

THE INFLUENCE OF DIGITAL NEWS MEDIA ON PUBLIC AWARENESS OF ISLAMIC BANKING PRODUCTS AND SERVICES

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Abstract

This study focused on the role of digital news media exposure, and news credibility on public awareness of Islamic banking products and services in Pakistan. Based on the Stimulus–Organism–Response approach and the Elaboration Likelihood Model, the study used information engagement as a mediator and digital media literacy as a moderator. A cross sectional design was adopted, and analyzed using PLS-SEM. The results revealed that exposure and credibility had significant effect in the information engagement and public awareness. Information engagement had the highest direct effect on awareness, and significantly mediated both these relationships. The impact of engagement on awareness was enhanced through digital media literacy. The model was found to be good in terms of explanatory power and predictive relevance. These findings underscore the potential of effective, engaging and literacy-based digital interaction to enhance knowledge of Islamic banking products.

1. INTRODUCTION

The digital media landscape has altered the ways in which members of the public acquire, understand, talk about and share financial information. Branches, printed ads, television and financial advisers have long been the outlets for banking information, but today, digital newspapers, news applications, social-media news pages, online videos, podcasts and mobile platforms are also a common way of disseminating banking information. These channels offer the opportunity for financial institutions to convey intricate offerings to geographically remote audiences in an accessible and engaging manner.

The rise of digital news, however, has created an information landscape in which professionally produced journalism, institutional communication, promotional, personal opinion and misinformation are sometimes found side by side. Credibility of the information and the ability of the users to interact with and critically evaluate the information are therefore also relevant to public understanding (Schäfer, 2023; Shahbazi & Bunker, 2024; Zimmermann et al., 2023).

The developments are especially important for Islamic banking, as Islamic banking products adhere to specific principles and structures, which, in many cases, are not fully comprehended by the

general public. Products like murabahah, mudarabah, musharakah, ijarah, diminishing musharakah, Islamic deposits, and sukuk are legally distinct, share differently the risks, possess different linkages with assets, and have different Shariah compliance requirements from conventional interest-based products. Understanding these differences is lacking can lead to product inauthenticity, profitability uncertainty, risk, and practical accessibility uncertainty. Previous studies demonstrate that there is a lack of uniformity in awareness about Islamic banking products as well as that customers might have positive attitudes towards Islamic banking and yet lack knowledge about the operational features of Islamic banking (Rammal & Zurbruegg, 2007; Ahmad & Bashir, 2014).

This is because Pakistan represents an excellent environment for the study of this issue as the Islamic banking industry has grown significantly, but public awareness has not necessarily kept pace. As per the data, Islamic banking industry in Pakistan had seven fully fledged Islamic banks and sixteen conventional banks with Islamic banking branches in March 2026. Islamic banking assets totalled about PKR 14.659 trillion, which is 23% of the banking industry, and Islamic deposits accounted for 28.5% of banking industry deposits. The network had also expanded to 7,674 branches in 145 districts and there was also significant growth in the number of Islamic banking accounts opened digitally (State Bank of Pakistan, 2026). These changes indicate a growing number of institutions available, but do not necessarily indicate that potential customers have awareness of the Islamic banking product's scope, principles, and advantages.

Research to date has tended to focus on social-media marketing, banking adoption, customer engagement or behavioural intention, but not on how digital news has contributed to raising public awareness. It has also rarely looked at the manner in which exposure and credibility are converted to awareness, or conditions under which this is enhanced. To fill the gap, this study investigates the antecedents of public awareness (exposing to digital news media) and digital news credibility, the mediator between the two variables

(information engagement), and the moderator of information engagement and public awareness (digital media literacy). The study thus clarifies the conditions and situations in which digital news affects Islamic banking awareness, as well as whether and how.

2. Literature Review, Theoretical Underpinning, and Hypothesis Development

2.1 Digital News Media and Financial Communication

Digital news media is the term used to describe any channel that produces or releases news and/or information of public interest or for an institution's "public service" audience that can be accessed digitally. These contain mobile news apps, news websites, social-media news accounts, video-based news channels, online newspapers, podcasts and content aggregators. Digital news platforms introduce a new dimension to news media, a multi-directional aspect with audience interactions. Users can find more information, they can comment on news, they can compare information sources, they can ask questions, they can share reports, and they can join in public discussion. Digital exposure to news could also be deliberate – for instance, looking for information about an Islamic mortgage – or incidental – for example, a banking story that you encounter while using social media. As demonstrated by Schäfer's (2023) review, incidental exposure has now emerged as an important aspect of modern news consumption as users often find news content in digital environments that are not designed for news seeking.

Digital media's interactive qualities are useful to banks because many financial products are information-rich and typically present perceived risk, technical jargon, and uncertainty. Digital communication allows banks, journalists, scholars, regulators and consumers to describe financial arrangements in articles, videos, diagrams, often asked questions and interactive discussions. Del Sarto et al. (2025) noted that social media is employed to engage customers, educate them on financial matters, communicate with customers, provide community support, and drive digital transformation within banks. In the

same way, Naeem (2019) found that social network is a means of helping Islamic banks solve the communication problem and improve their knowledge sharing and stakeholder relationship. The results suggest that digital news and information networks can help minimize the informational gap between Islamic banks and the general public.

However, more information does not necessarily lead to more accurate awareness. Online readers can scroll past information without digesting it, read promotional information as news, read incomplete headlines, or get mixed messages about the nature of Islamic banking. The algorithmic organization of information can also present to the user information that is interesting, but not necessarily accurate or educational. As a result, a theoretical model that is considered adequate should discriminate between exposure to information, perceptions of information credibility, engagement with information and awareness that comes from engagement with information.

2.2 Theoretical Underpinning

The proposed framework is based on the Stimulus-Organism-Response theory and further supported by the Elaboration Likelihood Model. The Stimulus-Organism-Response model suggests that stimuli in the environment change the internal psychological and/or cognitive state of the person, and that the resulting psychological and/or cognitive reaction is manifested behaviorally (Mehrabian & Russell, 1974). The model started in environmental psychology, but has since been applied to digital communication, online consumer behavior, information processing, and social-media engagement, given that it offers a logical framework for the external information cues that are transformed into an internal evaluation and outcome.

In the suggested framework, environmental stimuli are exposure to digital news media and perceived credibility of digital news media. Exposure is defined as the frequency, intensity and diversity of exposure to news on Islamic banking, which individuals encounter. Credibility is one of the evaluative features of information that

considers the accuracy, trustworthiness, balance, transparency and professional production of information. These stimuli affect information engagement the organism component of the framework. Information engagement refers to the mental and physical reactions of the user, such as paying attention, reading or watching attentively, looking for clarification, comparing information sources, discussing information and sharing relevant information. The action of public awareness that the products and services of Islamic banking has to do with the public is the response that has been generated after meeting the information environment.

