

Business colleges and their community: Content analysis of websites of business colleges in the MENA region

Ali Abdullah Alnodel¹, Dirar Elmahi Elobaid², Sally Ibrahim Elawady²,
and Sheroog A Alhdaif³

Abstract

This research aims to explore the practices of business colleges in the Middle East and North Africa (MENA) region to reveal their engagement with the society and the factors affecting their engagement with the community. The study utilized a content analysis approach in collecting data from the websites of business colleges in 2016. The sample size comprised 142 business colleges from 20 countries in the MENA region. A regression model was established for the relationship between the independent variables (age, type and academic accreditation of business school and income level, population density and Internet user rate in the country of the college) and the dependent variable (behavior of business schools in disclosing their societal role on their websites). The results indicate that situation and economic stability are central factors influencing the level of disclosure about the business schools' engagement with the community. This gives an impression that university practices of social responsibilities come as a result of economic and social development, not as a result of the needs of the society itself. Accordingly, the study recommends that business schools in less developed societies reemphasize their roles according to their community needs and facilitate technology in the process of fulfilling this responsibility.

Keywords

Community engagement, business schools, social responsibility, websites, MENA region

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Introduction

Given the pressing economic, social, and environmental anxieties, societal expectations about the roles of business schools require business schools to undertake fundamental changes to maintain their legitimacy.¹ The theory of legitimacy is based upon the “social contract” between society and the organization, arguing that organizations have to work within the expectations of their society to maintain their survival.² Moreover, recent trends in measuring the ability of business schools to deliver their educational programs and research outputs concentrate on the triangle of engagement, innovation, and impact.³ These trends emerge from rapid development in the business environment and the needs of the community, reflecting the importance of

optimal recruitment of the resources available to business schools to enhance society affairs.

Communication and engagement are important to maintain legitimacy and articulate the three fundamental roles of business schools in a way that boosts the educational

¹ Department of Accounting, Qassim University, Al-Mulida, Saudi Arabia

² Department of Economics and Finance, Qassim University, Al-Mulida, Saudi Arabia

³ Department of Business, Qassim University, Al-Mulida, Saudi Arabia

Corresponding author:

Ali Abdullah Alnodel, Department of Accounting, Qassim University, PO Box 4667, Buraidah Qassim 51412, Saudi Arabia.
Email: nodl@qu.edu.sa



process, research outcomes, and community service.⁴ From the educational perspective, communication and engagement should result in students gaining adequate knowledge and skills required for students to add value to their employers and society.⁵ The research process and outcomes will also be in accordance with the needs, problems, and challenges faced by the business community and society.⁶ Therefore, the opportunities to find creative solutions and products that could have an impact on the local or global community will be enhanced, and the legitimacy of the business school will be maintained.

These fundamental objectives might be enhanced by the utilization of technology communication. In current days, technology plays a tremendous role in human communication and engagement with each other, resulting in significant social, economic, and educational changes.⁷ Computers, cellular phones, and the Internet, for example, have considerable influence on the way engagement and work are carried out. Many in the field of technology in education demonstrate the importance of technologies in helping organizations meet the needs of its communities.^{3,7,8-13}

Unfortunately, there is insufficient evidence about how business schools utilize technology in discharging their social responsibilities in the Middle East and North Africa (MENA) region. The review of previous studies reveals that none of them concentrating on the social responsibilities of business schools in the MENA region has investigated the utilization of technology in discharging their social responsibilities. A conclusion that can be derived from the previous studies is that there is a general criticism of higher institutions because of weak alignment with the society's needs.¹⁴⁻¹⁷ This might be due in large part to the tools of communication between schools and society. Based on this background, this study investigates how business schools in the MENA region utilize their websites to fulfill their social and community roles, and what factors impact this practice.

