

Digital marketing for Saudi Arabian university student recruitment

Digital
marketing to
recruit
students

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Abstract

Purpose – The purpose of this paper is to develop a digital marketing capability maturity model (CMM) as a guiding framework in support of increasing international student recruitment to the public universities in Saudi Arabia (SAPUs).

Design/methodology/approach – The CMM was constructed by comparing the common practices of Web 2.0 usage for international student recruitment from five SAPUs and from five Scottish universities. The stages of the awareness, interest, desire and action (AIDA) marketing model were used to guide the analysis of the data and used as the business processes for the CMM.

Findings – All SAPUs use Web 2.0 for the recruitment of international students focusing on awareness and interest, but the content often lacks consistency and depth. Scottish universities use Web 2.0 across all stages of the AIDA model, and the content often has greater consistency and depth.

Research limitations/implications – The analysis draws on published content from a small sample of SAPUs and Scottish universities but did not solicit the views of the staff about the content's effectiveness.

Practical implications – This study extends the knowledge about the strategic use of Web 2.0 in SAPUs for addressing international student recruitment marketing challenges.

Social implications – Increasing the international student population at SAPUs is one strategy in the Kingdom of Saudi Arabia's 2030 vision to reduce its dependency on oil exports.

Originality/value – This study applies the AIDA model to develop a CMM for the use of Web 2.0 in SAPUs explicitly for international student recruitment.

Keywords AIDA model, Capability maturity model, Digital marketing

Paper type Research paper

Background

The Kingdom of Saudi Arabia (KSA) is a country with a population of about 33.5 million, 40 per cent of whom are younger than 25 years old (CDSI, 2018). For many years, the country's economy has been dependent on its oil reserves. However, the 2030 vision for KSA is to decrease the state's dependency on oil exports by increasing the exports of a broad range of other products and services. Achieving this goal requires a significant strategic investment in human



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capital. One element of this plan is to encourage the KSA public universities (SAPUs) to internationalise and increase the diversity of their knowledge base. KSA has 34 public higher education (HE) institutions (including 27 universities). International students comprise 1–2 per cent of the KSA student population. Recruitment is focused on Arabic-speaking students.

Recruiting more international students to SAPUs is a complex task that has many dimensions. One of these is to develop more sophisticated digital marketing approaches. Digital marketing means processes for creating, communicating, delivering and exchanging offerings that have value for customers, clients, partners and the society at large using digital channels ([American Marketing Association, 2013](#)). The most popular channels are websites, social media networking platforms, chat rooms and email. They are collectively known as Web 2.0 technology and enable interactions and collaborations in synchronous and asynchronous communications.

In this paper, we propose a digital marketing capability maturity model (CMM) ([Paulk et al., 1995](#)) to enable SAPUs to benchmark and enhance their use of Web 2.0 technologies for international student recruitment. A CMM is a matrix model of capability levels (columns) for a set of processes (rows) that are deemed highly relevant to one or more organisational business goals. It can help with diagnosing an organisation's current process maturity level and offer a roadmap to enhance quality, effectiveness and efficiency. To construct the CMM, we examined the use of Web 2.0 technologies at five SAPUs and compared these to five public universities in Scotland. We had three objectives: to investigate to what extent Web 2.0 has been used in SAPUs for international student recruitment, to explore the range of practice capability in doing so and to develop a CMM to strengthen practice capability.

Literature review

The use of Web 2.0 technologies within KSA universities

The use of Web 2.0 technologies, also known as social media, is viewed as being of great importance to branding and recruiting initiatives of universities ([Bennet et al., 2012](#)). In KSA, the extent to which Web 2.0 marketing is a prominent feature of student recruitment is mixed. [Alwagait et al. \(2015\)](#) investigated its use in marketing for student recruitment to SAPUs and found that Twitter and Facebook were the most commonly used platforms, but were often inefficiently applied, e.g. supporting multiple accounts for the same person. [Alsufyan and Aloud \(2017\)](#) found that engagement of SAPUs with prospective students using Facebook, YouTube, LinkedIn and Twitter was broadly low and largely targeted at domestic students. [Rutter et al. \(2016\)](#) argued that while many organisations deploy Web 2.0 technologies, some fail to understand how to use them in the most accurate way to positively impact their reputation and image. Examples of negative impact would be poorly designed Web 2.0 pages and ineffective paid advertising. At some universities, there is also a lack of skills to use these technologies ([Khan et al., 2017](#)). Hence, a key challenge to be addressed in this paper is the lack of guidance in developing the strategic use of Web 2.0 technologies to achieve recruitment objectives.

