



The Impact of Twitter on Government Organizations in KSA

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ABSTRACT

Government Organizations or Firms (GOFs) are interested in understanding aspects related to Governments' vision, mission, objectives and goals in order to formulate Information Systems (IS) and Information Technology (IT) strategies by determining and prioritizing best IS and IT technologies, which assist in achieving these goals. Twitter has spectacularly appealed to many people all around the world regardless of gender, age or qualification. This research paper explores and addresses the role of Twitter in GOFs that provides an answer to the question why GOFs must give great attention to Twitter? From experiences and literature review, we found that there are many business aspects that are greatly influenced by Twitter such as Research & Development, Marketing & Advertisements, Customer Relationship Management, Human Resources, Marketing Study, Total Quality Management, Forecasting and Risk Management. On that basis, the role of Twitter in GOFs, which are key enablers of effective business strategic planning, intrinsic strategic success criteria and drivers toward excellence. A case study has been carried out in one of the top telecommunication company of Kingdom of Saudi Arabia (KSA). The results of the case study (Passports) affirms that they are mainly using Twitter in three business activities marketing, advertising and customer service that affect the company's strategic planning critically.

Keywords

Strategic, Government Organizations or Firms (GOFs), Twitter Networks, Customer Relationship Management, Data Mining, Social Media Networks.

1. INTRODUCTION

Almost none will contest the validity of the fact that technology has changed cultures worldwide. Technology has influenced our thinking, goals, careers, aspirations, future, jobs, creativity, ambitions, communications, infrastructures, sciences, industries, healthcare, agriculture, education, human development and every aspect of human lifestyle, in general. Despite of this reality, people's passion for utilizing technology at large scale is still not satiated. Countries, governments, organizations, enterprises, SMEs (Small and Medium-sized Enterprises) and even small grocery stores cannot survive without technology. Technology has always been a key enabler of globalization and universal openness. Therefore, the competition among organizations and firms has reached its apogee locally and globally and expected to be even tougher in the future.

From this perspective, all governments are exerting maximum efforts to have a competitive advantage over other competitors in the same domain. Their respective strategic planning and formulation have been significantly affected by the evolution of Technology including IT and IS. Technology have become a significant factor of government's success. Deciding and fully utilizing of information technology to achieve business goals and objectives, is considered the goal of GOFs. Moreover, GOFs can also have an effective participation in setting up the business objectives and goals. It can also break new ground, find ways of innovative thinking and explore new opportunities for GOFs to have a step ahead, in either local or global markets competitions.

In recent years, a new digital tool has permeated people's lives and played an epic role in changing it. Nowadays, it is almost impossible to find someone living in a civilized society who is not using that tool or a set of similar tools. Simply, the tools we are talking about are called Social Media or Social Media Networks (SMNs). Facebook, Twitter, Instagram, MySpace, LinkedIn, YouTube etc. are all famous examples of technologies and systems. GOFs are making business to benefit people and societies and to gain profits. SMNs have rich and fertile environments fraught with data and information about people, societies, and markets. Thus, there are huge volumes of big data ready to be mined and explored.

Now, there is a strong need of discovering the gains that can be acquired out of Twitter? GOFs need to know what kind of information they must focus on for the proposed Twitter data. The attempt to define the role of SMNs in GOFs are one of the reasons that rendered the conduct this research paper a formidable task. Additionally, a case study of KSA based company has been conducted to support our arguments and thoughts.

This paper is structured as follows. Section 2, presents an overview of the related works in this area. Section 3, gives a summary of the fundamentals of GOFs. Section 4, discusses the main concepts of SMNs and related data mining techniques. Section 5, presents the research problem under consideration. Section 6, discusses the possible uses of SMNs in business activities. Section 7, describes the role of SMNs in GOFs. In section 8, the case study conducted at a KSA based company is elaborated. At last, a conclusion that summarizes the paper is shown in section 9.

2. LITERATURE REVIEW

In [1], J. Ward and J. Peppard, have elaborated the fundamentals of strategic information system planning. They have explained



the nature, processes, tools and techniques of IS/IT strategy formulation and management.

As in [2], the researchers in this paper aimed to focus on the GOFs importance and why it has gained so much attention by GOFs. They have identified three major reasons that support the importance of GOFs. First, GOFs tell exactly what are the most important systems that are required by a business to be developed that are worth an investment? Second, GOFs tell also, what IS/IT infrastructure required to fulfil the pre-defined needed systems by business current and future days? Last, GOFs discusses what are the possible IS/IT strategic failures chances? And how to avoid them?

