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INTRODUCING POSSIBLE REVENUE MODELS OF REVIEW
SITES IN THE SCHOOL INDUSTRY IN EGYPT

Master of Science thesis

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Examiner and topic approved by the
Faculty Council of the Faculty of
Business and Built Environment
on October 5th, 2016

ABSTRACT

HASSAN ATTIA: Introducing possible revenue models of review sites in the school industry in Egypt.

Tampere University of Technology

Master of Science Thesis, 84 pages, 02 Appendix pages

December 2016

Master's Degree Programme in Industrial Engineering and Management

Major: International Sales and Sourcing

Examiner: Professor Miia Martinsuo

Keywords: Revenue models, Review sites, Consumer reviews, School industry, Internet.

Businesses use different marketing communication tools to promote their company, product or services. Alongside the traditional tools, new Internet-based tools e.g. social media networks and review sites, are emerging thanks to technological breakthroughs. Review sites such as TripAdvisor, Yelp and IMDb have enabled creating large source of information on the web i.e. user generated contents in the form of blogs, comments, reviews etc. Academically, these sites have attracted considerable attention to study their business models and implications; however, critical elements such as revenue models have been overlooked, particularly for school review sites.

The objective of this thesis is to introduce possible revenue models that school review sites can utilize to derive revenue and to discuss the key requirements of these models. The theory framework has been developed bringing together the concepts of marketing communication tools, word-of-mouth communication, review sites and revenue models. The empirical data have been collected through three methods: semi-structured interviews with key persons in school reviews sites, survey a sample of education stakeholders in Egypt and process benchmarking the best practices of review sites.

The research revealed that no platform relies on a single revenue model. Nevertheless, review sites agreed to utilize a mixed model that consists of a combination of revenue models in order to explore the value appropriation advantages of each model. The study suggests that commercial-driven school review sites can adopt advertising, transaction and subscription models. However, non-profit platforms can better adopt philanthropy or corporate sponsorship models to derive revenues.

PREFACE

This thesis represents the final chapter of my Master's studies in industrial engineering and management in TUT. The last three years had been a fascinating learning experience. It gave me an excellent opportunity to broaden my knowledge about Internet businesses and marketing communication tools. During the research process, I got a chance to talk and meet with interesting people from different countries about ICT in education, school review sites and education in Egypt.

First of all, I would like to thank all my professors and lecturers in TUT that helped me during my studies so I would be able to write this paper, and most importantly my supervisor Professor Miia Martinsuo for her professional guidance and insightful comments. Neither this thesis nor my studies would be possible without the unconditional support and motivation from my mother Magda and father Ali, to whom I wish to express the sincerest words of gratitude. Special thanks go to my dear wife Nahla who was always beside me in the times of need.

This thesis marks the end of one interesting chapter in my life. Yet, new chapters are about to come. Now, I am ready to start my new journey.

Riyadh, 16.10.2016

Hassan Attia

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LIST OF SYMBOLS AND ABBREVIATIONS

ANSA-EAP	Affiliated Network for Social Accountability in East Asia and the Pacific
CMS	Check My School
CMSE	Check My School Egypt
CPA	Country programmable aid
CPC	Cost-per-click
CPM	Cost-per-impression
eWOM	Electronic word of mouth
ICT	Information and communications technology
IDO	International Development Organization
IMDb	Internet Movie Database
MCIT	Ministry of Communication and Information Technology
MENA	Middle East and North Africa
ODA	Official development assistance
RMP	Rate My Professor
RMS	Rate My School
SNS(s)	Social network site(s)
WOM	Word of mouth

1. INTRODUCTION

1.1 Background and motivation

When making purchase decisions, consumers are known to discuss products and brands (Berger, 2013). In the context of marketing communication, these types of discussions are known as word-of-mouth (WOM) communication, and refer to “*any information about the target object or brand transferred from one individual to another either in person or via some communication medium*” (Brown et al., 2005 in Herold, 2015). In recent years, people are used to rely on WOM as the primary enabler of their purchasing activities (Dellarocas, 2003) which garnered global attention from marketers to researchers around the world (Hollis, 2008). For instance, a recent study by Boughin et al. (2010) has suggested that WOM is the primary factor behind 20 to 50 percent of all purchasing decisions. Nevertheless, as consumers shift to communicate online, traditional word-of-mouth has evolved to electronic word-of-mouth, or eWOM where an immense amount of consumers’ opinions and reviews on a variety of products or services become accessible on the Internet (Zhang et al., 2013).

eWOM has become subject of considerable research over the past decade. Hennig-Thurau et al. (2004) define electronic word-of-mouth as “*any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet*”. When comparing eWOM to the traditional word-of-mouth communication, eWOM is more influential due to its speed and convenience (Sun et al., 2006). The rapid adoption of Internet technologies offers a fertile ground for eWOM communication development. eWOM communication can take place into various settings as consumers can share their opinions, comments and reviews of products and services on weblogs (e.g. Xanga.com), social networking sites (e.g. Facebook.com) and review sites (e.g. Epinions.com) (Cheung & Thadani, 2010). This paper focuses on review sites as a popular form of eWOM communication.

As the number of online consumers worldwide grows up to 1.2 billion in 2015 (Statista, 2015), online reviews have become an important resource for consumers that surf product information (Zhu & Zhang, 2009). Research has shown that nearly two-thirds of consumers consult online reviews, blogs, and other sources of online customer feedback before purchasing a new product or service (Wei & Lu, 2013). These online reviews can influence the e-marketplace tremendously as demonstrated in several popular websites, such as Yelp (www.yelp.com), IMDb (www.imdb.com) and TripAdvisor (www.tripadvisor.com) (Zhang et al., 2013). Existing literature refer to these platforms by several terms including review websites (Walsh & Swinford, 2006; Raut & Londhe, 2014), consumer

review sites (Chen et al., 2011; Matzat & Snijders, 2012) and customer review sites (Choi et al., 2013). This study uses the term review site as referred to by many scholars e.g. Vermeulen & Seegers, (2008), Ensing (2014) and Minnich et al., (2015). Review site is a website on which people post reviews for products and services (Innovationpei, 2011). In a broader sense, review site is a website that contains customer reviews regardless of whether hosting customer reviews is its primary purpose (CMA, 2015).

Review sites are widespread on the Internet and rapidly gaining in popularity among consumers, organizations and researchers (Dellarocas et al., 2004). For instance, Smith (2013) stated that 60% of consumers consider ratings and reviews important when researching products. On the Internet, there are hundreds of review sites that apply to businesses in almost every industry. Their influence on consumer behavior is widely recognized in industries such as the tourism industry e.g. TripAdvisor, where a 2010 Cornell Hospitality Report pointed out that travel-related websites like TripAdvisor are used by more than 40% of leisure travelers to make purchase decisions (Ensing, 2014); the catering industry e.g. Yelp, where a study by Luca (2011) showed that a one-star increase in Yelp ratings translates into a 5 to 9 percent increase in revenues for restaurants (Ensing, 2014), and the movie industry e.g. IMDb where movies' ratings have significant impact on box-office revenues (Dingenouts, 2012).

There are plenty of studies that explored the role of review sites in shaping consumers behavior. Driven by the popularity of TripAdvisor, Yelp, IMDb and Amazon, most of the existed studies have addressed only certain industries where concept, impacts and credibility of reviews have been the focus of most of them. While review sites are extremely popular in industries such as tourism, catering and movie with a wide range of websites operating all over of the world, the global reach of review sites is limited in industries such as school. For instance, RateMyProfessors (RMP), the largest online destination for professor ratings on the Internet with more than 15 million ratings and 4 million monthly visitors only operates across the United States, Canada and the United Kingdom (Rate-MyProfessors, 2015). Academically, the uniqueness of the case of RMP have attracted considerable attention to explore the role of review sites in the school industry using only the RMP case; however, critical elements such as revenue models have been overlooked.

In the context of this study, existing research mainly concentrates on studying two approaches: first, generic Internet revenue models; and second, renowned review sites; separately. This study attempts to integrate these two approaches and bridging the gap in between. Precisely, this thesis explores several revenue models in review sites, particularly focusing on the school industry. Thus, the thesis is focused on the fiscal perspective of review sites. The study used in this Master's thesis contributes to the digital project: Check My School Egypt (CMSE). CMSE is a prospect digital service for schools in Egypt that tends to improve the education performance of schools through the power of reviews.

Therefore, special emphasis is on presenting possible revenue models that suit CMSE in the Egyptian context.