Capability maturity models

A CMM offers guidance for the continuous improvement of a thematic set of activities in a disciplined and consistent manner. A CMM was originally designed for software development improvement, but modifications have been implemented for use in different organisational contexts and business processes ([Wang et al., 2016](#); [Al-Ammary et al., 2016](#); [Naser et al., 2016](#)). Examples from HE include strategic operations ([Duarte and Martins, 2013](#)), evaluation of social inclusion mechanisms ([Haezendonck et al., 2017](#)), quality assurance ([Silman et al., 2012](#)), quality improvement of e-learning in HE ([Tawsopar and Mekhabunchakij, 2009](#)) and development of academic software quality programmes ([Llamasa-Villalba and Aceros, 2010](#)).

A CMM comprises five process capability maturity levels. Level 1: *initial* is a stage in which organisational systems and processes are often poorly defined, and the organisation relies heavily on the competencies of individual designers. Process success is not well understood and difficult to replicate, leading to a failure to meet deadlines and/or excessive resource expenditure. In Level 2: *managed*, organisations emphasise planning and policy making, and individual projects and products are designed and monitored with basic controls in line with these plans and policies; however, there remains inconsistency across projects. In Level 3: *defined*, consistent project processes are executed across a range of different projects and activities; however, variations in some process steps are permitted. In Level 4: *quantitatively managed*, organisations develop a set of quantitative quality goals and measures to monitor the performance of their processes and create a database of metrics to support the development and maintenance of benchmarks. In Level 5: *optimising*, organisations focus on enhancing their process effectiveness through continuous analysis of costs and benefits of new technologies and process steps. A higher level assumes and extends the best practices of the preceding level.

Chaffey and Ellis-Chadwick (2016) proposed a CMM that took a broad strategic corporate perspective on digital marketing. It had six processes: digital channel strategy development, online customer acquisition, online customer conversion and customer experience, customer development and growth, cross-channel integration and brand development and overall digital channel governance, including change management. Table I shows other work that has taken a broad perspective. A limitation of these models is that the broader they are, the more generic they are, and require significant adaptation to meet an organisation's specific needs and context. Consequently, many sectors and organisations develop their own narrower more specific CMMs. The CMM in this paper falls into that category.

Methodology

Overview

We examined the use of Web 2.0 digital marketing tools for international student recruitment in some public universities in Scotland and compared this to the use of the same tools in some SAPUs. We chose Scottish universities as a benchmark for several reasons: their number is similar to the number of SAPUs, they have a considerably larger international student population than SAPUs (HESA, 2017) and they make extensive use of Web 2.0 technologies.

Digital marketing business processes

To develop a CMM that fits the specific needs and addresses the challenges facing SAPUs in recruiting international students, we used the four business processes of the AIDA marketing communications model (Barry, 1987; Rehman *et al.*, 2014; Hassan *et al.*, 2015). Our focus was to evaluate the extent to which Web 2.0 technologies were deployed to underpin these processes. AIDA covers the time when a consumer first becomes aware of an education service to the time when they make a purchase decision. The processes are:

Awareness: developing university brand recognition within a targeted population of international students;

Interest: communicating the benefits of studying at a SAPU and encouraging further investigation;

Desire: creating an emotional response (shifting needing/liking to wanting) through promotional strategies that increase willingness to choose the university; and

Action: sharing information and offering assistance that helps a prospective applicant to easily apply to the university.

