

Drivers of Social Media Adoption among SMEs in Sanaa and Aden Governorates of Yemen

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Abstract

Moving towards digitalisation in business relies on identifying specific purpose, strategy and plans. With continuous advancement in technology, SMEs are induced to adopt such technological advancements to attain and sustain competitive edge over their competitors. Using social media to promote their business goals (to the market) is a primary objective in addition to their activities, products and services offered by the enterprises. This study explores the extent of social media adoption among enterprises in 2 cities in Yemen (Sanaa & Aden); and the primary data (drawn from owners/managers) unveils that WhatsApp and Facebook are the most used social platforms for marketing; while the least used are YouTube and Snapchat. Further, it is also obvious that, where social media is mostly used to facilitate advertising (Mean = 2.54), which has reduced their advertising cost, (Mean = 2.17), at the same time, it has failed to change customer behavior (Mean = -0.66) and serve their recruitment needs (Mean = 0.42). A significant differences has also been observed in terms of their appraisal [when respondents are categorised according to the scope of operations, education level of owner/managers, and age of the enterprise]; and the study concludes that there is an earnest need to train and guide the entrepreneurs of SMEs to adopt social media for innovative purposes that could contribute/enhance the chances of growth and development of business in Yemen, which could help them in creating new business prospects.

Keywords: SMEs, Social Media, Drivers, Enterprises, Sanaa, Aden, Yemen

Introduction

Social media has been promoting a new form of communication among individuals and between companies and people as well (Araújo & Zilber, 2016). The cause behind the tendency of firms and organisations to adopt social media is to manage the force created by the massive social media adoption by individuals worldwide (Sinclair & Vogus, 2011). Small and medium enterprises still find it challenging to adopt new technology regardless of the role it plays in their economic growth and welfare. Along with the advancement of technologies in the business world, social media has emerged as a powerful tool for marketing activities worldwide (Dahnil et al., 2014).

The weak perception of development gains; which is reflected in low spending on research and development, increased import of capital goods, unstable regulatory environment, all coupled with less skilled workforce, leads to greater gaps between underdeveloped and developed economies in terms of science, technology, innovation and artificial intelligence. Further, underdeveloped economies have not benefited largely by such advancements due to numerous challenges faced by them with respect to economic growth and development (Utoikamanu, 2019).

Bradley and McDonald (2011) state that the 3 considerations affecting value in the world of social media are purpose, purpose, and purpose; which is similar to the famous saying in the real estate field: “3 considerations most impact value which are location, location, and location”. The logic behind this statement is that the success of social media efforts is mainly dependent on the choice of the purpose.

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Providing the technology to ease accessing or adopting social media is easy, while the challenge is choosing the purpose of using social media. The notable social media platform like Facebook, Wikipedia and LinkedIn have a clearly defined purpose to include, tracking what others are doing, collectively building an online encyclopedia, and leveraging professional networks for recruiting (Bradley & McDonald, 2011).

Erickson (2012) proposed in his article that for social media, to make a difference in productivity, creativity, and collaboration in the workplace, it should necessarily have characteristics similar to the characteristics of social media in personal life; such as, strategy including clearly defined purpose, technology designed around user behavior, organisation with practices and structures, and engagement efforts.

The process of adopting social media among enterprises is influenced by many factors related to end-user, customer, organisation, technology, management, and business environment (Dahnail et al., 2014). However, there is a scant amount of literature investigating the digitalisation process, e-business, digital marketing in the context of Yemen. This study attempts to measure the factors that drive young Yemeni entrepreneurs to adopt social media for their business purposes.

Literature Review

The Concept of Social Media

Zolkepli and Kamarulzaman (2015) defined social media as internet-based applications built on the Web 2.0 ideological and technological foundations. While it has been also defined as interactive communication technologies facilitating the interaction among individuals by sharing opinions, information, interests and knowledge (Papasolomou & Melanthiou, 2012). It's been referred to as the media used by individuals to share images, blogs, videos etc. Further, they have reformed technology allowing individuals to interact, share and exchange information on virtual networks/platforms or communities (Carr et al., 2015). These digital platforms are contributing constantly towards innovating the process of discovering, sharing and experiencing different kinds of brands (Prahald & Ananthanarayanan, 2020).

The Role of Social Media in Business World

Social media are used by customers and entrepreneurs for the purpose of image building, networking and strengthening the relationships of individuals and companies (Kahar et al., 2012). Even though there are many reasons behind adopting social media by companies, strengthening brand remains the major reason behind its adoption (Jussila et al., 2014), coupled with another reason, which is getting new customers (Michaelidou et al., 2011). Firms and companies tend to adopt social media because of the relative advantage and wider identity that they provide the organisations. Further, there is a tendency of big organisations with more formalized organisational structure to adopt social media more than small firms (Araújo & Zilber, 2016).