1.2 Goals, research questions and scope

It is believed that review sites are profoundly influential in a couple of industries such as the tourism industry e.g. TripAdvisor.com, the catering industry e.g. Yelp.com and the movie industry e.g. IMDb.com. These sites influence millions of consumers all over the world. However, other industries lack the similar global reach such as school and health industries due to several constraints e.g. limited revenue streams. To analyze this, it is important to explore the diverse attributes of review sites in different industries, and more precisely, the key requirements of online revenue models. Therefore, the goal of this study is to introduce possible revenue models for school review sites, which can particularly benefit websites generating exceptional revenue streams whilst delivering social value. In the context of this research, school review sites refer to all sites that allow consumers including students, parents and teachers to post their opinions about schools' teachers, services and tools. Hence, the main research question the thesis attempt to resolve is...

What kind of revenue models can school review sites utilize to derive revenue?

For this analysis, diverse revenue sources will be explored by comparing and benchmarking different revenue models of global review sites of multiple industries generally and the school industry particularly. Furthermore, the research will utilize data collected from semi-structured interviews and process benchmarking of several review sites. These data reflect the stakeholders' knowledge, expectation and attitude toward using school review sites and thereby the most suitable revenue models can be adopted.

Egypt is the national study context of this research. It is the fifteenth largest country in the world measured by population of 92 million (United Nations, 2015). Approximately 50 percent of Egyptians use the Internet (InternetLiveStats, 2015) with around 19 million users are on Facebook according to a recent study by AlexBank (2015). It is believed that the country-specific culture of education is unique and in order to apply any of the best practices of online revenue models; adaptation measures will be necessary. To complement the main research question the following sub-questions are raised...

- What are the key requirements of revenue models in review sites?
- How convenient is to utilize the selected revenue models in the Egyptian context generally and for CMSE particularly?

As a result of this thesis, several revenue models for review sites of selected industries are presented. These revenue models are analyzed in order to first describe the key requirements of these models, and also to check if they can fit the school industry. Special

attention is placed in the Egyptian context taking into account the country-specific education culture. However, the test and implementation of those revenue models are purposively excluded in this study. This paper also paves the way for further research in the areas of business model elements of review sites. Also studying cost and pricing models of school review sites can provide interesting directions for further research.

1.3 Structure of the thesis

This thesis consists of six chapters that follow the formats and regulations at Tampere University of Technology as presented in Figure 1. The Introduction part illustrates the background and motivation of this thesis work, defining the gap and the goals for this study as well as the research questions, scope and structure of the thesis.

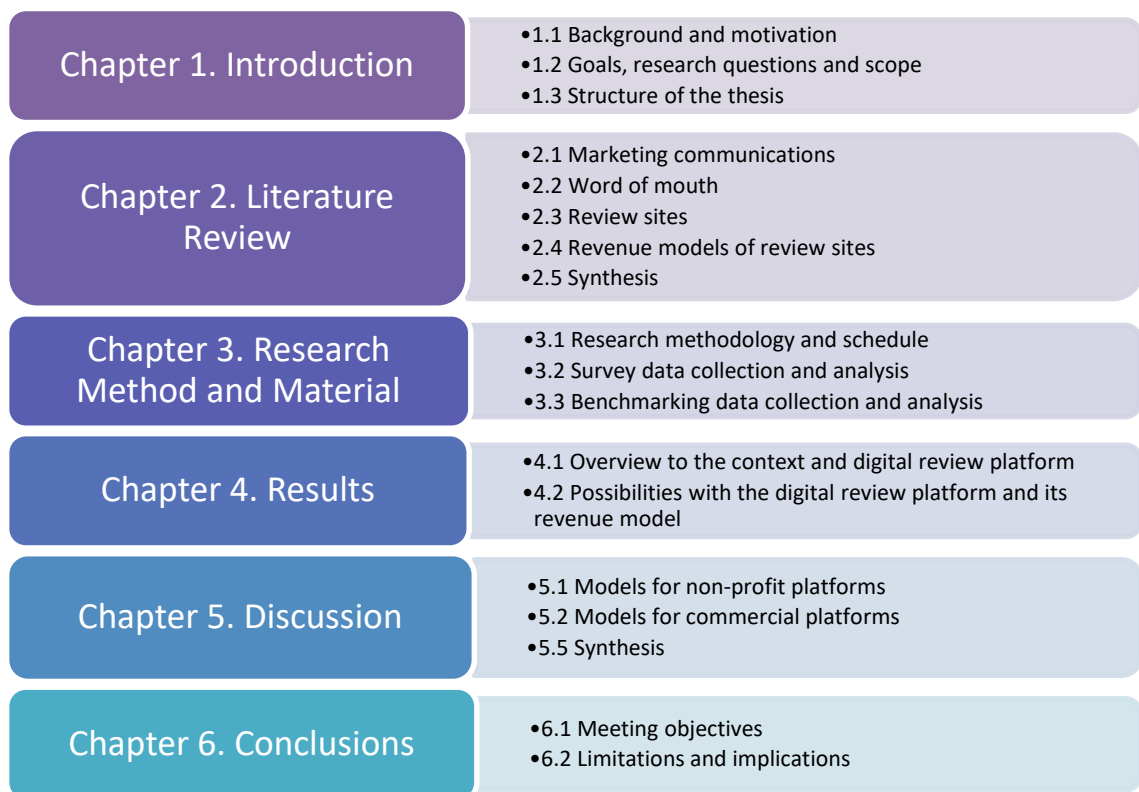


Figure 1. Structure of the thesis.

The second chapter presents a literature review that provides the background information needed for the analysis of the empirical study. This chapter elaborates on the existing research fields which are relevant to the topic and scope of this thesis. The literature review focuses on three main topics within the context of marketing communications, which are the keys for this study: electronic word-of-mouth, role of review sites in the e-marketplace and revenue models of review sites generally, and in the school industry particularly. Each section is divided into more specific subchapters that describe the elements, best practices and challenges of revenue models with special attention in the school industry. Chapter three illustrates how this study is conducted and what materials

are used in the study. It elaborates on the research process and data collection methods including survey, interviews and process benchmarking used in writing this thesis. Next the results are presented in chapter four where the survey, interviews and benchmarking findings are discussed and analyzed. A background of the paper's case study: Check My School Egypt is also illustrated in the fourth chapter besides a background about school culture, education system and status of information and communications technology in Egypt. Chapter five discusses the results of this study while connecting them to the existing literature and reveal the key findings of the thesis. Finally, the last chapter presents the conclusions of this thesis, limitations of the study and paves possible directions for future research.

2. LITERATURE REVIEW

2.1 Marketing communications

All organizations – large and small, commercial, government, educational and other non-profit organizations – need to communicate with a range of stakeholders. Today, consumers become free to choose among the many thousands of product offerings. Marketing communications provides a core activity so that all stakeholders can understand the intentions of others and appreciate the value of the goods and services offered. (Fill & Jamieson, 2006) Kotler & Keller (2012) define marketing communications as "*the means by which firms attempt to inform, persuade and remind their customers - directly and indirectly - of products and brands they sell*". In other words, marketing communication is a general term that describes all types of different tools to deliver planned messages via different media to audiences in order to build brand, provide information to target audience and boost sales (Ekhlassi et al., 2012).

Businesses use different marketing communication tools to promote their company, product or services. Traditionally there are five main marketing communication disciplines or tools as addressed by Kotler (2000), which are: advertising, sales promotion, public relations and publicity, personal selling and direct marketing. Besides, several other tools have been also presented into literature. For examples, Armstrong & Kotler (1993) argued that each type of those tools has its own sub-tools in which advertising includes print, broadcast, outdoor, and other forms; sales promotion includes point-of-purchase displays, premiums, discounts, coupons, specialty advertising, and demonstrations; personal selling includes sales presentations, trade shows, and incentive programs; direct marketing includes catalogues, telemarketing, fax transmissions, and the Internet. Moreover, Smith (1998) introduced twelve different marketing communication tools that include personal selling, advertising, sales promotion, direct marketing, public relations, sponsorship, exhibitions, packaging, point-of-sale and merchandising, the Internet, word-of-mouth and corporate identity. All these tools pursue the same objective of marketing communication which is ultimately to achieve sales (The Chartered Institute of Marketing, 2009).

