Developing Digital Empowerment Programs to Enhance the Marketing Performance of Private Islamic Higher Education Institutions

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Abstract
The sustainability of higher education should be supported by marketing strategies that enhance marketing performance and attract a higher number of prospective students. Considering the decision of prospective students to attend a particular institution is always motivated by the information they obtain on that institution's achievements, this study aims to develop digital network empowerment and digital information sharing activities based on the resource-based view model. In addition, considering digital services have not yet had a conclusive effect on marketing performance, this study also aims to develop digital service recovery to enhance the effect of digital network empowerment and digital information sharing on marketing performance. Primary data were collected using a questionnaire sent to the management teams of Indonesian private Islamic higher education institutions via a Google form link. The data were processed using SPSS and Amos. The findings demonstrate that digital network empowerment and digital information sharing have a very significant effect on marketing performance, but digital service recovery does not. However, digital service recovery has a very significant effect on digital network empowerment and digital information sharing. The findings illustrate that digital network empowerment and digital information sharing can contribute to the resource-based view model to enhance marketing performance.

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1. Introduction

The sustainability of higher education should be supported by the implementation of recruitment strategies that successfully attract prospective students. These strategies are therefore marketing strategies oriented to enhance marketing performance. Considering that previous findings demonstrate that the decision of prospective students to attend a particular higher education institution (HEI) is motivated by the information they obtain about the institutions' achievements (Sidin et al., 2003), this study develops higher education resources to deliver the necessary information. The resources are expected to have a positive impact on marketing performance. To do so, this study proposes network empowerment and information sharing. Considering that today's prospective higher education students are Generation Z (those born between 1997 and the early 2010s), living in the era of technological advancement (Schroth, 2019), the network empowerment and information sharing activites are to be developed digitally.

The success of higher education is supported by the role of networks. Network strengthening is increasingly being carried out by HEIs, not only for social reasons but also for finacial purposes (Muijs et al., 2010; and Gibbs, 2002). Simply put, HEIs can undertake mutually beneficial and professional cooperation for the recruitment of prospective students. Networks that can be invited to collaborate are those that can successfully influence people around them, especially prospective students. These networks should have strong characteristics and good kinships and offer positive experiences and intense involvement with social and higher education activities. By working with such networks, any information delivered by the networks to prospective students becomes reliable information, influencing their decision making. However, considering that some beneficial networks may be located hundreds or even thousands of kilometers from the location of the HEI, HEIs should have systems in place to coordinate and share information with the networks, as well as to empower them in terms of capabilities (Boer et al., 1999). These capabilities include system capability, which is the capability to provide services and marketing systems; coordination capability, which is the capability to coordinate services and marketing; and information sharing capability, which is the capability to educate on services and marketing. Through these capabilities, the networks can be empowered to recruit prospective students without being limited by distance, space, or time (Best, 2008).

Information required by prospective higher education students relates to the HEI achievements in academic activities and research, as well as supporting elements such

as community service activities (Nguyen et al., 2017; and Sidin et al., 2003). To make it easy for prospective students easy to access the information, HEIs should spread information about their achievements (Elken, 2020). Effective information sharing can be carried out through digital media because this information can be accessed by prospective students without any limits on space, distance, and time. In addition, the use of digital media demonstrates to prospective students that the information delivered is reliable, responsible, and transparent (Chatterji et al., 2020), thereby encouraging the prospective students to make the decisions to study at that particular institution (Razmerita et al., 2016). Therefore, this study develops digital network empowerment activities to enhance marketing and information sharing performance.