This study could make a significant contribution to the literature since it is covering all geographical areas in the MENA region and considering the impact of a variety of factors on website utilization by business schools in the region. It could have a number of implications since there is a crucial need in the region to develop their system of education.¹⁸ More specifically, business schools, regulators, and society could benefit from this study in developing their policies and procedures to enhance their engagement with the community.

The rest of the article is organized as follows. The next section discusses previous studies, followed by four sections discussing the research objectives, research methodology, and the results. The final section is the conclusion of the study.

The literature review

In the MENA region, many research works have concentrated on the issue of the social responsibility of universities,^{4,14-17} but none of them has investigated the utilization of technology in discharging these social responsibilities. A conclusion that can be drawn from these studies is that there is a general criticism of higher education institutions because of their weak alignment with the society's needs. This might be due in large part to the tools of communication between schools and society. Unfortunately, there is no sufficient evidence about how business schools utilize technology to discharge their social responsibilities. We can divide the relevant literature into two groups. The first group of studies emphasizes the issues of social responsibility and its impacts on enhancing the relationship between business schools and society. The second group of studies involves those issues relating to the impact of technology on education and the roles of business schools.

Societal expectations about the optimal level of involvement of institutions in social developments typically emphasize the university's resources and capacity to meet its social responsibility. Smerek et al.¹⁹ explain that institutions, individually or collectively, have the human, financial, institutional, and intellectual resources that enable them to play their participatory roles in social services, whether in the local or regional environment in which they operate. The study further criticizes institutions of higher education because their work is often deficient regarding the real impact on communities. From this vein, criticisms of business schools have long been pointed out by many authors. These criticisms range from being driven by markets,²⁰ irrelevance of their research,²¹ narrowness of scope and overspecialization of education,²² focus on amoral theories,²³ and insularity and isolation from business practice and society.¹

In the MENA region, previous studies have expressed much criticism of the institutions of higher education for failing to fulfill their social roles. Among these studies is research conducted by Hassan¹⁴; the purpose of her study has been to highlight the relationship between universities and the society. She demonstrates that this relationship is still full of some ambiguity and ignorance and states that universities are still far from playing an active role in providing services to their surrounding environment. The study stresses the importance of activating and documenting the relationship between a university and the society in which it operates, especially in the light of the scientific, cognitive, and technological boom. Aqel¹⁵ sheds light on the role that a university can positively play in influencing the society. Using a descriptive approach, the researcher reached some conclusions, the most important of which is that if the university wants to become part of the future, it must meet the current and future needs of the society, use modern information technology, and focus on skills such as problem-solving, innovation, and communication. In

another context, Perwadi¹⁶ criticizes Indonesian universities. The author emphasizes that Indonesian universities should play three roles: education, scientific research and development, and service to the society. The study suggests that this process should be taken as a partnership among universities, public institutions, and civil society organizations.

From the same theoretical perspective, other studies have attempted to explore the important benefits that can be gained by enhancing the role of universities in serving the local community. These studies argue that applying this concept can effectively redress a number of problems faced by institutions. One of these benefits is that the participating schools can better obtain financial and technical support as well as appreciation from the society.¹⁷ Similarly, others believe that the social programs offered by institutions will help schools to develop and improve the quality of teaching curricula in university colleges, making them more interactive and keeping them up to the needs of the local community, which would increase the employment and absorption rates of graduates of these institutions.⁴

On the other hand, some studies have emphasized the ethical dimensions of the social responsibilities of business schools. For example, Cortese²⁴ argues that despite efforts at the individual and group levels within the formal education system, education for sustainability is not a priority and those who graduated from the world's best colleges and universities are the ones who lead the world today in an unhealthy, unfair, and unsustainable path. The study pointed out that the contemporary educational process focuses mostly on the process of education, teaching, and competition, which leads to educational outputs that are far from the areas of cooperation for the social environment. The researcher adds that the quality of education requires sufficient consideration of global environmental crises in values, ideas, views, and knowledge, the lack of which could be seen as a crisis of education. According to this study, institutions should prepare and build professionals who are capable of developing, leading, and managing the educational and teaching process in a way that has a positive impact on the community. To achieve these goals, the article recommends that higher educational institutions should introduce environmental and sustainability decisions within their educational programs so that the outputs of these institutions can be integrated with the challenges of the society. Alzyoud and Bani-Hani²⁵ investigated the issues of social responsibility in higher educational institutions in Jordan. Their article aimed to discuss how universities could achieve development, sustainability, and competitiveness through applying University Social Responsibility (USR) concepts. They find that USR can be put into practice when university administrators emphasize responsibility to the public, ethical behavior, and the need to practice good citizenship.