In accordance with the last passage, savvy marketers know that communication goes beyond the five significant tools addressed by Kotler as marketing communication is constantly developing. Although traditional printed media, radio, telephone and television remain important marketing communication tools, but alongside these traditional media, new Internet-based media are emerging thanks to technological breakthroughs, such as websites, weblogs, emails, Facebook and Twitter. (Floor & Raaij, 2011) These new technologies have encouraged more organizations to move from mass communication to more targeted communication and one-on-one dialogue (Armstrong & Kotler, 1993). Figure 2

illustrates a couple of the most popular tools of marketing communication in today's market.



Figure 2. Marketing communications' tools.

As per the figure above, businesses use a wide range of marketing communication tools. It is believed that adopting a variety of communication tools in organizations has the ability to maximize the communication impact on target consumers (Saeed et al., 2013). The integration of these tools constitutes what is known as marketing communication mix. Marketing communication mix is the set of marketing tools that the organization uses to pursue its marketing objectives in the target market (Kotler, 2000). Each element of these communication tools should integrate with each other so that a unified message is consistently reinforced (Olander & Sehlin, 2000). However, organizations sometimes fail to integrate their various communications tools. This results into every day the consumer being overloaded with all kinds of marketing communication. All these messages compete for attention, but only a small proportion of all communication really touches the consumer. (Floor & Raaij, 2011) Therefore, in order to determine the right mix, organizations must decide which tools to use and how to combine them to achieve their marketing and communication objectives. (Belch & Belch, 2008)

Within the conceptual framework of marketing communication, this thesis focuses on studying word-of-mouth as a tool of marketing communication. This chapter discusses three key topics of interest for the development of this thesis: word-of-mouth, review sites, and revenue models of review sites. Dichter (1966) has discussed word-of-mouth (WOM) as a particular form of marketing communication that originates from consumers and is directed to other consumers.

2.2 Word-of-Mouth

This section identifies the first stream of research which is word-of-mouth communication. This section includes three subchapters. The definition of word-of-mouth (WOM) is the starting point. The second subchapter illustrates the shift from word-of-mouth to electronic-word-of-mouth (eWOM). Lastly, different forms of eWOM are studied.

2.2.1 Definition

When making purchase decisions, consumers are known to discuss products and brands (Berger, 2013). In marketing, these types of discussions are known as word-of-mouth (WOM). WOM is merely defined by the Word of Mouth Marketing Association as the act of consumers providing information to other consumers (WOMMA, 2007). In the marketing communication context, the last decades have witnessed an emerging literature focusing on the concept and aspects of WOM (Gildin, 2003; Gheorghe, 2012); WOM communication (Harrison-Walker, 2001); positive WOM (Brown et al., 2005); negative WOM (Richins, 1983); the relationship between customer satisfaction and WOM (Anderson, 1998); the effects of WOM on sales and revenue (Chevalier & Mayzlin, 2006; Liu, 2006); and the impacts of WOM on consumer decision-making (Herold, 2015). The extensive research on WOM has proven that it is one of the most influential channels of communication in the marketplace (Allsop et al., 2007).

Word-of-mouth as a concept has been mentioned in literature since the late 60s; and has been defined by a number of researchers in the marketing field (Lerrthaitrakul & Panjakajornsak, 2014). Researchers have associated this concept with personal recommendations, interpersonal relationships, informal communication, personal and interpersonal influence and even with an informal form of advertising (Gheorghe, 2012). Some of these relevant concepts for word-of-mouth are presented in Table 1.

Table 1. *Definitions of WOM (Gheorghe, 2012).*

Author(s)	Definition
Arndt (1967)	Oral, person to person communication between a receiver and a communicator whom the receiver perceives as non-commercial concerning a brand, a product, or a service.
Richins (1983)	The act of telling at least one friend about the dissatisfaction.
Bone (1992)	An exchange of comments, thoughts, and ideas among individuals in which none of the individuals represent a marketing source.
Anderson (1998)	Informal communication between private parties concerning evaluations of goods and services.

Author(s)	Definition
Brown et al. (2005)	Any information about the target object or brand transferred from one individual to another either in person or via some communication medium.

The table above shows that WOM is not a new concept. Instead, it started to occur only among neighbors exchanging news and comments regarding the offerings of neighborhood stores in a face-to-face conversation (Gheorghe, 2012). As in Figure 3, this face-to-face conversation is usually private, and conducted between two parties: the source of the information and the receiver. The source and the receiver are usually friends, relatives or acquaintances. (López & Sicilia, 2014) In these conversations, parties share their experiences whether they are positive or negative.

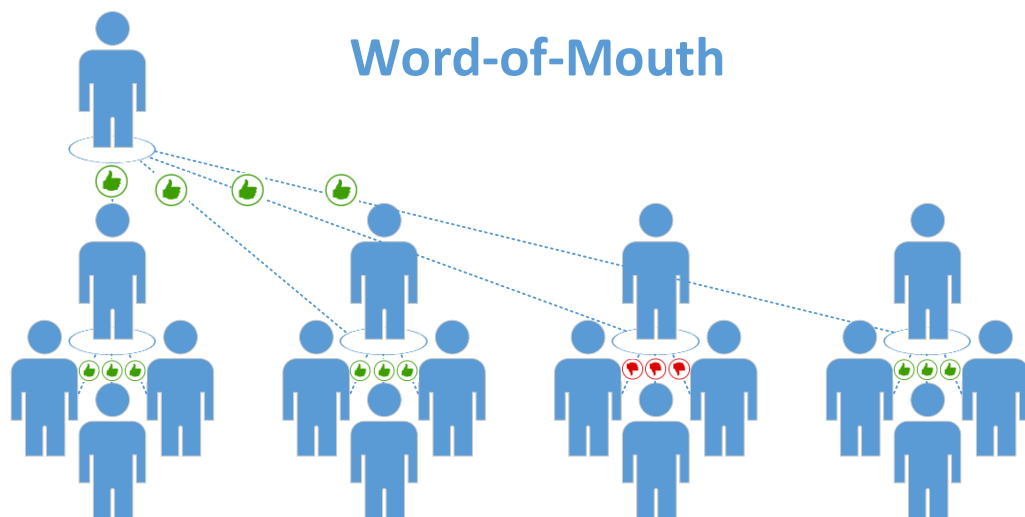


Figure 3. *Word-of-Mouth.*

The last figure revealed the basic idea behind WOM which is both positive and negative comments and reviews about products, services, stores and organizations can spread from one individual to another either in person or via some communication medium. While WOM can be positive or negative, marketers are naturally interested in promoting positive WOM, such as recommendations to others (Brown et al., 2005). The positive WOM can encourage consumers to buy the products and services while negative WOM has the opposite effect (Lerrthairakul & Panjakajornsak, 2014). For instance, a study by Ye et al. (2009) shows that positive WOM can significantly increase the number of bookings in a hotel while variance in WOM can decrease sales.

Impact of WOM on consumer purchase behaviour has been discussed in marketing literature for a long time (Ghosh et al., 2014). For instance, a recent study by Boughin et al. (2010) has suggested that WOM is the primary factor behind 20 to 50 percent of all purchasing decisions. Moreover, Gheorghe (2012) has claimed that WOM is more effective in influencing consumers' purchasing decision behavior than other types of marketing. The reason behind the WOM's power has been addressed by Allsop et al. (2007). The

authors claimed that WOM is more credible and trustworthy than marketer-initiated communications such as television commercials or other kinds of advertisements because it is assumed to be unbiased reflection of other consumers' experiences.

Although WOM can benefit group of consumers when they communicate and share information, opinions and experiences of using products and services, traditional WOM is limited and can be done only within small groups of potential consumers such as a group of friends, neighbors or family members (Lerrthaitrakul & Panjakajornsak, 2014). With the advent of the Internet, and later social media, WOM has gained extraordinary importance which enabled consumers to disseminate and access WOM on a broader scale through electronic medium (Willemsen, 2013). In a few words, traditional WOM has evolved into a new form of communication, namely electronic word-of-mouth (hereafter: eWOM) which is able to generate more reach (Cheung & Thadani, 2010). eWOM is described in more detail in the following section.

2.2.2 Electronic word-of-mouth

The Internet's impact on our society has led to an extended platform for customer opinions and reviews (Dahlin et al., 2015). The rapid adoption of Web 2.0 have created radically new ways for consumers to publicize and share their product experiences and opinions with no geographic or time constraints —i.e., through word-of-mouth or consumer reviews (Wirtz et al., 2010; Chen et al., 2011). According to Santos et al. (2009), Web 2.0 is often associated with collaborative and user-generated content. In addition, Jakob et al. (2009) argue that one of the key characteristics of Web 2.0 is that it allows Internet users to share with other users their viewpoints and opinions about almost everything.