The development of digital network empowerment and information sharing activities is a breakthrough to replace the use of business themes in higher education marketing, as these are considered not to be based on appropriate literature and theoretical models (Brown & Oplatka, 2006). Digital services should be developed from HEIs' resources and capabilities, as intended by the resource-based view model (Penrose, 2009). The digital services deliver information on HEI achievements in academics and research as well as supporting elements such as community service to prospective students. Through digital service development, this study demonstrates that marketing performance can be enhanced by using a marketing strategy characterized by higher education functions, not by business themes (Litten, 1980; and Brown & Oplatka, 2006). The development is a smart adaptation to a marketing model (Binsardi & Ekwulugo, 2003). However, considering that the direct effect of digital services on marketing performance does not yet have conclusive results (Andriyansah & Fatimah, 2020; Tsiotsou & Vlachopoulou, 2011; Geebren et al., 2021; Vasudavan & Standing, 1999), this study also develops digital service recovery as their antecedent. Digital service recovery development is aimed to improve digital services and intended to anticipate any potential failures of digital network empowerment and information sharing to enhance marketing performance (Michel et al., 2009; Smith et al., 2013). It is also based on the findings that digital service recovery can directly enhance institutional performance (Sim et al., 2010; and Leticia et al., 2013).

2. Literature Review

2.1. Resource-based View

The theory of resource-based view (RBV) is widely adopted for strategic purposes and organizational survival (Barney, 1991). The theory reveals that every organization has resources and capabilities not possessed by competitors,

which function as competitive advantages (Penrose, 2009). The resources and capabilities are all the tangible and intangible assets owned by the organization (Karim & Mitchell, 2000), such as technology, human resources, finance, and infrastructure (Monteiro et al., 2017). These assets should be empowered or strengthened in order to compete effectively and efficiently (Barney, 1991). Based on this theory, higher education can thus empower and employ their assets to attract prospective students and enhance marketing performance (Hart & Dowell, 2011).

Higher education networks consist of non-governmental organizations, community leaders, student organizations, high schools and youth organizations, among others (Dlouha et al., 2017). These networks can be considered HEI assets (Monteiro et al., 2017). Based on RBV theory, they should be strengthened and used for the strategic interest and survival of HEIs (Barney, 1991). HEIs can empower the networks to share information on institutional achievements in academics and research as well as supporting elements such as community service to prospective students, as well as assisting them to enrol.

HEI achievements in the pillars of academics, research, and community service are intangible HEI assets (Monteiro et al., 2017). These intangible assets represent the institution's power and should be shared publicly to educate and attract prospective students to enrol at that institution (Razmerita et al., 2016). Information sharing is a manifestation of the implementation of higher education resources and capabilities as intended by resource-based view theory.

Based on the explanation above, networks and information sharing activities are higher education assets. Both assets can be strengthened and used to deliver higher education achievements. These assets are strong capital that helps HEIs succeed in competition against competitors. Packaging the assets with digital technology further provides a competitive advantage (Mahmoud et al., 2019) as well as significant value for marketing performance enhancement (Chatterji et al., 2020). This is because digital technology has been fully integrated into the daily activities of today's youth (Generation Z), including those seeking higher education opportunities (Schroth, 2019). Therefore, this study develops the assets into digital service innovations (Gatfield, 2006) in the form of digital network empowerment and digital information sharing to attract prospective students and enhance marketing performance (Villena et al., 2016).

2.2. Higher Education Marketing Performance

Higher education marketing performance is an HEI's performance in recruiting prospective students through planned marketing strategies and materials (Morgan et al., 2002; and Best, 2008). The performance is based on the amount of income, the number of registrations, and the amount of market share achieved within a certain period, or at least within one academic year (Li, 2000). For this reason, this study develops digital network empowerment and digital information sharing as a manifestation of creative and progressive marketing strategies in a competitive market (Chatterji et al., 2020). This study considers that digital services are approriate for members of the Generation Z market looking for higher education, because their daily activities always involve digital technology (Schroth, 2019). Through digital services, all information related to higher education achievements can be delivered in a reliable, responsible, and transparent manner (Chatterji et al., 2020), adjusted to meet the needs of the market (Setiawan & Ferdinand, 2021) and aimed to attract prospective students (Razmerita et al., 2016). This study demonstrates that marketing performance characterized by higher education functions (Litten, 1980; and Brown & Oplatka, 2006) can be enhanced through the digitization of institutional resources and capabilities, as intended by RBV theory.

