

# Strengthening social media capabilities to improve private Islamic higher education marketing performance

Hendra Riofita<sup>1</sup>, Waldana Dimasadra<sup>2</sup>

<sup>1</sup>Economic Education Study Program, Teacher Training, and Education Faculty, Universitas Islam Negeri Sultan Syarif Kasim, Riau, Indonesia <sup>2</sup>Environmental Health Department Politeknik Kesehatan, Kementerian Kesehatan, Yogyakarta, Indonesia

Article Info	Abstract
Article History Received : 2022-11-26 Revised : 2022-11-30 Accepted : 2022-12-13	<b>Purpose</b> – This research is conducted to strengthen social media capabilities to improve Private Islamic Higher Education marketing performance as well as the number of prospective students.
Recepted : 2022-12-10 Published : 2022-12-20 Keywords: Social media, public relations, networks, marketing	<b>Methodology</b> – The design of this study is a survey. The data processed with SPSS and Amos program are collected from the elements of leaders of Indonesian private Islamic higher education. Multi-stage sampling and simple random methods are applied.
performance, higher education. <b>DOI:</b> https://doi.org/10.20885/AJIM. vol4.iss2.art3	<b>Findings</b> – Digital public relations and digital network empowerment, respectively has a very significant role to strengthen social media capabilities to improve Private Islamic Higher Education marketing performance and as well as the number of prospective students.
<b>JEL Classification:</b> M31, I23	<b>Implications</b> – The findings of this research encourage Private Islamic Higher Education to apply both digital public relations and digital network empowerment on social media.
Corresponding author: Hendar Riofita hendrariofita@uin.suska.ac.id Author's email: waldanadimasadra@gmail.com	<b>Originality</b> – This research develops digital public relations and digital network empowerment as intervening variables, considering that both digital constructs have the capabilities to realize the marketing-related activities through a collaborative relationship approach required by social media to attract prospective students to join Private Islamic Higher Education.
Paper type: Research paper Center for Islamic Economics Studies and Development, Faculty of Business and Economics, Universitas Islam Indonesia	Cite this article: Riofita, H., & Dimasadra, W. (2022). Strengthening social media capabilities to improve private Islamic higher education marketing performance. <i>Asian Journal of Islamic Management</i> , 4(2), 110-125. https://doi.org/10.20885/AJIM.vol4.iss2.art3
and Economics, Universitas Islam Indonesia Introduction	https://doi.org/10.20885/AJIM.vol4.iss2.art3

Many entry routes provided by State higher education are justified in discouraging the opportunities for private Islamic higher education to get prospective students (Alfian, 2018). This justification is exacerbated by the fact that in the last three years, the number of private Islamic higher education has continued to increase, while the number of prospective students has continued to decline. Based on the data provided by the dashboard of the Education Management Information System (EMIS) of Indonesian Islamic higher education accessed in September 2022, the number of private Islamic higher education in the Academic Year of 2019/2020 is 786 with the number of new students studying at both state and private Islamic

P ISSN 2746-0037 | E ISSN 2722-2330

higher education as many as 229,217. In the Academic Year of 2020/2021, the number of private Islamic higher education is 806 with the number of new students studying at both state and private Islamic higher education as many as 213,763. Meanwhile, in the Academic Year of 2021/2022, the number of Private Islamic Higher Education is 821 with the number of new students studying at both state and private Islamic higher education as many as 206,803.

The increase in the number of private Islamic higher education and the continuous decrease in the number of new students has made the competition among Indonesian private Islamic higher education to recruit prospective students increasingly stringent. Many marketing tools to recruit prospective students are discussed and implemented then, but social media is an interesting issue for marketers to improve the marketing performance and the number of prospective students (Saravanakumar & Laksmi, 2012). Social media is an effective, inexpensive, reliable, and trusted marketing media for companies to market products and to get customers (Saravanakumar & Laksmi, 2012; Chatterji et al., 2020). Private Islamic Higher Education can use social media as marketing media to improve marketing performance and as well as to recruit prospective students. The findings of Constantinides and Fountain (2008), Kim et al., (2010), and Mangold and Faulds (2009) have revealed that social media have capabilities to improve marketing performance. The condition is an opportunity for Private Islamic Higher Education to improve the number of prospective students. The opportunity is supported by the findings of Gibbs (2002), and Brown and Oplatka (2006) revealing that social media is a potential marketing media for prospective student recruitment. The findings make sense since most social media users are Z Generation (Schroth, 2019). Specifically, the findings of the Association of Indonesian Internet Service Providers or Asosiasi Penyelenggara Jasa Internet Indonesia (2022) reveal that the largest number of social media users in Indonesia is at the age of students who will continue their higher education, as many as 99.16%. The data reveals that social media is an attractive marketing tool to recruit prospective students (Boyd, 2007).

However, the use of social media as a means of marketing Private Islamic Higher Education should pay attention to the findings of Stephen and Galak, (2009), and Constantinides and Stagno (2011) revealing that social media capabilities to improve higher education marketing performance are still under traditional marketing capabilities. Even social media is ranked at the bottom of the list of information sources that prospective students need to decide to join higher education (Constantinides & Stagno, 2011). In detail, it is revealed that only 29.8% of prospective students access higher education social media as an information source. 95.1% of the prospective students maintain their social media and 75.5% even access social media at least once a day.

The inability of social media to improve higher education marketing performance and as well as the number of prospective students is suspected by Constantinides & Stagno (2011) since higher education social media does not provide relevant content for the prospective students, does not have interactive dialogue, and does not have online communities as a forum for dialogue. Based on the findings of Wright and Hinson (2009), the online community is very interested in dialogue forums to discuss content that is relevant to their needs. Stephen & Galak, (2009) reveals that social media has a great opportunity to recruit prospective students through published content. Interesting publications are publications that can provoke prospective students to discuss and find references for the discussions. The interesting publications are displayed in the forms of photos and videos (Constantinides & Stagno, 2011) related to the achievements of higher education in the fields of academics, research, and community service since the publications on the three pillars are the publications that prospective students need to determine their decision to join higher education (Riofita & Iqbal, 2022; Sidin et al., 2003). Therefore, higher education should publish the achievements and discuss them interactively with prospective students on social media. To do so, this research considers that Private Islamic Higher Education social media should have digital public relations bridging Private Islamic Higher Education communication with prospective students (Constantinides & Stagno, 2011).