Model	Description	Strengths	Constraints
Organisational dynamic capability model (Bolat <i>et al.</i> , 2016)	<p>Four capabilities:</p> <ol style="list-style-type: none"> (1) Market sensing (2) Managing relations (3) Branding (4) Developing content 	Distinguishes skills and know-how for deploying mobile social media capability for each level	Focuses on advertising industry in business-to-business (B2B) environments. Based on a single operational level rather than maturity levels
Social media excellence (Chaffey, 2018)	<p>Five capabilities:</p> <ol style="list-style-type: none"> (1) <i>Initial</i> (un-purposed social media usage) (2) <i>Managed</i> (defined goals) (3) <i>Defined</i> (SMART objectives) (4) <i>Quantified</i> (measuring social media activity statistically) (5) <i>Optimised</i> (return on investment in reviewed) 	The model is constantly updated by smart insights' research group to inform latest and best practices of social media	Focuses on plans and activities without attention to staff capabilities to deliver these
Organisational strategic capability (Nguyen <i>et al.</i> , 2015)	<p>Three capabilities:</p> <ol style="list-style-type: none"> (1) Acquire knowledge from social media (2) Integrate knowledge (3) Apply knowledge in alignment with an organisation's strategic directions and choices 	Focused on how social organisational behaviour can lead to successful integration of social media in the implementation of an organisation's strategy	Switches between organisational change and marketing strategy; grounded in cultural and economic context of China and its commonly used Web 2.0 technologies, e.g., WeChat, Weibo
Social media capability in B2B communication (Wang <i>et al.</i> , 2016)	<p>Five capabilities:</p> <ol style="list-style-type: none"> (1) Transmission velocity – speed which social media message reaches target audience (2) Parallelism – extent of mutual understanding between sender and receivers (3) Symbol sets – flexibility rate in encoding message (4) Rehearse ability – can message be edited before sending (5) Reprocess ability – can message be edited/ deleted after sharing 	Developed a model for improving marketing communication skills limited to B2B practices of small and medium enterprises (SMEs)	The focus is on B2B practices in SMEs Limited to Chinese SMEs and Web 2.0

Table I.
Digital marketing
capability studies

(continued)

Model	Description	Strengths	Constraints
Social media capability in B2B marketing (Wang <i>et al.</i> , 2017)	<p>Four capabilities:</p> <ol style="list-style-type: none"> (1) Technological – understanding and categorising the different social media sites according to the strategic aim(s) of the organisation (2) Operational – building online communities to increase the benefits of usage (3) Managed – evaluation, control and measurement mechanisms for social media performance and results (4) Strategic – ensuring the organisation has the necessary cultural and individual capabilities for long-term social media deployment in its business 	Developed a model which suggests having a dynamic environment capability that utilises socio-cognitive approaches to individuals' skills differences is necessary for successful deployment of Web 2.0 in B2B marketing	Descriptive study based on literature analysis of 112 articles; no primary data have been collected

Table I.

We chose the AIDA model because it is simple and widely understood but is flexible enough to allow for universities' different starting points and capabilities. This model has been applied within a digital environment for the strategic use of social media within organisations (Rehman *et al.*, 2014; Hassan *et al.*, 2015).

Sample selection

First, we determined which SAPUs and public universities in Scotland used the Web 2.0 technologies Twitter, Facebook and Instagram, for international student recruitment. All SAPUs have a presence on all three. Of the 19 universities in Scotland, 18 used Twitter, Facebook and Instagram; one did not use Instagram. Second, we selected a sample of five universities from each country by choosing one from each of the five quintiles of league table rankings (Table II). For SAPUs, we considered a general ranking table (Webometrics, 2018). For Scottish universities, we considered a social media ranking (Times Higher Education, 2017) and some general rankings (Times Higher Education World Ranking, 2019a, b, c).

We performed a content analysis of more than 4,500 Twitter, Facebook, and Instagram posts made between 18 January and 31 May 2018, across the selected SAPU and Scottish universities. The posts we examined were made by current and potential international students and by university staff. We read each post and recorded whether it belonged to one of the four business process categories (A, I, D, A), and for each process, we analysed the posts allocated to identify recurring themes.