2.3. Digital Network Empowerment

Digital network empowerment is the digital involvement of non-governmental organizations, community leaders, student organizations, schools, and youth organizations (Dlouha et al., 2017) for enhancing higher education student recruitment and marketing performance (Gibbs, 2002). Digital network empowerment is intended to provide prospective students with information on HEI achievements in implementing key higher education functions (academic, research, and community service), without limitations of space, distance and time. Through digital network empowerment, networks can even assist prospective students to enrol at an HEI online. This means that the networks' system, coordination, and information sharing capabilities need to be developed, so that both HEIs and networks can carry out services and marketing for prospective students without meeting face-to-face (Boer et al., 1999). This is done through developing shared values for mutually beneficial results (Gibbs, 2002), ultimatley providing HEIs with an opportunity to enhance their marketing performance (Schütz, 2011). The proposed hypothesis is:

H1: Digital network empowerment has a significant effect on marketing performance.

2.4. Digital Information Sharing

Digital information sharing is the delivery of information on the HEIs in academics, research, and supporting elements such as community service to prospective students through digital media in order to educate them and encourage them to enrol at the institution (Goslin, 2003; Razmerita et al., 2016; Nguyen et al., 2017; Siano et al., 2016;in which the corporate website plays a key role. Despite this growing attention in both the academic and business communities, models for the analysis and evaluation of online sustainability communication have not been developed to date. This paper aims to develop an operational model to identify and assess the requirements of sustainability communication in corporate websites. It has been developed from a literature review on corporate sustainability and digital communication and the analysis of the websites of the organizations included in the \"Global CSR RepTrak 2015\" by the Reputation Institute. The model identifies the core dimensions of online sustainability communication (orientation, structure, ergonomics, content-OSEC and Wong et al., 2020). According to Chatterji et al. (2020), digital information sharing activities have a high level of trust, responsibility, and transparency, resulting in high market value to enhance marketing performance. Higher education can undertake this through websites, social media, and other supporting digital media (Siano et al., 2016; dan Wong et al., 2020). Considering that digital information sharing is conducted to influence prospective students, the type of communication used is marketing communication (Kotler, 2000). Therefore, the media used by HEIs for digital information sharing should have (1) transaction capabilities, namely the capability to share HEI achievements effectively and efficiently; (2) interaction capabilities, particularly the capability to interact with prospective students to educate them about HEI achievements; and (3) attractive design, to attract the prospective students to interact and provide a pleasant experience during the interaction (Kim & Kim, 2004). The proposed hypothesis is:

H2: Achievement information sharing has a significant effect on marketing performance.

2.5. Digital Service Recovery

Digital service recovery, as developed in this study, is a digital action for HEIs to anticipate the weaknesses of digital network empowerment and digital information sharing (Leticia et al., 2013). The definition is adapted from Leticia et al. (2013), revealing that service recovery is not only developed to solve the weaknesses of services provided by service institutions, as proposed by Grewal et al., (2009), Reynolds & Harris (2009), Smith et al. (2013), East et al. (2007), La & Kandampully (2004), and Michel et al. (2009), but also to anticipate that the weaknesses do not occur, as implied by Johnston & Michel (2008), La & Kandampully (2004), Michel et al. (2009), Schibrowsky & Lapidsus (1994), and Smith et al. (2009). Anticipatory actions can be taken by analyzing all information obtained about failures (Schibrowsky & Lapidsus, 1994; Durvasula et al., 2000; Homburg & Furst, 2005; and Gonzalez et al., 2010), acting quickly on any service failures that occur (Hart et al., 1990), informing customers about the changes or service improvements made (Hart et al., 1990), making improvements to avoid service failures (La & Kandampully, 2004; Schibrowsky & Lapidsus, 1994; and Vos et al., 2008), and providing training to human resources assigned to carry out digital service recovery (Hart et al., 1990; Johnston & Michel, 2008; 2008; Lin, 2010).

