TMK comprises assignments, which are given to students three times every semester. The assignments are usually in the form of questions related to the registered course material. The time duration starts from the beginning of the lecture to TMK 1, then from TMK 1 to TMK 2, and so on. During this time, students are free to study independently utilising printed teaching materials ("*Bahan Ajar Cetak*", BAC) or modules. The students' preferred learning mode is usually based on the time they have, technological skills, and facilities and infrastructure that support the learning process.

The interview results show that students who choose TUTON do so because the time given to attend lectures is more flexible. The use of Moodle and asynchronous mode give students the flexibility to access their learning at any time, 24 hours a day. This makes it easy for them to set the best time to study the material, respond to discussions, and complete assignments. Another reason for the popularity of TUTON is that a tutor is assigned to answer questions that the students may have when they do not understand what has been learnt in the module. Additionally, some students admitted that the reason for their choice is that the contribution of TUTON scores is quite high, i.e., 40% of the final grade of the course (a combination of study aid scores and take-home exam scores).

> P14.Q4.4 I have opted for TUTON's study assistance service, because I feel that TUTON can help me in studying. For example, if there is something that I can't understand in the module, I can directly ask the tutor of the subject. TUTON's value distribution is also very high, i.e., 40%, so this is the reason I have chosen TUTON. The schedule is well-structured and goes smoothly, but sometimes there are network problems when the electricity goes out, but after that the network will be back to normal. If the tutorial service is ready, we just need to log in and follow the material. The material in the tutorial is very easy for us to understand, one problem for us is that sometimes we have finished with the material, but the assessment is not yet available.

The most common cause of student dissatisfaction with UT services while participating in online tutorials is the tutors' lack of responsiveness in replying to messages, and assessing discussions and assignments that the students have completed. This is often revealed through the students' semesterly evaluation. Unlike online tutorials, TUWEB is designed to create interaction between students and tutors. TUWEB has been implemented since the start of the pandemic; courses that should be held face-to-face have turned into meetings through webinars, especially practical/practice/practice courses (Sugilar, 2020). Through the Microsoft Teams application, which provides a platform for online face-to-face sessions, students can listen to material delivered by tutors, conduct discussions, and ask questions directly. Problems commonly faced during TUWEB are outside UT's influence or control, such as limited infrastructure in supporting online learning in students' residential areas. In addition, students' digital skills in utilising online applications can also be a problem given that currently TUWEB is accompanied by activities in a learning management system (LMS) that is full of technology-based activities.

Promotion Strategy and Service Quality of Universitas Terbuka   ASEAN Journal of Open and Distance Learning
in Increasing Student Satisfaction through Customer Value   Vol. 14, No. 1, 2022, pp. 74 – 88
in the North Maluku Regional Office

P6.Q4.3 Yesterday, for our fourth semester, we had civil law and criminal law subjects. We had materials, said the lecturer from Universitas Khairun. We study using TUWEB because of the pandemic. The schedule must be on Saturday and Sunday.

UT's image is that of a higher education institution carrying out online learning. However, UT actually also provides a face-to-face tutorial mode (TTM) through eight weeks of meetings. As previously explained, UT utilises offices or schools as locations for TTM. These facilities and infrastructure are assessed every semester. According to several informants, the provision of facilities for the implementation of TTM has been appropriate and adequate. Similar to TUTON and TUWEB, students' expectations of TTM not only concern facilities for the venue, but also the quality of teaching from tutors. They expect the course tutors to be disciplined in terms of attendance based on the TTM schedule, use teaching methods that are student-centred, and able to stimulate communication, critical thinking, and student creativity. Thus, the tutorial process is expected to achieve not only academic achievement, but also meaningful learning.

Unlike the other three learning modes, TMK is not accompanied by an eight-week class schedule or tutors. TMK is a learning mode that has been used during the pandemic, and usually chosen by students who are less skilled in the more sophisticated technology needed for TUTON and TUWEB. This is because the TMK is assignment-based, consisting of four to five questions over three terms. Students who choose this learning mode are those who before the pandemic had chosen to study independently, namely those not engaged in TUTON, TUWEB, or TTM, but only relied on the UT learning modules. Since they live in areas without adequate Internet access, they often have problems downloading questions and uploading answers. As such, UT looks for ways to help both processes through a Teaching Material Services Learning Assistance ("*Bantuan Belajar dan Layanan Bahan Ajar*", or BBLBA) manager, who directs each of the Regional Responsible Persons.