The growth in both mobile and Internet convergence in the Web 2.0 era has fostered people to communicate online where an immense amount of consumers' opinions and reviews on a variety of products or services become accessible on the Internet. As consumers shift to communicate online, traditional WOM has also evolved to electronic WOM, or eWOM (Zhang et al., 2013). Similarly to the traditional WOM, there is a growing body of literature on eWOM that spans diverse fields of research including marketing, management and information systems (Nagle & Riedl, 2015). eWOM is a concept that has seemed to grow by leaps and bounds over the last decades (Tucker, 2011) which there have been various attempts to define it in the marketing literature. For instance, Hennig-Thurau et al. (2004) define electronic word-of-mouth as "*any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet*". This definition has been agreed by Litvin et al. (2006) and Senecal & Nantel (2004) who viewed that eWOM allows people to share comments and opinions about products and services.

Although both WOM and eWOM provide consumers' opinions about a product or service, they are dissimilar as they do not use the same channels to transmit information. As

in Figure 4, WOM takes place in a simultaneous and bidirectional conversation, face-to-face between source and receiver. However, in eWOM the conversation does not have to be simultaneous and bidirectional. The source writes an opinion about a product or a service on the Internet that can stay there for a long time and many consumers can access this opinion and decide whether to answer the source. (López & Sicilia, 2014)

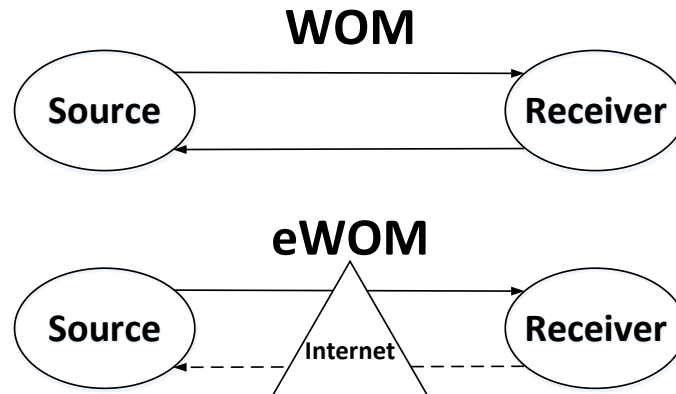


Figure 4, WOM vs. eWOM, Adapted from López & Sicilia (2014)

When comparing eWOM to the traditional word of mouth, eWOM appears to be more influential due to its ability to disseminate rapidly to many consumers via the Internet (Sun et al., 2006). As in Figure 5, consumers and organizations can derive competitive advantage from harnessing the power of eWOM due to its ability to spread amongst multitude of individuals with no geographic or time constraints.

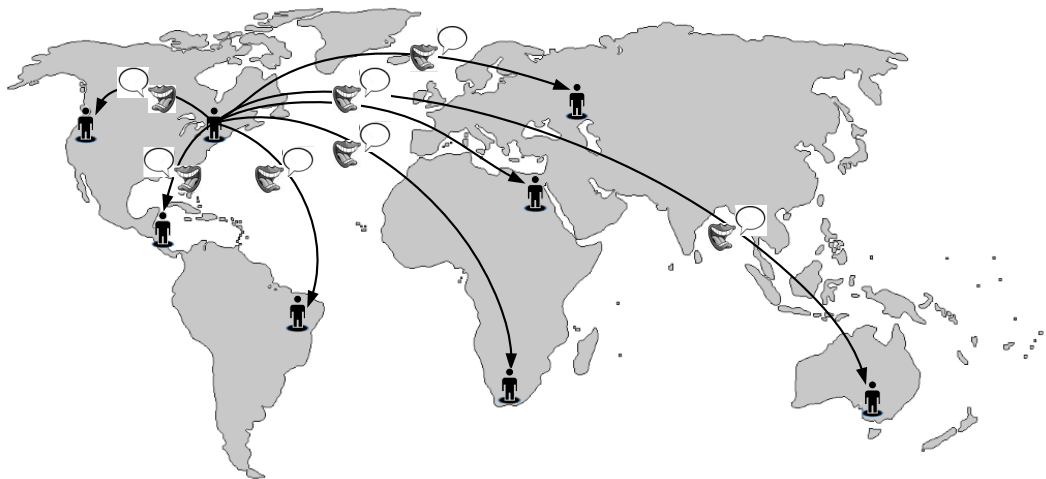


Figure 5, Dissemination of eWOM.

Moreover, Willemsen (2013) argue that consumers are more likely to value and trust the opinions of those with whom they are acquainted; however, consumers still regard eWOM as a valuable source of information because it is immediate and is accessible by others. While eWOM has some characteristics in common with WOM, there are differences in several dimensions. These dimensions attribute to the uniqueness of eWOM as addressed by Cheung & Thadani (2010) and Amblee & Bui (2007) in Table 2.

Table 2. *Difference between WOM and eWOM.*

	WOM	eWOM
Mode	Sharing information between small groups of individuals in synchronous mode.	Sharing information amongst a multitude of individuals in asynchronous mode.
Diffusion	Sharing information in an immediate intimate conversation,	Sharing information via the Internet.
Accessibility	Information only exists at a moment in time.	Information can be archived and retrieved at any point in the future.
Measurability	Information is less measurable and observable than eWOM.	Information can be measured and observed more easily than WOM.
Credibility	Credibility of sender and information can be easily judged.	Credibility of sender and information cannot be easily judged.

As per the table above, Cheung & Thadani (2010) have chosen five main dimensions, mode, diffusion, accessibility, measurability and credibility of information, in order to differentiate between traditional WOM and eWOM. First, eWOM takes place amongst a multitude of individuals in asynchronous mode unlike traditional WOM where information is only shared face-to-face between small groups of individuals in synchronous mode. Second, WOM occurs only in real time and in limited geographical space; however, due to the Internet, eWOM possess unprecedented scalability and speed of diffusion. Third, unlike traditional WOM, eWOM is more persistence and accessible where most of the consumers' opinions presented on the Internet can be archived and retrieved at any point in the future. The permanence of the opinions increases the level of information exchange compared to traditional WOM (López & Sicilia, 2014). Fourth, eWOM is more measurable and observable than traditional WOM. Last, in the case of traditional WOM, the sender is known by the receiver, thereby the credibility of the sender and the message contents are known to the receiver. However, the nature of eWOM eliminates the receiver's ability to judge the credibility of the sender and the message.

The widespread adoption of Web 2.0 innovations has drastically facilitated eWOM with a range of communication platforms (e.g., online discussion forums, consumer review sites, weblogs, social network sites, etc.) (Sotiriadis & Zyl, 2013; Lerrthairakul, & Panjakajornsak, 2014). However, eWOM has gained a new dimension with the advent of social media and social networking sites (SNNs). The social media innovation has enabled people to communicate and present their personal opinions and experiences more conveniently through the Internet (Erkan & Evans, 2014). More detailed information about different eWOM's platforms is presented in the following section.

2.2.3 Electronic word-of-mouth platforms

According to López & Sicilia (2014), traditional media such as TV, newspapers and magazine ads appears to be losing ground as an influencer to the Web. Recent studies have shown that consumer confidence in traditional media declined by around 25% between 2009 and 2011. In addition, industry research reports have demonstrated that when making purchase decisions, Internet users trust online reviews posted by unknown consumers more than they trust traditional media (Cheung & Thadani, 2012). Therefore, there is increasing evidence that eWOM has a significant influence on consumers' decision making process. The effectiveness of eWOM in influencing consumers' decision making process has long been known since it is consumer-generated rather than firm-generated, meaning that people put more trust in what friends or other consumers say about a product than information from the firm (Svensson, 2011).

Unlike firm generated information, eWOM communication is created and delivered by consumers themselves making it a more credible non-commercial source of information (Themba & Mulala, 2013). Online communities are enabling people to share their opinions with others by creating media content as pictures, videos or texts. For instance, social networking sites (e.g. Facebook, Twitter), brands' websites (e.g. Amazon), consumer review sites (e.g. Epinions), forums (e.g. Zapak) and blogs (e.g. Blogger) are different kinds of eWOM platforms as shown in Table 3 (Erkan & Evans, 2014).

Table 3. Different types of eWOM, adapted from Cheung & Thadani (2012).