This study considers it necessary to develop digital service recovery, because as digital services, both digital network empowerment and digital information sharing have potential weaknesses. In general, these weaknesses are (1) in interacting with customers; (2) in adding services; and (3) in procedures for adding services (Holloway & Beatty, 2003). Digital service recovey is expected to anticipate weaknesses and strengthen the functions of digital network empowerment and digital socialization (Collier & Bienstock, 2006). Considering that no service innovation is perfect, the development of digital service recovery is very much required (Kau & Loh, 2006). Therefore, digital service recovery should be developed by taking into account: (1) the quality of environment, especially related to user interface display; (2) the quality of delivery, namely the quality of interaction with customers; and (3) the quality of outcomes, particularly after service delivery (Brady & Cronin, 2001). The proposed hypotheses are:

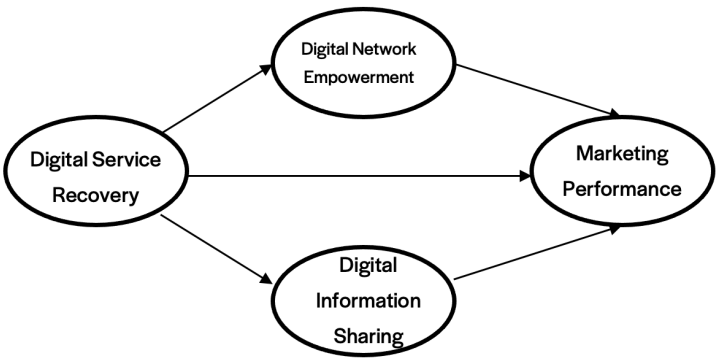
H3: Digital service recovery has a significant effect on empowerment of digital networks.
H4: Digital service recovery has a significant effect on digital information sharing.

Several studies have demontrated the inclusivity of the effect of digital services on marketing performance (Andriyansah & Fatimah, 2020; Tsiotsou & Vlachopoulou, 2011; Geebren et al., 2021; Vasudavan & Standing, 1999). Digital services that have no effect on marketing performance are indicated to have weaknesses in the dimensions of interactivity, distribution, and service procedures (Holloway & Beatty, 2003). In other words, such services fail to embrace customers requiring the services, fail to deliver the services, and have no appropriate ways to deliver the services. These sorts of weaknesses should be anticipated with digital service recovery (Kau & Loh, 2006), which will lead to customer satisfaction (Nikbin et al., 2010). HEIs that cannot manage their digital service recovery properly will threaten their long-term survival (Komunda & Osarenkhe, 2012). Thus in the context of higher education, a quality digital service recovery should be developed jointly with customers (Abdullah et al., 2011) to enhance marketing performance (Leticia et al., 2013).

H5: Digital service recovery has significant effect on marketing performance.

Based on the literature review and hypothesis development above, this study develops conceptual frame as below:

Figure 1: Conceptual Framework



3. Methodology

3.1. Population, Sample, and Procedure

This study took place through a survey of respondents from leadership teams of Indonesian private Islamic higher education institutions. The higher education comprises three different levels of accreditation (A, B, and C levels), representing

adult, adolescent, and birth, as proposed by Chandler (1962) and Lippitt & Schmidt (1967), therefore multi stage sampling is applied. 30 institutions were selected at each level of accreditation using a simple random method, therefore 90 institutions were selected to participate. Three leaders from each institution became the targeted respondents of this study. This means There should be 290 samples becoming respondents for this study. However, only 276 respondents participated, and only 263 responses could be verified as data for this researach. A total of 91 institutions (34.6%) have A accreditation; 94 (35.7%) have B accreditation; and 78 (29.7%) have C accreditation. The respondents are illustrated in table 1.

Table 1. Higher Education Respondents Based on HEI Accreditation Level

No.	HEI Accreditation Level	Number	%
1.	A	91	34.6%
2.	B	94	35.7%
3.	C	78	29.7%
	Total	**263**	**100%**

Based on their institutional types, 83 (31.6%) of respondents are from universities; 88 (33.5%) respondents are from institutes; and 92 (34.9%) respondents are from colleges. The respondents are illustrated in table 2.

Table 2. Higher Education Respondents Based on Institutional Types

No.	Institutional Type	Number	%
1.	University	83	31.6%
2.	Institute	88	33.5%
3.	College	92	34.9%
	Total	263	100%

Based on gender, 145 (55.1%) respondents are male, and 118 (44.9%) respondents are female. The respondents are illustrated in table 3.