Findings and discussion

Table II shows the number of posts examined at each university on each social media platform. On average, the range of posts reviewed for each of the universities was around 200

Table II.
Representative sample
of five KSA and five
Scottish universities

University	Number of posts			Social media rank	National rank	Overall AIDA percentages
	Twitter	Facebook	Instagram			
King Abdulaziz	68	165	210	N/A	2	A: 50% I: 35% D: 10% A: 5%
King Faisal	354	64	400	N/A	8	A: 50% I: 35% D: 10% A: 5%
Najran	61	8	150	N/A	12	A: 50% I: 35% D: 10% A: 5%
Ha'il	198	2	111	N/A	19	A: 50% I: 35% D: 10% A: 5%
King Saud	359	330	81	N/A	1	A: 50% I: 35% D: 10% A: 5%
Total KSA	1040	569	952			
Glasgow	346	60	93	7	2	A: 25% I: 25% D: 25% A: 25%
Strathclyde	142	50	75	59	8	A: 30% I: 30% D: 25% A: 15%
Dundee	94	195	63	55	5	A: 30% I: 30% D: 20% A: 20%
Aberdeen	168	210	96	53	3	A: 20% I: 30% D: 25% A: 25%
Q. Margaret	210	190	20	114	15	A: 50% I: 35% D: 10% A: 5%
Total Scotland	960	705	347			
Total sample	2,000	1,274	1,299			

posts for Twitter, 130 for Instagram and 127 posts for Facebook. Some principal differences between the Scottish universities and the SAPUs are:

- (1) at both SAPUs and Scottish universities, the most popular channel across the sample was Twitter;
- (2) at SAPUs, the social media posts were in Arabic or English, whereas at Scottish universities, they were in English;
- (3) at SAPUs, the total number of posts was 27 per cent higher than at Scottish universities;
- (4) at SAPUs, the content focused on the quality of the education experience on offer, whereas at Scottish universities, it also covered how a good education underpinned a successful career and broader contributions to local, national and international society;
- (5) at SAPUs, there were few examples of using the social media channels to promote research innovations, methods of knowledge exchange or working with businesses;
- (6) at SAPUs, explaining how to construct an application and how to apply was not a strong feature of social media engagement, whereas at Scottish universities, pointers to this activity were more frequent and more transparent;
- (7) at SAPUs, around 85 per cent of the posts are concerned with awareness or interest, whereas for the Scottish universities, the posts are spread more evenly across all four stages of the AIDA model; and
- (8) branding emerged as a key element across all CMM levels.

A digital marketing CMM for SAPUs

Table III shows a proposed CMM for SAPUs to evaluate and enhance their international student recruitment activities using Web 2.0 technologies. Below we have set out an explanation of what is typical for that level of capability for each business process. The assumption is that the strengths of a lower level are carried forward into the higher level.

Level 1 “initial”

Awareness: Recruitment marketing processes focus on developing brand recognition through Web 2.0. Social media channels are key to communicating the HE brand in the marketplace (Nguyen *et al.*, 2015). Currently, Twitter is a valuable social platform for brand communication. Whilst post numbers are indicative, alone they are not a predictor of marketing effectiveness; the range of content is more important (Rodriguez *et al.*, 2012). The recruitment focus is on KSA nationals and other Arabs. Non-Arab international students typically learn about SAPUs from the English language version of their websites.

Interest: There is a description of the quality of education and the university campus, facilities and geographical advantages. For example, a key geographical advantage of SAPUs for Muslim students is its geographical closeness to Islamic pilgrimage sites and attractions. Information is also set out on culture, language and social life and how studying and working in KSA addresses the needs, backgrounds and expectations of international students. This information includes clarifying and addressing objections and negative views that local and foreign students might hold on these issues.

Desire: Creating desire through Web 2.0 at this level is inconsistent and unfocused. A common promotional strategy is personal selling, i.e. face-to-face contact with representatives at university fairs.