Digital public relations functions as an intermediary for Private Islamic Higher Education and prospective students to collect and share information related to Private Islamic Higher Education achievements published on social media and to bridge interactive dialogue between the two parties (Wright & Hinson, 2009). Digital public relations play an active role to attract prospective students to discuss the achievements published massively in the online community. Digital public relations activities on behalf of Private Islamic Higher Education to convince prospective students and assist the prospective students to get the interesting information needed to make choices towards Private Islamic Higher Education (Razmerita et al., 2016). Digital public relations services strengthen the effect of social media on marketing performance through relational marketing activities (Weiss, 2008) with a collaborative relationship approach (Gibbs, 2002). Therefore, this research considers that it is necessary to examine the capability of digital public relations to do so (Constantinides & Stagno, 2011).

Social media is also more effective to attract new customers than old customers (Alalwan, et al., 2017). The condition is an opportunity to empower customers who are Private Islamic Higher Education networks, digitally (Wang & Kim, 2017), as opinion leaders to strengthen and convince prospective students about the achievements of Private Islamic Higher Education published on social media. The capability of the networks to do so is considered very effective (Wright & Hinson, 2009), since the networks are the partners of Private Islamic Higher Education that are closely related to Private Islamic Higher Education activities. The condition makes the networks be trusted by prospective students (Muijs et al., 2010). Digital network empowerment on social media is carried out by prioritizing prospective students-focused paradigms based on openness, engagement, cooperation, and co-creation, therefore the networks tend to function to assist rather than to control the prospective students (Krishnan, 2008). This encourages Private Islamic Higher Education to carry out relational marketing activities (Weiss, 2008) with a collaborative relationship approach to strengthen social media capabilities to improve marketing performance and as well as the number of prospective students (Gibbs, 2002). Therefore, this research also proposes digital network empowerment to strengthen the effect of social media on improving Private Islamic Higher Education marketing performance and as well as the number of prospective students.

This research is conducted to strengthen social media capabilities to improve Private Islamic Higher Education marketing performance and as well as the number of prospective students. Two digital constructs are considered to be able to strengthen the effect of social media capabilities on marketing performance and as well as the number of prospective students through relational marketing activities (Weiss, 2008) with a collaborative relationship approach (Gibbs, 2002). The constructs are digital public relations and digital network empowerment.

# Literature Review

#### Social Media and Spiral of Silent Theory

Social media has changed the way to convey opinions to the public and to make the opinions accepted by the public, therefore, become public opinion (Zerback & Fauzi, 2016). Social media can function as digital public relations bridging the interactive dialogue between the sources of the opinion and the public to turn the opinions conveyed by the sources into public opinion. Even to build public opinion, through the capability to create social interaction, social media can also encourage the networks of the sources to convey and strengthen the opinions to those closest to the networks, therefore those closest to the networks can have the same opinion (Schulz & Rossler, 2013).

Through digital public relations and digital network empowerment, social media can encourage anyone to be able and dare to express opinions and form public opinion therefore social media becomes a very broad forum for enjoying the same opinion menu for opinion consumers (Shabir, et al, 2019). The capability of social media to develop digital public relations and digital network empowerment to build public opinion is an explanation of the spiral of silence theory indicating that anyone can and dares to convey opinions to the public as long as the opinions have the potential to become public opinion, as intended by Neumann (1974). This fact encourages this research to develop digital public relations and digital network empowerment as the mediators strengthening social media to convey information about private Islamic higher

education achievements in academics, research, and community service to prospective students to build an opinion on the mind of the prospective students that private Islamic higher education has the strengths that the prospective students need and that can attract the prospective students to decide to join. In other words, this research develops digital public relations and digital network empowerment to strengthen the effect of social media on marketing performance based on the sprial of silent theory.

## Marketing Performance

The presence of social media is more to empower customers as the networks to improve marketing performance (Rha et al., 2002). Therefore social media has redefined marketing performance (Constantinides, 2006). Marketing performance in this research is defined as a measure of Private Islamic Higher Education performance in prospective student recruitment through social media publishing materials of academics, research, and community service achievements (Morgan et al., 2002; Best, 2008; Nguyen et al., 2017; Sidin et al., 2003). The publication materials are delivered in the form of creative photos and videos attracting prospective students to discuss and find references from Private Islamic Higher Education for the discussions (Stephen & Galak, 2009; Constantinides & Stagno 2011). To succeed, the social media effect on marketing performance is strengthened by digital public relations and digital network empowerment. The digitization of the constructs is carried out to adjust to the Private Islamic Higher Education market (Setiawan & Ferdinand, 2021), namely the prospective students from the z generation, surfing digitally every day (Schroth, 2019). Through digitization, publications can be delivered in a reliable, responsible, and transparent manner. Even though digitization, creative publications delivered through social media become the materials and marketing strategies providing competitive advantages to attract prospective students to join (Chatterji et al., 2020). Marketing performance is measured based on the amount of income, the number of registrations, and the number of market shares resulting from Private Islamic Higher Education within a certain period or at least in one academic year (Li, 2000).

## Social Media

Social media is a web technology used to interact with online communities (Qureshi & Zahoor, 2017). In this research, the interaction carried out by Private Islamic Higher Education through social media is with prospective students and is intended to publish the achievements of academic, research, and community service in the forms of photos and videos (Wright & Hinson, 2009; Stephen & Galak, 2009; and Constantinides & Stagno 2011; Nguyen et al., 2017; Sidin et al., 2003). The interaction is carried out in an interesting way to attract prospective students to join (Stephen & Galak, 2009; Constantinides & Stagno 2011; Nguyen et al., 2017; Razmerita et al., 2016). Through the interactions, Private Islamic Higher Education assists the prospective students to understand and evaluate Private Islamic Higher Education through the published achievements therefore the prospective students can then decide to join (Albors et al., 2008). Therefore, social media is used effectively as a marketing tool to improve marketing performance and as well as to recruit prospective students. The work is supported by the findings of Constantinides and Fountain (2008), Kim et al., (2010), and Mangold and Faulds (2009) revealing that social media is an effective tool to improve marketing performance. Even Gibbs (2002), and Brown and Oplatka, (2006) reveal that social media is a potential marketing media for prospective student recruitment. There are many types of social media (Dabbagh & Kitsantas, 2012), but the most widely and popularly used in Indonesia are YouTube, Facebook, and Instagram (Syam & Nurrahmi, 2020; Auliarahman & Sumadi, 2020). The prospective students spend more than five hours a day using social media (Adiarsi et al., 2015). Therefore, the social media used by Private Islamic Higher Education in this research refers to YouTube, Facebook, and Instagram. The proposed hypothesis is:

H1: Social media has a significant effect on marketing performance.