As in [3], the study has introduced a conceptual model to express the intimate relationship between IS capabilities and GOFs success. The model is simply focused on what kind of talented and knowledgeable personnel are required for GOFs to have successful GOFs. It has considered the external and internal influences that affect the GOFs successes either positively or negatively. For instance, internal factors include GOFs size, culture and IS goals. On the other hand, the external factors include GOFs economic sustainability and trends of markets changes.

The authors of [4] have developed a framework to compare and evaluate which factor has more effect on GOFs success? They have selected in the study two factors: user participation and top management commitment. Their framework is applied to manufacturing based SMEs. Top management commitment means how much the management is aware of the benefits of having a successful GOFs. However, user participation means to what extent the regular employees are involved in forming GOFs. They have concluded that top management commitment has more influencing ratio over the user participation.

As in [5], the researchers have taken on their study the problem of identifying the correlation of GOFs enablers, inhibitors, and benefits throughout conducting a case study of a large company in Korea. They came up with a model that described this relationship. This model simply stated that GOFs inhibitors should be identified and well-understood. Then, GOFs enablers should be identified that weaken the inhibitors. At last, by knowing the differences between them and working hard to decrease the inhibitors and increasing the enablers to reap the desired GOFs advantages.

In [6], the authors have explored the impact of Twitter. In their study, six business capabilities have been taken into consideration such as collaboration & communication, rapid application development, CRM, Innovation, Training and knowledge management. They have achieved enhancement of business capabilities because of Twitter.

In [7], the study has identified and classified different data mining methodologies. Data mining activities can be predictive or descriptive. The main objective of predictive data mining activities is to forecast using data. It includes regression, classification and deviation detection. Whereas, descriptive data mining cares about defining correlations between data and finding patterns. It includes techniques like summarization, sequential patterns, clustering and association learning. Moreover, data mining for business strategies includes Cart

Analysis, Database Marketing, Merchandise Planning, Card Marketing, Customer Loyalty and Marketing Segmentation.

In [8], the authors have elaborated the critical challenges that data mining is facing in mining data sources of Twitter. These challenges include expert findings, link analysis, community detection, mood analysis, opinion mining, and trust or distrust prediction among individuals. The issues come from Twitter data are mainly user-generated which led to noisy, scattered, distributed and unstructured data sets.

As in [9], some of the data-mining techniques are introduced for Twitter. The authors focused on how these techniques can help analyze and assess customer satisfaction in Telecommunication industry. These techniques include Text Mining, Clustering, and Visualization.

In [10], a real-life example, of forecasting revenues of Hollywood movies using the SMN Twitter, has been considered in the research paper. The authors have proven that Twitter data can be mined and analyzed to produce valuable information. They have gathered data of around 2.89 Tweets talked about around 24 movies over 3 months' period. The output results, using a linear regression model, for producing the revenues were more accurate than the results of Hollywood Stock Exchange.

As in [11], the author elaborated the importance of using Twitter for small business companies on advertising, marketing, customer service and public relations functions. The paper resulted that Twitter may provide the small business companies the chance to compete with larger ones in terms of advertising and building interactive relationships with customers. Moreover, Twitter may help companies in finding ways to reach consumer markets. However, companies may face the risk of being exposed to public criticism if they have too much customer interactions publicly.

In [12], GOFs importance, stages and success are reviewed. GOFs can be conducted through five main phases: strategic business planning, information system assessment, information system vision, information system guidelines, and strategic initiative.

In [13], the study has focused on how Twitter has helped in SMEs growing on market access, CRM, and product pricing.

In [14], the study has discussed the adoption of Twitter in GOFs traditional information systems issues. These issues include GOFs cultural readiness, thinking about business before tools, and employees' involvement.

Many research papers have talked about the impact and the advantages that could benefit the GOFs business in general. This research paper is extending the previous work by exploring Twitter benefits to businesses in general and by highlighting the role of Twitter in GOFs in particular.