The role played by social media platforms has been investigated (in the literature) that indicates the systems and technologies accessed by social media led firms and companies make them more innovative and massively use knowledge (intelligent resources) for accomplishing business purposes. Through analysing online data, the ability of firms and companies to understand offline phenomena gets increased (Jungherr & Jürgens, 2013), rational predictions are made by firms and companies by analysing data from social media (Kalampokis et al., 2013), and it also enables firms and companies to access credibility of contents generated by users (Castillo et al., 2013).

Social Media among Small and Medium Enterprises

Small and medium enterprises are offered digital tools for creating and maintaining a competitive advantage, and improving the performance in a fast-moving global business environment (Deloitte, 2019). However, small and medium enterprises do not seem to derive optimal benefits due to their inability to utilise the full potential of the new digital tools (Taiminen & Karjaluto, 2015).

Small and medium enterprises face challenges while strategizing their business activities and communicating their products/brands through social media. They focus on short term operational activities and challenges rather than long term activities, their lack of focus

on communication, lack of essential resources that contribute to their growth and development such as; human capital, technological and financial resources all act as deterring factors (McGrath & O'Toole, 2011; Harrigan et al., 2012).

The disconnection between the reality of being a closed organisation and the aspirations to become a collaborative organisation is considered as the major barrier for social collaboration. Therefore, the decision of an organisation to go social and make it part of its culture tends to be a resourceful way of becoming more agile, increasingly innovative and sharing knowledge resources. Unisys, the famous global corporation is an example of making "go social" part of the organisation's culture (Meister, 2011).

Enterprises tend to use microblogging to make purposeful connections with individuals with similar or common business interests (Günther et al., 2009; Meyer & Dibbern, 2010). Adopting social media among enterprises varies moderately according to few factors such as organisational, technological and environmental factors (Larosiliere et al., 2015). When it comes to small and medium enterprises, its adoption depends on factors such as perceived benefits, technological compatibility and cost; organisational context such as; firm size, top management support and technological readiness; environmental context such as the pressure of customers/competitors and the external support; and finally the individual context such as innovativeness and knowledge among owners and managers.

Further, factors affecting adopting social media among enterprises have been grouped into factors related to end user such as, training and knowledge of social media and perceived usefulness; factors related to organisational resources to include top management allocation of time and money to adopting social media; factors related to technological limitation in the digital platforms; factors related to the attitude of managers and owners towards social media; and finally factors related to the business environment which includes competitors and the infrastructure (Kumar et al., 2019).

Hence, adopting social media in companies, so as to avoid longstanding issues and efficiency, firms and companies will have to ensure that, the strategy is engaged by senior

management, promote involvement of stakeholders, there is appropriate choice of the right technologies, identifying the pilot group in the company to go social, establishing proper guidelines, developing a plan for communication, identifying the related business merits such as increasing sales and innovation, and finally the implementation of going social process (Meister, 2011).

SMEs in Yemen

There is no unique and universal classification of small and medium enterprises in Yemen, which perhaps can be attributed to the absence of a specific authority supervising the activities of small and medium enterprises (Saleh & Manjunath, 2021). However, there are many notions on defining enterprises in Yemen, as proposed by the Central Statistical Organisation, Social Funds for Development and Ministry of Industry and Trade. The only detailed definition is the one proposed by the policy of small and medium enterprises issued in 2005, which defines micro enterprises as the organisations employing up to 4 workers, and the small and medium enterprises are the enterprises employing up to 50 employees (PSDP, 2011; Alnedhari, 2009; Aliriani, 2013; YMIT, 2014).

Research Methodology

This study adopts a mix of exploratory and analytical research method, in order to arrive at a deep understanding of the phenomena with respect to the drivers and enablers to adopt social media among entrepreneurs in Yemen (Creswell, 2013). The exploratory method is used to gain an insight into the environment of small and medium enterprises in Yemen and their use of social media, while the analytical method is used for collecting and analysing the concerned data, to be in a position to explore the factors that drive the intention of entrepreneurs to adopt social media.

Research Objective

The research mainly aims to investigate the factors that induce organisations to adopt social media among entrepreneurs in Yemen. Further, it aims to identify the extent of social media use among small and medium

enterprises in Yemen in order to be in a position to compare social media adoption among SMEs in an underdeveloped economy (e.g. Yemen) to other studies and their relevance in other developing economies.

Research Hypotheses

According to the review of literature and the objective of this study, the following statements have been hypothesized:

- SMEs in Yemen do not show high agreement towards the drivers of social media adoption.
- SMEs in Yemen do not find social media platforms feasible to promote their products and services.
- There is no significant difference in terms of social media usage by SMEs in Yemen when tested with their demographic profiles.
- There are no significant differences in drivers of social media adoption among SMEs in Yemen when tested with their demographic variables.

Data and Measurement Scale

The data has been collected from small and medium enterprises in Sana'a City in Yemen through electronic questionnaire. Respondents were asked to give their agreement upon statements measuring the drivers for adopting social media and about their demographic details such as establishment year, manager's characteristics, number of employees and application of social media by them.