O'Brien (2009) reveals that Twitter plays a significant role in public relations. Wright and Hinson (2009) reveal that blogs have made many changes to public relations. Meanwhile, Scott (2008) indicates that the web should be used by public relations to communicate with the strategic public. The conditions imply that social media can be very influential on public relations. The effect of social media on public relations is supported by Wright and Hinson (2009), and Graham et al., (2013). Social media is a public relation channel to affect customers, personalize products, and develop collaboration and innovation aimed at customers (Constantinides, 2014). Therefore, through social media, Private Islamic Higher Education can function in public relations digitally to make relationships and maintain relationships with prospective students (Wright & Hinson, 2009). Even digital public relations can play a role in convincing prospective students about Private Islamic Higher Education achievements published on social media, discuss the achievements interestingly, and then assist the prospective students to decide to join (Stephen & Galak, 2009; Constantinides & Stagno 2011; Nguyen et al., 2017; Razmerita et al., 2016). The proposed hypothesis is:

H2: Social media has a significant effect on digital public relations.

Social media is an effective means of communication to affect networks (Weber, 2007). Social media has changed the way organizations interact with networks (Wright & Hinson, 2009). Social media can empower digital networks to get customers (Constantinides, 2014). In other words, social media can capitalize on network empowerment to recruit new customers (Stephen & Galak, 2009). The condition is an opportunity for Private Islamic Higher Education to apply social media to empower digital networks for prospective student recruitment (Constantinides, 2014). Private Islamic Higher Education networks are lecturers, academic staff, students, higher education organizers, student organizations, high schools, community leaders, and youth organizations (Dlouha et al., 2017). Digitizing network empowerment on social media is considered effective and reliable for recruiting prospective students since the networks are part of the elements actively involved in Private Islamic Higher Education activities (Dlouha et al., 2017). The proposed hypothesis is:

H3: Social media has a significant effect on digital network empowerment.

#### **Digital Public Relations**

Digital public relations in this research is defined as two-way digital communication between Private Islamic Higher Education and prospective students on social media provided by Private Islamic Higher Education, to discuss interactively the achievements of Private Islamic Higher Education in the fields of academics, research, and community service, published in the form of photos and videos (Levens, 2012). In terms of Private Islamic Higher Education, digital public relations services convey information and convince prospective students to join. Meanwhile, from the perspective of prospective students, digital public relations serves as a media to get the information needed convincingly before deciding to join Private Islamic Higher Education (Huang & Hagan, 2011). The application of digital public relations on social media is needed by Private Islamic Higher Education to affect the decision-making behavior of prospective students (Constantinides & Fountain, 2008). Digital public relations are a means for Private Islamic Higher Education to communicate (Parise & Guinan, 2008) and carry out relational marketing activities (Weiss, 2008) on social media. Through digital public relations, Private Islamic Higher Education runs marketing in the form of collaborative relationships approach (Gibbs, 2002). The approach is built and maintained attractively on social media with active and massive interactions (Constantinides & Stagno, 2011). Through digital public relations, Private Islamic Higher Education brings together the information that prospective students need with what Private Islamic Higher Education provides to improve marketing performance (Constantinides & Stagno, 2011). The capability of digital public relations to improve marketing performance is supported by the findings of Bagwell (2016) and Hassani (2017). The proposed hypothesis is:

H4: Digital public relations have a significant effect on marketing performance.

## **Digital Network Empowerment**

Digital network empowerment is the digital empowerment of Private Islamic Higher Education partners for prospective student recruitment. The empowerment of the networks is carried out digitally to strengthen the publication of achievements in academics, research, and community service delivered by Private Islamic Higher Education in the forms of photos and videos on social media (Stephen & Galak, 2009, Constantinides & Stagno, 2011, Nguyen et al., 2017; Sidin et al., 2003). Digital network empowerment plays a role in convincing prospective students of the published achievements by being actively involved in interactive conversations in the dialogue forum on social media (Constantinides & Stagno, 2011). The networks are even provided the opportunity to assist prospective students to register through the online registration system. Therefore, digital network empowerment is supported by the system, coordination, and socialization capabilities for service and marketing needs that are not constrained by distance, space, and time (De Boer et al., 1999). Digital network empowerment is seen as providing effective results, considering that the networks are partners closely related to Private Islamic Higher Education activities, therefore can be trusted by prospective students (Muijs et al., 2010). The capability of digital network empowerment to improve marketing performance is supported by the findings of Bampo et al., (2008). The proposed hypothesis is:

H5: Digital network empowerment has a significant effect on marketing performance

## Social Media, Public Relations and Marketing Performance

The findings of Constantinides and Stagno (2011) reveal that prospective students do not use social media as the main source of information to choose higher education. Even social media fails to increase the number of prospective students since it displays irrelevant content, does not have interactive dialogue, and does not have online communities as a forum for dialogue. Refer to Wright and Hinson (2009), Stephen and Galak (2009), Constantinides and Stagno (2011), Nguyen et al., (2017), and Sidin et al., (2003), Private Islamic Higher Education should create social media content in the forms of photos and videos publishing Private Islamic Higher Education achievements and provoke prospective students to discuss the achievements interactively and interestingly in online dialogue forums. To do so, Private Islamic Higher Education requires digital public relations bridging Private Islamic Higher Education communication with the prospective students (Constantinides & Stagno, 2011). Through digital public relations, Private Islamic Higher Education can collect and share information about the achievements with prospective students (Wright & Hinson, 2009). Through interactive dialogue, digital public relations lead prospective students to be interested in Private Islamic Higher Education and register (Razmerita et al., 2016). The condition is an opportunity to improve Private Islamic Higher Education marketing performance as well as the number of prospective students. The proposed hypothesis is:

H6: Digital public relations mediate the effect of social media on marketing performance significantly.