3. TWITTER

There are some virtual societies that connect people from all around the world. Some of them have started in 1997 and still growing at a larger scale as at today. Accordingly, people's daily lives have tremendously changed in all aspects physiologically, culturally, socially, and sentimentally. Most importantly, Twitter has contributed to raising people's awareness of businesses,



products or services. Hence, customer requirements and satisfaction become more challenging. It is a social media platform where people can communicate with each other by sharing photos and videos and posting messages. To be able to post messages on Twitter an individual must register and create a Twitter account. However, individuals can only read the tweets and see shared posts on Twitter if they are unregistered and do not have a Twitter account (Fitton, Hussain, & Leaning, 2014). Twitter Inc. was created in 2006 and within few years it had become globally popular and by the year 2012 it had over 100 million registered users, posting more than 350 million tweets per day (About Twitter, 2017). By 2013 it had become one of the ten most popular websites in terms of highest numbers of viewers.

Twitter is not an application that is only used by people. They have become a goldmine of data that helps to assimilate people deeply. To dig in Twitter data and transfer them into information and further into knowledge, data gathering, mining and visualization approaches are used. There are many data mining methodologies such as text mining or sentiment (opinion mining) [13]. Algorithms applied in such techniques are Association rules, Clustering, Decision Trees, Linear Regression, Logistic Regression, Naïve Bayes, Neural Networks, Sequence Clustering and Time Series [14]. Several sequenced steps must be followed to mine data. These steps are data source gathering, cleaning & integration, selection information, mining, evaluation, visualization, and knowledge [14].

4. RESEARCH PROBLEM

GOFs are continuously trying to improve and enhance their position in the market and to have a competitive advantage. One of the recent technologies that have formulated a modern style of people's lives is Twitter. Therefore, getting the advantage of existing digital data sources of Twitter and analyzing them to help in decision-making, forming business strategies and GOFs, would be this research paper's concern. Hence, the research question that is taken up in this paper is put as follows:

What is the role of Twitter in Strategic Information Systems Planning? Why GOFs should not neglect Twitter? And how it can avail the business of GOFs?

5. POSSIBLE USES OF TWITTER IN GOVERNMENTS

GOFs are conducting their organizations activities for many reasons such as improving human life and benefiting societies to the highest level they can reach, gaining the honor and good reputation of serving people, and making profits. To achieve such ultimate objectives, GOFs keep on researching, producing, monitoring, measuring, evaluating, and enhancing the products and services they provide. When people all around the world have a passion for modern technology (SMNs), where they can spend most of their time-sharing thoughts, ideas, feelings, interests, and almost every aspect of their lives, GOs should never hesitate to seize such golden opportunities. With such intention in mind, they will find out things that they might have never realized or thought about.

Here, this research will first explore how Twitter mining can benefit various organizations in different aspects and at varied levels. On that basis, it will define the role of Twitter in GOFs.

From experiences, thoughts and the literature review the researchers have taken the following angles into consideration were Twitter might be utilized:

- **Research & Development (R&D) angle:** mining Twitter data sources to help R&D units to study people trends, interests, feelings, and feedback to continuously improve existing products / services or develop new ones. Another key point is the existence of high potential of cooperation with Twitter that results in supplying customized data sources in very limited scales and narrowed ranges to simplify the Twitter data analysis activities. Such customization can be very useful in terms of data sources costs, size and mining times. Absolutely, such capabilities will add value for enhancing or manufacturing new products or services based on the target markets and focus.
- **Marketing & Advertising (MA) angle:** Using Twitter as MA mediums in general especially for small companies [11]. Twitter are smart mediums when it comes to advertisements. It is important to realize that a cost-effective and wide access advertisement strategy would be derived from using Twitter. For example, specific types of ads would be promoted to specific people who share similarities based on the results of analysis of their genders, ages, places, interests, trends, likes ...etc. Let's think about these two scenarios to realize that Twitter is a sea of innovative ideas concerning ads. First, Twitter or Instagram has the capability of mentioning people in posts. Recent psychological studies proven that people love to see Twitter notifications in their smartphones in general and mentions. Consequently, best customers (famous or normal) could be mentioned in official ads or in whatever important posts. Second, famous celebrities or normal people who have a remarkable influence in Twitter posts would be monitored and analyzed frequently. Based on the results, private messages of good deals and discounts on services and goods could be sent. For instance, a famous actor posted a Tweet saying, "Next week in France for Cannes Film Festival". Hence, an airlines or tourism company may send good deals; or as gifts; for tickets and accommodations as, private messages and then asking them to tweet back or post with mentions of the companies official accounts. This part of marketing strategies insists on going ahead in searching and reaching customers instead of awaiting them to come. Another example of getting benefited from Twitter that a company may provide Tablets in all its branches and allow customers to take selfie pictures with their products inside the store using the company accounts and mentioning the customers' accounts.
- **Customer Relationship Management (CRM) angle:** CRM is meant to be used for building, strengthening and sustaining robust relationships with all parties that GOFs deal with. Twitter can be integrated with CRM to benefit GOFs on many various levels. At the level of customers, Twitter could be employed as a free