From a broader scope, Johnston²⁶ investigates how schools approach sustainable development by comparing

the performance of 15 higher educational institutions in 12 member states of the Organization for Economic Cooperation and Development. She concludes that higher education is nowhere near optimizing its contribution to sustainability because schools do not align their visions with sustainability issues, as these schools still focus more on the learning and planning process than on delivering specific outputs. Johnston²⁶ further recommends combining traditional strategies with those relating to the development of sustainability to optimize the delivery of schools' vision.

Wade and Demb²⁷ suggest a model, depicting the relationship between universities and society. After reviewing the historical background of the role of colleges, the authors discussed specific activities, including teaching, community-oriented research, and some professional services to present a model that shapes community participation by the faculty of the colleges. The researchers then provided a model for faculty engagement from a holistic view and outlined the factors that influence the extent of community participation by the colleges.

These criticisms of business schools led a number of studies to argue that business schools need to change themselves to retain their legitimacy. A landmark work emphasizing this is the large international project initiated by the World Business School Council for Sustainable Business, jointly with some international organizations such as the Globally Responsible Leadership Initiative and the UN Principles for Responsible Management Education. This project argues that, nowadays, crises lie in business schools' responsibilities, requiring fundamental changes in business education and social participation to provide solutions to current crises.²⁸ Dyllick¹ reviews the literature on business education and argues that business schools need to transform themselves fundamentally to retain their legitimacy. One of the needed changes is to participate fully in providing solutions to society's problems, such as in economic growth and sustainability issues.

These fundamental objectives might be enhanced by the utilization of technology communication. Numerous studies are investigating the utilization of technology and social network in improving organizations' achievements. For example, focusing on the content of electronic word of mouth (eWOM), Cho and Chan⁷ investigated the influence of eWOM on online ratings. In their investigation, they have reported that weekly volume of posts, nature of positive (negative) comments relating to value for money and sound quality, and those posts from the earlier week imposed strongly on weekly sales of products. Siqing et al.¹¹ show the significant impact of social media platforms on the communication, propagation of ideas, and maintaining relationships. They researched communities to investigate the evolution patterns of social and content networks in a topic-oriented Douban group. Their findings show the importance of social media marketing and in directing and controlling public opinion.

Also, using content analysis and a content analysis information system, Kim and Baek¹² propose a quality requirement analysis method. They argue that social network system can be used to quickly and accurately identify specific requirements for products and services from a consumer perspective. In their findings, they show that smartphone manufacturers can obtain information about user demands and complaints regarding smartphone functions using the proposed method. Su et al.¹³ discuss challenges and opportunities of current social media such as tweets and Facebook posts. They have suggested a hybrid method to enhance reliability, validity, and efficiency in analyzing social media content. They argue that the dramatic increase in social media platforms produced a wealth of data about communicative processes and human relations and led to changes about how people communicate because of constraints and possibilities of social media such as tweets and Facebook posts. Their research provides an empirical demonstration of how the presented hybrid method can analyze defined communication sentiments and topics from large-scale social media data sets.