However, one problem for which no solution has been found so far is that the website for uploading assignment answers (https://tmk.ut.ac.id/) often experiences problems when it is accessed simultaneously by students throughout Indonesia during peak periods, i.e., when assignments are due.

4.2.3. Teaching Materials that Support the Independent Learning Process

Since establishment, UT has provided teaching materials to students in the form of learning resources consisting of BAC and non-printed teaching materials ("*Bahan Ajar Non Cetak*", or BANC) (Utami & Hermawati, 2018). Some courses are designed with both BAC and BANC as teaching materials that are related and can support each other, while other courses provide the BAC and BANC separately so that each can be used individually. Students, whether they choose TUTON, TUWEB and TMK learning modes, automatically receive teaching materials based on their registered courses every semester. UT strives to develop teaching materials with the most interactive language possible to support students in the independent learning process, even without any learning assistance or guidance by tutors. Thus, UT teaching materials can be used by students wherever they are, whether they are in cities with adequate technological infrastructure, or in 3T areas where the Internet network is often unstable.

P11.Q5.3 The contents of the teaching materials that I studied really helped me face the semester exams, because the materials all came out in the semester exam items. In my opinion, the materials are easy to understand and digest.

To ensure that the teaching materials can be used properly and help the lecture process, UT introduced a speed-reading strategy (teaching materials) during the orientation period for new students. This is known as Student Learning Skills Education ("*Edukasi Keterampilan Belajar Mahasiswa*", or EKBM). It is common knowledge that BAC provided by UT have many pages and appear as physically thick books. In EKBM training, instructors from UT or UT partners provide tips and tricks to read the BAC effectively and efficiently, so that students only need to plan according to their time and reading habits. However, based on the activity records at UPBJJ-UT Ternate, not all students attend the EKBM training.

ASEAN Journal of Open and Distance Learning   Promotion Strategy and Service Quality of Universitas Terbuka
Vol. 14, No. 1, 2022, pp. 74 – 88   in Increasing Student Satisfaction through Customer Value
                                                              in the North Maluku Regional Office

The problem related to the availability of teaching materials is the distribution from *UT Pusat* in Pondok Cabe to students in each region of this archipelagic country. UT provides a dedicated webpage for students to locate the teaching materials during the distribution process. Some students can track the materials independently; others are assisted by UT. Delays are rarely due to delivery from UT Pusat, but from the delivery service provider to students' residential locations. This may be especially problematic if the students' addresses are incomplete or difficult to find. This can interfere with learning because students may not receive the teaching materials in time before lectures begin. However, students with complete addresses in the UT database or those who live in easily accessible areas do not suffer this problem. For those who do, as a solution to overcome delays in teaching material delivery as well as part of UT's effort to innovate in the digital era, UT has developed the Virtual Reading Room ("*Ruang Baca Virtual*", or RBV), which comprises teaching materials that can be accessed online. As long as students can access the Internet, they can use the RBV at any time with their laptop/tablet/mobile phone.

4.2.4. Good Customer Value as a Consequence of Excellent Service from UT and its Partners

Customer value (reflected in every student's value of UT as a higher education institution) is created when an individual receives a promotional presentation about UT, decides to enrol in one of the study programmes, and subsequently receives various academic services at UT. This value can be a form of student loyalty to UT so that the students persist and maintain a positive attitude until they complete their lectures (He *et al.*, 2021; Simpson, 2021). Good value will not develop without good relations and treatment from UT towards its students and partners. UT's sensitivity in maintaining customer value involves creating a good image of the institution to the public. This includes public trust in the quality of UT as a long-distance state university that can compete with conventional universities in Indonesia in general, and in Ternate particularly.