customer service medium especially for startups instead of having a costly dedicated call center. For example, identifying customer issues intake of complaints and responding to them in private messages for detailed information. Later, some public posts can be made after solving issues for the sake of transparency and efficiency of customer service function. Also, Twitter can give chances to reestablish rapport with our lost customers (e.g. un-followers). This will give a big picture on how GOFs branches function and their level of services, restoring relations with lost customers and identifying the reasons for dissatisfaction and showing them that we care about them and seeking their satisfaction. At the level of suppliers or partners, in tendering and accepting bidder's proposals Twitter data can be analyzed to check if they have Twitter with a good reputation. At the level of competitors, Twitter provides means of monitoring and analyzing existing or new competitors' accounts to elicit their objectives, advertisements and people's impressions about their products/services.

- **Human Resources (HR) Angle:** Twitter can be used as a community for gathering and monitoring subject field expertise to share knowledge, experiments, thoughts, cases, and keep abreast of the latest news. In addition, as a part of recruitment processes SMNs like LinkedIn data could be reviewed to select candidates and contact their previous GOFs that they have already worked for. Also, Twitter is like a gate to study new candidates' personalities, characteristics, and orientations professionally, psychologically, and socially.
- **Markets Studying (MS) angle:** Let us examine the following perspectives of which Twitter data sources can be extremely helpful in respect to MS. Firstly, determine target markets based on geographical data of people along with their interests in products/services. Secondly, explore regions locally or globally that products/services did not reach yet through frequency analysis of customers' locations. Thirdly, valuable opportunities of discovering and creating new, foreign and emerging markets via analyzing Twitter data sets & understanding many societies in different languages by integrating translation tools or algorithms. Because of such understanding of market's needs, GOFs indeed would have different business strategies consecutively. As an illustration, Multilateral Development Banks (MDBs) can benefit from the mining of Twitter by exploring new chances of development projects or investments in many unknown or hidden parts of the globe. Fourthly, Twitter would be considered as a cost-time effective approach of collecting, analyzing, and understanding people immediate needs instead of paper-based or electronic based surveys. This is true to some extent because people express themselves in Twitter and mostly provide truthful information about their thoughts and emotions. For example, student's impressions and feedback about courses and

instructors at the end of each semester. Normal surveys can lead to false subjective results of assessments because they are filled with fear sometimes.

- **Total Quality Management (TQM) Angle:** Twitter provides effortless ways to reach famous products/services inspectors or reviewers to examine, spread and convey real customer values that would be gained. Therefore, GOFs will have favorable results out for evaluating people opinions and comments to avoid errors in products/services designs before releasing, customize them for different markets, earn innovative ideas for new ones or new versions and draw management attention to internal weaknesses and the responsible business units. With all this in mind, considerable changes may occur in GOFs value chain and manufacturing processes.
- **Forecasting Techniques Angle:** As we mentioned earlier in literature review section, [10] authors have proven that Twitter is an efficient technique for predicting future desirable or unknown outcomes. As an example, smartphones manufacturing companies can have a close figure of stocks and volume of exports to be manufactured and transferred in advance before releasing for different markets and places.
- **Risk Management (RM) Angle:** Utilizing Twitter data in initiating disaster or emergency plans by keeping track of the news of incidents that happened nearby GOFs assets or branches; as this news are spread on Twitter before TV channels nowadays. For example, at the level of Governments, Twitter would have been so much helpful to identify people's needs in general with regards to their Nutrition, Healthcare, Education, Human Rights, Freedom, Social Justice and Job Security Needs. For instance, the mass demonstrations (Arab Spring) could have been avoided or at least controlled if the Governments were able to study their public Twitter activities and intentions. Such studies would be extremely helpful for driving peoples' future based on their needs and ambitions. Moreover, GOFs must be aware of the risks comes out fake accounts on Twitter that may spread rumors from competitors.