The scale used in the questionnaire is 5-point Likert scale, and the items included in the questionnaire has been extracted from multiple sources (Table 1). The choice of the concerned items from many resources is according to the nature of the enterprises in Yemen and its business environment. Cronbach's Alpha test is used to measure the reliability of the variables in the questionnaire items, and with value of 0.788 (which is moderately high) it is acceptable for analysing the data. Table 1 shows the statements used in the questionnaire along with the resources where they were adopted from.

Table 1: Item Used to Measure the Tendency to Use Social Media among SMEs

<i>Drivers</i>	<i>Source</i>
I use social media for speeding communication with clients and suppliers	Exploratory investigation. (Smith, 2019). (Hollingsworth, 2019). (Newberry, 2018). (Begg, 2015). (Abdullah, 2019). (Rafiq, n.d.)
I use social media for cost savings instead of spending on other marketing activities	
I use social media for changing customer behavior	
I use social media for customer acquisition	
I use social media for building awareness about my products and services	
I use social media for better targeting of messages	
I use social media for enhancing customer service	
I use social media for the purpose of increasing sales to existing customers	
I use social media for facilitating dialogue with customers	
I use social media for strengthening Brand	
I use social media for facilitating advertising activities about my products and services	
I use social media for recruitment purposes	
I use social media to keep an eye on the competition	
I use social media to stay on top of industry news.	

Results and Findings

The following section presents the results of the data analysis, (i) the demographic profiles, details analysis, (ii) the results regarding utilities derived from social media

by SMEs in Sana'a and Aden governorates of Yemen, (iii) the descriptive statistics of the drivers of social media use among small and medium enterprises, and (iv) hypothesis testing, correlation and the evidences/ conclusion drawn.

Demographic Profile of Respondents

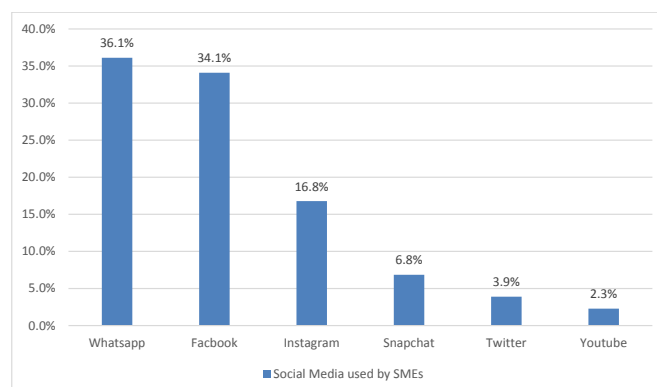
Table 2: Demographic Profile of Respondents

Demographic Variables			Count	Percentage
City	Sana'a	N=330	187	56.67%
	Aden		143	43.33%
Field	Manufacturing	N=330	125	37.88%
	Service		69	20.91%
	Trade		136	41.21%
Age of Enterprise	Less than one year	N=330	100	30.30%
	2 to 5 years		98	29.70%
	6 to 10 years		34	10.30%
	More than 10 years		98	29.70%
Scope	Domestic	N=330	130	39.39%
	National		131	39.70%
	International		69	20.91%
Number of Employees	1 to 9 employees	N=330	131	39.70%
	10 to 19 employees		106	32.12%
	20 to 29 employees		93	28.18%

Source: primary data. Note: N=330, % to N=330.

Social Media Use among SMEs in Yemen

The respondents were asked to list the social media they use frequently for their enterprises, and the result of their responses are illustrated in the chart below (Fig. 1), it shows that WhatsApp is the most used platform by enterprises (36.2%), while Facebook is the 2nd most used platform (34%). Instagram platform is the least used by enterprises (16.8%) due to the nature of a platform with primary focus on images and videos contents of users. A small portion of enterprises use Snapchat platform for their marketing activities, while the video platform – YouTube is used by only 2.3% of small and medium enterprises in Sana'a and Aden governorate in Yemen. It is worth noting that other options (Linkedin, and other) were not chosen by respondents hence they have been excluded from the analysis of the data.



Source: Analysis of collected data.

Fig. 1: Social Media used by SMEs in Yemen

Descriptive Statistics

Table 3: Descriptive Statistics of Responses

Statements	Mean
I use social media for speeding communication with clients and suppliers	2.16
I use social media for cost savings instead of spending on other marketing activities	2.17
I use social media for changing customer behavior	-0.66
I use social media for customer acquisition	1.4
I use social media for building awareness about my products and services	2.13
I use social media for better targeting of messages	2.04
I use social media for enhancing customer service	1.84
I use social media for the purpose of increasing sales to existing customers	0.29
I use social media for facilitating dialogue with customers	0.82
I use social media for strengthening Brand	1.29
I use social media for facilitating advertising activities about my products and services	2.54
I use social media for recruitment purposes	0.42
I use social media to keep an eye on the competition	2.07
I use social media to stay on top of industry news.	2.11
Overall Mean	1.4734
Maximum	2.71
Minimum	0.29
Standard Deviation	0.5723

Source: author's work based on the collected data.