#### Social Media, Digital Network Engagement and Marketing Performance

Previous studies have revealed that social media affects improving marketing performance (Constantinides & Fountain, 2008; Kim et al., 2010; Mangold & Faulds, 2009). Even Gibbs (2002), and Brown and Oplatka (2006) reveal that social media is a potential marketing medium to recruit prospective students. However, the findings of Stephen and Galak (2009) and Constantinides and Stagno (2011), reveal the opposite results. It is even found that prospective students are not interested in using social media for their information needs to determine their desired higher education (Constantinides & Stagno, 2011). The condition should be addressed by Private Islamic Higher Education by carrying out relational marketing activities (Weiss, 2008). The relational marketing activities are realized by assisting the prospective students to get the information needed through publications on social media, in the forms of photos and videos of higher education achievements, in the fields of academics, research, and community service.

Therefore, relational marketing activities encourage Private Islamic Higher Education to use social media with a collaborative relationship approach. For success, higher education can digitally empower networks actively involved with higher education activities (Dlouha et al., 2017). In other words, digital network empowerment functions as an opinion leader with a collaborative relationship approach to strengthen and convince prospective students about the achievements published on social media to then affect them to decide to join. The collaborative relationship approach is considered effective in strengthening social media capabilities to improve marketing performance (Gibbs, 2002). For service and marketing needs, Private Islamic Higher Education provides a system, coordination, and socialization capabilities for digital network empowerment (De Boer et al., 1999). Therefore, digital network empowerment not only serves to strengthen and convince prospective students of private Islamic Higher Education process. The proposed hypothesis is:

H7: Digital network empowerment mediates the effect of social media on marketing performance significantly.

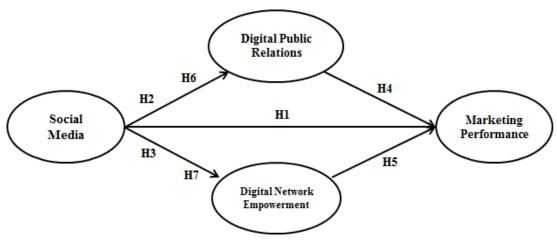


Figure 1. Conceptual Framework

# **Research Methods**

The design of this research is a survey. The population is the elements of leaders (rector or vicerector, dean or vice dean of university or institute, chairman or vice chairman of college. and head of department or head of study program) of Indonesian private Islamic higher education organizers. Multi-stage sampling was applied since Indonesian private Islamic higher education has 3 levels of accreditation, namely: Excellent, Very Good, and Good. This research used a simple random method to take 30 private Islamic higher educations at each level. This research then collected 90 private Islamic higher education and 3 elements of leaders in each for samples, therefore 270 samples should be the respondents. 267 respondents could only participate, and only 265 respondents whose data could be verified. For description, 92 or 34.6% of respondents were from private Islamic higher education accredited Excellent, 95 or 35.7% of respondents were from Private Islamic higher education accredited Very Good, and 78 or 29.7 % of respondents were from private Islamic higher education accredited Good.

Table 1. Private Islamic Higher Education Accreditation of Respondents'

No.	Accreditation Levels	Number	%
1.	Excellent	92	34.6
2.	Very Good	95	35.7
3.	Good	78	29.7
	Total	265	100

Source: Processed primary data, 2022

Based on the forms of private Islamic higher education, 84 or 31.6% of respondents were from universities, 89 or 33.5 % of respondents were from institutes, and 92 or 34.9% of respondents were from colleges.

No.	Institutional Forms	Number	0⁄0
1.	University	84	31.6
2.	Institute	89	33.5
3.	College	92	34.9
	Total	265	100

Table 2. Private Islamic Higher Education Forms of Respondents'

Source: Processed primary data, 2022

Meanwhile, based on genders, 146 or 55.1% of respondents were males, and 119 or 44.9% of respondents were females.

Table 3. Private Islamic Higher Education Respondent Genders

No.	Genders	Number	%
1.	Male	146	55.1
2.	Female	119	44.9
	Total	263	100

Source: Processed primary data, 2022

The instrument of this research was a questionnaire containing closed questions sent via a google form link to respondents. A Linkert scale in the range of 1 to 5 was used for answers, where 1 represented strongly disagree and 5 represented strongly agree. The questionnaire was based on the indicators of the variables. Social media adopted 4 indicators from Chanthinok et al. (2015), namely: customer communication channel focus, product diversity presentation awareness, proactive competitor learning capability, and market response timeliness orientation. The digital public relations variable adapted 4 indicators from Heerden and Rensburg (2005), namely: communication technician, communication facilitator; expert prescriber; and problemsolving facilitator. Digital network empowerment adapted 8 indicators from Dlouha, et al., (2017), namely: lecturers, academic staff, students, higher education organizers, student organizations, high schools, community leaders, and youth organizations. Marketing performance adopted 3 indicators from Li (2000), namely: income, number of registration, and market share.

The model reliability of this research was based on Cronbach's Alpha values. Cronbach's Alpha is excellent if the values around 0.9 are excellent, is very good if the value is around 0.8, is adequate if the values are around 0.6 to 0.7, and is unreliable if the values are below 0.5 (Kline, 1998). The model validity of this research was based on Confirmatory Factor Analysis consisting of the values of factor loadings, Average Variance Extracted (AVE), and Composite Reliability (CR). According to Hair et al., (2017), the values of factor loadings should be at least 0.5, the Average Variance Extracted (AVE) should be larger than 0.5, and Composite Reliability (CR) should be at least 0.7. Meanwhile, model fit analysis was based on the critical values of Chi-Square (CMIN/DF): 1 to 3; Probability:  $\geq 0.05$ ; Root Mean Square Error Approximation (RMSEA):  $\leq 0.08$ ; Incremental Fit Index (IFI):  $\geq 0.90$ ; Goodness of Fit Index (GFI):  $\geq 0.90$ ; Comparative Fix Index (CFI):  $\geq 0.95$ ; and Tucker-Lewis Index (TLI): 0.95 (Hair et al., 2017).

## **Results and Discussions**

The minimum value of Cronbach's Alpha for this study is 0.785. It means that the research model has good reliability. The minimum value of factor loading is 0.546, of AVE is 0.614, and of CR is 0.708. It means, based on the values of Confirmatory Factor Analysis, the validity of the construct is satisfied. Meanwhile, the values of Chi-Square (CMIN/DF): 1.863; Probability: 0.000; RMSEA: 0.057; IFI: 0.962; GFI: 0.912; CFI: 0.961; TLI: 0.952. The model of this study is fit,

although profitability is in marginal fit (Hair et al., 2017). Furthermore, construct reliability and validity are presented in Table 4.