The Stimulus-Organism-Response model is a good one to use because the stimulus itself is not likely to produce meaningful awareness. An individual may see a news item without paying it attention or give it cognitive processing. Likewise, a believable report can have minimal educational benefit if the reader doesn't read beyond the headline and link the information to what they already know. Information engagement is thus the internal process by which external information stimuli are converted to product awareness. This theoretical model is used to justify the role of engagement as a mediator variable instead of only as an independent variable.

The Elaboration Likelihood Model offers further understanding of what role credibility and digital media literacy play. The model recognizes the two routes of information processing: central and peripheral (Petty & Cacioppo, 1986). Central processing involves a person being thoughtful about the quality, relevance, and meanings of information. Peripheral processing involves processing the message at a superficial level, through factors like source attractiveness, popularity, familiarity, or presentation style. Due to the contractual differences, Shariah requirements, risk sharing, pricing for Islamic banking and non-Islamic banking products, and other differences, Islamic banking information is often found to be central in nature. Users can, however, rely on peripheral information when they have a low level of motivational or cognitive capacity to assess technical financial information.

Perceived source credibility can go through either of these routes. This could stimulate central processing by signaling to the user that the information is worthy of processing and also serve as a peripheral cue when users depend upon the reputation or expertise of the source. Research shows that users' perceived expertise and source attributes influence their credibility of digital news and their willingness to engage with it (Zimmermann et al., 2023). The expectations of engagement and credibility judgements may also be affected by journalistic transparency, such as disclosure of information and the verification process (Curry & Stroud, 2021; Peifer & Meisinger, 2021).

Within this processing framework, digital media literacy is an ability-related boundary condition. It allows users to find sources, spot advertising, check facts, understand the purpose behind a message, compare conflicting stories, and determine if the evidence backs up a message. Thus, a highly literate user can more effectively transform active engagement with the information into accurate awareness. A less literate user might be able to read and read a lot, but still miss out on misleading, promotional or technically incorrect information. The Stimulus - Organism - Response theory, then, coupled with the Elaboration Likelihood Model, accounts for the full picture: Digital exposure and credibility as informational stimuli, engagement as internal cognitive and behavioural processing, awareness as the response, and digital media literacy as the effectiveness with which engagement is transformed into knowledge.

2.3 Digital News Media Exposure and Information Engagement

Digital news media exposure refers to how much one has been exposed to Islamic banking information from digital news media. It considers the frequency of exposure, amount of time spent with relevant information, variety of platforms used, and the number of times it is seen in terms of product-related content. The more often you're exposed to information, the more likely it is to be noticed, familiar, and prompting more inquiries. Users are more likely to read, discuss, search for, and share information about Islamic banking

products, new sukuk issues, Shariah governance, branchless banking, and regulatory developments if they persistently encounter reports on these topics.

These online platforms also allow users to transition from passive viewing to active participation. Anyone who sees a notice about Islamic home finance is able to view the bank's website, compare products, view explanatory videos, read user comments or discuss the information with others. According to Lim and Rasul (2022), customer engagement in social media is a multi-dimensional process consisting of cognitive, emotional and behavioral aspects of the process. Likewise, in the banking sector, Del Sarto et al. (2025) demonstrate how digital communication can encourage discussion, learning, and engagement with the community. Exposure thus provides the opportunities out of which engagement can grow.

This is not automatic, as some exposure is incidental and is not given attention. However, the more and the greater variety of encounters which are relevant, the greater the chance that some will correspond with the individual's needs, interests or personal situation. For instance, the news on Islamic savings products could hit the home plate of those who are looking for an alternative to provide their savings, and the news of Islamic small-business financing could be a hit on the home plate of entrepreneurs. Relevance, Repetition and Accessibility all contribute to the likelihood of cognitive/behavioural interaction.

H1: Digital news media exposure has a positive influence on information engagement with Islamic banking content.

2.4 Digital News Media Exposure and Public Awareness

Awareness refers to the understanding and recognition of the existence of the main characteristics of Islamic banking products and services by the individual. Awareness is a person's ability to recognize, recall and understand the existence and main characteristics of Islamic banking products and services. Awareness is a necessary precondition of exposure, since people can't learn about products if they don't come in

contact with them. Digital news can be used to bring the terms, availability, uses and unique features of Islamic banking services. The repeated exposure can enhance memory, familiarity and diminish the newness of terms like murabahah, musharakah, and ijarah.

Past Islamic banking awareness studies have demonstrated that knowledge of Islamic banking does not necessarily translate to in-depth knowledge of its products. Rammal and Zurbruegg (2007) concluded that Muslims were interested in Islamic banking, but they had little knowledge of particular financial products. Ahmad and Bashir (2014) similarly reported that customers' awareness levels were related to their utilization of Islamic banking services in Pakistan. The findings underscore the information value of accessible communication.

Digital news could be particularly powerful due to the fact that it offers repeated, searchable explanations with multimedia. Users have the option to go back to information, trace links within information, and compare reports from regulators, banks, journalists, and scholars. Graphic descriptions can help to clarify complicated contracts, too. However, user depth of engagement with the product is required to create basic recognition in direct exposure. The proposed framework thus assumes that there is a direct exposure-awareness connection, but that there is also an indirect connection via information engagement.

H2: Digital news media exposure has a positive influence on public awareness of Islamic banking products and services.

2.5 Perceived Digital News Credibility and Information Engagement

Perceived digital news credibility is defined as the level of trust in the accuracy, reliability, objectivity, transparency and knowledgeability of the information presented in digital news. In Islamic banking, credibility is especially important as it has both financial and religious aspects in the product claims. There is a risk that audiences may doubt that a product is truly Shariah-compliant, whether the benefits claimed for an Islamic financial product are claimed to be more than what is

actually offered, or whether the information sufficiently differentiates Islamic financing from conventional financing.

People focus on only part of what they are doing. When information is relayed as being unreliable, it is more likely to be ignored, dismissed, or read on the surface, but when information is perceived as credible, it is more likely to be read carefully, and further investigated. Zimmermann et al. (2023) identified that the perceived credibility of a source and interest in digital news were shaped by source expertise. In the context of Islamic online banking, Yasin et al. (2025) show that trust is another critical factor contributing to engagement behavior through the use of social media. The more trust people have in the site, the less perceived informational risk they will experience, leading to an increase in consumer engagement with banking information.