> P6.Q7.4 If I say there is no UT campus, or it doesn't exist, I have to argue. I do not agree with that because we are accredited: some are accredited A, some are accredited B, and none is accredited C. Indeed, we have been recognised, by the world and the state. Thus, people shouldn't say that we don't have a campus, we don't have this or that, because the state alone has recognised us.

UT's image, which has been described previously, is more or less supported by the availability of various modes of learning that can be utilised by students from various educational backgrounds, professions, and areas of residence. The informants also acknowledged that the learning modes are up-to-date, especially for the current digital era (Pregowska et al., 2021). Another UT feature that has turned out to be quite attractive to prospective students is the acceptance of those who opt for credit transfer, are transferring from another campus, or continuing studies from their previous education level.

In addition, the costs that must be paid by students at UT in comparison with the costs involved at other state universities are very different. UT is known for its affordable campuses (Li & Wong, 2021; Neupane, 2021) and inexpensive registration fees. The money deposited by students during registration covers costs for teaching materials and the right to participate in the various learning modes.

The series of promotional activities carried out by UT within the community supports students in recommending UT to relatives and colleagues as the choice university to continue their studies.

5.   Conclusion

The conclusions to be drawn from this study are as follows. (1) Promotional strategy has a positive and significant effect on student satisfaction at UPBJJ-UT Ternate. This means that the promotional strategy at UPBJJ-UT in Ternate as a whole has been able to provide satisfaction to students. (2) Service quality has a positive and significant effect on student satisfaction at UPBJJ-UT Ternate. This means that the quality of service at UPBJJ-UT in Ternate as a whole has been able to provide satisfaction to students. (3) Customer value has a positive and significant effect on student satisfaction at UPBJJ-UT Ternate. This means that the customer value at UPBJJ-UT Ternate as a whole has been able to provide satisfaction to

Promotion Strategy and Service Quality of Universitas Terbuka
in Increasing Student Satisfaction through Customer Value
in the North Maluku Regional Office

ASEAN Journal of Open and Distance Learning
Vol. 14, No. 1, 2022, pp. 74 – 88

students. (4) Promotional strategy has a positive and significant impact on customer value at UPBJJ-UT Ternate. This means that the promotion strategy at UPBJJ-UT in Ternate as a whole has been able to provide or shape customer value. Finally, (5) service quality has a positive and significant effect on customer value at UPBJJ-UT Ternate. This means that the quality of service at UPBJJ-UT in Ternate as a whole has been able to provide or form customer value. Suggestions made are as follows. (1) Consistent information could be provided through printed media such as brochures, leaflets, posters and catalogues. (2) Leaflets, posters and catalogues could be redesigned. (3) Short videos related to the registration process of new students could be created. (4) Clear information could be provided according to student needs. (5) Workshops on strengthening UT academic administrative staff in the context of "Motivating Employees to Provide Excellent Service", as well as socialising opportunities could be organised. (6) Complaints need to be handled quickly and accurately, service could be more flexible in terms of time, and a more flexible learning system could be introduced in the context of online learning information system service performance.

References

Abadi, R. R., Nursyamsi, I., & Syamsuddin, A. R. (2020). Effect of customer value and experiential marketing to customer loyalty with customer satisfaction as intervening variable (Case Study on gojek Makassar consumers). *The Asian Journal of Technology Management, 13*(1), 82-97.

Aguilar-Barrientos, S., Villegas-Gomez, J., & Arias-Salazar, A. (2021). Pricing and promotion: A literature review. *Aibi revista de investigación, administración e ingeniería, 9*(3), 59-65.

Ahmed, S., & Sarma, R. (2018). Brand performance evaluation: Customer perceived value analysis. *SCMS Journal of Indian Management, 15*(4), 52-61.

Ahrholdt, D. C., Gudergan, S. P., & Ringle, C. M. (2019). Enhancing loyalty: When improving consumer satisfaction and delight matters. *Journal of business research, 94*, 18-27.

Amin, M. (2018). ICT for rural area development in Indonesia: a literature review. *Journal of Information Technology and Its Utilization, 1*(2), 32-37.

Baines, P., Fill, C., & Rosengren, S. (2017). *Marketing*: Oxford University Press.