Variables and Indicators	Factor Loadings	AVE	α Cronbach	CR
Social Media		0.614	0.785	0.708
SM1	0.566			
SM2	0.546			
SM3	0.676			
SM4	0.664			
Digital Public Relations		0.727	0.874	0.883
DPR1	0.831			
DPR2	0.846			
DPR3	0.807			
DPR4	0.745			
Digital Network		0.623	0.912	0.910
Empowerment				
DNE 1	0.731			
DNE2	0.828			
DNE3	0.732			
DNE4	0.841			
DNE5	0.702			
DNE6	0.744			
DNE7	0.704			
DNE8	0.684			
Marketing Performance		0.749	0.831	0.834
MP1	0.723			
MP2	0.818			
MP3	0.829			

Table 4. Construct Reliability and Validity

Source: Processed primary data, 2022

The results of the hypothesis test using structural model analysis show that H1 has a pvalue of 0.024 or  $p \le 0.05$  at a standardized estimate value of 0.207, therefore the hypothesis stating that social media has a significant effect on marketing performance is supported significantly. H2 is supported very significantly because the p-value is well below 0.05 ( $p \le 0.05$ ) at a standardized estimate value of 0.087. It means that social media affects digital public relations very significantly. Furthermore, H3 is supported very significantly, because the p-value is well below 0.05 ( $p \le 0.05$ ) at a standardized estimate value of 0.088. Therefore, social media affects digital network empowerment very significantly. H4 is supported very significantly because the pvalue is well below 0.05 ( $p \le 0.05$ ) at a standardized estimate value of 0.121. It means that digital public relations affect marketing performance very significantly. H5 is not supported, because the p-value is 0.982 ( $p \ge 0.05$ ) at a standardized estimate value of 0.136. Therefore, the finding does not support the hypothesis stating that digital network empowerment has a significant effect on marketing performance.

Table. 5. Structural Model Analysis

No.	Relationship Between Variables	Standardized estimate	Р	Result
1.	Social Media and Marketing Performance (H1)	0.207	0.024	H1 is supported
2.	Social Media and Digital Public Relations (H2)	0.087	***	H2 is supported
3.	Social Media and Digital Network Empowerment (H3)	0.088	***	H3 is supported
4.	Digital Public Relations and Marketing Performance (H4)	0.121	***	H4 is supported
5	Digital Network Empowerment and Marketing	0.136	0.982	H5 is not
	Performance (H5)			supported

Source: Processed primary data, 2022

The mediation test is conducted using the Sobel Test based on the coefficients of regression. The regression coefficient of social media on marketing performance is 0.471, with a standard error value of 0.038 and a significance value of 0.000. Meanwhile, when mediating the effect of digital public relations on marketing performance, the regression coefficient of digital public relations on marketing performance is 0.424, with a standard error value of 0.037 and a significance value of 0,000. Using Sobel Test, at a significance level of 0,05 or 5%, the Z value or mediation value of digital public relations on the effect of social media on marketing performance is 8.414, larger than the critical value of 1,96. It means that H6 is supported significantly or digital public relations can enhance the effectiveness of social media on marketing performance significantly.

When mediating the effect of social media on marketing performance, the regression coefficient of digital network empowerment on marketing performance is 0.137, with a standard error value of 0.019 and a significance value of 0,000. Using Sobel Test, at a significance level of 0,05 or 5%, the Z value or mediation value of digital network empowerment on the effect of social media on marketing performance is 6.233, larger than the critical value of 1,96. It means that H7 is supported or digital network empowerment can enhance the effectiveness of social media on marketing performance significantly.

The findings of this study indicate that social media is a significant antecedent for marketing performance. The findings confirm Constantinides and Fountain (2008), Kim et al., (2010), and Mangold and Faulds (2009) revealing that social media affects marketing performance. Specifically, the findings support the findings of Gibbs (2002) and Brown & Oplatka, (2006) revealing that social media is a potential marketing medium for prospective student recruitment. The findings also reveal that social media will be an attractive tool to improve marketing performance and as well as to recruit prospective students (Boyd, 2007), if social media publishes the achievements of Private Islamic Higher Education in the fields of academics, research, and community service, since the achievement information is the information needed by the prospective students for making decisions to join (Stephen & Galak, 2009; Constantinides & Stagno 2011; Nguyen et al., 2017; Sidin et al., 2003). The achievement information should be published on popular social media in Indonesia such as Youtube, Facebook, and Instagram, in the form of photos and videos (Constantinides & Stagno, 2011).

Social media is believed to have changed the way organizations communicate (Wright and Hinson, 2009). Social media is effective for creating stable, and quality relationships in the long term with customers (Huang & Hagan, 2011). Therefore, social media has an effective role in higher education public relations (Wright & Hinson, 2009). The findings of this research very significantly confirm the role and at the same time confirm the findings of Wright and Hinson (2009), and Graham et al., (2013) revealing that social media affects public relations. Furthermore, this research also proves that social media can develop public relations digitally to connect and maintain relationships with prospective students (Wright & Hinson, 2009). Digital public relations can convince prospective students to the publications of Private Islamic Higher Education achievements in the fields of academics, research, and community service, discuss the achievements interestingly, and assist the prospective students to decide to join (Stephen & Galak, 2009; Constantinides & Stagno, 2011; Nguyen et al., 2017; Razmerita et al., 2016).

The findings of this research very significantly imply that social media affects digital network empowerment to improve Private Islamic Higher Education marketing performance as well as the number of prospective students. The findings confirm Constantinides (2014) revealing that social media can empower digital networks to recruit prospective students. In other words, social media catalyzes network empowerment digitally to recruit prospective students (Stephen & Galak, 2009). Social media is an effective means of communication to do so (Weber, 2007).

Digital public relations work to bring together the information that prospective students need with that higher education provides ((Brown & Oplatka, 2006). Digital public relations do this on social media through relational marketing activities (Weiss, 2008). The research findings show that the development of digital public relations in this way significantly improves Private Islamic Higher Education marketing performance as well as the number of prospective students.

The findings confirm the findings of Bagwell (2016) and Hassani, (2017). Therefore, through digital public relations, Private Islamic Higher Education can carry out marketing in the form of collaborative relationships to improve marketing performance and as well as the number of prospective students, as intended by Gibbs (2002).