Zedan and Miller²⁹ use a social network analysis (SNA) approach to show the social networks of the stakeholders of a number of owner-occupied housing case studies in Australia. They argue that the degree of connectivity is an important source of influencing other stakeholders' decisions, suggesting integrating SNA with stakeholder management approaches. Ferraro and Iovanella³⁰ show how the connections' patterns affect the organization of the networks by showing the role of the members within the system. By using a case study, they provide environmental insights for possible decision strategies that can incorporate more effective actions. Zunk³¹ demonstrates the importance of a network of all supply chain actors for organizational success. Grimaldi and Hanandi³² find that competence indicators depend on the environment and sector where these indicators are applied in evaluating the intellectual capital of technology that should lead to competence and value in response to exogenous environments. Vucek et al.³³ assert that technological development that results in making a traditional approach to business process management (BPM) is not helpful anymore. They argue that the utilization of the social software principles in the management of business processes BPM, which is called social BPM, can help in overcoming limitations in the traditional BPM.

Within the focus of this study, some studies have concentrated on the utilization of technology by business schools to confront challenges. One of the most important topics that have been subject to extensive research is the utilization of technology in business education. For example, Parker and Burnie⁸ argue that in the modern business school, technology serves all areas of business education and can help schools substantially in their achievements. In their study, they surveyed the administrators and faculty of the Association to Advance Collegiate Schools of Business (AACSB) in the United States. They report an extensive

investment of technology by US business colleges. Massy and Zemsky⁹ emphasize the benefits that business schools can derive from technology, such as economies of scale, mass customization, teaching convenience, and alternative means of assessment. Kemelgor et al.¹⁰ report that technology is an important driver of organizational change in education, now and in future. International accrediting bodies, such as the AACSB, encourage technology investment and usage in business colleges.³

Technology utilization by business schools can be extended to include their engagements with the community and society. Cornuel³⁴ argues that business schools have to adapt themselves to make a positive contribution to their society through the use of technology. Bell³⁵ and Sutton³⁶ argue that even technology and society can be isolated from each other; they are held in opposition to one another because technology significantly causes social, economic, and educational changes.

Generally speaking, the review of related studies shows common criticisms of business schools in discharging their social responsibilities and deficiency in approaching their communities' needs. Also, previous studies have shown much evidence about the importance of technology in bridging gaps between organizations and society. Consequently, researchers and associations of business schools have recommended extensive technology investments and utilization to fulfill roles of business schools in society. In the MENA region, unfortunately there are limited studies investigating how business schools make use of technology in this respect. This study will investigate the utilization of the website by business schools in fulfilling their social responsibilities.

Research objectives

Although there is a diversity of studies that discuss the importance of the social role of business schools, there is insufficient work on how business colleges in the MENA region approach these duties, specifically in the area of communication and engagement with the community. Accordingly, this study concentrates on the utilization of website by business schools in the MENA region. It raises the following two major questions:

1. How do business schools in the MENA region employ their websites to communicate and interact with the community?
2. What factors affect the use of websites by business schools in the MENA region to communicate and interact with their communities?

Methodology

Data collection

This study adopted a content analysis approach to collect the required data. Websites of business schools in the

Table 1. Study sample.

| Variables | Frequents | Lower | Upper | Average |
|--|-----------|-----------|-----------|------------|
| Qualitative variables | | | | |
| Type of the college | | | | |
| Government | 91 | — | — | — |
| Private | 51 | — | — | — |
| International Accreditation of College Programs | | | | |
| Accredited | 25 | — | — | — |
| Unaccredited | 117 | — | — | — |
| Age of the College | | | | |
| Less than 25 years | 98 | — | — | — |
| From 25 to 50 years | 26 | — | — | — |
| More than 50 years | 16 | — | — | — |
| Quantitative variables | | | | |
| Population in the country | — | 1,331,000 | 82,800,00 | 25,839,838 |
| Population density in the state of the college | — | 4 | 1753 | 163 |
| Percentage of Internet users in the country | — | 0.02 | 0.90 | 0.463 |
| The level of per capita income in the state of the college | — | 1000 | 93,714 | 13,556 |
| Number of universities in the country | — | 5 | 48 | 23 |
| Percentage of universities to the population | — | 121,000 | 3,600,000 | 1,073,393 |