Barik, A. L., Purwaningtyas, R. A., & Astuti, D. (2019). The effectiveness of traditional media (leaflet and poster) to promote health in a community setting in the digital era: A Systematic Review. *Jurnal Ners, 14*(3), 76-80.

Belgrave, L., & Seide, K. (2019). Coding for grounded theory. *The SAGE handbook of current developments in grounded theory*, 167-185.

Beuttler, F. (2021). A Brief History of Graham School: President Harper's Vision. *Graham School News*. Retrieved from https://graham.uchicago.edu/articles/open-enrollment/brief-history-graham-school-president-harpers-vision

Bilro, R. G., & Loureiro, S. M. C. (2020). A consumer engagement systematic review: synthesis and research agenda. *Spanish Journal of Marketing-ESIC*.

Biscaia, R., Yoshida, M., & Kim, Y. (2021). Service quality and its effects on consumer outcomes: a meta-analytic review in spectator sport. *European Sport Management Quarterly*, 1-25.

Cacheiro-Gonzalez, M. L., Medina-Rivilla, A., Dominguez-Garrido, M. C., & Medina-Dominguez, M. (2019). The learning platform in distance higher education: Student's perceptions. *Turkish Online Journal of Distance Education, 20*(1), 71-95.

ASEAN Journal of Open and Distance Learning
Vol. 14, No. 1, 2022, pp. 74 – 88

Promotion Strategy and Service Quality of Universitas Terbuka
in Increasing Student Satisfaction through Customer Value
in the North Maluku Regional Office

Chandler Jr, A. D. (2018). History and management practice and thought. In A. G. Bedeian (Ed.), *Management Laureates* (pp. 203-236). Routledge.

Chen, C., & Li, X. (2020). The effect of online shopping festival promotion strategies on consumer participation intention. [Online shopping festival promotion strategies]. *Industrial Management & Data Systems, 120*(12), 2375-2395. doi:https://doi.org/10.1108/IMDS-11-2019-0628

Eckert, C., Neunsinger, C., & Osterrieder, K. (2022). Managing customer satisfaction: Digital applications for insurance companies. *The Geneva Papers on Risk and Insurance-Issues and Practice*, 1-34.

Emmanuel, B., & Priscilla, O.-A. (2022). A Review of corporate social responsibility and its relationship with customer satisfaction and corporate image. *Open Journal of Business and Management, 10*(2), 715-728.

Fisher, D. R., Andrews, K. T., Caren, N., Chenoweth, E., Heaney, M. T., Leung, T., . . . Pressman, J. (2019). The science of contemporary street protest: New efforts in the United States. *Science advances, 5*(10), eaaw5461.

Gogoi, B. J. (2021). Customer trust influencing customer perceived value and brand loyalty. *Academy of Marketing Studies Journal, 25*(5), 1-10.

Gupta, A., & Lee, G.-L. (2020). The effects of a site-based teacher professional development program on student learning. *International Electronic Journal of Elementary Education, 12*(5).

Gupta, P., & Kaushik, N. (2018). Dimensions of service quality in higher education–critical review (students' perspective). *International Journal of Educational Management.*

Harizan, S. H. M., & Hilmi, M. F. (2021). Developing measures for the effectiveness of distance education as regards sustainability: the mixed method approach. *Turkish Online Journal of Distance Education, 22*(3), 177-195.

Harrison, R. L., Reilly, T. M., & Creswell, J. W. (2020). Methodological rigor in mixed methods: An application in management studies. *Journal of Mixed Methods Research, 14*(4), 473-495.

He, L., Yang, N., Xu, L., Ping, F., Li, W., Sun, Q., . . . Zhang, H. (2021). Synchronous distance education vs traditional education for health science students: A systematic review and meta-analysis. *Medical education, 55*(3), 293-308.

Jiménez-Zaragoza, A., Arredondo-Soto, K. C., Miranda-Ackerman, M. A., & Cortés-Robles, G. (2020). *Consumer perception applied to remanufactured products in a product-service system model* [Paper presentation]. International Conference on Applied Human Factors and Ergonomics.