It can be achieved by a number of cues, such as reputation of the news organization, author expertise, reference to regulatory information, disclosure of sources, consistency with other reports, and separation of reporting from paid promotion. News about Islam banking which mentions recognized shariah boards, the State Bank of Pakistan, audited reports or financial experts is more likely to be considered worthy of attention as compared to unsupported promotional claims. This credible information can also drive further interaction since users will be inclined to share or comment on content they feel will be helpful and accurate.

H3: Perceived digital news credibility has a positive influence on information engagement with Islamic banking content.

2.6 Perceived Digital News Credibility and Public Awareness

However, there are also direct effects on awareness through credibility with regard to acceptance, retention, and integration of information. Users who are skeptical of a source may be exposed to and comprehend the claims of that source but decline to take the claims into their knowledge. The converse is true, however, for information from a credible source: it is more likely to be

accepted as valid, remembered, and used to develop beliefs with respect to financial products. The connection between these two is significant in the current digital context as the same Islamic banking product can have different terminologies used by banks, news media, religious commentators, influencers and unhappy customers. When there is a clash between messages, it can be confusing and not awareness. This uncertainty can be mitigated through credible reporting, which includes providing evidence, clarifying contractual structures, separating fact from opinion and describing the pros and cons. Luo et al. (2022) highlight the strong interdependence between new media literacy and trustworthiness rating of news, and Shahbazi and Bunker (2024) state that trust is a key aspect in handling misinformation in the social media environment.

Therefore, credible news can lead to an increase in substantive awareness rather than just awareness of the text. A person might be familiar with the name of an Islamic financing product but not be aware of its underlying sale, lease or partnership. Well-informed and well-balanced information can transform awareness from recognition to comprehension. Hence, the perceived credibility is hypothesized to directly positively affect public awareness, with part of this effect being mediated by information engagement.

H4: Perceived digital news credibility has a positive influence on public awareness of Islamic banking products and services.

2.7 Information Engagement and Public Awareness

Information engagement is the attention, information seeking, discussion, sharing and cognitive efforts in relation to the digital Islamic banking information. It is unlike exposure, which is passive. An engaged user reads, compares, looks for an explanation, speaks to others about, or reads more about a news item, while a person may see several of the items but not read them.

There are several ways in which engagement increases awareness. Attention helps users to accept information for cognitive processing, elaboration integrates unfamiliar concepts with

existing knowledge, repeated searches provide users with additional explanations, and discussion encourages reflection and correction. Content sharing can also reinforce learning as people are likely to look at, and process information in their own way, before sharing it with others. Digital banking research shows that social media engagement has the potential to boost financial education, relationship-building and information sharing (Del Sarto et al., 2025; Naeem, 2019). Yasin et al. (2025) also highlight the importance of engagement in online banking relationships for Islamic banking.

For Islamic banking, understanding of products is crucial as typically this requires multiple exposures. Users might have to research the methods used for calculating profit rates, the transfer of ownership, risks being shared, and the supervision of Shariah compliance. Through activity, people can clarify these questions and create a more structured picture of the services available.

H5: Information engagement has a positive influence on public awareness of Islamic banking products and services.

2.8 Mediating Role of Information Engagement

The suggested mediation relationships describe how digital news exposure and credibility is then mediated into public awareness. There are more opportunities for people to find out more, but awareness depends on whether or not those opportunities lead to cognitive and behavioural engagement. Likewise, credibility can lead to acceptance and attention, and to a greater extent, to the educational value when individuals examine and process the information.

According to the Stimulus–Organism–Response model, exposure and credibility are stimuli, engagement is the organism's internal state, and awareness is the response. This design suggests that engagedness transfers some of the influence of each stimulus to the outcome. The mediation is likely to be partial and not necessarily complete, as simple recognition can be formed through repeated exposures, and information that is credible can be remembered with shallow processing. But more knowledge of the principles

and characteristics of Islamic banking should call for participation.

The first stage in the exposure pathway is when people come across Islamic banking information online. Exposure catches the eye, evokes curiosity, and provides personal relevance. Then, users read, search, compare, discuss, or share content – acquiring product knowledge. The credibility mediated pathway starts with an evaluation of the credibility and usefulness of the information. This evaluation enhances commitment to time and effort, leading to greater awareness.

The mediation argument serves to represent an important shortcoming of the previous studies. Research is often directly linked to attitudes, intentions to use, or money spent on digital communications, and the internal information-processing mechanisms remain under-explained. The present study sets itself apart from the mere availability of information by the role of the mediator of engagement as a link in public education.

H6: Information engagement mediates the relationship between digital news media exposure and public awareness of Islamic banking products and services.

H7: Information engagement mediates the relationship between perceived digital news credibility and public awareness of Islamic banking products and services.

2.9 Moderating Role of Digital Media Literacy

Digital media literacy is a composite of knowledge and skills needed to access, analyze, evaluate, verify, create and communicate digital information responsibly. It also enables them to find out where a report comes from, differentiate between news and sponsored content, understand what persuasive and algorithmic influences are, check facts with independent sources, interpret digital evidence, and detect misinformation. New media literacy is thus larger than technical skills for using a smartphone or a social media application, as it is defined by Lee et al. (2015) and Lin et al. (2013).

This current approach places digital media literacy as a mediator for information engagement and public awareness. Engagement cannot always lead

to true knowledge. Users can interact with incomplete, misleading or promotional content, and thus can form an incorrect awareness. Digital media literacy will depend on the extent to which users will be able to translate engagement into trustworthy understanding. Highly literate users will be more likely to check the claim, review the evidence, compare reports, and identify conflict of interest. This involvement should, therefore, produce more powerful and more precise awareness.

This argument for a boundary condition is supported by empirical evidence. Luo et al. (2022) demonstrate the link between new media literacy and trustworthiness in news evaluation. Luo et al. (2022) reveal that new media literacy has a connection with news trustworthiness evaluation. In the United States and India, Guess et al. (2020) determined that a digital media literacy intervention enhanced people's ability to differentiate between real news and fake news. Similarly, Wei et al. (2023) identified the skills required for social media literacy, which are also applicable in curbing the propagation of misinformation. The results in this study suggest that the use of digital information is more effective when combined with evaluative competencies.

This is an important moderating role for Islamic banking, as users have to assess financial and Shariah aspects. Digital content can contain inaccurate information on products, misrepresent contractual arrangements, or present advertising as a stand-alone financial education. The digitally literate user can check if an article provides source information, if a claim is backed up by regulatory information and if promotional interests are made known. These should help to reinforce engagement to meaningful awareness.

The suggested moderation isn't a sign that the user who uses digital media less well doesn't gain anything from engagement. Instead, it forecasts that the positive impact of engagement becomes more pronounced the higher the level of digital media literacy. At low levels of literacy, deep engagement can lead to partial and/or incorrect knowledge. The likelihood of verified understanding and integration increases at higher levels of engagement.