Action: A common feature is a lack of clarity around the detailed processes and instructions for applying as an international student. Information on admission requirements, the forms required to be completed by an applicant, deadlines, to whom applications should be sent, how they will be processed and when to expect an outcome vary considerably both in their availability and level of detail.

Level 2 “managed”

Awareness: The focus of raising awareness is on perceived brand differentiation through Web 2.0. The development of a distinctive brand helps to create a sustainable competitive advantage in the HE sector (Hemsley-Brown and Goonawarda, 2007). A university should

AIDA elements	Level 1 Initial	Level 2 Managed	Level 3 Defined	Level 4 Quantitatively managed	Level 5 Optimisation
Awareness	Brand recognition	Brand differentiation	Brand preference	Brand loyalty	Brand advocacy
Interest	Education and university facilities	Professional development	Professional and personal development	Society welfare	Global interest
Desire	Unfocused appeal	Credible appeal	Emotional appeal	Scientific appeal	Multiple appeals
Action	Disconnection with personal messages	Occasional connection with personal messages	Some regular connection with personal messages	High connection with personal messages	Immediate connection with personal messages

Table III.
Digital marketing CMM for international student recruitment by SAPUs

consistently position, capitalise on and creatively communicate its unique values and services that stand out among competition in the global marketplace, but often, this does not happen. For example, some research-intensive universities promote their innovations, methods of knowledge production, working with businesses and their international technology expertise.

Interest: There is a description of the high-quality academic training and professional development that leads to successful job opportunities. Universities attract talented students by delivering a brand promise that their educational services can produce competitive graduates who will have highly rewarding careers. Academic and professional career potential is explained for by showing how qualifications from an SAPU is readily recognised by KSA employers and pointing to www sites where work opportunities in KSA are advertised.

Desire: To make their educational services internationally desirable, universities focus on communicating the credibility of their educational services. This is based on assuring prospective students they will develop and enhance their skills and knowledge to match the Middle Eastern labour market requirements. Descriptions of alumni career pathways are provided.

Action: The admission process is fully electronic at this maturity level through the university website. The website link may be shared in Web 2.0 announcements that help prospective students, but personalised answers to applicants' questions and comments are not the norm.

Level 3 "defined"

Awareness: Building awareness at the third level focuses on establishing brand preference. Brand preference is choosing a brand over others that are similar in price and availability. Argue that corporate brands take shape and evolve from continuously engaging with multiple stakeholders. While universities differentiate their brands from other sector offerings, they find it harder to differentiate their brand within the HE sector. In this case, explain why a student should choose your university when other universities offering similar programmes are also available. Social media channels are used to cultivate long-term relationships with potential students rather than for communications based on a single activity, e.g. promotional offer.

Interest: Creating interest needs to cover more than just delivering a brand promise of building a successful career. Many students, especially millennials, seek graduate qualifications not only for tangible reasons such as for career opportunities, but also for intangible reasons such as self-respect and satisfaction. Explain why a university education offers a platform for more well-rounded professional and personal needs. Some universities share videos on their Instagram account of graduates explaining their reasons for joining the university.

Desire: The use of an emotional appeal is adopted at this level. Some universities send welcome posts to prospective and newly recruited students and greetings to all students emphasising international holidays and religious festivals. For SAPUs, an emotional appeal to their international audience might include showing how their diverse cultures, education backgrounds and skills can help can change the future of a significant Middle East country and its surrounding region.

Action: Whilst a website is the main source for receiving applicant enquiries, Web 2.0 technologies are more widely used to encourage enquiries. More use is also made of personalised videos and messages from students and alumni about their experiences and career pathways. Nevertheless, responsiveness to addressing these enquiries can still be improved.

Level 4 “quantitatively managed”

Awareness: The aim is to build brand loyalty by reflecting upon students’ performance and attitudes towards the university. Within social media, building an online university brand community can help to enhance brand loyalty (Laroche *et al.*, 2013). Building online brand communities enhances the bond amongst its members, e.g. university, existing and potential students, and creates a feeling of community, which creates value for the students and the university (Laroche *et al.*, 2012). Social media channels can be used to develop interactive experiences within their brand communities to encourage engagement rather than delivering information (Nevzat *et al.*, 2016), beyond creating emotional responses to technical content. This approach is underpinned by the development and implementation of policies for the proper and ethical deployment of digital communication suitable for the university’s context.