Note: SD: Strongly disagree, D: Disagree, N: Neutral, A: Agree, SA: Strongly Agree. The mean values presented are the weighted average (WA) mean values. The scale used in coding the 5-point Likert scale is weighted as follows: -2 has been given to "Strongly Disagree", -1 is given to "Disagree", 1 is given to "Neutral", 2 is given to "Agree", and 3 is given to "Strongly Agree".

The purpose of using social media differs among individuals and enterprises. With the help of the responses collected from enterprises, we present the descriptive analysis in this part. According to the majority of enterprises (40% Agree –A, and 39.4% Strongly Agree – SA), improving as well as speeding the communication with clients and suppliers is dependent on the social media use, while a moderate percentage of enterprises (19.4% Neutral –N) fails to realise the relevance of adopting social media in enhancing the communication of enterprises with suppliers. A very tiny portion of enterprises (0.6% Disagree –D, and 0.6% strongly Disagree –SD) are against using social media to speed communication with suppliers and clients. With a mean score of 2.16, we can conclude that majority of Yemeni enterprises agree/believe that communications and interactions with clients and suppliers using social media would necessarily speed up their communication process.

Entrepreneurs also believe that using social media reduces cost (time and monetary) of advertisement (40% A, and 40% SA), a small portion of enterprises fail to realize the utility of advertising through social media to reduce their marketing cost (19.1% N), while almost no enterprises (0.9% SD) are scoring down its ability to reduce advertising cost. It is concluded with a mean score of 2.17 that most enterprises believe that the objective of saving the advertising cost can be realised effectively by adopting social media platforms for advertising their products.

Social media platforms when used to connect and interact with prospective and existing clients and customers are expected to influence customer behavior; (a small portion of enterprises i.e. 10.6% A, and 0.6% SA), However, the majority of enterprises have never found social media platforms influencing customer behavior (58.8% D, and 20% AD), and a small portion of enterprises have also failed to realise any relevance social media influencing their customer behavior (10% N). With a mean score of -0.66, it can be concluded that the Yemeni enterprises have found social media to create real time interface not **benficial** to provide any utilities to entrepreneurs to change their customer behaviour.

Attracting new customers into the business by adopting various strategic tools is an aim of a big portion of enterprises in Yemen (59.1% A, and 20% SA), at the same

time, a small portion adopts social medial platforms with an objective other than acquiring new customers (0.6% D, and 19.4%). A very small percentage of enterprises observes that using social media platforms has no relevance to acquiring new customers (0.9% N). With a weighted average mean of 1.40, it leads to the conclusion that by using social media platforms, enterprises are in a position to attract new customers.

Educating the audience as well as targeted customers about products and services through social media platforms is a primary aim for most small and medium enterprises in Yemen (45.2% A, and 34.8% SA). Almost no enterprises are against spreading awareness about products among customers by using social media platforms (0.3% D, and 0.3% SD). However, a moderate percentage of SMEs fails to realise the benefit of using social media platforms to educate their audience about their products and services (19.4% N). It can be concluded with a weighted mean score of 2.13 that majority of SMEs in Yemen find social media as efficient tool for educating their existing as well as prospective customers about their products and services.

Social media platforms have been observed as effective tool for targeting the right audience among most Yemeni enterprises (53% A, and 26.4% SA), a few SMEs fail to realise any relevance of using social media to accurately target the right audience (20% N). However, almost none of the Yemeni enterprises are found considering the usefulness of social media without aiming for better targeting the right audience (0.3% D, and 0.3% SD). This being said, it can be concluded with a mean score of 2.04 that most enterprises aim for targeting the right audience by adopting social media for their business.

Providing optimal customer experience/customer service is primary focus for every enterprise, however, improving customer services through social media platforms is common among Yemeni SMEs (64.6% A, and 10.6% SA). A moderate portion failed to realise the benefit of using social media platforms to enhance customer engagement and satisfaction (23.6% N), while on the other hand, almost none of SMEs experience failure in providing customer satisfaction by adopting social platforms (0.3% D, and 0.6% SD). With a mean score of 1.84 it can be concluded that adopting social media undoubtedly enhances customer service and satisfaction among SMEs in Yemen.

Social media has also facilitated in promoting/increasing sales among customers moderately for SMEs in Yemen (19.4% A, and 0.9% SA). While majority has experienced failure in realising this objective using social media platforms (45.5% D, and 0.3% SD). At the same time, a large portion of SMEs do not find any role played by social media in increasing their sales (33.9% N). We can conclude with a mean score of 0.29 that there are no conclusive evidence to exhibit how good social media has been for Yemeni entrepreneurs to promote their sales.