6. THE ROLE OF TWITTER IN GOVERNMENTS

Sullivan (1986) suggested that the key element of effective planning is to search for a competitive advantage via the application of IS/IT [1]. By keeping in mind all that have been discussed in the previous sections, the Twitter role in GOFs can be defined as follows:

- **Key enablers of effective business strategic planning:** as they are rich IS technologies full of valuable data sources they can help in defining business strategies which will help in formulating the IS strategy and consequently, prioritize IS applications needed by GOFs.



- **Intrinsic strategic success criteria:** In terms of continuous assessment and enhancement of customer values, creating new opportunities for investments or new markets and avoiding catastrophes through pro-active analysis for predicting future events to gain good ROI.
- **Driver toward excellence:** As they have significant effects on GOFs in terms of understanding external environment (customers, competitors, and markets), formulating business strategies, keeping track of frequent changing customer requirements and open gates for innovative ideas (adding values through finding weaknesses and re-engineering business processes for doing things easier & better).

Since, Twitter might critically affect different angles of GOFs business such as Research & Development, Marketing & Advertisement, Customer Relationship Management, Human Resources, Market Study, Total Quality Management, Forecasting and Risk Management. As such, it is worth mentioning that Twitter falls under the strategic application in GOFs IS application portfolio, as they are critical to have sustaining future business strategies. In other words, Twitter is the GOFs which they must have some sort of good caretaking because of their entitlement of investment.

7. METHODOLOGY

To explore the role of Twitter in GOFs in real life, we have conducted the case study with one of large GO in Kingdom of Saudi Arabia (The passports). The main objective of this case study is to assess how companies envisage the importance of Twitter regarding their GOFs? Therefore, to meet the aim of this research mixed research methods has been adopted as a methodology for carrying out this research. According to Creswell, (2009) mixed methods involves collection, analysis, and integration of quantitative (for instance, surveys and experiments) and qualitative (for instance, interviews and focus groups) research. Adoption of this approach for a research offers better understanding about the research problem rather than both of them individually. Robson (1993) supported the mix of both qualitative and quantitative data, as the researcher is able to obtain depth and breadth of corroboration and understanding, while offsetting weaknesses that are inherent to the use of every approach on its own.

For this research study, a case study approach has been chosen and a single government organization has been examined to learn the importance it has for Twitter. Therefore, in-depth interview sessions survey questionnaire has been conducted with senior representatives and employees respectively in the company who have a deep knowledge about the IS, especially for their latest GOFs. Questionnaire consists of 10 statements that are relevant to assess the importance of Twitter in the GOFs from the perspective of the employees. Furthermore, questionnaire is carried circulated to 150 employees in the Passport control organization of KSA. Also, interviews have been carried out 5 senior executives working in the passport control GO. The data analysis includes offering the responses of participants from the questionnaire in tabular form and to evaluate them for answering the research question. Moreover, the responses from the interviews are also assessed by

discussing them with respect to the questions that were presented to the interviewee.

8. ANALYSIS AND DISCUSSION

8.1 Interview Analysis

The following questions were asked to those seniors' representatives working at the Passports Government organization in KSA:

- Is there a specific strategy designed by Twitter within their government organizations?
- What are the procedures that are used by the organization to benefit their business from Twitter?
- What are the aspects that the organization uses Twitter?
- Did the organization establish departments that are responsible for studying on how to utilize Twitter?
- Are there any specific systems or applications specialized for Twitter that have been integrated with the basic information systems of the organization?
- How important can Twitter take place to benefit the organization's success in general?

The responses of the interviewees have highlighted that the Passport control government organization in KSA have already introduced new departments to deal with Twitter for providing the company's services. It has also generated official accounts for different departments authenticated in Twitter to provide customers the trust they need when dealing with the organization online or seeing promoted ads. Most of the interviewees have affirmed that the organization is mainly using Twitter as mediums to support three main functions such as marketing, advertising, and customer service. It has achieved customers' satisfaction in terms of customer service by delivering the support and providing detailed information about products in more efficient, faster, and cost-effective way. The organization's traditional customer service methods load has dramatically decreased by around 30% after integrating Twitter. The interviewees also shared that around 65% of the users prefer to contact through with the organization through Twitter. On that basis, the company has increased its attention to mobile data (3G or 4G) by 75% more than the normal SIM cards call and SMSs services after observing the dramatic usage of their customers in Twitter especially for the clients with ages between 14 to 45 years. It has also integrated online communications with customers through Twitter with their customer service information system with the availability of 24/7.