Interest: Creating an interest at this level goes beyond self-interest. Thus, the marketing communication does not focus only on career opportunities and self-satisfaction, but how gaining graduate qualifications positions one to make broader contributions to local, regional and national public life. Social media platforms can be used to showcase examples of staff and students actively engaged in a wide range of projects from local community initiatives to international campaigns.

Desire: Creating desire at this level is through an evidence-based approach by sharing facts and successful career experiences of university graduates. Each programme provides examples of current students and recent alumni who explain why they joined the programme and the range of personal and professional benefits it has brought them.

Action: High-quality personalised responses and services through Web 2.0 technologies are offered to assist followers, but often, only at fixed working hours and responses may be up to 24 h.

Level 5 “optimisation”

Awareness: The fifth level focuses on boosting awareness via brand advocacy by encouraging loyal customers (brand ambassadors or advocates) to provide positive information about the organisation to other members with a brand community and within their own networks (Sashi, 2012). Brand advocates may be 50 per cent more impactful than average consumers and 58 per cent more likely to advocate brand information through Web 2.0 (Dunnhumby, 2018). At this level, universities have realised the importance of customer development and recruit existing students to help the development and management of their Web 2.0 marketing tools. Individuals who grew up using the internet such as digital natives are often very capable of making considerable contributions to changes in managing digital communications (Jones *et al.*, 2010). They can help build technology platforms that can collect and disseminate relevant recruitment process data to help universities and provide a market intelligence function to understand competitors’ actions. Student brand ambassadors help to spread positive information about a university’s commitment to learning and teaching, to the support offered to students during their studies, to the excellence of the university facilities, to its exciting and world-class research and to its various interactions and engagements with government, industry and other stakeholders.

Interest: International students often have international ambitions, so interest is created about the relevance of the programme, the university and the country to global ideas. An emphasis is placed within self-promotion to the global impact of research innovations, to the international rankings for learning, teaching and the student experience, to the worldwide reputation of leading academics and to the prizes and accolades achieved by the university and its staff and students.

Desire: To create desire at this stage, the appeal is personalised according to the situation at hand. The type of appeal, e.g. emotional, logical or even credibility, is adopted based on the

needs and wants of the targeted students' educational level (e.g. undergraduate, graduate), field of study and demographical background.

Action: Personalised marketing information is sent out immediately on first contact. Several follow-up contacts are made as part of a disciplined planned individual recruitment campaign. 24/7 services are provided often using online chatrooms that include personalised replies and support that is provided immediately or with a commitment to resolve a query within a fixed timescale.

Conclusion and research limitations

HE institutions aim to competitively stand out in the global competition for recruitment of international students. SAPUs are dealing with societal and economic challenges influencing their domestic and international recruitment. A CMM can help SAPUs address digital marketing challenges in relation to international student recruitment and raises the importance of branding across all levels of the model.

The overall impression is that most SAPUs use Web 2.0 technology for the purposes of international student recruitment at Level 1. Individual good practices in executing some of the AIDA elements exist at most universities, but the application of good practice is not consistently applied across all AIDA elements.

The contribution of this research is threefold:

- (1) We have extended knowledge of how Web 2.0 relates to market orientation in universities in non-western socio-economic and cultural settings.
- (2) We have provided advice and guidance to inform practice and decision makers regarding the most appropriate digital marketing activities to enhance their international student recruitment efforts based on empirical evidence.
- (3) We have added to the research into the strategic use of the AIDA model in HE for the use of international student recruitment.

This research study has limitations: it has only drawn from a small sample of SAPUs and Scottish universities; additionally, there is no self-evaluation by the universities themselves of the effectiveness of their Web 2.0 presence. Our next step is to collect and analyse additional qualitative data through interviews with a wide range of stakeholders at several of the universities involved in different aspects of the international student recruitment process.

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