H8: Digital media literacy positively moderates the relationship between information engagement and public awareness of Islamic banking products and services, such that the relationship is stronger when digital media literacy is high.

2.10 Research Gap and Conceptual Contribution

Extensive literature on Islamic banking has explored several concepts related to the adoption of Islamic banking, including religiosity, service quality, trust, perceived usefulness, customer satisfaction and intention to adopt. Social-media marketing, online engagement, and brand relationships are other areas of digital communication research. But, there is a lack of focused research about digital news media as a medium for the public to be aware of Islamic

banking products. Digital news is not a form of direct bank marketing as it involves journalistic reporting, expert commentaries, regulatory announcements and public discussion that can be seen as more independent than institutional advertising.

Limited integration of exposure, credibility, engagement, awareness, and media literacy in a single model is also available in the literature. The proposed framework also helps to distinguish the amount of informational contact with the quality of perceived information, recognize engagement as a process by which news activities support awareness, and suggest that digital media literacy is a condition that supports the effectiveness of news activities in terms of awareness. Thus, it moves research from the mere exposure model to the moderated mediation model for the awareness of Islamic banking in the public.

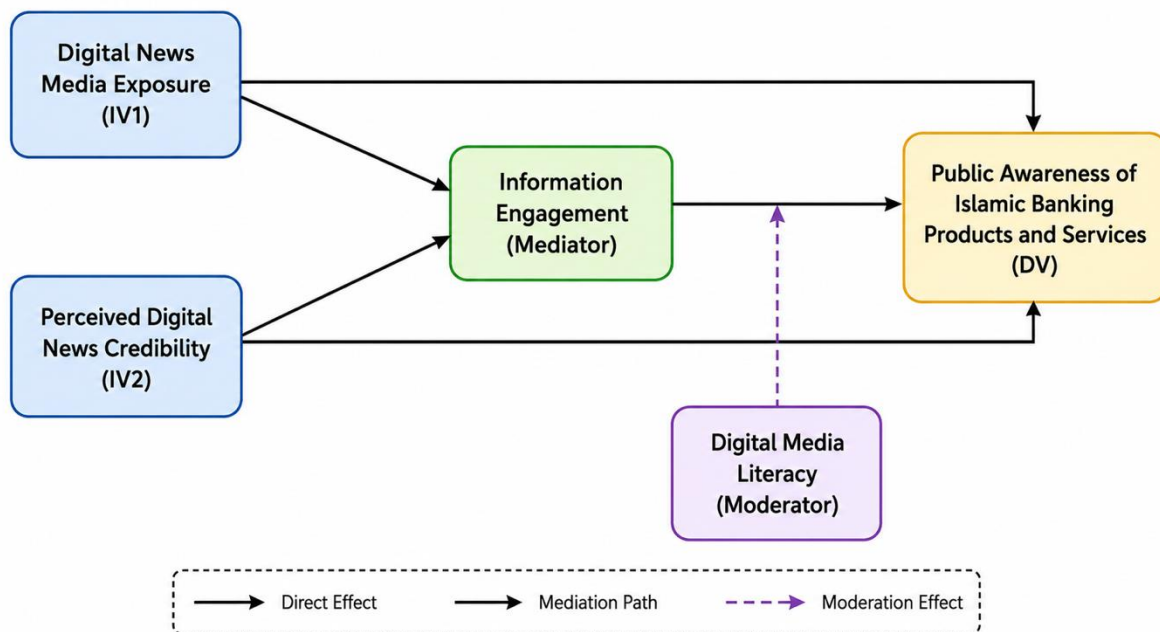


Figure 1: conceptual model

3. Methodology

3.1 Research Design

The study Was quantitative, explanatory and cross sectional. Because the study aims to make the constructs put forward into the study more operational and concrete in order to measure them numerically, and because it is a study that tests a theoretically specified network of direct,

indirect and interaction effects, the quantitative approach is suitable. The explanatory design is appropriate because the study is not simply about the awareness of public; it investigates if the difference in information engagement between the non-exposing and digital news exposing groups is a result of the former or latter, and if digital

media literacy shifts the relationship between information engagement and awareness.

Structured questionnaire was used to collect data at one time. The cross-sectional design is suitable for an initial empirical examination as the respondents of the study are digital media users who are spread out throughout the geographical area and the main objective is to test theory using structural equation modelling. However, causal interpretation was to be probative but theoretical as it is not possible to establish temporal sequencing from cross-sectional data. The questionnaire was organized with the constructs into different sections and provide neutral instructions that minimizes the possibility of respondents making inferences on the proposed relationships.

The unit of analysis was the individual digital-media user. This not involved studying the effectiveness of the communication performance of a particular news organization or bank – rather, personal exposure, perceptions of credibility, engagement, literacy and awareness. Empirical setting was Pakistan as it has a rapidly expanding Islamic banking sector, increasing access to digital finance, and significant linguistic, educational, and regional diversity.

3.2 Population, Sampling Technique, and Sample Size

The target population included adult residents of Pakistan who use digital media and can get access to financial or banking news. Eligible participants were 18 years or older, read digital news or social-media news related content at least once a week, and have found banking, economic or financial information in the previous six months online. Even though the dependent variable is public awareness, and not customer satisfaction, existing Islamic banking customers were not be the only eligible respondents. The inclusion of both customers and non-customers give greater diversity in product awareness and improve the public orientation of the study.

There is no complete national data available of all the digital-news users of Pakistan. Thus, strict probability sampling is not possible. The research method that was used is purposive sampling

method with multistage sampling technique, which is quota sampling. The first stage is that regional quotas were fixed for Punjab, Sindh, Khyber Pakhtunkhwa, Balochistan and Islamabad Capital Territory or other regions. The second phase involved a selection of respondents from universities, professional associations, community organizations, bank customer panels, digital-media groups, and social media in general. In the third phase, screening questions were employed to keep only eligible digital-news users. Gender and broad age groups will be monitored to minimize over-representation of young males at the University, a tendency of on-line financial studies.

The statistical power and precision will be used as a basis for determining the minimum sample size. Cochran's formula at 95% confidence level, 5% margin of error and a maximum response variability yields an estimated sample size of about 384 responses for a large population. The statistical requirement for PLS-SEM is likely to be less as the number of structural predictors converging to a construct will be limited. However, the larger benchmark is better since there is mediation and moderation in the framework, and also, responses that are incomplete, poorly written or are not applicable will have to be eliminated.

The study will then strive to collect about 450 usable questionnaires. 500 questionnaires or invitation to participate in the survey should be sent, allowing for a partial response and screening for data. A final sample of at least 384 valid cases will be acceptable, 400-450 of which will yield greater statistical power when assessing how interaction effects are observed, testing measurement quality, and conducting optional subgroup comparisons. This target also works well for bootstrapping and out-of-sample predictions in SmartPLS.