Table 3. Higher Education Respondents Based on Gender

No.	Gender	Number	%
1.	Male	145	55.1%
2.	Female	118	44.9%
	Total	263	100%

3.2. Research Instrument

A questionnaire containing closed questions was used as the research instrument for this study. It was sent to respondents via a Google form link. Answer options used a likert scale in the range of 1 to 7, where 1 represents 'strongly disagree' and 7 represents 'strongly agree'. The questionnaire is based on the indicators of each variable as follows. The service recovery variable adapts three indicators from Brady & Cronin (2001): environment quality, delivery quality, and outcome quality. Digital network empowerment adapts three indicators from Boer et al. (1999): system ability, coordination ability, and information sharing ability. Digital information sharing adapts three indicators from Kim & Kim (2004): transaction, interaction, and design. Meanwhile, marketing performance adapts three indicators from Li (2000): income, number of enrolments, and market share.

4. Results

4.1. Construct Validity

Data is analyzed by using SPSS version 22 and Amos version 20. Goodness of fit model demonstrates the value of Chi Square: 69.257; probability: 0.055; RMSEA: 0.036; AGFI: 0.936; GFI: 0.958; CFI: 0.985; and TLI: 0.982. The values indicate that the proposed model for this study is acceptable (Hair et al., 2017). Based on the answers of the respondents, the validity and reliability of questionnaire have been met. The multivariate normality value is -0.870 and partial normality value for each indicator, measured using a critical ratio for skewness and kurtosis, is in the controlled range of -2.548< normality value < + 2.548. Factor loading of each indicator is above 0.6, affirming credible validity criteria. Meanwhile, for each variable, α-Cronbach value is above 0.7, and CR value is between 0.700 and 0.837, affirming high level of reliability (Hair et al., 2017). The construct validity is presented in table 4.

Table 4. Construct Validity

Variables and Indicators	CR Skewness	CR Kurtosis	Factor Loading	α Cronbach	CR
Service Recovery				0.720	0.700
Environment Quality	-0.357	-0.227	0.682		
Delivery Quality	-0.136	-0.019	0.619		
Outcome Quality	-0.511	-0.253	0.683		

Digital Information Sharing				0.783	0.785
Transaction	-0.299	-0.053	0.767		
Interaction	-0.016	-0.338	0.699		
Design	-0.264	-0.029	0.755		
Digital Network Empowerment				0.836	0.837
Sistem Ability	-0.060	-0.649	0.781		
Coordination Ability	-0.133	-0.381	0.809		
Information Sharing Ability	0.019	-0.677	0.792		
Marketing Performance				0.733	0.732
Income	-0.208	-0.262	0.728		
Number of Enrolments	-0.044	-0.274	0.697		
Market share	-0.259	-0.216	0.646		
Multivariate Normality		-0.870			

4.2. Structural Model Analysis

The results of hypothesis test using a structural model test demonstrate that almost all hypotheses are accepted. H1 is accepted, because it has a value of p = 0.020 (far below p ≤ 0.05) and a standardized estimate value of 0.108. H2 is also accepted, because it has a p value that is far below 0.05 and a standardized estimate value of 0.100. Furthermore, H3 is accepted, because it has a p value that is far below 0.05 and a standardized estimate value of 0.098. H4 is also accepted, because it has a p value that is far below 0.05 and a standardized estimate value of 0.083. Only H5 has a value of p = 0.762 (or p ≥ 0.05) and a standardized estimate value of 0.153, therefore the hypothesis is rejected. The results of the hypothesis test are illustrated in table 5.

Table 5. Results of Hypothesis Test

No.	Relationship Between Variables	Standardized estimate	P	Result
1.	Digital Network Empowerment and Marketing Performance (H1)	0.108	0.020	H1 is accepted
2.	Digital Information Sharing and Marketing Performance (H2)	0.100	***	H2 is accepted
3.	Service Recovery and Digital Network Empowerment (H3)	0.098	***	H3 is accepted

4.	Service Recovery and Digital Information Sharing (H4)	0.083	***	H4 is accepted
5	Service Recovery and Marketing Performance (H5)	0.153	0.762	H5 is not accepted

Goodness of Fit: Chi Square: 69.257; Probability: 0.055; RMSEA: 0.036; AGFI: 0.936; GFI: 0.958; CFI: 0.985; TLI: 0.982

4.3. Pathway Analysis

Digital service recovery as a trigger for digital network empowerment and digital information sharing, respectively, to enhance marketing performance is tested through pathway analysis using the causal step method from Baron & Kenny (1986). As shown in table 3, digital service recovery can indeed trigger digital network empowerment and digital information sharing.