Types of eWOM	Examples
Social networking sites	Facebook.com, Twitter.com
Online brand/ shopping sites	Amazon.com
Blogs	Xanga.com, Blogger.com
Online discussion forums	Zapak.com
Online consumer review sites	Epinions.com

As illustrated by the table above, the popularity of Web 2.0 has empowered consumers to influence others through a variety of platforms to post user-generated content (UGC) tools (e.g., social networking sites, blogs, forums, shopping sites and review sites,) (Cheung & Thadani, 2012). This section aims to briefly shed light on these platforms. First, with the emergence of social networking sites (SNS) such as Facebook and Twitter as presented in Figure 6, eWOM has become a pervasive and influential source of product information where people can choose what they want to be presented (Thoumrungroje, 2014). Poynter (2008) argues that users can greatly affected by the information that appeared in the social networking sites. Moreover, it is discovered that 70% of the consumers approaches social

media sites to access products and brands related information and 49% of them finalize their purchase decisions based on information they have retrieved from the social networking sites. (Poynter, 2008 in Severi et al., 2014).

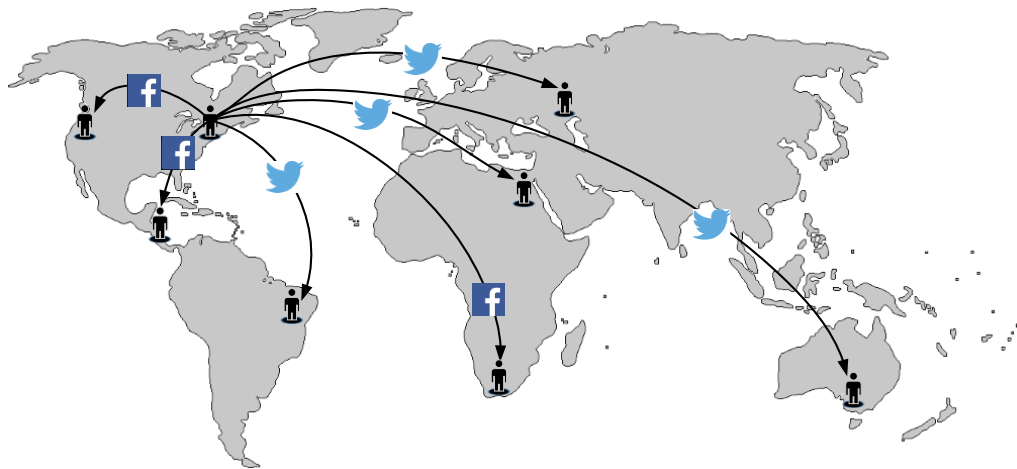


Figure 6, *Dissemination of eWOM through SNS platforms e.g. Facebook & Twitter.*

For instance, Facebook is now, by a very wide margin, the largest social networking site in existence with more than 1.05 billion daily active users (Facebook, 2015). In fact, 4.75 billion piece of content are shared by Facebook users each day that provides them a series of tools that facilitate the spread of eWOM to their friends. Therefore, there are several research studies show that Facebook has the potential of being an ideal channel for eWOM, combining the benefits of reach and trustworthiness since the sender has the possibility to influence a large number of people in one's social circle (Svensson, 2011).

Further, Twitter is a powerful platform for spreading many kinds of messages through microblogging, including eWOM (Bornfeld et al., 2014). Microblogging, or tweet, is a new form of communication which is reasoned to influence current and future purchases (Oosterveer, 2011). Microblogging enable users to describe things of interest (i.e., sentiment) almost anywhere (i.e., while driving, or sitting at their computer) to almost anyone "connected" (e.g., Web, cell phone, IM, email) on a scale that has not been seen in the past. While the shortness of the tweets keeps people from writing long thoughts. In short, these tweets are immediate, ubiquitous, and scalable. (Jansen et al., 2009).

Second, online shopping sites, such as Amazon, encourage consumers to create online reviews for products through product reviews (Matta & Frost, 2011). The eWOM generated by consumers of online shopping sites can be considered to be typical eWOM since they provides abundant information for the purchasing decision: information about products, similar products, customer reviews and ratings (Amblee & Bui, 2007). Park et al (2007) affirms that when thinking about shopping online, the presence of users and reviews drive people to websites such as Amazon which provides platforms for hosting product reviews on virtually any product, written by many, and accessible to everyone.

Third, communicators usually write about their daily experiences and opinions on various issues, such as products using blogs such as Blogger.com, (Lee & Youn, 2009). From a marketing perspective, blogging has been viewed as a new type of eWOM (Osman et al., 2009) as it has become part of a consumer's decision making process when shopping online (Hsu et al., 2012). Personal blogs have also been found to influence consumers' buying decisions (Lee & Youn, 2009). A 2006 Ipsos MORI survey found that roughly half the respondents said they decided to buy a product after reading a positive review on a personal blog, while one-third of them decided not to buy a product after reading a negative review (Bulik, 2007 in Lee & Youn, 2009).

Fourth, Internet forums provide an online avenue for consumers to share their experiences and opinions with others on specific topics that include reviewing products and services (Cheung et al., 2007). There is substantial evidence that participation in Internet forums e.g. Zapak.com can significantly impact consumer behavior as it have greater credibility than marketer-generated information (Bickart & Schindler, 2001). One study by Almana & Mirza (2013) found that Internet users are heavily dependent on eWOM in online forums when making purchasing decisions (Al-Haidari & Coughlan, 2014).

Last, electronic communication, via online consumer review sites, has enabled an immediate information flow to a much wider audience as a single message can affect all site visitors (Chen et al., 2011). According to Dahlin et al. (2015), online consumer reviews, ratings and recommendations are the most dominant and accessible forms of eWOM and it has been proven to have a strong influence in the consumer purchase decision-making process. The next section discusses review sites in depth.

2.3 Review sites

2.3.1 Background

In offline markets, during the product purchasing process, consumers usually make purchase decisions with incomplete information as they lack full information about several attributes e.g. product quality, seller quality, and the available alternatives (Mudambi & Schuff, 2010). These purchase decisions are made without knowing all the relevant information because information is difficult to obtain (i.e., search cost for information is high). However, such constraint does not exist in the online markets as one prominent property of the Internet is that information abounds. (Chen et al., 2004) According to Degeratu et al., (2000), an important difference between online and offline markets is that information can be obtained at lower search costs in online than offline markets. For instance, in offline markets, buying a book usually limits the consumer only to the book titles a physical bookstore carries. However, in online markets, one can choose among a much larger set of related books in several online bookstores, and may thus get a book that fits better. This low search costs for information distinguishes the Internet from other channels.

As the Internet significantly reduces search costs and enables the convenient comparison of various alternatives (Zhu & Zhang, 2009), firms began to invest in creating platforms that enables consumers to provide and read product reviews, and voice their complaints and opinions about various products and services. In addition, these platforms are used in order to reduce search costs by helping customers in narrowing their choice set. (Chen et al., 2004) Existing literature refer to these platforms by several terms including review websites (Raut & Londhe, 2014), participative networked platforms (OECD, 2010), consumer review sites (Chen et al., 2011) and customer review sites (Choi et al., 2013). This study uses the term review sites as referred to by many scholars e.g. Vermeulen & Seegers, (2008), Ensing (2014) and Minnich et al., (2015).

Review site is a website on which people post reviews for products and services (Innovationpei, 2011), while online consumer reviews can be defined as peer-generated product evaluations posted on review sites (Mudambi & Schuff, 2010). As in Figure 7, on the Internet, there are several review sites that operate in different industries such as TripAdvisor, Yelp and IMDb (Zhang et al., 2013). These sites create large source of information i.e. user generated contents in the form of blogs, comments, reviews, wikis, photos etc. (Raut & Londhe, 2014).



Figure 7, Different review sites in different industries.

In a broader sense, review site is a website that contains customer reviews regardless of whether hosting customer reviews is its primary purpose (CMA, 2015). However, there are different online platforms which incorporate the function of online reviews (Dahlin et al., 2015). For instance, TripAdvisor publishes traveler reviews of hotels, Yelp publishes customer reviews of local businesses, Amazon publishes consumer reviews of products and IMDb displays viewer ratings of movies (Anderson & Magruder, 2011). While TripAdvisor is an example of an online review site, strictly built on consumer reviews, Amazon is an example of an online shopping site which also uses the feature of online reviews as a complement to their services (Dahlin et al., 2015).