3.3 Measurement Instrument

A structured questionnaire will be developed based on existing instruments for digital-media, information-engagement, media-literacy and Islamic banking research. The questionnaire will include screening questions, construct measures and demographic information. The principal variables will be assessed using multiple items on a

seven-point Likert scale from 1 (strongly disagree) to 7 (strongly agree). A seven-point scale is suitable as it gives enough range of responses and it is suitable for structural equation modelling.

Digital news media will be evaluated with five items to determine the frequency, duration and nature of their exposure to online news about Islamic banking. The items will log exposure through digital newspapers, news websites, mobile news apps, social-media news pages, online videos and financial news. An illustrative item is: "I often read online news articles about Islamic banking products and services." The measurement will not be targeted at direct advertisements by Islamic banks but will target news and informational content.

Five items for perceived accord expertise of digital news sources will be used to measure perceived digital news credibility. The respondents will rate the news articles on digital Islamic banking on the five dimensions of fact accuracy, balance, professional production and trustworthy evidence. An illustrative item is: "Digital news about Islamic banking products is generally reliable." Items will be modified from existing media-credibility scales and tailored to financial and Sharia-related information.

Information engagement will be assessed based on six items measuring involvement of cognitive and behavioural interaction with Islamic banking news. The items will evaluate if respondents are paying careful attention to the information, have read or watched it completely, sought further explanations, compared information from various sources, discuss with others, and share information relevant to the question. An illustrative item is: I find information on digital news about Islamic banking and do a search for more information. This is the mediating construct that will act as a mediator between the two independent variables and public awareness.

A total of six items will be used to assess the awareness of public about Islamic banking products and services. The items will test respondents' recognition and understanding of the major Islamic banking products such as murabahah, musharakah, mudarabah, ijarah, Islamic deposit accounts, Islamic home financing,

and others. Awareness will also involve respondents' awareness of the differences between Islamic and conventional banking, the role of Shariah supervision and the availability of Islamic banking services. An illustrative item is: "The basic differences between Islamic and conventional banking products are understood."

The six items that will be used to assess digital media literacy will determine respondents' ability to identify news from advertising, verify claims, compare information across platforms, recognise false information and evaluate the evidence behind digital news. An illustrative item is: I can tell sponsored banking content from independent digital news. Digital media literacy will be exemplified as the medium between information engagement and public awareness.

The questionnaire will be designed and created in English and then translated into Urdu to make it more accessible. A back-translation procedure will be adopted to ensure the Urdu version has the same meanings as the English questionnaire. The respondents will have the option to choose either version. The instrument will be evaluated by a panel of five to seven scholars and/or researchers who have experience in Islamic banking, digital communication, media studies, and quantitative research, prior to the actual data collection process. Each item will be judged for clarity, relevance, representativeness, and contextual appropriateness by the experts.

A small-scale survey of some 40 respondents will then be carried out. The pilot respondents will also be required to be the same qualifications as the final respondents, but they will not be part of the main sample. The items will be judged for understandability, time to complete reasonable, and preliminary reliability of the constructs in the pilot study. Items that are unclear, have low item-total correlation, or lack strong conceptual distinction from other items will be amended and/or eliminated prior to the final version.

3.4 Data Collection Process

Data will be gathered using online and face-to-face (limited) questionnaires. The online survey will be created using a secure online platform (such as Google Forms or Qualtrics) and sent out via social

media, community organizations, universities, professional networks, and banking groups. Face-to-face distribution can be done at universities, business branches, and at public places where potential adult digital-news users can be reached.

The first page of the questionnaire will inform the participants the purpose of the study, the criteria for participation, that participation is voluntary, what steps will be taken to keep the information confidential and that the participants have the right to withdraw at any time. Neither names, national identity numbers, account information or other unnecessary identifying information will be collected. Before the respondents will take the questionnaire, they will be given the opportunity to provide informed consent.

The screening questions will ensure that the participants are at least 18 years old, residents of Pakistan, using digital news media at least once a week and have come across financial/banking information online within the past six months. If they do not meet these conditions, they will not continue to the main questionnaire.

Data Collection will continue for about 6-8 weeks. To boost response rate, two reminder messages can be sent via the online groups. Care will be taken to ensure that a quota is not exceeded from any one province, age group, gender, educational level or occupational level in the collection process. If one group is over-represented, then the next step in recruitment will be to underrepresented groups.

Common method bias will be minimized by the use of a few procedural measures. The questionnaire will provide respondents with assurance that there are no right or wrong answers, simple and neutral language, distinguish predictor and outcome constructs in separate sections, and not pre-specify the hypotheses. In some cases, the order of items might be altered, but too much randomization will be avoided to prevent respondents being confused. Questionnaires that are filled out in an unrealistically short time frame, with significant missing information, or with response consistent with items on the questionnaire all the time, will be discarded.

3.5 Data Analysis Techniques

The data that is collected will be analyzed with SPSS and SmartPLS. Initially, data will be coded, cleaned, and descriptively analyzed using SPSS, missing value analysis, and respondent profile analysis. Demographic variables and construct items will be reported as frequencies, percentages, means and standard deviations. The missing data will be investigated prior to analysis. If there are missing responses that are substantial, the case will be removed, but if they are limited and missing at random, then they can be addressed through appropriate imputation procedures.

Standardized scores will be used to identify potential univariate outliers and Mahalanobis distance will be used to identify multivariate outliers. PLS-SEM does not require multivariate normality, but skewness and kurtosis will be investigated to gain insights into the distribution of the data. A comparison of key constructs between early and late respondents will be conducted to evaluate the possible non-response bias.

The study has multiple latent variables, mediation, moderation and prediction-oriented model, so the study will be performed using partial least squares structural equation modelling using SmartPLS. The analysis will take place in two phases including measurement model assessment and structural model evaluation.

For the reflective measurement model, outer loadings will be used to check the indicator reliability. Items with loadings of .708 or higher will be preferred, but items with loadings between .60 and .708 can be retained if the removal does not have a meaningful impact on construct reliability or validation. Cronbach's alpha, composite reliability and rho_A will be used for internal consistency. Scores in the range of .70 - .95 will suggest reasonable reliability. Values in excess of .95 will be investigated as they might indicate redundant items.

The convergent validity will be determined by average variance extracted. An average variance extracted of .50 or higher will indicate a construct has more than 50% variance explained in the indicators. Heterotrait-monotrait ratio will be used primarily to check for discriminant validity. If it is

less than .85, then it has strong evidence of discriminant validity, but if less than .90, it may be acceptable for closely related constructs. Variance inflation factors was used to assess collinearity. Values less than 3.3 will be preferred, although values less than 5 may be acceptable. Procedural controls and statistical diagnostics will be used to evaluate for common method bias. Harman's one factor test can be used as a preliminary assessment, but it won't be considered adequate evidence. The full collinearity variance inflation factors will also be analyzed.