Table 6. Pathway Anlaysis (Coeeficient in Regression)

IV	M	DV	IV ➛ DV	IV ➛ M	IV+M ➛ DV		Result
					IV ➛ DV	M ➛ DV	
Digital Service Recovery	Digital Network Empowerment	Marketing Performance	0.448	0.590*	0.221*	0.384*	Partial
Service Recovery	Digital Information Sharing	Marketing Performance	0.448	0.500*	0.247*	0.402*	Partial

Notes: *p-value < 0.05

IV: Independent Variabel; M: Mediator; DV: Dependent Variable

Step 1: IV ➛ DV is significant

Step 2: IV ➛ M is significant

Step 3: IV+M ➛ DV is significant

When M is significant, IV is not significant, M has a full trigger effect

When M is significant, IV is significant, M has a partial trigger effect.

5. Discussion

This study confirms that digital network empowerment can enhance higher education marketing performance because it is developed professionally and with mutually beneficial principles (Schütz, 2011). Therefore, networks are not be only an asset that functions socially but also professionally, especially if they are driven collaboratively with financial rewards (Schütz, 2011). The finding also implies that HEIs can embrace and foster the networks anywhere and anytime

through digital technology that accomodates capability development in systems, coordination, and information sharing (Schütz, 2011). Through digital network empowerment, HEIs can drive networks to share information on HEI achievements in implementing higher education functions in academic activities, research, and supporting elements such as community service pillars. According to Sidin et al. (2003), this is the information that prospective students need before deciding to enrol. As trusted sources, these networks have the potential to ensure all informed shared with prospective students is accurate as well as persuasive.

Sharing the information about HEI achievement required by prospective students digitally is proven to enhance marketing performance. Our findings confirm those of Chatterji et al. (2020) because when information is shared digitally regarding an institute's achievements, these activities have a high level of trust, responsibility, and transparency. Therefore, information sharing has marketable value to enhance marketing performance. The finding implies that higher education institutions should proactively share their academic, research, and other achievements through websites, social media, and other digital media. In addition to being effective in reaching and educating prospective students who are also digital natives (Schroth, 2019), digital information sharing is also low cost (Chatterji et al., 2020). Effective digital marketing communications also makes HEI information sharing goals easier to achieve (Kotler, 2000; and Razmerita et al., 2016), especially when supported by strong transaction capability, interactivity, and attractive design (Kim & Kim, 2004).

This study demonstrates that digital service recovery has a very significant effect on digital network empowerment and digital information sharing. Digital service recovery can anticipate digital service weaknesses in interacting with customers, in services, and in delivering service procedures (Holloway & Beatty, 2003). The findings confirm that digital service recovery is not only to solve the weaknesses but also to anticipate them (Leticia et al. 2013). Confirming studies conducted by Gonzalez et al. (2010); Gruber et al. (2010); Johnston & Michel (2008); Wirtz & Lovelock (2018); Michel et al. (2009); and Smith et al. (2009), digital service recovery can be implemented as a long-term strategy for higher education. Therefore, higher education should maintain and improvedigital service recovery capabilities through the development of environmental quality, delivery quality, and outcome quality (Brady & Cronin, 2001). The goal is to ensure digital network empowerment and digital information activities work as expected and without failure. In other words, digital service recovery is an effective and efficient antecedent for the development and implementation of digital activitieson.