The findings of this research reveal that digital network empowerment cannot improve Private Islamic Higher Education marketing performance and as well as the number of prospective students. Therefore, the findings cannot also confirm the findings of Bampo et al. (2008). Digital network empowerment (Schütz, 2011) will only provide significant results to do so when carried out professionally, and mutually beneficial both financially and non-financially (Gibbs, 2002). Even Gibbs (2002) reveals that the networks should not only function as social but also professional capital if empowered collaboratively with financial rewards. Therefore, Private Islamic Higher Education should embrace the networks with the principle of mutual benefit (Muijs et al., 2010).

The findings of this research reveal that digital public relations strengthen social media capabilities to improve Private Islamic Higher Education marketing performance and as well as the number of prospective students. The findings imply that digital public relations can build interactive and interesting communication with prospective students about the publication of Private Islamic Higher Education achievements on social media and affect the prospective students' decision to join (Stephen & Galak, 2009; Constantinides & Stagno, 2011; Nguyen et al., 2017; Razmerita et al., 2016). Digital public relations can make social media the main information reference to determine the prospective students' choice of Private Islamic Higher Education (Constantinides & Stagno 2011). Therefore, the findings confirm that social media will improve marketing performance and as well as the number of prospective students if the social media has interactive communicative capabilities, has relevant content in the forms of photos and videos publishing Private Islamic Higher Education achievements (Stephen & Galak, 2009; Constantinides & Stagno, 2011; Nguyen et al., 2017; Razmerita et al., 2016). The capabilities can be realized through the development of digital public relations.

The reluctance of prospective students to use social media as the main reference source of information can also be addressed by carrying out relational marketing activities (Weiss, 2008). To make it happen Private Islamic Higher Education develops digital network empowerment. Private Islamic Higher Education carries out the developments to convince prospective students about Private Islamic Higher Education achievements published on social media, and to assist the prospective students in the registration process (Muijs et al., 2010; Stephen & Galak, 2009; Constantinides & Stagno, 2011; Nguyen et al., 2017; Razmerita et al., 2016). Therefore, through digital network empowerment, Private Islamic Higher Education uses social media with a collaborative relationship approach (Gibbs, 2002). The findings of this research have revealed the capability of digital network empowerment to strengthen the effect of social media to improve Private Islamic Higher Education marketing performance as well as the number of prospective students.

## Conclusion

This research is conducted to strengthen social media capabilities to improve Private Islamic Higher Education marketing performance and as well as the number of prospective students. Through a collaborative relationship approach, this research develops digital public relations and digital network empowerment as relational marketing activities to do so. The development of digital constructs is proven to be able to provide more conclusive results on the effects of social media on marketing performance and as well as the number of prospective students. In other words, the digital constructs can strengthen social media capabilities such as YouTube, Facebook, and Instagram to improve Private Islamic Higher Education marketing performance and as well as the number of prospective students (Villena et al., 2016; Chatterji et al., 2020). Furthermore, the digital constructs are very effective in explaining the spiral of silence theory since the constructs can encourage prospective students who are not interested to be interested in using

social media as an information reference to decide to join Private Islamic Higher Education (Wright & Hinson, 2009).

To improve marketing performance and as well as the number of prospective students, the findings of this research encourage Private Islamic Higher Education to develop digital public relations functioning as a communication technician, communication facilitator, expert prescriber, and problem-solving facilitator (Heerden & Rensburg, 2005). In addition, Private Islamic Higher Education should also develop digital network empowerment in the forms of participation of lecturers, academic staff, students, higher education organizers, student organizations, high schools, community leaders, and youth organizations for prospective student recruitment (Dlouha, et al., 2017). Furthermore, Private Islamic Higher Education social media should have well-designed digital sites to publish innovative, high-quality, market-oriented educational products (Constantinides & Stagno, 2011).

The findings of Constantinides and Stagno (2011) reveal that prospective students who frequently surf on social media are those who have an interest in social studies, not science and technology. This study does not distinguish the interests. Therefore, it is recommended for future research to examine social media capabilities to improve the marketing performance of Private Islamic Higher Education, as measured by the number of prospective students who have an interest in each of the majors respectively, and then to compare the results for subsequent marketing decisions.

#### **Author Contributions**

Conceptualization: Hendra Riofita Data curation: Hendra Riofita Formal analysis: Hendra Riofita Investigation: Waldana Dimasadra Methodology: Hendra Riofita Project administration: Waldana Dimasadra Supervision: Hendra Riofita Validation: Hendra Riofita Visualization: Waldana Dimasadra Writing–original draft: Waldana Dimasadara Writing–review & editing: Hendra Riofita

#### References

- Adiarsi, G. R., Stellarosa, Y., & Silaban, M. W. (2015). Literasi media internet di kalangan mahasiswa. *Humaniora*, 6(4), 470–482. https://doi.org/10.21512/humaniora.v6i4.3376
- Albors, J., Ramos, J. C., & Hervas, J. L. (2008). New learning network paradigms: Communities of objectives, crowdsourcing, wikis, and open source. *International Journal of Information Management*, 28, 194–202. https://doi.org/10.1016/j.ijinfomgt.2007.09.006
- Alfian, F. Y. (2018). Dampak ujian berulang masuk PTN persempit peluang PTS terima calon mahasiswa. *Lampost.* https://www.lampost.co/berita-dampak-ujian-berulang-masuk-ptn-persempit-peluang-pts-terima-calon-mahasiswa.html
- Alalwan, A., A., Rana, N., P., Dwivedi., Y., K., & Alhgarabat, R. (2017). Social media in marketing: A review and analysis of the existing literature. *Telematics and Informatics*, 34, 1177-1190. https://doi.org/10.1016/j.tele.2017.05.008
- Asosiasi Penyelenggara Jasa Internet Indonesia (2022). Profil pengguna internet 2022. Kata Data. https://databoks.katadata.co.id/datapublish/2022/06/10/penetrasi-internet-di-kalanganremaja-tertinggi-di-indonesia
- Auliarahman, L., & Sumadi (2020). The effect of social media marketing and religiosity on perceived value and student's decision in choosing a non-religious program at Islamic higher education. Asian Journal of Islamic Management, 2(2), 82-95. https://doi.org/

10.1108/AJIM.vol2.iss2.art2

Bagwell, T. (2016). Impact of public relations expenditure on corporate performance of commercial banks in Nigeria. *International Journal of Innovative Research & Development*, 5(10), 66–73.