Once the quality of the measurement has been established, the structural model will be assessed. Testing of the hypothesized relationships will be done by bootstrapping with 10,000 subsamples, a two-tailed test and 95% bias-corrected confidence intervals. A hypothesis will be accepted if the path coefficient is in the hypothesized direction, the p value is less than .05, and the confidence interval is not equal to zero.

The coefficient of determination will be used to assess the explanatory power of the model. The value of R^2 can vary between 25, 50, and 75, depending on the research context and can be interpreted as weak, moderate, and substantial correlations. For the interpretation of the contribution of every predictor to the endogenous variable the effect sizes will be evaluated using f^2 . Predictive relevance will be assessed using the Q^2 and values over zero will represent the predictive relevance of the model. The analysis of PLSpredict can also be conducted to examine the indirect effect of digital news media exposure on public awareness mediated by the public awareness of digital news credibility. The indirect effect will be supported with mediation when the bootstrapped confidence interval for the indirect effect does not contain the value of zero. The direct effects will then be reviewed to see if the mediation is indirect-only, complementary or competitive.

To determine the moderating effect of digital media literacy, an interaction term will be created between the information engagement and digital media literacy. As this is an appropriate method for assessing interaction effects with reflective latent constructs, it is used in the two-stage approach. The coefficient should be greater than

zero to uphold the hypothesis that, at high digital media levels, information engagement will have a greater effect on public awareness.

The moderation effect will also be explored in a simple-slope plot. Information engagement and public awareness will be shown at low, average and high digital media literacy. For the proposed moderation, a steeper positive slope at the higher media-literacy levels will offer graphical support. The overall moderated mediation process could also be explored by measuring the indirect effects of digital exposure and credibility at different levels of digital media literacy.

Some control variables like age, gender, education, income, existing use of Islamic banking, and frequency of digital-media use can be included to evaluate if the primary relationships are stable. Multigroup analysis can be used to compare the existing Islamic bank customers with the non-customers or the financial education high and low groups of customers as long as the sample size at each group is sufficient.

4. Findings and Analysis

4.1 Measurement Model

All constructs of the study had confirmed reliability and validity as seen in the measurement model results. The loadings for the indicators were in the range of 0.824 to 0.890 which are higher than the recommended loading of 0.70. This suggested that all the measurement items were suitable for their corresponding latent constructs. The highest loading (0.890) was for PAIB3, while the lowest were for PAIB4 (0.824) and PAIB6 (0.824) which were still within acceptable limits. The internal consistency of the items in each of the constructs ranged from Cronbach alpha values of 0.912 to 0.934, indicating high internal consistency. Likewise, composite reliability values ranged from 0.934 to 0.948 well above the minimum criterion of 0.70. The results of these revealed that measurement scales were highly reliable. The values of the average variance extracted were between 0.714 and 0.753, which are higher than the threshold of 0.50 and indicate good convergent validity. The highest value of AVE was 0.753 for Innovation Engagement, which means that the indicators accounted for a

large amount of the variance in the construct. In addition, VIF values for the variables were between 2.279 and 3.260, all of which are less than the threshold of 5.00. So, the multicollinearity problem was not serious among the indicators.

The results indicated that the measurement model had good indicator reliability, internal consistency, convergent validity, and collinearity conditions for further evaluation of the structural model.

Table 1: Reliability and Validity

Construct	Item	Loading	VIF	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)
DML	DML1	0.835	2.408	0.920	0.937	0.714
	DML2	0.838	2.544			
	DML3	0.845	2.396			
	DML4	0.856	2.703			
	DML5	0.851	2.526			
	DML6	0.842	2.440			
DNME	DNME1	0.876	2.800	0.912	0.934	0.739
	DNME2	0.849	2.356			
	DNME3	0.872	2.674			
	DNME4	0.841	2.322			
	DNME5	0.859	2.533			
IE	IE1	0.873	3.007	0.934	0.948	0.753
	IE2	0.852	2.618			
	IE3	0.884	3.260			
	IE4	0.859	2.710			
	IE5	0.868	2.886			
	IE6	0.870	2.897			
PAIB	PAIB1	0.872	2.959	0.925	0.941	0.728
	PAIB2	0.867	2.874			
	PAIB3	0.890	3.225			
	PAIB4	0.824	2.305			
	PAIB5	0.841	2.442			
	PAIB6	0.824	2.279			
PDNC	PDNC1	0.861	2.534	0.912	0.934	0.740
	PDNC2	0.864	2.691			
	PDNC3	0.874	2.704			
	PDNC4	0.845	2.344			
	PDNC5	0.857	2.533			