This study cannot prove the effect of digital service recovery on marketing performance. Infact, the effective digital service recovery leads customers to have think positively, and to interact positively with institutions (East et al., 2007; La & Kandampully, 2004; and Michel et al., 2009). On the other hand, the failure of digital service recovery can generate negative word of mouth and drive customers away (Kelley et al. 1993), athough it does present an opportunity to make changes by creating added value to increase competitive advantage in the future (Leticia et al., 2013). With regards to the higher education secor, confirming the opinion expressed by Abdullah et al. (2011), HEIs can make improvements by actively inviting students to contribute to the development of digital service recovery. The changes should be made proactively, because digital service recovery is not only required to enhance marketing performance, but also to enhance digital network empowerment and digital information sharing. Since no one can guarantee that service failure will never occur (Schoefer & Ennew, 2005; and Wirtz & Mattila, 2004), and considering digital services have significant roles in the sustainability of higher education (Komunda & Osarenkhe, 2012), digital service recovery must be managed wisely. Developing complaint systems through email and telephone hotlines for students and holding stakeholder gatherings to explore service needs are effective ways that HEIs can improve their digital service recovery.

This study provides interesting findings for consideration. Although digital service recovery is not proven directly to enhance marketing performance, the variable can enhance the effect of digital network empowerment and digital information sharing on marketing performance. From the path analysis, it is evident that the enhancement contributed by digital service recovery is only partial. Therefore, digital service recovery can provide a more explanation for the impact of digital services, through the digital network empowerment and digital information sharing on the marketing performance. In fact, many previous findings have revealed the influence of digital services on marketing performance (Andriyansah & Fatimah, 2020; Tsiotsou & Vlachopoulou, 2011; Vasudavan & Standing, 1999). This condition implies that the digital service recovery systems' anticipation of failures in digital network empowerment and digital information sharing work as expected, confirming that digital service recovery can also be developed to anticipate service failures (Johnston & Michel, 2008; La & Kandampully, 2004; Michel et al., 2009; Schibrowsky & Lapidsus, 1994; and Smith et al., 2009), not only to solve the failures (Grewal et al., 2009; Reynolds & Harris, 2009; Smith et al., 2013; East et al., 2007; La & Kandampully, 2004; Michel et al., 2009). The capability of digital service recovery to anticipate failures assists HEIs to enhance

their competitiveness and marketing performance (Leticia et al., 2013). Therefore, it is strong encouragement for HEIs to enhance the roles of such digital service recovery, such as through increasing the system's ability to solve the weaknesses of digital network empowerment and digital information sharing in the aspects of interactivity, distribution, and service procedures (Holloway & Beatty, 2003). In addition, for the success, digital service recovery should be developed according to the wishes of users (in this case, higher education students), meaning students should have the freedom to provide assessment and input for digital service recovery (Nikbin et al., 2010).

6. Conclusion

This study aims to explore how digital network empowerment and digital information can encourage prospective higher education students and enhance HEI marketing performance. Digital services work to provide information on HEI achievements in academics, research, and supporting elements such as community service. The services are developed in line with the resource-based view model, because digital services are key resources for HEIs that function as competitive advantages. This study also analyzes digital service recovery to enhance digital network empowerment and digital information sharing to enhance the effect on marketing performance, as well as to enhance marketing performance directly.

This reseach finds that digital network empowerment and digital information sharing affect marketing performance in a very significant manner. Through technological advancements, digital network empowerment can empower higher education networks anywhere and at any time to share information about HEI achievements to prospective students within those networks. Through digital network empowerment, these networks can even assist prospective students to complete HEI enrolment processes. Networks' strong characteristics, kinships, experiences, and involvements with social activities and higher education agenda support digital network empowerment activities so that HEIs and networks can work together effectively and efficiently to marketing performance and attract prospective students. Furthermore, digital information sharing that utilizes websites, social media, and other internet media has also proven to be influential in sharing HEI achievements, information which is crucial for prospective students as background information before deciding to enrol (Sidin et al., 2003; and Nguyen et al., 2017). The effectiveness and efficiency of both digital designs are supported by the transaction capabilities, interaction capabilities, and attractive designs

(Kim & Kim, 2004) in providing reliable, responsible, and transparent information (Chatterji et al., 2020).