Katz-Buonincontro, J., & Anderson, R. C. (2020). A review of articles using observation methods to study creativity in education (1980–2018). *The Journal of Creative Behavior, 54*(3), 508-524.

Keegan, D., & Rumble, G. (2018). Distance teaching at university level. *The distance teaching universities* (pp. 15-31). Routledge.

Kusumadewi, R. (2019). The role of marketing and individual environment association in elevating the customer value. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal), 2*(4), 451-460.

Li, K. C., & Wong, B. T.-M. (2021). A review of the use of open educational resources: the benefits, challenges and good practices in higher education. *International Journal of Innovation and Learning, 30*(3), 279-298.

Promotion Strategy and Service Quality of Universitas Terbuka
in Increasing Student Satisfaction through Customer Value
in the North Maluku Regional Office

ASEAN Journal of Open and Distance Learning
Vol. 14, No. 1, 2022, pp. 74 – 88

Manca, A., & Whitworth, A. (2018). Social media and workplace practices in higher education institutions: A review. *The Journal of Social Media in Society, 7*(1), 151-183.

Meylina, M., Ardiasih, L. S., & Rahmiaty, R. (2021). Teachers' digital competences: An overview on technological perspectives. *Linguists: Journal Of Linguistics and Language Teaching, 7*(2), 29-43.

Miles, M. B., Huberman, A. M., & Saldaña, J. (2018). *Qualitative data analysis: A methods sourcebook*. Sage publications.

Mirahmadizadeh, A., Delam, H., Seif, M., & Bahrami, R. (2022). Designing, constructing, and analyzing Likert scale data. *Journal of Education and Community Health, 5*(3), 63-72.

Neupane, A. (2021). Practices of open and distance education in Nepal: Opportunities and challenges. *Interdisciplinary Research in Education, 6*(1), 57-70.

O. Nyumba, T., Wilson, K., Derrick, C. J., & Mukherjee, N. (2018). The use of focus group discussion methodology: Insights from two decades of application in conservation. *Methods in Ecology and evolution, 9*(1), 20-32.

Otto, A. S., Szymanski, D. M., & Varadarajan, R. (2020). Customer satisfaction and firm performance: insights from over a quarter century of empirical research. *Journal of the Academy of Marketing Science, 48*(3), 543-564.

Panwar, D., Anand, S., Ali, F., & Singal, K. (2019). Consumer decision making process models and their applications to market strategy. *International Management Review, 15*(1), 36-44.

Praditya, D. (2014). The utilization of Information and Communication Technology (ICT) by government in rural level. *Jurnal Penelitian Komunikasi, 17*(2).

Pregowska, A., Masztalerz, K., Garlińska, M., & Osial, M. (2021). A worldwide journey through distance education—from the post office to virtual, augmented and mixed realities, and education during the COVID-19 pandemic. *Education Sciences, 11*(3), 118.

Rust, R. T. (2020). The future of marketing. *International Journal of Research in Marketing, 37*(1), 15-26.

Simpson, O. (2021). Distance education futures: What are the factors that will affect how distance education develops in the future? Nova Science Publishers, Inc.

Siqin, T., Choi, T. -M., Chung, S. -H., & Wen, X. (2022). Platform operations in the industry 4.0 era: Recent advances and the 3As framework. *IEEE Transactions on Engineering Management.*

Sugilar, S. (2020). *Effectivity and students' satisfaction to a tutorial in statistics through a webinar* [Paper presentation]. Journal of Physics: Conference Series.

Universitas Terbuka. (2021). *Universitas Terbuka dalam Angka* (Vol. 2021). Tanggerang Selatan: Universitas Terbuka.

Wipulanusat, W., Panuwatwanich, K., Stewart, R. A., & Sunkpho, J. (2020). *Applying mixed methods sequential explanatory design to innovation management* [Paper presentation]. The 10th International Conference on Engineering, Project, and Production Management.

Wu, M.-Y. (2020). Exploring organizational use of social media marketing: A global perspective. *China Media Research, 16*(1).

Yustika, G. P., & Iswati, S. (2020). Digital literacy in formal online education: A short review. *Dinamika Pendidikan, 15*(1), 66-76.