One of the major developments on the Internet, from a consumer behavior perspective, is the growth in the number of review sites (Bailey, 2005). The extent to which consumers rely on review sites for information has been the subject of previous research due to their immense popularity and important role in modern e-commerce (Lappas & Terzi, 2011). The findings of these studies ensure that online reviews created by the general public have the largest influence on their purchasing decisions (Tucker, 2011). They increasingly supplement expert opinion and social networking sites in informing consumers about product and service quality (Anderson & Magruder, 2011). The importance of online reviews was confirmed by Wei & Lu (2013) who conducted a study to reveal that nearly two-thirds of consumers consult online reviews, blogs, and other sources of online customer feedback before purchasing a new product or service. Further, Smith (2013) stated that 60% of consumers consider ratings and reviews important when researching products.

A recent report by Statista (2015) shows that the number of online consumers worldwide grows up to 1.2 billion in 2015. As in Figure 8, the 2015 BrightLocal's annual Local Consumer Review Survey finds that 92% of consumers regularly or occasionally read online reviews (vs. 88% in 2014) while only 8% of consumers do not read online reviews (vs. 12% in 2014).

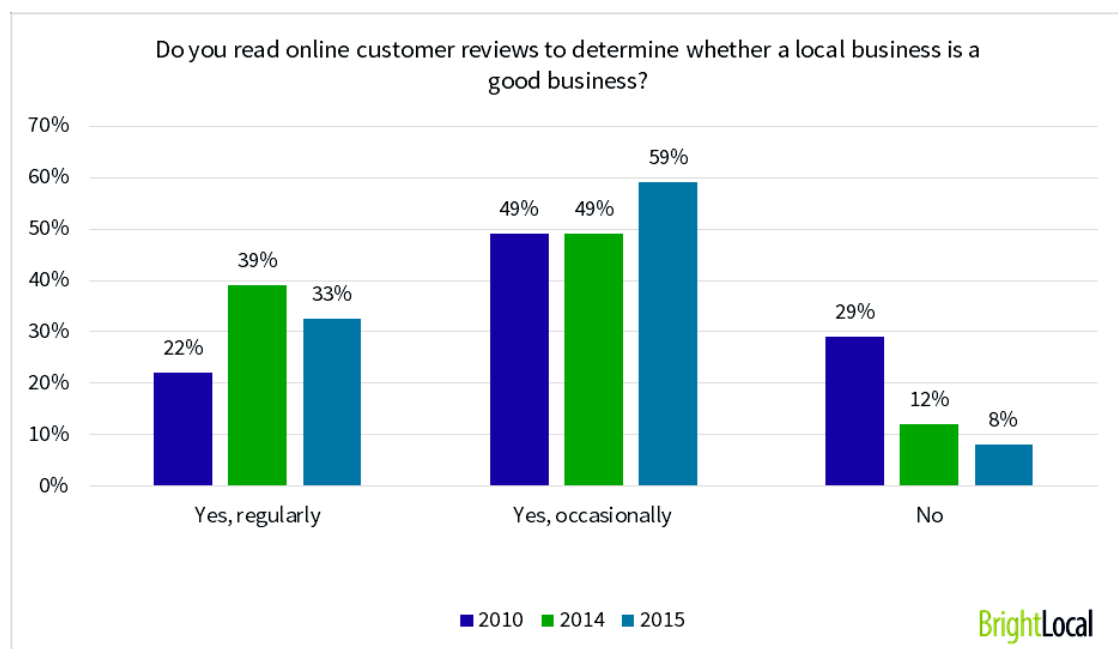


Figure 8. Growth of consumer reviews interaction, adapted from BrightLocal (2015).

Although consumers regard the concrete experiences described in the text as more informative, numerical star ratings for online customer reviews are also typically used (Di Virgilio & Di Pietro, 2014). Numerical star ratings enable customers to rate different aspects of the products and services, such as popularity, satisfaction, or quality; and they typically range from one to five stars (Dahlin et al., 2015). A very low rating (one star) indicates an extremely negative view of the product, while a very high rating (five stars)

reflects an extremely positive view of the product (Mudambi & Schuff, 2010). Prior studies show that positive consumer reviews increase sales whereas negative reviews decrease sales (Di Virgilio & Di Pietro, 2014). Negative reviews can seriously lower consumer attitudes toward the reviewed products and therefore can be particularly harmful to the products' reputation (Matzat & Snijders, 2012). According to Schwichtenberg (2015), statistics reveal that dissatisfied customers are four times more likely to formulate a review than satisfied customers. Thus, negative reviews appear to have a greater effect than positive reviews (Park & Lee, 2009).

To conclude, it is agreed that consumers are increasingly relying on opinions posted on the Internet to make a variety of decisions ranging from what movies to watch to what stocks to invest in (Hu et al., 2011). Therefore, there are hundreds of review sites that apply to businesses in almost every industry. Besides, studies has shown online user-generated reviews could significantly influence the sales of products like hotels, restaurants, books, CDs, and movies (Chevlier & Mayzlin, 2006; Ghose & Ipeiritis, 2006). The following section discusses the influence of online reviews on consumer behavior in three different industries: tourism, catering and movie.

2.3.2 Popular review sites

As a result of eWOM, consumer behavior has changed due to the emerging phenomenon of online travel communities (Dahlin et al., 2015). In particular, review sites have been widely in use in the online travel industry (Mayzlin et al., 2013). Review sites facilitate eWOM by hosting UGC from the personal opinions of travelers (Bronner & de Hoog, 2011). Furthermore, they allow customers to express their opinions or observations regarding the service offered during their stay by awarding points to pre-selected criteria or by publishing their comments. This feedback can provide valuable information to service providers. Therefore, various studies show that more and more customers consult online reviews before making (online) travel arrangements and no longer blindly trust information given by the hotel service providers. (Schegg & Fux, 2010)

TripAdvisor is considered the largest travel community in the world, which enables travelers to plan and book trips using advice from millions of travelers' reviews. It attracts 350 million unique monthly visitors, and provides more than 320 million reviews and opinions covering more than 6.2 million accommodations, restaurants and attractions. (TripAdvisor, 2016) According to many scholars and marketers, TripAdvisor is of great importance when people are planning, and booking their travel arrangements and it has significant influence on the decision making process (Dahlin et al., 2015). Gretzel & Yoo (2008) argued that three-quarters of travelers have considered online consumer reviews in review sites such as TripAdvisor as an information source when planning their trips. Around 75% of online travelers use at least three travel review sites before finalizing booking arrangement plans (Hotel News Resource, 2011 in Hsu et al., 2012). A recent

study presented in the 2010 Cornell Hospitality Report has pointed out that travel-related websites like TripAdvisor are used by more than 40% of leisure travelers to make purchase decisions (Ensing, 2014).

Equivalently, WOM have always been critical for catering, with customers spreading the news about their dining experiences to family and friends. Online reviews are particularly influential in the catering industry as restaurants and cafe reviews are the most commonly read by consumers listed in BrightLocal's Consumer Review Survey 2015. Also, nearly 34 percent of diners report that information on a review site is likely influencing their decision when choosing a restaurant (National Restaurant Association, 2013). Yelp, a popular review site in the restaurant industry, creates an environment where consumers can communicate about their experience at a particular business in frank and practical language. (Tucker, 2011).

Statistics show that Yelp receives approximately 130 million unique visitors per month, and counts over 95.2 million reviews not only of restaurants but also of barbers, mechanics, and other services, in its collection (Luca & Zervas, 2015). It has been proved that Yelp ratings clearly have a profound effect on the success of businesses as "an extra half-star rating causes restaurants to sell out 19 percentage points more frequently" (Anderson & Magruder, 2011). A study by Luca (2011) shows that a one-star increase in Yelp ratings translates into a 5 to 9 percent increase in revenues for restaurants; furthermore, a 2012 study by the University of California claims that restaurants with an extra half-star rating on Yelp are more likely to be fully booked (National Restaurant Association, 2013).

Similarly, in the context of the movie industry, IMDb is the world's most popular and authoritative source for movie, TV and celebrity content. On IMDb, more than 250 million monthly visitors post millions of reviews on more than 3.5 million titles (IMDb, 2015). IMDb solicits numerical user ratings on a scale from 1 ("awful") to 10 ("excellent") (Dellarocas et al., 2004). Prior research suggested that online movie reviews offer significant explanatory power for both aggregate and weekly box office revenues (Liu, 2006). A recent study showed that the volume of online WOM about a new film release can help predict the movie's success at the box office (Oetting, 2009). Zhang & Dellarocas (2006) found that star ratings of online reviews may be associated with an increase of over 4% in box office revenues. In fact, movies are seeing rapid change in revenues between the opening weekend and second weekend due to the rapid spread of WOM (Dellarocas et al., 2004).