The success of developing digital services must, logically, be supported by digital service recovery. This study develops digital service recovery to anticipate failures that may occur in digital network empowerment and digital information sharing activities (Johnston & Michel, 2008; La & Kandampully, 2004; Michel et al., 2009; Schibrowsky & Lapidsus, 1994; and Smith et al., 2009). Previous studies have primarily developed digital service recovery to solve digital service failures (Grewal et al., 2009; Reynolds & Harris, 2009; Smith et al., 2013; East et al., 2007; La & Kandampully, 2004; Michel et al., 2009). However, by ensuring environmental quality, quality of delivery, and outcome quality (Brady & Cronin, 2001), digital service recovery can anticipate potential weaknesses of the interactive, distributive, and procedural dimensions of digital services (Holloway & Beatty, 2003). Digital service recovery is also proven to enhance the effect of digital network empowerment and digital information sharing on marketing performance. Therefore, digital services such as network empowerment and information sharing can eliminate the gaps found by previous studies on the effect of digital services on marketing performance (Andriyansah & Fatimah, 2020; Tsiotsou & Vlachopoulou, 2011; Geebren et al., 2021; Vasudavan & Standing, 1999). However, digital service recovery cannot directly enhance marketing performance. Since marketing performance will be related to satisfaction, loyalty, (Bou-Llusar et al., 2009; and Gonzalez et al., 2010), and word of mouth (Kelley et al., 1993), the findings suggest that HEIs involve more students in developing digital service recovery to ensure their needs and desires are encorporated into recovery systems (Nikbin et al., 2010).

The findings of this study indicate that digital network empowerment and digital information sharing can be developed through the theory of resource-based views, in particular to enhance HEI marketing performance. The digital network empowerment and digital information sharing are strong assets that assist HEIs in gaining advantage over competitors in recruiting prospective students when supported by digital service recovery. Furthermore, based on the RBV model developed, the key findings can be stated as follows: (1) the importance of developing digital services, especially network empowerment and information sharing to enhance marketing performance; (2) the importance of developing digital service recovery to anticipate the failures of digital services, not only to solve the failures; (3) although digital service recovery cannot directly enhance marketing performance, it is crucial to enhance the effect of digital network

empowerment and digital socialization on marketing performance, indicating a conclusive find on the impact of digital services on marketing performance; and (4) the importance of developing a marketing strategy characterized by higher education functions to enhance marketing performance.

7. Implication

The findings of this study direct HEIs to share information on their achievements to prospective students. These include achievements in (1) the academic pillar, such as the success of lecturers and students in winning educational olympiads, the success of lecturers and students in national and international exchange programs, and the success of students in obtaining employment with prestigious companies; (2) the research pillar, such as the success of lecturers and students in presenting new beneficial findings in science, the success of lecturers and students in obtaining patents, and the success of lecturers and students in receiving assistance from the government and the private sector; and (3) other supporting elements (community service), such as the success of lecturers and students as business coaches, the success of lecturers and students in developing handicrafts for export, and the success of lecturers and students in alleviating poverty through cooperatives.

The purpose of sharing information on HEI achievements is to educate and attract prospective students to enrol at the institution. To do so, higher education can empower networks, such as non-governmental organizations, community leaders, student organizations, high schools, and youth organizations (Dlouha et al., 2017). Since such networks can be located anywhere, HEIs can strengthen them through the development of digital network empowerment activities, focusing on improving networks' system, coordination, and information sharing capabilities (Best, 2008). In addition, HEIs can also develop digital sources of information through websites, social media, and other internet media. Finally, to enhance the above activities, HEIs should also develop digital service recovery alongside their students through providing email and hotline numbers for complaints and suggestions, or holding stakeholder gatherings to explore their service needs (Abdullah et al., 2011).

8. Limitation

This study only looks at digital network empowerment for networks external to HEIs. Considering that HEIs also have internal networks, such as administrators,

academic staff, and students, future research should also develop a variable that can empower internal networks to attract prospective students and enhance marketing performance. In addition, both external and internal networks are potential markets for HEIs to recruite prospective students. Therefore, it is recommended for future studies to measure the enhancement of marketing performance with antecedents developed from institutional resources.

9. References

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