The overall results of the interviewees' answers and discussions point towards the fact that Twitter are playing a critical role in the organization's strategic planning regarding the marketing, advertising, and customer service related business functions.

8.2 Questionnaire Analysis

This subsection presented the results obtained from the questionnaire that was carried out with the employees working at the passport control and possess knowledge regarding the importance of Twitter in their organization. The following heads



have been chosen on how Twitter improves the performance of the organization in terms of (1) use of Twitter, (2) Company image (3) accessibility of information, (4) customer relations and (5) work efficiency. The questionnaire scale is designed on Likert scale where 5 is Strongly Agree and 1 is Strongly Disagree.

The quantitative data has been analyzed with the use of frequency distribution table analysis, in which percentages of the responses have been provided for each statement that is required to be answered by the respondent. This helped in evaluating the view of majority of employees about the impact that Twitter usage have on the performance of the passport government organization in KSA.

8.2.1 Demographic Characteristics

The first section of the survey included demographic characteristics such as gender, age and experience of the employees with the Passport organization of KSA. The first question was asked about how many males and females participated in the survey. The result was having been depicted in Table 1 below highlights that 88.7% of the participants were male, whereas only 11.3% are females who participated in the research. This is due to the conservative society of KSA, moreover, this factor might certain gender biases and it might be inclined towards the males.

The next question was to identify participants age groups, and it is evident from Table 1 that majority of the participants belonged to 31-45 years of age (56.7%).

The last question of the first section demographic characteristics includes the years spent by the employees in the company. It is evident from Table 1 that majority of the participants have worked for the company for 2 -4 years (49.70%).

Table 1: Demographic Characteristics

<i>1. Gender</i>	
Male	88.3 %
Female	11.3 %
<i>2. Age groups</i>	
18 to 30 years	29.9%
31 to 45 years	56.7 %
46 to 65 years	13.4 %
<i>3. Experience with the Company</i>	
1- 2 years	35.5%
2-4 years	49.7%
4 or more years	14.8%

8.2.2 Use of Twitter

Section 2 consists of two statements that are relevant to use of twitter by the employees in the Passport organization of KSA and the summary of these results has been provided in Table 2 below. The first statement of this section asked the employees if Twitter helps them in communicating with their customers easily. Majority of the participants (54.6%) have agreed to the statement and it means that Passports Organization in KSA Twitter is used to communicate with the customers.

The second statement on which participants have responded is that Twitter helps the employees in better understanding the customers' queries. Majority of the participants in this survey strongly agreed (53.2%) to the statement.

Table 2: Use of Twitter

<i>Twitter helps in communicating easily with the customers</i>	
Strongly Agree	28.7%
Agree	54.6%
Neutral	5.1%
Disagree	7.0%
Strongly Disagree	4.6%
<i>Twitter helps in understanding better the queries of customers</i>	
Strongly Agree	53.2%
Agree	27.5%
Neutral	7.5%
Disagree	19.8%
Strongly Disagree	2.0%

8.2.3 Company Image

Section 3 consists of two statements that are relevant to how Twitter is used in improving the image of the Passports Organisation in KSA. The respondents expressed that they significantly agreed (57.8%) that use of Twitter helps Passports Organisation of KSA to develop a good impression of itself.

Furthermore, another statement on which the respondents presented their opinions is that use of Twitter influences people's opinion about Passports organisation in KSA. This means that majority of the participants have agreed and strongly agreed that their organisation influences the people's opinions with the use of Twitter. It is evident from the responses that the image of a company can be influenced with the use of Twitter.

Table 3: Company Image

<i>Use of Twitter helps your company develop a good impression of itself</i>	
Strongly Agree	21.9%
Agree	57.8%
Neutral	5.3%
Disagree	10.7%
Strongly Disagree	9.6%
<i>Using Twitter influences the people's opinion in your company</i>	
Strongly Agree	27.1%
Agree	28.1%
Neutral	20.5%
Disagree	20.0%
Strongly Disagree	5.3%

8.2.4 Accessibility of Information

Section 4 consists of two statements that are relevant to the effect that Twitter has in terms of information accessibility. The first statement of this section includes responses of the participants that if use of Twitter improves the accessibility of the company to customers' feedback and views. Majority of the participants have agreed (47.9%) to this statement.