In short, literature review shows that a majority of review sites studies have only focused on certain industries such as tourism, catering and movie due to the global reach of websites such as TripAdvisor, Yelp and IMDb while other industries of review sites have received far less attention such as school and health. However, a couple of review web-

sites in the school industry succeeded to attract considerable attention in modern academia such as Rate My Professors (RMP) and Check My School (CMS). These sites are described in more detail in the next section.

2.3.3 Review sites in school industry

The global education system is largely public and technically free as it is provided by governments. Yet, there are some private schools that take part into the education system with substantial fees. Globally, private education is found to be on the rise. These private schools may operate under the auspices of the Ministries of Education. According to the World Bank, in 2013 nearly 13% of global primary education students enroll into private institutions. This percentage has risen 4% in 20 years. Parents who can afford to pay the education fees – send their children to private schools assuming that they can receive better education and get more opportunities. Yet, similar resources may be available in public schools. (OECD, 2011)

When it comes to education, schools' culture, methods and techniques are different from one context to another. For instance, Finland, the top-scoring OECD country on the international PISA assessments, enjoys free public education at all levels from pre-primary to higher education where opportunities to education should be available to all citizens irrespective of their ethnic origin, age, wealth or where they live (Ministry of education and culture, 2012). However, in Egypt, school is theoretically free; nevertheless, families must often spend substantial sums through private tutoring in order for their children to succeed in school due to the low quality of free public education (Assaad & Krafft, 2015). Besides, there also exists a parallel private education sector in Egypt. The quality of education provided by many of these private schools is vastly superior to that on offer in public, and its beneficiaries often find themselves better equipped than their public counterparts for the labor market. (Loveluck, 2012)

Worldwide, whether schools are public or private, many schools offer end-of-semester in-class evaluations of professors and courses to indicate teaching quality. The results of these evaluations help students to make informed decision regarding choosing courses in future semesters. However, some schools do not publish these official evaluations or show them to students upon request. In those cases students have to rely on unofficial sources such as school review and professor ratings sites. (Tipoe, 2013) Increasingly, students and parents rely on eWOM through review sites to aid in the process of information-gathering about schools and course selection (Edwards et al., 2009). If education is a purchase item, and if professor reviews and the course information that students want are not readily available, online review sites such as RMP are an obvious avenue for students to pursue. On one hand, students of today are avid consumers living in a rapidly expanding information age. For better or worse, they expect to use the Internet to find answers to their questions and to influence others. (Bleske-Rechek & Michels, 2010) On the other hand, Hess et al. (2011) argue that even if families are content with their schools

and are not concerned about having the choice to attend another school—but that does not mean they are satisfied with all that transpires in their schools. Thus, they may welcome the opportunity to access new options for enhancing school tools and services.

In recent years, several independent websites were established in order to allow students to informally evaluate their professors. These platforms are utilized for the evaluation of college instructors and their courses and are likely to have significant impact on education. (Edwards et al., 2009) For instance, it is arguable that the online student ratings could improve both student learning and instructor performance (Otto et al., 2008). Further, it was hypothesized that students who received positive eWOM about a course would demonstrate greater levels of cognitive and behavioral learning than would students who received no information or negative eWOM (Edwards et al., 2009). Leading websites of this nature include Rate My Professors, Rate My Teachers, My Edu, Pick a Prof, Professor Performance and Ratings Online (Sanders et al., 2011).

Rate My Professors (RMP) is a review website that was launched in 1999 as an outlet for students to rate and voice commentary on their professors across the United States, Canada and the United Kingdom (Bleske-Rechek & Michels, 2010). RMP is considered the largest and best known online destination for professor ratings (Kindred & Mohammed, 2005). There has been a marked increase in activity. In May 2003, 2.7 million ratings of 478,000 faculty had occurred, and by August 2006 the numbers had risen to over 5.7 million ratings of about 770,000 professors in nearly 6000 schools (Otto et al., 2008). As of 2015, website held over 15 million ratings on 1.4 million professors from over 7,000 different schools and 4 million monthly visitors (RateMyProfessors, 2015).

Much like other consumer-review sites such as Epionons, the consumer-review site RMP provides quick access to school data that make it easy to compare a number of options (Hess et al., 2011). Further, the website allows students to anonymously rate their professors in several categories and comment on such traits as humor and classroom style (Minor et al., 2013). Since its inception, RMP has grown in popularity and has attracted considerable attention in modern academia due to its success. For instance, Forbes started to use of RMP's data to rank U.S. colleges and universities which it demonstrates the degree to which the website is known and influencing how people think about education. (Bleske-Rechek & Michels, 2010).

Besides, there is RateMyTeachers.com that has been around since 2001 (Minor et al., 2013). It is a review website that helps students, parents and faculty make informed decisions by promoting transparency within education through rating schools and professors. The website works in several countries while 65% of the posted ratings are positive. The site provides user generated feedback on teachers' and professors' teaching methods and their respective courses. (RateMyTeachers, 2016). On the website, students can rate their schools' tools and services.

Further, the World Bank Institute adopted a digital service in the Philippines that allowed citizens to review issues reported with their schools and post other concerns they may have on an online platform called CheckMySchool.org (CMS) as shown in Figure 9 (Livingston & Walter-Drop, 2014). CMS is an innovative social accountability platform using open data to promote citizen participation in the monitoring of public school performance in the Philippines (Shkabatur, 2012). This is a government-to-citizen online interactive tool includes budget allocations, teacher and textbook information, and test scores for about one-fifth of the 44,000 schools in the country (World Bank, 2012). The initial success of the project in the Philippines drove other countries to adopt it in a way that can fit their context. Later, it was introduced to Indonesia, Moldova, Kenya, Mongolia and Cambodia under different names.

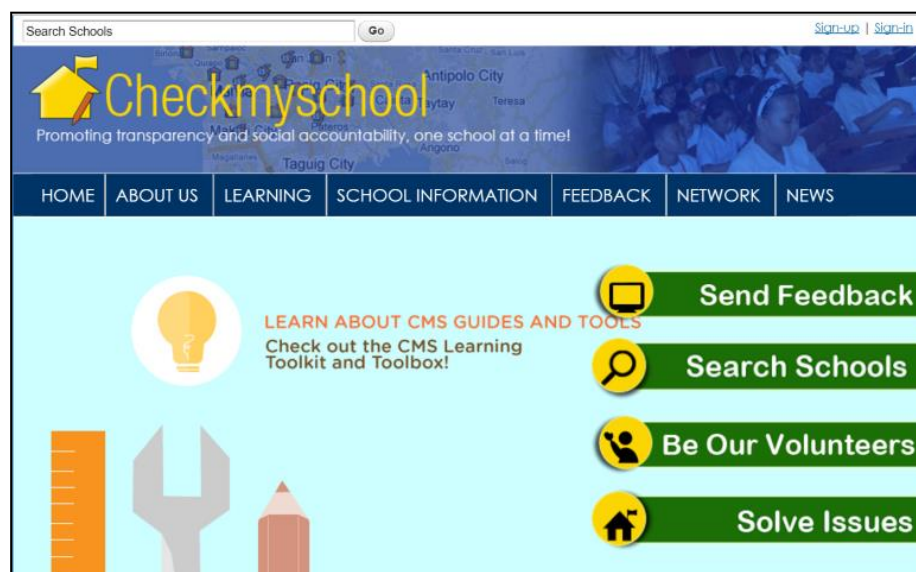


Figure 9. CheckMySchool.org website (CheckMySchool, 2016)

CMS in the Philippines was executed through a host organization – the Affiliated Network for Social Accountability in East Asia and the Pacific (ANSA-EAP). ANSA-EAP is a non-profit association that was originally set up by the World Bank’s Development Grant Facility. This non-profit corporate promotes constructive engagement with citizens’ monitoring of the performance of government, specifically, the quality of public service delivery and the transparency of public transactions (ANSA-EAP, 2016). In general, there is a large assortment of research focusing on why consumers voice their opinion online and engage in eWOM. However, there is little research to be found concerning how review sites currently generate revenue. In the context of this study, existing research has mainly addressed two approaches: first, generic Internet revenue models; and second, revenue models of renowned review sites; separately. The following section discusses these approaches further.