MENA region were surveyed. Collecting data from the websites of business schools was based on three main reasons. First, the importance of this means of communication to interact with the community, as it is one of the most important means of communication in our contemporary days because of its multiple benefits—absorptive capacity, rapid deployment, accessibility, storage capacity, and capacity for cost saving. The second reason relates to the scope of the study, as it is a survey of a large number of colleges from different countries, thus requiring a method able to cover the large population of these colleges, especially with the difficulty of alternative means to collect the required data. Third, some research studies with similar interests have frequently employed the content analysis approach.^{7,11–13}

The study population represents all the business schools in the MENA region. First, we used the University Directory in Arab countries issued by the Union of Arab Universities (2014), which includes more than 300 universities. A sample of 250 universities was randomly selected. Eight universities were excluded from the sample due to the lack of access or inability to navigate their websites. In the end, a sample consisting of 142 business schools from 20 countries in the MENA region was surveyed. Table 1 presents the data collected for this study.

The data were collected by the research team. Each website of each college was reviewed; then, the items were marked by assigning 1 where the item is presented and (0) otherwise. Then, an average was calculated for each business college based on the total of the disclosed items to the total items that are supposed to exist. To verify the accuracy of the coding and recording of the data by the team members, a sample of each member's coding was tested by another member for consistency and accuracy.

To collect the necessary data, a checklist was designed, which included 21 items related to different aspects of the interaction between business schools and society. Table 2 presents these items according to the three subgroups.

To ascertain the appropriateness of these items, the Cronbach Alpha test was used to validate the instruments. It gives a score of more than 70%, which gives reassurance about the suitability of the items to convey the business schools' engagement and communication with society.

Research model

In constructing the intellectual framework and the underlying assumptions of the research, previous studies were reviewed. A regression model for the relationship between the dependent variable and the independent variables is illustrated in Table 3. The dependent variable is the business schools' scores for their communication and engagement with their community using their websites in fulfilling their social role, which is calculated as the average of the disclosed items on the business school's website to the total items that should be disclosed. The independent variables are age, type, and international accreditation of business schools as well as population density, income level, and rate of Internet users in the state of the business schools.

Descriptive analysis

Even though there is a tendency among business schools in the MENA region toward confirming their social roles through the vision and goals on their websites, it is still not a common practice among colleges in the region. Table 4 shows that 28% of the total business schools emphasize their social role. This reflects, to some extent, the gap that

Table 2. The engagement of business colleges to fulfill their social role.

| Items | Average | Standard deviation |
|--|---------|--------------------|
| First: Confirming the social role of the business school faculties | | |
| Does the college message give explicit statements about the university's partnership with the community? | 0.33 | 0.472 |
| Does the college vision provide vocabulary for leadership in community service? | 0.24 | 0.428 |
| Do the college goals include one or more goals to associate with the community? | 0.55 | 0.499 |
| Do the values and principles of the college clearly reflect the spirit of community partnership? | 0.08 | 0.279 |
| Does the Dean's word include the faculty's keenness to serve the community? | 0.27 | 0.444 |
| Does the Dean's word contain a central problem for society? | 0.03 | 0.166 |
| Second: The implementation of social role by the business colleges | | |
| Does the college have national/regional/international initiatives in a community issue? | 0.23 | 0.419 |
| Does the faculty have centers/units that reflect its mission toward society? | 0.46 | 0.500 |
| Does the college have specialized educational programs to serve the community? | 0.43 | 0.497 |
| Are there any courses on ethics? | 0.16 | 0.370 |
| Are there courses on Social Responsibility? | 0.06 | 0.245 |
| Are there any courses on sustainable development? | 0.04 | 0.202 |
| Are there any decisions on protecting and preserving the environment? | 0.06 | 0.231 |
| Does the faculty have periodic activities that reflect its partnership with society? | 0.29 | 0.455 |
| Third: Report and disclosure of business colleges regarding their social role | | |
| Are faculty members interacting with the community? | 0.44 | 0.498 |
| Does the college give any offer to agreements with the community? | 0.31 | 0.464 |
| Does the college give a special site or link to its activities with the community? | 0.38 | 0.487 |
| Does the college expose the community to its strategic plan? | 0.15 | 0.356 |
| Does the college give periodic electronic reports on its community activities? | 0.18 | 0.388 |
| Does the college offer its annual plan for community service? | 0.04 | 0.202 |
| Does the college disclose the financial costs of its community activities? | 0.00 | 0.000 |