For any enterprise, it becomes very essential to establish a real time exchange platform to exchange dialogue with their customers and making it easy for them to reach out, SMEs in Yemen find it moderately successful in realising this objective (10.6% A, and 20% SA), at the same time, a moderate portion of SMEs do not find social media facilitating them to reach out customers to present their ideas as an aim for building equity among them (33.6% D, and 0.6% SD). However, a large portion of SMEs have failed to understand the relevance and efficiency in facilitating a dialogue and customers (35.2% N). With a mean score of 0.82, it can be concluded that a large portion of SMEs in Yemen are yet to understand and realise how good digital platforms e.g. social media are in providing an efficient interface between stakeholders.

To strengthen the brand among customers as well as in the market by adopting social platforms has been a primary aim for a large group of SMEs in Yemen (30.9% A, and 19.7% SA), and a moderate group of enterprises have not been very successful in using social media platforms for strengthening their brands (19.1% D, and 0.9% SD). A large portion of enterprises have also failed to realise the relevance of adopting social media platforms in strengthening their brands. The mean score of 1.29 leads to the conclusion that the majority of SMEs in Yemen have been fairly successful strengthening their brands by adopting social media platforms.

Social media as a fundamental tool for advertising products and services has been found effective by small and medium enterprises in Yemen (39.1% A, and 59.1% SA), and a few enterprises have failed to understand the benefit of social media platforms in realising their advertising objectives (0.9% D, 0.6% SD, and 0.3% N).

Hence, it can be concluded with a mean score of 2.54 that almost all enterprises have found social media facilitating advertising activities and helping them to effectively reach their target customers.

Social media platform are considered a resourceful platform for finding prospective workforce by a moderate group of SMEs in Yemen (29.1% A, and 1.5% SA), while a large portion of SMEs do not agree to serve their need for required workforce through social media platforms (29.4% D, and 10.3% SD). Moreover, a large group of SMEs have failed to understand the role that can be played by social media platforms to acquire their essential/required workforce (29.7% N). The mean score of 0.42 leads to concluding that most enterprises in Yemen are searching their workforce largely outside social media platforms.

The very objective of any business is to sustain their competitive structure be it large or small and medium enterprises, and the Yemeni enterprises have realised this objective using social media (46.7% A, and 31.5% SA). On the other hand, almost none of the enterprises in Yemen have found social media helping them sustain competitive status by adopting social media platform (0.6% D, and 0.6% SD). However, a large amount of enterprises fails to realise the role social media platforms could play in maintaining a competitive edge over others (20.6% N). With a score of 2.07, we can conclude that majority of small and medium enterprises are relying on social media platforms to maintain their competitive position in the market place.

For the enterprises to achieve a spot in the industry news, social media platforms are an appropriate place as per majority of enterprises in Yemen (46.4% A, and 34.2% SA), and a very few of enterprises have failed to use social media to achieve a spot in industry news (1.2% D, and 0.6 SD), while a moderate group of enterprises fail to realise the relevance of using social media platform and being on top in industry-related news and updates (17.6% N). With a score of 2.11, we can conclude that Yemeni entrepreneurs find social media platforms helpful to them to be a part of industry news and updates.

To summarise, it is observed in the Table 3 that facilitating advertisement and reducing its cost have been the most agreed on by respondents, and changing customer behavior

and serving recruitment needs have been the least agreed-upon statement. We can conclude from the overall mean score of 1.47 that enterprises show a moderate level of agreement with the statements shown in the Table 3.

Analysis of Variance

The Table 4 illustrates the differences observed in the means of the responses collected from enterprises. This variance is presented in 2 aspects, the 1st aspect is in terms of social media use and adoption among enterprises, while the 2nd aspect is in respect to drivers of adopting social media.

The Variance of Adopting Social Media Drivers based on Demographic Variables

Mann-Whitney U test identifies the significant difference in social media use and the driving forces behind social media adoption among SMEs, the demographic variables of 2 categories (place of the enterprise) as a determinant factor, Kruskal Wallis test is used to test the significant difference in social media use as well as the drivers of social media adoption among Yemeni SMEs based on more than 2 demographic variables (age of enterprise, field of activities, number of employees, and scope of operations)

The analysis of variance through Mann-Whitney U test based on place of operations of the enterprises leads to observing differences in the mean ranks of enterprises both in Sana'a and Aden cities (as shown in the Table 4). However, the z test values and p value unveil that there is no significant difference between the means in terms of social media use among SMEs in both cities (p. value > 0.05). This implies that both Sana'a and Aden enterprises are realising similar utilities using social media, which implies the failure to reject the hypothesized statement

that there is no significant difference between the means in social media use among SMEs.

Evaluating the benefits derived from social media with the field of the enterprise, the analysis indicates differences in the means ranks of SMEs, p value of Kruskal-Wallis H test confirms the variance of means ranks in terms of social media use among SMEs (p. value < 0.05) being significant leading to rejection of hypothesized statement. This further indicates that the utilities significantly differ among SMEs and is greatly influenced by the nature and scale of operations and how well they synergize their communication using social media platforms.

Further, the period of exposure in their business is also found significant, Kruskal-Wallis H test unveils that the differences are found to be significant (p. value < 0.05) which leads to rejecting the null hypothesis. The enterprises/SMEs in Yemen based on their existence are able to realise the need and relevance of social media to their business.