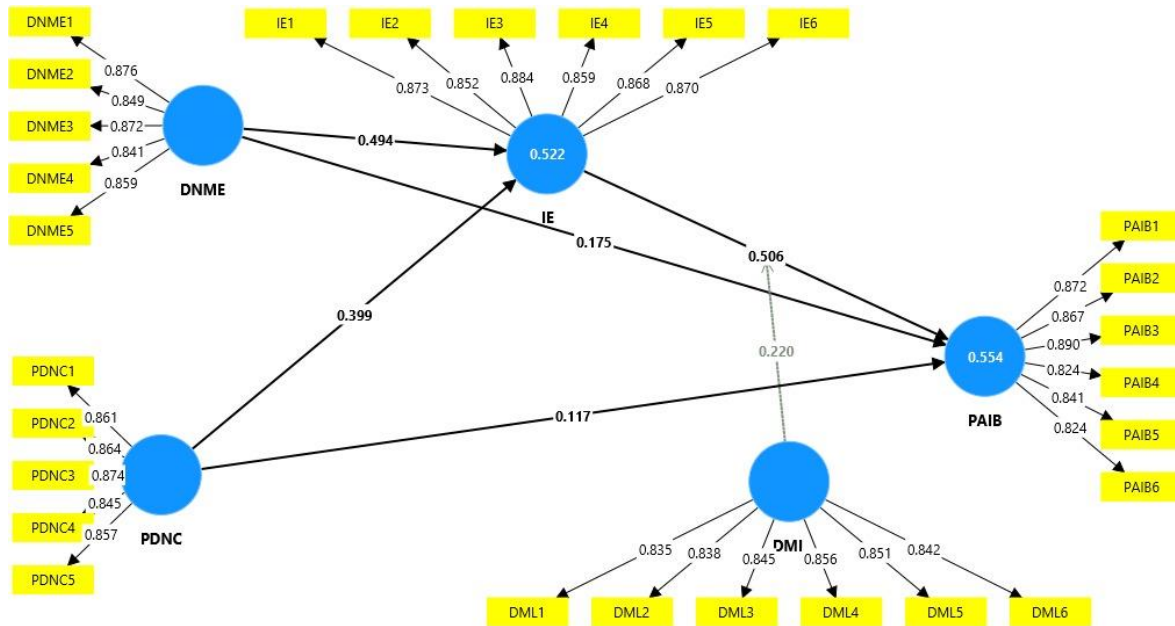


Figure 2: Measurement Model

4.1.1 Discriminant Validity

The results of the discriminant validity performed confirmed that there was empirical distinction between the five constructs. The inter-construct values were in the range of 0.227 to 0.731, which were all below the more conservative value of 0.85, and the more liberal value of 0.90. The highest was found between IE and PAIB, with a correlation of 0.731, suggesting that there was a strong association, but not construct redundancy. IE and DNME showed the second highest value of 0.665 followed by IE and PDNC at 0.593. The least

overall overlap was observed between DML and DNME with a weak correlation of 0.227. The other values were also within acceptable range, such as DNME-PAIB (0.582), PAIB-PDNC (0.492) and DNME-PDNC (0.330). Overall, none of the pairs of constructs broke the recommended cut-off. Thus, findings demonstrated good discriminant validity, indicating that each construct measured a conceptually distinct dimension for further investigation of the structural model and relationships among the constructs within the research framework.

Table 2: HTMT Criteria

Construct	DML	DNME	IE	PAIB	PDNC
DML	—				
DNME	0.227	—			
IE	0.237	0.665	—		
PAIB	0.294	0.582	0.731	—	
PDNC	0.255	0.330	0.593	0.492	—

4.2 Structural Model

4.2.1 Path Coefficients

All the proposed direct and the moderating and mediating relationships were statistically

significant from the results of the structural model. DNME exerted a strong positive effect on IE ($\beta = 0.494$, $t = 15.187$, $p < 0.001$) and a smaller but significant direct effect on PAIB ($\beta = 0.175$, $t =$

3.831, $p < 0.001$). IE had the highest direct effect on PAIB ($\beta = 0.506$, $t = 10.738$, $p < 0.001$), which were the main factors to explain the dependent construct. PDNC also positively affected IE ($\beta = 0.399$, $t = 11.243$, $p < 0.001$) and PAIB ($\beta = 0.117$, $t = 2.992$, $p = 0.003$), although its direct influence on PAIB was comparatively weaker. The interaction effect between DML and IE on PAIB was positive and significant ($\beta = 0.220$, $t = 6.835$, $p < 0.001$), indicate that DML has a moderating

effect. Furthermore, IE significantly mediated the effects of DNME on PAIB ($\beta = 0.250$, $t = 8.667$, $p < 0.001$) and PDNC on PAIB ($\beta = 0.202$, $t = 7.847$, $p < 0.001$). There were also small differences between the original estimates and the sample means and low standard deviations which suggested stable and reliable estimates in the bootstrap. In general, all the proposed hypotheses in model were supported.

Table 03: Hypotheses testing

Hypothesized Relationship	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Statistics T (O/STDEV)	P Values
DNME $\rightarrow$ IE	0.494	0.494	0.033	15.187	0.000
DNME $\rightarrow$ PAIB	0.175	0.175	0.046	3.831	0.000
IE $\rightarrow$ PAIB	0.506	0.505	0.047	10.738	0.000
PDNC $\rightarrow$ IE	0.399	0.399	0.035	11.243	0.000
PDNC $\rightarrow$ PAIB	0.117	0.117	0.039	2.992	0.003
DML $\times$ IE $\rightarrow$ PAIB	0.220	0.219	0.032	6.835	0.000
DNME $\rightarrow$ IE $\rightarrow$ PAIB	0.250	0.250	0.029	8.667	0.000
PDNC $\rightarrow$ IE $\rightarrow$ PAIB	0.202	0.202	0.026	7.847	0.000

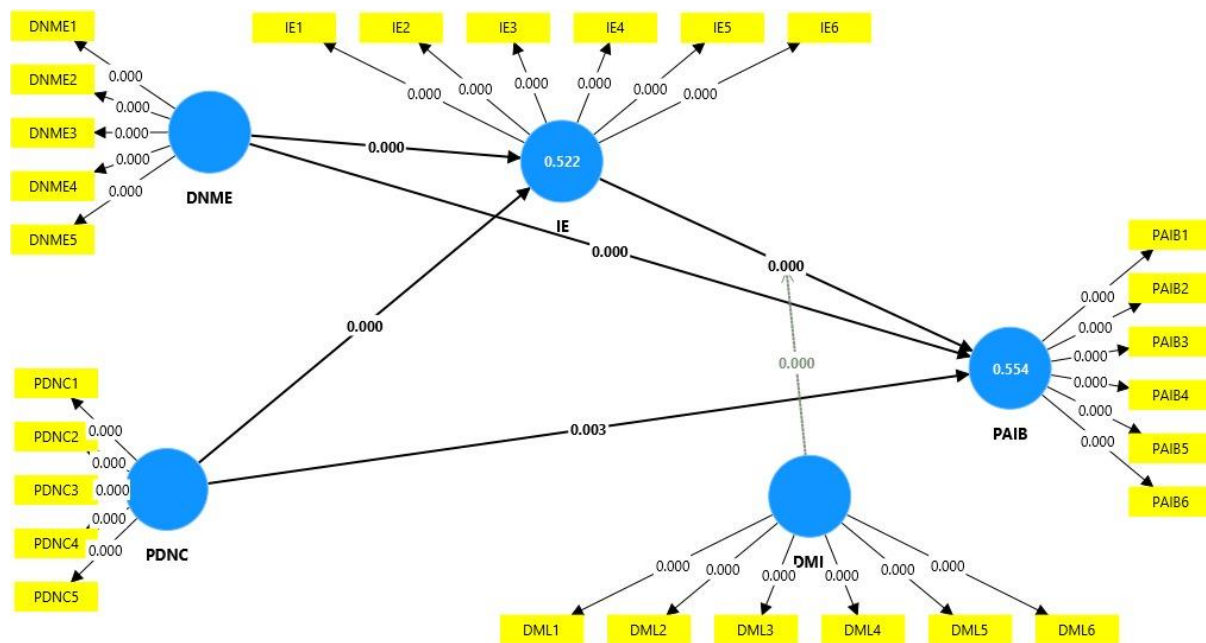


Figure 3: Structural Model

4.2.2 Model explanatory power and predictive relevance

The structural model proved to be adequate in explaining and predicting the phenomenon. For IE, the R^2 was 0.522, which means that the model could account for 52.2% of the variance in the data. Likewise, the R^2 value of the PAIB model was 0.554, which indicated that the model accounted for 55.4% of the variance in the dependent construct. The adjusted R^2 values were near to the

respective R^2 values, which proved the stability of the models. In terms of effect size, DNME resulted in a large effect size on IE ($f^2 = 0.464$) and PDNC resulted in a moderate to large effect size on IE ($f^2 = 0.303$). Moderate effect of IE on PAIB ($f^2 = 0.273$). The IE-PAIB relationship was found to be small-to-moderate ($f^2 = 0.109$) and was moderated by DML. There were small other direct effects on PAIB. In addition, the Q^2 values for IE (0.390) and PAIB (0.397) were positive, indicating good predictive relevance.