exists between business schools and their communities, whether because of insufficient media coverage or because these schools are far more interested in education and teaching than investing in real engagement with their communities.

Table 3. Dependent and independent variables of the study.

| Dependent variables | | Measurement |
|-----------------------|--|--|
| Rt | The communication and engagement of the business schools with their community through their websites | Disclosed items/total items |
| Independent variables | | |
| AG | Age of business school | Number of years of the business school |
| Ty | Type of business school | Public versus private university |
| Ac | International accreditation of college programs | Accredited versus nonaccredited |
| PD | Population density | State population |
| IL | Income level | State income |
| IU | Internet users | Percentage of Internet users |

Table 4. The engagement of business schools with their community.

| | Lower | Upper | Average | Standard deviation |
|---|-------|-------|---------|--------------------|
| Confirming the business faculties of their social role | 0.000 | 0.857 | 0.339 | 0.195 |
| The implementation of social roles by the business colleges | 0.000 | 0.818 | 0.283 | 0.223 |
| Report and disclosure of the business colleges' social role | 0.000 | 0.857 | 0.214 | 0.227 |
| Average | 0.000 | 0.856 | 0.279 | 0.237 |

Table 4 shows that emphasizing the social role by the business schools in their vision and goals is the most common practice among these schools. Almost 34% of these schools have addressed these roles in their vision and goals.

On the other hand, the implementation of social role by business schools comes low, as the efforts to perform this role do not exceed the average of 28% among the business schools surveyed. Among the most important efforts on these issues identified in the websites of business schools is the establishment of a unit or center for community service, on the basis that these units or centers work to link the college with the community, whether in implementing joint programs with the community or directing research to serve the community (as shown in Table 2 in the previous section). Although this ratio is considered low, it reflects a growing awareness among business colleges to interact with the community's issues.

Furthermore, there is a significant infrequent practice within the business schools in the MENA region in terms of providing courses emphasizing, for example, the issues of sustainable development or that are related to business

Table 5. The engagement of the business schools with their society on their websites.

| Dependent variable: Rt | B | Standard deviation | β | t | Sig. |
|-------------------------|--------|--------------------|-------------|--------|-------|
| Constant | -0.117 | 0.064 | — | -1.822 | 0.071 |
| AG | 0.039 | 0.19 | 140 | 2.087 | 0.039 |
| Ty | 0.043 | 0.28 | 0.109 | 1.562 | 0.121 |
| Ac | 0.11 | 0.035 | 0.221 | 3.129 | 0.002 |
| PD | -0.015 | 0.02 | -0.055 | -0.739 | 0.461 |
| IL | 0.055 | 0.017 | 0.254 | 3.291 | 0.001 |
| IU | 0.095 | 0.019 | 0.407 | 5.051 | 0.000 |
| Sample | | | 142 | | |
| R ² | | | 0.47 | | |
| Adjusted R ² | | | 0.45 | | |

ethics and social responsibility or preservation of the environment, whereas the proportions of these items do not exceed 4%, 16%, and 6%, respectively. This may indicate that there is a gap between the concepts of social role, which is emphasized by the mission and goals of the college, and the practical educational process and research within these colleges. This is very likely to significantly affect the achievement of the core goals of the college's engagement and communication with the community and thus the development of these colleges' academics and research. Recent trends and accreditation standards emphasize that engagement with society is an important means for innovation and access to the desired impact.³ This result supports, to some extent, the findings of Johnston²⁶ and Dyllick¹ arguing about the difficulties in aligning between schools' vision and social issues.