http://internationaljournalcorner.com/index.php/ijird\_ojs/article/view/136547/95670

- Bambo, M., Mather, D. R., Stewart, D., & Wallace, M. G. (2008). The effects of the social structure of digital networks on viral marketing performance. *Information Systems Research*, 19(3), 273–290. https://doi.org/10.1287/isre.1070.0152
- Best, R. J. (2008). *Market-based management: Strategies for growing customer value and profitability* (5th Ed.). New Jersey: Pearson College Division.
- Boyd, D. (2007). Why youth (heart) social network sites: The role of networked publics in teenage social Life. Cambridge: MIT Press.
- Brown, H., & Jane Oplatka, I. (2006). Universities in a competitive global marketplace: A systematic review of the literature on higher education marketing. *International Journal of Public Sector Management*, 19(4), 316–338. https://doi.org/10.1108/09513550610669176
- Chanthinok, K., Ussahawanitchakit, P., & Jhundra-Indra, P. (2015). Social media marketing strategy and marketing performance: Evidence from e-commerce firms in Thailand. AU-GSB E-Journal, 8(1), 32–50. http://www.assumptionjournal.au.edu/index.php/AU-GSB/article/view/1454
- Chatterji, N., Rameshwar, R., & Kiran, R. (2020). Is university performance embedded in university-industry collaboration, marketization, and information disclosure? Evidence from India. *Journal of Marketing for Higher Education*, 32(1), 89–112. https://doi.org/10.1080/08841241.2020.1834485
- Constantinides, E. (2006). The marketing mix revisited: Towards the 21st-century marketing. Journal of Marketing Management, 3/4, 407–438. https://doi.org/ 10.1362/026725706776861190
- Constantinides, Efthymios. (2014). Foundations of social media marketing. Procedia Social and Behavioral Sciences, 148, 40–57. https://doi.org/ 10.1016/j.sbspro.2014.07.016
- Constantinides, Efthymios, & Fountain, S. J. (2008). Web 2.0: Conceptual foundations and marketing issues. *Journal of Direct, Data and Digital Marketing Practice*, 9(3), 231–244. https://doi.org/10.1057/palgrave.dddmp.4350098
- Constantinides, Efthymios, & Stagno, M. C. Z. (2011). Potential of the social media as instruments of higher education marketing: A segmentation study. *Journal of Marketing for Higher Education*, 21(1), 7–24. https://doi.org/10.1080/08841241.2011.573593
- Dabbagh, N., & Kitsantas, A. (2012). Personal learning environments, social media, and selfregulated learning: A natural formula for connecting formal and informal learning. *Internet* and Higher Education, 15(1), 3–8. https://doi.org/10.1016/j.iheduc.2011.06.002
- Dashboard EMIS PTKI (2022). https://emispendis.kemenag.go.id/ptkidashboard/
- De Boer, M., & Bosch, F. A. J., Van D., & Volberda, H. W. (1999). Managing organizational knowledge integration in the emerging multimedia complex. *Journal of Management Studies*, 36(3), 379–398. https://doi.org/ 10.1111/1467-6486.00141
- Dlouha, J., Handerson, L., Kapitulcinova, D., & Mader, C. (2017). Sustainability-oriented higher education networks: Characteristics and achievements in the context of the UN DESD. *Journal of Cleaner Production*, 172, 4263-4276. https://doi.org/ 10.1016/j.jclepro.2017.07.239
- Gibbs, P. (2002). From the invisible hand to the invisible handshake: Marketing higher education.

Research in Post-Compulsory Education, 7(3), 325–338. https://doi.org/10.1080/13596740200200134

- Graham, F. J., Haidt, J., Koleva, S., Motyl, M., Iyer, R., Wojcik, S. P., Ditto, P. H., Theory, M. F., Graham, J., Haidt, J., Koleva, S., & Motyl, M. (2013). *Advances in Experimental Social Psychology*, Burlington: Academic Press.
- Hair, J. F., Hult, G. T. M., & Ringle, C. M. (2017). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) (2nd Ed.). Los Angeles: SAGE.
- Hassani, H. Y. (2017). The impact of public relations practices on the performance of public universities in Ethiopia. *African Research Review*, 11(1), 136–155. https://www.academia.edu/46684079/The\_Impact\_of\_Public\_Relations\_Practices\_on\_t he\_Performance\_of\_Public\_Universities\_in\_Ethiopia
- Hatch, M. J., & Schultz, M. (2003). Bringing the corporation into corporate branding. *European Journal of Marketing* 37(7/8), 1041-1064. https://doi.org/10.1108/03090560310477654
- Heerden, G. V, & Rensburg, R. (2005). Public relations roles empirically verified among public relations practitioners in Africa. *Communicare*, 24(1), 69–88. https://doi.org/10.36615/jcsa.v24i1.1752
- Huang, Y. C., & Hagan, L. M. (2011). The role of market-oriented relations in public relations: The differing perspectives of managers and practitioners in the U.S. and Taiwan. *Public Relations Review*, 37, 297–304. https://doi.org/10.1016/j.pubrev.2011.03.006
- Kim, W., Jeong, O. R., & Lee, S. W. (2010). On social websites. *Information Systems*, 35, 215–236. https://doi.org/10.1016/j.is.2009.08.003
- Kline, R. B. (1998). Software Review: Software programs for structural equation modeling: Amos, EQS, and LISREL. *Journal of Psychoeducational Assessment*, 16(4), 343–364. https://doi.org/ 10.1177/073428299801600407
- Krishnan, C. K. P. & M. S. (2008). The new age of innovation. driving co-created value through global networks. New York: McGraw Hill.
- Levens, M. (2012). Marketing: Defined, explained, applied (2nd Ed.). Upper Saddle River: Pearson Education.
- Li, L. X. (2000). An analysis of sources of competitiveness and performance of Chinese manufacturers. *International Journal of Operations and Production Management*, 20(3), 299–315. https://doi.org/10.1108/01443570010294307
- Mangold, W. G., & Faulds, D. J. (2009). Social media: The new hybrid element of the promotion mix. *Business Horizons*, 52(4), 357–365. https://doi.org/10.1016/j.bushor.2009.03.002
- Morgan, N. A., Clark, B. H., & Gooner, R. (2002). Marketing productivity, marketing audits, and systems for marketing performance assessment: Integrating multiple perspectives. *Journal of Business Research*, 55(5), 363–375. https://doi.org/10.1016/S0148-2963(00)00162-4
- Muijs, D., West, M., & Ainscow, M. (2010). Why network? Theoretical perspectives on networking. *School Effectiveness and School Improvement*, 21(1), 5–26. https://doi.org/10.1080/09243450903569692
- Neumann, N., E. (1974). The spiral of silence: A theory of public opinion, Journal of Communication, 24(2), 43-5. https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1460-2466.1974.tb00367.x
- Nguyen, H. C., Ta, T. T. H., & Nguyen, T. T. H. (2017). Achievements and lessons learned from Vietnam's higher education quality assurance system after a decade of its establishment. *International Journal of Higher Education*, 6(2), 153–161. https://doi.org/10.5430/ijhe.v6n2p153