Considering the scope of operation, the social media use differs among enterprises which creates the need to investigate its significance, Kruskal-Wallis H test reveals the presence of significant differences in the means ranks in terms of social media use (p value < 0.05), hence we reject the hypothesized statement and conclude, the intensity of adopting social media for the activities of enterprises has a strong bearing of their scope of operation/business.

Categorising enterprises by the number of employees unveils the presence of differences in terms of social media use among enterprises. Kruskal-Wallis H test indicates such difference being significant (p value < 0.05). This implies that the number of employees plays a role in the context of the intensity of social media usage among SMEs, and we reject the hypothesized statement.

Table 4: Variance of Adopting Social Media Drivers based on Demographic Variables

Demographic Variables		Social Media Use among SMEs					
		WhatsApp	Facebook	Instagram	Snapchat	Twitter	YouTube
City	Sana'a	166.88	162.03	164.76	163.82	165.12	164.94
	Aden	163.69	170.04	166.46	167.69	166.00	166.23
	Ztest	0.448	1.036	0.191	0.583	0.170	0.318
	P value	0.654	0.300	0.849	0.560	0.865	0.751
Field of Enterprise	Manufacturing	192.04	116.38	103.00	140.00	151.00	158.32
	Service	196.00	203.50	251.26	204.57	186.87	178.52
	Trade	125.63	191.37	179.43	169.12	167.99	165.49
	Kruskal-Wallis H	89.531	101.687	159.076	52.791	26.786	13.598
	P. value	0.000	0.000	0.000	0.000	0.000	0.001
Age of Enterprise	Less than one year	196.00	203.50	256.45	184.55	175.75	173.50
	2 to 5 years	133.70	149.62	103.00	140.00	151.00	158.68
	6 to 10 years	196.00	38.50	103.00	140.00	151.00	157.00
	More than 10 years	155.59	186.66	156.88	180.41	174.57	167.10
	Kruskal-Wallis H	56.711	157.289	210.109	40.331	21.163	10.239
	P. value	0.000	0.000	0.000	0.000	0.000	0.017
Scope of Operation	Domestic	149.04	162.88	103.00	140.00	151.00	158.27
	National	165.77	148.08	182.35	170.23	168.63	165.82
	International	196.00	203.50	251.26	204.57	186.87	178.52
	Kruskal-Wallis H	24.163	28.979	163.795	54.024	27.470	13.873
	P. value	0.000	0.000	0.000	0.000	0.000	0.001
Number of Employees	1 to 9 employees	196.00	163.19	218.88	174.01	169.89	169.60
	10 to 19 employees	152.42	135.01	154.37	177.36	172.79	166.34
	20 to 29 employees	137.45	203.50	103.00	140.00	151.00	158.77
	Kruskal-Wallis H	51.808	48.244	116.666	23.784	12.663	4.856
	P. value	0.000	0.000	0.000	0.000	0.002	0.088

The Variance of Social Media Use based on Enterprises Demographic Variables

Analyzing the variance in mean ranks in terms of the drivers of social media adoption among small and medium enterprises in Yemen (Table 5) unveils the following:

The place of operation of the enterprises has a little difference in the mean ranks of Sanaa and Aden cities. The p value of Mann-Whitney U test confirms that the difference between the mean ranks in terms of drivers of social media adoption among SMEs is statistically insignificant and leads to the failure of rejecting the null hypothesis (p value = 0.735, > 0.05).

The service field enterprises scored the highest mean among others (Mean = 289.50). Kruskal-Wallis H was calculated to identify the significant difference among

the mean ranks, and the results indicate significant differences among the mean ranks in terms of drivers of social media adoption among SMEs in Yemen. Hence, the null hypothesis is rejected at 0.05 level of significance (p. value < 0.05).

Considering the age of the enterprises, enterprises in the group age of less than 1 year scored the highest mean and enterprises in the age group of 2 to 5 years scored the lowest mean. The result of Kruskal-Wallis H test was in favour of the existence of significant differences among the mean ranks in terms of drivers of social media adoption among Yemeni SMEs (p value = 0.000 < 0.05).

Evaluating the scope of operations, it is found that these enterprises who are involved in the international operations scored the higher mean and enterprises in the domestic operations scored the lower mean. The result of

the Kruskal-Wallis H test confirms the differences being statistically significant among enterprises (p. value < 0.05).

Evaluating the number of employees employed by the enterprises, those enterprises with fewer employees scored a higher mean, while enterprises with many employees scored the lower mean rank. Kruskal-Wallis H finds differences being statistically significant among the means ranks, indicating significant differences in terms of drivers of social media use among SMEs in Yemen (p value < 0.05).