Table 4: Explanatory power, effect size, and predictive relevance

Assessment	Construct/Relationship	R^2	Adjusted R^2	f^2	SSO	SSE	Q^2
Coefficient of Determination	IE	0.522	0.520	—	—	—	—
Coefficient of Determination	PAIB	0.554	0.548	—	—	—	—
Effect Size	DML → PAIB	—	—	0.022	—	—	—
Effect Size	DNME → IE	—	—	0.464	—	—	—
Effect Size	DNME → PAIB	—	—	0.042	—	—	—
Effect Size	IE → PAIB	—	—	0.273	—	—	—
Effect Size	PDNC → IE	—	—	0.303	—	—	—
Effect Size	PDNC → PAIB	—	—	0.021	—	—	—
Effect Size	DML × IE → PAIB	—	—	0.109	—	—	—
Predictive Relevance	IE	—	—	—	2400.000	1463.019	0.390

Assessment	Construct/Relationship	R ²	Adjusted R ²	f ²	SSO	SSE	Q ²
Predictive Relevance	PAIB	–	–	–	2400.000	1447.701	0.397

Note: R² = coefficient of determination; f² = effect size; SSO = sum of squares observations; SSE = sum of squares prediction errors; Q² = predictive relevance.

Discussion

Results indicate that the exposure to digital news media had a significant impact on information involvement ($p=0.000$) and perceived digital news credibility had a significant impact on information involvement ($p=0.000$). The direct effect of information engagement had the strongest relationship with public awareness ($\beta = 0.506$); exposure ($\beta = 0.175$) and credibility ($\beta = 0.117$) each had only partial mediation and both had significant indirect effects. Therefore, digital information is meaningfully aware when the user is attentive, compares, discusses and elaborates. This interpretation aligns with the findings that social media are used to educate consumers about banking (Del Sarto et al., 2025) and that trust leads to participation in Islamic online banking communities (Yasin et al., 2025). Reliability is still key, as good source cues help in the ability to discern the truth and influence online engagement (Prike et al., 2024). The high interaction effect ($\beta = 0.220$) also indicates that the conversion of engagement to accurate product awareness is strengthened by digital media literacy. This is consistent with evidence from a meta-analysis of media-literacy interventions that they foster increased credibility assessment and resistance to misinformation (Lu et al., 2024). The results support a moderated-mediation pathway in which exposure creates opportunity, credibility helps to dissipate uncertainty, engagement helps to connect with what was cognitively learned, and literacy helps protect the quality of awareness in the context of rich, complex financial communication environments.

Theoretical Implications

The study further extends Stimulus–Organism–Response theory, as it shows that information exposure and information credibility can be considered separate informational stimuli, and that information engagement is the cognitive-

behavioural process that works as a link between the two information stimuli and information awareness. The large indirect effects lend support to the view that awareness is a process of active processing and is not just a result of the mere exposure to content. Furthermore, the moderating effect of digital media literacy adds to the Elaboration Likelihood Model by demonstrating that digital media user's evaluative ability is linked to the effectiveness of the engagement to achieve accurate understanding. The framework thus evolves digital financial communication research from the direct-effects reasoning to a moderated-mediation explanation which entails the conjunction of information quantity, information quality, cognitive processing and user capability.

Practical Implications

The results suggest that Islamic Banking awareness campaigns should be a blend of digital media and reliable and captivating educational material. Short videos, product comparisons, interactive explainers, and frequently asked questions about Shariah products, contracts, risks, pricing and shariah governance should be created in a joint effort between banks, regulators, journalists, and shariah scholars. The audiences should be urged to ask questions, crosscheck sources, watch webinars and read related regulatory documents as engagement was high and highly correlated with awareness. Campaigns should be accompanied by prompts in the media for media literacy, labels on the sources of information, disclosure of sponsored information, and guidance for fact checking. These can create a sense of informed exposure rather than passive exposure and can mitigate the confusion of "marketing or misleading financial messages.

Managerial Implications

Digital news communication should not be seen as a promotional but as an educational mechanism

that builds relationships with managers of Islamic banks. Impressions should not be the sole measure of content performance; instead, use completion rate, number of clarifications, verified learning, and discussion. Because both credibility and engagement factors were found to have an impact on awareness, managers should set up editorial rules on the evidence, balanced explanation, expert attribution, Shariah-board verification and transparent sponsorship. Multilingual and platform-specific communication for students, professionals, entrepreneurs and non-customers should be based on audience segmentation. Digital teams at banks should also be trained on media literacy and addressing misinformation, and banks should work with trusted media and regulators to improve the public's trust in the banking system.

Discuss the limitations and make future recommendations.

The cross-sectional study design precludes the ability to make causal inferences since exposure, engagement, literacy and awareness were all assessed in the same time period. National generalisability can be limited in purposive and quota sampling, especially for those in rural areas, have poor literacy scores, and lack access to the internet. Recall error, social desirability, and common method bias all can contaminate self-reported measures. More future studies need to use longitudinal panel data, experiments or behavioural trace data to create time order and study real news use. Comparative studies are recommended across provinces, groups of customers, platforms and systems of Islamic banking. The researchers propose that further boundary conditions are to be tested – such as misinformation exposure, the type of information source, religiosity, financial literacy, and algorithmic curation.

Conclusion

The study findings indicate that when digital news media is credible, captivating, and with the aid of digital media literacy, it has the potential to increase public awareness about Islamic banking. Although exposure and credibility had a large direct effect, the influence of the exposure and

credibility was enhanced by information engagement, indicating that it is necessary for the user to process the information to achieve awareness of financial information. This was amplified by digital media literacy, which allows viewers to compare and contrast sources and assess whether information is being explained truthfully or promoted or distorted. The model includes moderate explanatory power and high predictability, providing an account on digital Islamic banking communication. The key ingredients of effective awareness are reach, trust, engagement and evaluative competence.

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