- O'Brien, K. (2009). Companies should consider value before jumping into social media. *PR Week*, 9, March 23.
- Parise, S., & Guinan, P. J. (2008). Marketing using web 2.0. The 41st Hawaii international conference on system sciences, January, 1–7. https://doi.org/10.1109/hicss.2008.242
- Qureshi, I. H., & Zahoor, S. Z. (2017). Social media marketing and brand equity: A literature review. *Journal of Marketing Management*, 16(1), 47–64. https://www.researchgate.net/publication/331132272\_Social\_media\_marketing\_and\_bra nd\_equity\_A\_Literature\_review
- Razmerita, L., Kirchner, K., & Nielsen, P. (2016). What factors influence knowledge sharing in organizations? A social dilemma perspective of social media communication. *Journal of Knowledge Management*, 20(6), 1225–1246. https://doi.org/ 10.1108/jkm-03-2016-0112
- Rhea, J.-Y., Widdows, R., Hooker, N., & Montalto, C. (2002). E-consumerism as a tool for empowerment. *The Journal of Consumer Education*, 19/20, 61–69. http://www.cefe.illinois.edu/jce/archives/2001\_2002\_vol\_19\_20/Rha%20et%20at%202 0012002.pdf
- Riofita, H., & Iqbal, M., A. (2022), Enhancing Islamic higher education image as the halal industry dribing Indonesian halal industries. *Journal of Digital Marketing and Halal Industry*, 4(1), 77 - 90.https://doi.org/10.21580/jdmhi.2022.4.1.12439
- Saravanakumar, & Laksmi, S. (2012). Social media marketing. *Life Science Journal*, 9(4), 4444–4451. https://www.lifesciencesite.com/lsj/life0904/670\_13061life0904\_4444\_4451.pdf
- Schroth, H. (2019). Are you ready for gen z in the workplace? *California Management Review*, 6(3), 5–18. https://doi.org/10.1177/0008125619841006
- Schulz A and Rossler P (2012). The spiral of silence and the internet: selection of online content and the perception of the public opinion climate in computer-mediated communication environments. *International Journal of Public Opinion Research, 24*(3): 346–367. https://doi.org/10.1093/ijpor/eds022
- Schütz, S. (2011). Value Co-Creation in Seller-Reseller Relationships: The Participatory Approach to Business Relations. VDM Verlag Dr. Müller.
- Scott, D. M. (2008). The new rules of viral marketing: How Word-of-Mouse Spreads Your Ideas for Free. Creative Commons License, Attribution 3.0.
- Setiawan, A. I., & Ferdinand, A. T. (2021). Synergized network asset: A driver for Indonesia's furniture industries to elevate marketing performance. *International Journal of Business and Society*, 22(2), 765–787. https://doi.org/10.33736/ijbs.3758.2021
- Shabir, G., Safdar, G., Hassan T., & Hussain, J., S. (2019). Social media defy spiral of silence theory and provides baseline for new spiral of social media theory: Ground perspective. *Pakistan Journal of Social Science*, 39(4), 1549-1558. https://www.researchgate.net/publication/348805342\_Social\_Media\_Defy\_Spiral\_of\_Sil ence\_Theory\_and\_Provides\_Baseline\_for\_new\_Spiral\_of\_Social\_Media\_Theory\_Groun d\_Perspective
- Sidin, S. M., Hussin, S. R., & Soon, T. H. (2003). An exploratory study of factors influencing the college choice decision of undergraduate students in Malaysia. *Asia Pacific Management Review*, 8(3), 259–280. https://kmc.unirazak.edu.my/an-exploratory-study-of-factorsinfluencing-the-college-choice-decision-of-undergraduate-students-in-malaysia/
- Stephen, A. T., & Galak, J. (2009). The Complementary Roles of Traditional and Social Media in Driving Marketing Performance. Fontainableau: INSEAD
- Syam, H. M., & Nurrahmi, F. (2020). "I don't know if it is fake or real news" How little Indonesian university understand social media literacy. *Jurnal Komunikasi*, 36(2), 92–105.

https://doi.org/10.17576/JKMJC-2020-3602-06

- Villena-Manzanares, F., & Souto-Pérez, J. E. (2016). Sustainability, innovative orientation and export performance of manufacturing SMEs: An empirical analysis of the mediating role of corporate image. *Journal of Industrial Engineering and Management*, 9(1), 35–58. https://doi.org/10.3926/jiem.1532
- Wang, Z., & Kim, H. G. (2017). Can social media marketing improve customer relationship capabilities and firm performance? Dynamic capability perspective. *Journal of Interactive Marketing*, 39, 15–26. https://doi.org/10.1016/j. intmar.2017.02.004
- Weber, L. (2007). *Marketing to the social web how digital customer communities build your business* (1st Ed.). Hoboken: Wiley.
- Weiss, M. (2008). Results-based interaction design. *Educanse Quarterly*, 31(4), 42–49. https://er.educause.edu/articles/2008/11/resultsbased-interaction-design
- Wright, D. K., & Hinson, M. D. (2009). An updated look at the impact of social media on public relations practice. *Public Relations Journal*, 3(2), 1–27. https://prjournal.instituteforpr.org/wp-content/uploads/An-Updated-Look.pdf
- Zerback, T., & Fawzi, N. (2017). Can online exemplars trigger a spiral of silence? Examining the effects of exemplar opinions on perceptions of public opinion and speaking out. *New Media and Society*, *19*(7), 1034-1051. https://doi.org/10.1177/1461444815625942