Table 5: Variance in Terms of Social Media Use based on Enterprises Demographic Variables

<i>Demographic Variables</i>		<i>Drives of Social Media Adoption</i>
City	Sana'a	163.95
	Aden	167.52
	Ztest	0.339
	P value	0.735
Field of Enterprise	Manufacturing	149.00
	Service	289.50
	Trade	117.75
	Kruskal-Wallis H	156.000
	P. value	0.000
Age of Enterprise	Less than one year	267.00
	2 to 5 years	76.79
	6 to 10 years	151.87
	More than 10 years	155.37
	Kruskal-Wallis H	201.832
	P. value	0.000
Scope of Operation	Domestic	120.70
	National	144.65
	International	289.50
	Kruskal-Wallis H	153.096
	P. value	0.000
Number of Employees	1 to 9 employees	239.21
	10 to 19 employees	124.55
	20 to 29 employees	108.35
	Kruskal-Wallis H	132.476
	P. value	0.000

The role of social media use in enhancing the business process

Like any other communication tool, social media platforms are also considered as efficient tool to reach the target audience with an objective to evaluate how good these platforms have been to the business. The surveyed enterprises in Yemen unveil that the social media use among SMEs happens to be correlated positively with the scope of operation ($r = 0.674$) (Table 6). Testing the significance of this correlation (t test of correlation significance) ($t_{cal} = 16.545 > t_{0.05} = 1.960$), confirms that the positive association between social media use and the scope of operation of enterprises is statistically significant.

Similarly for other variables, the correlation between social media use among Yemeni SMEs and number of employees was negative correlation ($r = -0.4254$); testing the significance through t test ($t_{cal} = 8.5143 > t_{0.05} = 1.960$) null hypothesis is rejected and show that the negative correlation is statistically significant and the number of employees employed has no significant impact on the intent of the enterprise to adopt social media. This further implies that the use of social media can promote the optimum benefit of workforce in small and smaller enterprises.

Evaluating the impact of the period of presence in business on the use of social media among Yemeni SMEs indicates a negative correlation ($r = -0.27701$), testing the significance ($t_{cal} = 5.22127 > t_{0.05} = 1.960$), null hypothesis is rejected and we can conclude the utilisation of social media by enterprises increases when their exposure to the business environment matures more and more and they are in a position to understand the need for adopting technology.

Further, the field of activities is also found to be correlated at a low level with the social media use among Yemeni SMEs ($r = 0.30602$); and testing the significance of this correlation ($t_{cal} = 5.82174 > t_{0.05} = 1.960$) it can be concluded that the role of social media can still have an effect in enriching activities in the field of operations/activities of SMEs in Yemen.

Testing the relevance of place of origin on the utilisation of social media by the enterprises ($r = 0.03218$), indicates

almost no correlation; and testing the level of significance ($t_{cal} = 0.58315 < t_{0.05} = 1.960$) substantiates that the social media use among enterprises has no influence of the place

of operations of enterprises. It is only the need/objective of the enterprise and not the ethnocentric values/culture that influence it is adoption.

Table 6: Correlation Analysis of Social Media use with Demographic Variables of SMEs

		<i>Social Media Use</i>	<i>Scope of Operation</i>	<i>Number of Employees</i>	<i>Age of the Enterprise</i>	<i>Field of the Enterprise</i>
Social Media Use	Pearson Correlation	1				
	Sig. (2-tailed)					
	N					
Scope of Operation	Pearson Correlation	.674**	1			
	Sig. (2-tailed)	.000				
	N	330				
Number of Employees	Pearson Correlation	-.425**	-.832**	1		
	Sig. (2-tailed)	.000	.000			
	N	330	330			
Age of the Enterprise	Pearson Correlation	-.277**	-.365**	.446**	1	
	Sig. (2-tailed)	.000	.000	.000		
	N	330	330	330		
Field of the Enterprise	Pearson Correlation	.306**	.244**	-.082	.053	1
	Sig. (2-tailed)	.000	.000	.135	.337	
	N	330	330	330	330	
City of Enterprise	Pearson Correlation	.032	.028	-.004	.049	.036
	Sig. (2-tailed)	.560	.614	.942	.372	.514
	N	330	330	330	330	330

$$df = n - 2 = 328$$

$$t = r \times \sqrt{\frac{n-2}{1-r^2}} = 0.674 \times \sqrt{\frac{328}{1-0.45492}},$$

$$t = 0.674 \times \sqrt{\frac{18.1107}{0.5450}} = \frac{12.21540}{0.73829}$$

$$t = 16.5455$$

Note: r is the correlation score, n = 330, and df = degree of freedom 328.

Discussion

The descriptive analysis unveils that respondents agreed less on the drivers of using social media for changing customer behaviour. This can be attributed to the lack of marketing awareness among small and medium enterprises. Most of the marketing departments focus on persuading customers rather than focusing on changing their behaviour. When enterprises/entrepreneurs are successful in changing their behavior, they can better

target, design appropriate marketing activities, optimise their opportunities to realise better set goals, specifying time and duration of their plans, be ready and prepare for any temptation, and managing the environment by making desired behaviors easier and the undesired one harder to reach (Markman, 2014).