Moreover, the second statement for which the employees of the Passport organization responded is that use of Twitter improves



the accessibility of the company customer complaints. It evident from the Table 4 that majority of the respondents have agreed (51.3%) to the statement. Therefore, majority of the respondents were of the opinion that use of Twitter makes it easier for the Passport Organisation of KSA to access information.

Table 4: Accessibility of Information

<i>Using Twitter improves the accessibility of the company to customers' feedback and views.</i>	
Strongly Agree	24.3%
Agree	47.9%
Neutral	7.8%
Disagree	12.0%
Strongly Disagree	8.0%
<i>Using Twitter improves the accessibility of the company customer complaints.</i>	
Strongly Agree	32.0%
Agree	51.3%
Neutral	12.0%
Disagree	3.4%
Strongly Disagree	1.3%

8.2.5 Customer Relations

Section 5 consists of two statements that are relevant to the effect that Twitter has in terms of maintaining customer relations. The first statement of this section includes responses of the participants that if use of Twitter improves the accessibility of the company customer complaints. Majority of the participants have agreed (53.2%) to this statement.

Moreover, the second statement for which the employees of the Passport organization responded is that use of Twitter makes it easier to directly interact with customers and public. It evident from the Table 5 that majority of the respondents have agreed (49.9%) to the statement. Therefore, majority of the respondents were of the opinion that use of Twitter makes it easier for the Passport Organisation of KSA to maintain good customer relations.

Table 5: Customer Relations

<i>Using Twitter improves the accessibility of the company customer complaints.</i>	
Strongly Agree	32.1%
Agree	53.2%
Neutral	5.0%
Disagree	4.7%
Strongly Disagree	5.0%
<i>Using Twitter makes it easier to directly interact with customers and public</i>	
Strongly Agree	26.0%
Agree	49.9%
Neutral	4.1%
Disagree	9.8%
Strongly Disagree	10.2%

8.2.6 Work Efficiency

Section 6 consists of two statements that are relevant to the effect that Twitter has in terms of maintaining customer

relations. The first statement of this section includes responses of the participants that Twitter makes it easier to respond quickly to the customers' queries. Majority of the participants have agreed (47.2%) to this statement.

Moreover, the second statement for which the employees of the Passport organization responded is that Twitter is less time consuming in terms of replying to multiple customers compared to letter or email. It evident from the Table 6 that majority of the respondents have agreed (45.1%) to the statement. Therefore, majority of the respondents were of the opinion that use of Twitter makes it easier for the Passport Organisation of KSA helps in increasing the work efficiency of the employees.

Table 6: Work Efficiency

<i>Twitter makes it easier to respond quickly to the customers' queries</i>	
Strongly Agree	31.7%
Agree	47.2%
Neutral	15.5%
Disagree	3.4%
Strongly Disagree	2.2%
<i>Twitter is less time consuming in terms of replying to multiple customers compared to letter or email.</i>	
Strongly Agree	29.1%
Agree	45.1%
Neutral	15.4%
Disagree	7.2%
Strongly Disagree	3.2%

9. CONCLUSION AND FUTURE WORK

This research paper has undertaken the study of the interrelationship between Twitter and any GO. Twitter is submerged in every part of the business body as they can be mined to prolong authentic information derived directly from people and societies. The paper has concluded to define Twitter role as key enablers of effective business strategic planning, intrinsic strategic success criteria and drivers toward excellence. The paper also has conducted a case study in one of the largest governmental organization in Saudi Arabia (Passport). The feedback from the passport's results into the fact they are mainly using Twitter in marketing, advertisements, and customer services functions, which significantly plays a key role in the passport's strategic planning.

The results of the questionnaire have also depicted that Passports Organization in the KSA uses Twitter to communicate effectively with its clients and maintain healthy relationships with them. It also helps in sharing information with the customers and public and provides better understanding of customer complaints and queries. Furthermore, Twitter also helps in reducing time and effort on the part of the employees and improves the image of the company. These findings are supported by Tundjungsari (2013) that government organizations make use of social media in order engage and communicate with their customers and stakeholders.

An empirical study that supports the claims of this study in the sense of numbers and statistics may have high potential leverage for GOFs as a future work. Also, it is recommended that data



sets have to be gathered and mined using data mining techniques and tools to extract data and visualization tools to present information in different angles discussed for business.

In future, other researches can be carried out to test the importance of Twitter in a specific industry as well as a cross-country analysis for the same industry can be carried out with a larger sample of respondents to obtain more authentic and better results.

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