This gap in communication is further demonstrated by the tendency of the business schools to report and disclose what has been done to fulfill the social role of the college. The percentage of colleges that report their social initiatives on their websites does not exceed the average of 21% of the colleges surveyed. For example, most colleges do not give details of their strategies and plans about their social role to enable the community recognize the extent of its engagement with the community. Of those colleges, only 15% put their strategic plans on their own websites and 18% provide periodic electronic reports on their community activities (see Table 2). This might be representing what has been reported by Su et al.¹³ about the challenges of employing modern technologies in social communications.

Regression results

A multiple linear regression employing ordinary least squares (OLS) was conducted to examine the relationship between the scores for the business schools' communication and engagement with their community using their websites and independent variables (age, type and academic accreditation of business school and population density, income level and rate of Internet users in the host country). Appropriate tests that are applied for checking

the OLS assumptions, normality, linearity of the data are approved, with no multicollinearity since tolerance and variance inflation factor (VIF) are within the acceptable levels. The regression results are obtained using standard stepwise approach in SPSS statistics software [version 23] and are summarized in Table 5.

The results show that three factors have a significant impact on the communication and engagement of the business schools in the MENA region with their society. As shown in Table 5, the regression analysis shows that the prevalence of Internet use, the level of per capita income, and the extent to which the business schools have access to international academic accreditation are the most influential variables affecting the effectiveness of the business schools in performing and reporting their societal role in their websites.

The value of R^2 is 0.47, meaning that the independent variables can explain 47% of the differences and changes in the engagement of the business schools with society through their websites. These findings show that the economic factors and welfare in the host country are the decisive factors in the attitude of business schools in disclosing their engagement with their community and not the need of the society itself, indicating that the role of business schools in interacting with the society comes as a product but not an influential one. Thus, in general terms, the results of the regression analysis reveal a separation between societal needs and the business schools in the MENA region.

As shown in Table 5, the percentage or rate of Internet users is among the most influential variables affecting the effectiveness of business schools in utilizing their website in performing their social role. The equation shows that the relationship between the rate of Internet users and the social responsibility of the business schools is positive and that the value of the variable is 0.095. This means that a change of 1% in Internet users leads to a change of 0.095 in the level of community service. It also supports the value of T , which is equal to 5.05. This can be explained by the fact that business schools can employ their websites in an environment that allows for such communication with the initiatives offered by these colleges. Therefore, the higher

the percentage of the community using the Internet, the greater the effectiveness of the college in performing its social role. This reflects the importance of the increased use of technology in the society¹³ and the importance of such technology in aligning services and products with intended users.¹²

The second variable (level of per capita income) comes second in terms of the impact on the social role of the business schools. The data in Table 5 show a positive relationship between the two variables. The equation shows that a change of 1% in per capita income may lead to a positive change in the level of community service in business schools by 0.055, and the value of T supports that trend at 3.29.

The results also show that the international accreditation of the business school is a determined variable, explaining the engagement of the business schools in the MENA region with their society. It suggests that the business schools that have access to international academic accreditation positively engage with their community through their websites. However, this variable is ranked third among the explanatory variables. Equation (1) shows that a change of 1% in the international academic accreditation variable results in a positive change of 0.11 in the effectiveness of the business schools and their social roles. The value of T confirms this effect at 3.13. This variable underlines the importance of adopting programs in line with the international academic accreditation standards that enhance the commitment of business schools to issues of innovation, impact, and community partnership.³ Also, these results support the arguments of Parker and Burnie⁸ about the utilization of technology by accredited business schools in the United States.

The age of the business schools is an important part of the community roles of these schools. In spite of this positive relationship between the age of the college and the level of its social role and engagement, it comes in the fourth place in terms of statistical significance at the level of 5%. A change of 1% in the age of the business school may lead only to a change of 0.039 in the level of community services provided by universities. But despite the low rate, the value of (T) is equal to 2.09.