The key factor to reach a position to influence the customer behavior is starting with small changes, certainly not to the way customers thinks but to the extent environment demands in which they make their decisions (Beshears &

Gino, 2014). This creates the need for providing training and guidance to SMEs in Yemen, about the marketing strategies and activities essential for success. Social media platforms can be used with the aim to change customer behavior, and hence necessary orientation towards its application is very essential. Further, using social media for increasing sale to existing customers is not agreed upon by respondent which somehow is harmonized by the aim to change customer behavior. Using social media to stay connected and educate existing customer and keep them updated about the products and services offered by SMEs is supposed to contribute to increase the sales of these enterprises.

Posting intellectual/rational contents on social media platforms plays an effective role in positioning the sales among loyalty programs members, while for non-loyalty programs, behavioral changes realised tend to drive better sales. This makes it important for SMEs to adopt social media platforms to keep their customers in loop, as loyalty programs members contribute in spreading the word of mouth and at the same time, they also tend to stay as customers for a longer time (Stanko et al., 2019).

The underutilisation of social media platforms to acquire new customers as well as to serve recruitment needs among SMEs in Yemen can be attributed to the less use of Internet in general by individuals, which induces them to look out for other avenues for tapping their customers and new workforce. This raises a question if the lack of access to internet is the only reason why enterprises are not focused on seeking customers and workforce through social media, which can be better explained by further research to further investigate the sources for acquiring customers and workforce outside social media platforms.

Low agreement is observed by SMEs over the statements related to strengthening brands, enhancing customer services, and facilitating dialogue with customers, which reflects the lack of training and awareness of small and medium enterprises towards the role social media platforms can play in increasing sales, transforming consumer communication, and business commerce (Ezeife, 2017). This could be an untapped research area for investigating the training as an effective tool to encourage SMEs managers/owners to effectively use social media platform in such a manner to benefit the performance as well as the chances of growth for small

and medium enterprises in an underdeveloped economy such as Yemen. This earnest need for future research in this regard stems from the opinion of respondents in respect to paying less attention to using social media to enhance customer services, strengthening the brands, and facilitating dialogue with customers. This leads to the notion that imparting training on how to effectively use social media platform can boost the way that SMEs serve their customers in Yemen. Therefore, research can be conducted to investigate the impact of training on the effectiveness of social media use among SMEs in Yemen, further, research can evaluate the different types of training that can be imparted among SMEs managers/owners in regards to effective social media use.

Positive agreement is shown among enterprises in terms of speeding communication with customers, better targeting of messages, keeping an eye over the competitive status, and spreading awareness about products and services, which goes in line with the existing works/literature (Cao et al., 2018; Stanko et al., 2019). Moreover, the use of social media for the purpose of advertising products and service, and reducing the actual cost of other types of advertising are considered basic aims of adopting social media, therefore it is not surprising to score the highest mean among others (2.17 and 2.54 out of 3). Another untapped area of research here could be the effective utilisation of social media platforms to attract prospective customers as well as maintaining the existing customer. Therefore, more research can further investigate effectiveness of convincing the customers of small and medium enterprises through the utilisation of social media platforms which can be measured from the point of view of customers.

The social media use is found correlated with the scope of operation of enterprises which can be attributed to the diversity adopted by enterprises and using social media for better targeting and communication with customers and suppliers; which in turn, contributes towards the enhancement of the business performance of SMEs leading to better growth and development. While at the same time no correlation is found between the social media use among SMEs and the place of enterprises, which implies that using social media to promote the business performance is not associated with the place of operations of the enterprise.

Conclusion

With an aim to investigate the drivers of social media adoption among small and medium enterprises in 2 Yemeni cities (Sana'a & Aden). With the help of primary data drawn from 330 enterprises from both cities, the research findings indicate that WhatsApp and Facebook are the most used platform among enterprises, while YouTube and Snapchat are the least used platforms. The results show a low attitude of SMEs towards using social media platforms for changing customer behavior and fostering their recruitment needs, and higher attitudes towards adopting social media platforms for facilitating advertisement activities and reducing the actual cost of other types of advertisement.

Further, the results indicate a significant difference among respondents in terms of social media use as well as the drivers of social media adoption among enterprises when evaluated with the field of activity, scope of operation, number of employees and age of the enterprises, while no significant difference is found when evaluated the enterprises according to the city of the enterprise. Furthermore, the results unveil significant positive correlation between the use of social media among SMEs and the scope of operation and field of enterprise. While a negative correlation is observed with the number of employees and the enterprises' age, and no correlation is found with the place of operations of the enterprises.

Based on the results drawn above, the study suggests providing training and guidance through policy makers and SMEs supervising authority so as to achieve optimum use of adopting social media platform will undoubtedly transform the performance of small and medium enterprises in Yemen and also contribute to the economic growth and welfare of the Yemeni economy. Further research can focus on the effectiveness of training imparted among owners and managers of SMEs as well as on the effectiveness of such use from the point view of the customers in respect to social media platforms utilisations.

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