In contrast to these influential factors, the results of the multiple linear regression analysis do not show a significant relationship between the type of business schools (public versus private) or the population density and the engagement of business schools with society through their websites. Table 5 shows that a change of 1% in the type of college/university variable leads to a change of only 0.043 on the engagement variable with the community of business colleges. There may be some justifications for private business schools, but for government business colleges, this means a poor indicator, as it reflects the fact that government business schools do not make a different use of available resources in comparison with private business schools in interacting with the community through their websites.

This may be due to their focus on their educational role due to the large number of students in those public colleges. These results also support the criticisms provided by a number of researchers about the role of business schools.^{1,20-23}

Similarly, the density of the population or the ratio of the number of universities to the population does not affect the engagement of business schools with their surrounding community. Table 5 shows that the relationship is inverse but not significant. The equation suggests that if the variable increases by 1%, the business school's effectiveness level is expected to decrease by 1.5%. This may indicate that, in densely populated societies, the focus is more on the educational process than on community service. While this makes sense, it creates some difficulty as to how to reconcile the capacity of colleges in these communities to create an environment capable of achieving excellence and engagement with society.

In general, these findings confirm that the business schools in the MENA region and their social programs and engagement stem from economic factors and the welfare of the society in which they operate, and not from the society's need for development. This may lead to a fundamental deficiency in the ability of the business schools to fulfill their roles toward achieving and influencing society's aspirations.

Conclusion and recommendations

This study aims to investigate the communication and engagement of business schools in the MENA region with their society through their websites. Previous studies have shown that fulfilling this responsibility requires asserting it and activating the implementation of various initiatives and communication with the surrounding society.³⁴

The study used the content analysis approach in the collection of data from the websites of a sample of business schools in the MENA region. A total of 142 colleges' websites from 20 countries in the MENA region were investigated.

Generally, the results show a tendency toward emphasizing the social responsibilities of business schools on their websites; however, this is still below expectations. Furthermore, the study demonstrates that some factors are of great importance in determining the extent of utilization of website by business schools to communicate with society, specifically the level of income, Internet user rate in the host country, and the academic accreditation of the college.

These results are in contrast to what is expected from business schools. Despite the need by the least developed communities for the contribution of business schools to meet their needs, these results show that the situation of economic stability is a central factor in the expansion of business schools in the MENA region, in the areas of social responsibility and utilization of websites. Perhaps, the most

important reason for this is the involvement of the business schools in the educational process at the expense of the rest of their roles because of factors relating to social and economic conditions such as the lack of resources, adoption of the traditional university role, and population. These results support the criticisms by some researchers of the role of business schools.^{1,20–23}

Since there is a crucial need in the region to develop the system of education,¹⁸ these results could have a number of implications. More specifically, business schools, regulators, and society could benefit from this study in developing their policies and procedures to enhance their engagement with the community. Accordingly, the study recommends that business schools in the MENA region highlight and emphasize the role of these colleges in the area of social responsibility. This may be enhanced through better engagement and communication with their stakeholders through modern technology. Also, the study recommends that business schools in the region adopt the standards of international academic accreditation, especially those that advocate the need for community partnership and sustainability of the surrounding society. This should help in retaining their legitimacy in the society.

Like other research, this study is not without some shortcomings that should be mentioned. The most important of these shortcomings is its reliance on the methodology of content analysis and focus on the websites of business schools. Even though this point is important, it is justifiable by the difficulty of adopting other means like a survey, which would be very difficult to cover all these schools across all geographical areas. Another justification for the use of this method is that the use of websites to communicate with stakeholders is considered effective, especially nowadays. The research deficits that may also be mentioned include the possible impact of coders on the process of data collection. This matter has been mitigated by trying to reconcile the coding of each investigator with each other.

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