2.4 Revenue models of review sites

2.4.1 Internet revenue models

Internet business models have been widely discussed in literature within the last decade (Abdollahi & Leimstoll, 2011). According to Timmers (1998), a business model is defined as ‘*the organization of product, service and information flows, and the sources of revenues and benefits for supplier and customer*’. In other words, a business model reflects the operational and output system of a company, and as such captures the way the firm functions and creates value. It can be thought of as consisting of several sub-models (Wirtz et al., 2010). According to Osterwalder et al., (2005), the sub-models are value proposition, target customer, distribution channel, relationship, value configuration, core competency, partner network, cost structure and revenue model. The latter sub-model is the core of this study and according to Gruhn & Weber (2005), it is one of the core elements in planning and realizing a company. In short, according to Eurich et al. (2011) a revenue model is widely accepted as a key element of a business model with connections to many other business model components. A summary of the relevant concepts for revenue models are presented in Table 4.

Table 4. *Revenue models definitions.*

Author(s)	Definition
Zerdick et al. (1999)	It is the determination of the sources of revenue.
Laudon & Traver (2004)	It describes how the firm will earn revenue, produce profits, and produce a superior return on invested capital.
Osterwalder et al., (2005)	It describes the way a company makes money through a variety of revenue flows.
Gruhn & Weber (2005)	The offered value a customer is willing to pay for as well as the related processes of revenue generation.
Chaffey (2009)	It describe methods of generating income for an organization.
Popp (2011)	It defines how a company is compensated for each of the business patterns provided.

In academia, the terms of revenue model and revenue streams are used to identify how revenues are generated. Many authors use these terms interchangeably. According to Eurich et al. (2011), the revenue streams refer to the money an organization generates from each customer segment while the revenue model is the blueprint that defines how the organization creates value for itself by defining the sources of the revenue (revenue

stream) and mechanisms to generate the revenue. All in all, the difference is best described by Popp (2011) as a revenue model consists of one or several revenue streams. Therefore, it becomes obvious that the revenue stream is an integral part of a revenue model (Teece, 2010).

On the Internet, every business needs to identify at least one model that can be used to structure its business behavior and generate revenue (Abdollahi & Leimstoll, 2011). In other words, there has to be a clear understanding of how the revenues can be generated (Gruhn & Weber, 2005). Ryanair, the low-cost airline, for example, took advantage of the existing technology to eliminate intermediaries in ticket sales while acting as an intermediary in hotel and rent-a-car bookings. Not long ago, it was essential for a customer to walk into a travel agency to book their travel arrangements. The price the customer paid would reflect multiple fees ranging from the travel agency commission to the actual airfare. Airline companies depended on agencies to sell their tickets and vice-versa. The revenue distribution and stream were set and only limited possibilities for innovation and growth were available. These days all of this can be done at home with the click of a mouse or touch of a screen. (DaSilva & Trkman, 2013)

Internet companies usually adopt strategies in order to generate revenue through various types of fees. To do so, a company needs to carefully evaluate the pros and cons of each type of fee and then configure a revenue model that allows it to capture value and maximize profit. A firm's revenue model can be composed of different revenue streams that all have different pricing models, the most common of which include advertising, sales, subscription, and transactions. Evidently, these revenue channels can be combined into mixed models that can be based on a combination of fees and explore the value appropriation advantages of each channel. (Brunn et al., 2002; Cortimiglia et al., 2011)

Technology is transforming business models on the web and subsequently revenue models are continuously evolving over time (Enders et al., 2008). These range from direct commissions on sales of goods and services, to other types of less direct models for collecting fees. As innovation continues, further types of revenue models will be available in the future. (Novak & Hoffman, 2001) As a consequence, there is still no consensus about a unique classification for online revenue models due to several factors including market and context.

On one hand, Afuah & Tucci (2001) have defined seven online revenue models that help companies to generate income. These models are commission, advertising, markup, production, referral, subscription, and fee-for-service. On the other hand, Coursaris & Hasanein (2002) have classified several online revenue models in the m-Commerce market place, some of which involve customers such as access, subscription, and pay-per-use, while others do not such as advertising, transaction, payment clearing, hosting, and point-of-traffic. In short, multiple revenue models are available, and the particular revenue model employed can depend on the marketplace (Teece, 2010).

Although there are many different Internet revenue models that have been developed, most firms rely on one, or some combination, of the following major revenue models: the advertising model, the transaction model, the subscription model, the sales model, and the affiliate model. (Laudon & Traver, 2004) All five revenue models addressed are explained in detail as follows:

- **Advertising:**

Traditionally, most television channel output is enabled by an advertising-supported revenue model whereby broadcasters provide free programming to an audience along with advertising messages (Ohene-Djan, 2008). The Internet advertising model is an extension of the traditional media broadcast model whereby the intermediary provides content and services for free alongside advertising or branding/co-branding messages (OECD, 2010). Advertising model can provide revenue streams by offering a third party the benefit of reaching their audience. In this model, an advertiser pays the publisher or host a fee for the opportunity to promote their product, service, or company through one or several formats (Maron & Ithaka S+R, 2014).

This model works best when the volume of viewer traffic is very large or very specialized (e.g. a search query) (OECD, 2010). If the website is highly successful at generating a large and/or well-defined audience on their website, advertising revenues become increasingly likely (Trepp, 2000). Yahoo.com, for instance, derives a significant amount of its revenue from selling advertising such as banner ads. This model is considered a primary source for web-based revenue. (Laudon & Traver, 2004) According to Maron & Ithaka S+R (2014), advertising is most likely to be suitable for digital platforms with the following strengths:

1. *High volume of traffic*; this is measured by unique visits and/or page views.
2. *Loyal users who often return to the site and spend time there*, advertisers may pay a premium for ‘sticky’ sites, where users spend a more than usual amount of time.
3. *Users who represent demographics valued by advertisers*, advertisers pay a premium for the ability to target a specific group. The target audience may be defined by geography, gender or age or interests.
4. *Users engaged in specific activities relevant to the sponsor*, i.e. hotels and travel agents wish to reach people in the process of planning trips; camera manufacturers wish to target people who are researching digital cameras.

According to the 2014 IAB Internet advertising revenue report, there are ten online advertising formats available today. The following table draws on the definitions of these formats provided in the IAB report (PWC, 2015).

Table 5. *Advertising formats (PWC, 2015).*

Form	Description
Banner Advertising	Advertiser pays an online company for space on one or more of the online company's pages to display a static or linked banner or logo.
Sponsorship	Advertiser pays for custom content and/or experiences, which may or may not include ad elements such as display advertising, brand logos.
Email	Email newsletters that may include banner ads, links or advertiser sponsorships within an email or the entire email.
Search	Advertisers pay online companies to list and/or link their company's information, products, services, and/or domain to a specific search word or phrase, e.g. Google AdSense.
Lead Generation	Advertisers pay online companies that refer qualified potential customers or provide consumer information where the consumer opts in to being contacted by a marketer (email, postal, telephone, and fax).
Classifieds and Auctions	Fees paid to advertisers by online companies to list specific products or services (e.g., online job boards and employment listings, yellow pages).
Rich Media	Display-related advertisement that often includes Flash or Java, which allows audience to view and interact with the product or service.
Digital Video Advertising	Video advertisement that appears before, during, or after video content within a video player, such as ads on YouTube, or online TV commercials that appear while streaming content or in downloadable video.
Mobile Advertising	Advertisement tailored to and delivered through wireless mobile services such as smart phones (iPhone, Blackberry, Android, etc.) in the form of display ads, rich media, text messages, video, or search.
Social Media Advertising	Advertising delivered on social platforms websites and apps, across all device types, including desktop, laptop, smartphone and tablet.

In printed newspapers and magazines, ad space and ad content are normally fixed. Everyone who purchases the publication sees the same ad in the same space. But websites are different. Online ad space are not bound by the same physical limitations. They can be dynamic as ads are tailored to several factors such as the reader's search criteria, content interests and geographical location. (Sweeney, 2013)

As shown in the last table, Google AdSense is one of the most renowned forms of advertising amongst websites as it places customized ads for millions of sponsors on millions of websites (Chai et al., 2007) When a reader enters a keyword in an enrolled website, Google AdSense embeds ads believed to be relevant to his search in the web page of results (Sweeney, 2013). To place an online ad, advertisers bid for keywords and pay

Google each time one of their advertisement links are clicked (CPC) or when specific advertisements are displayed every 1,000 times (CPM). A percentage of this payment is passed on to website's owner. This helps create a beneficial partnership between both Google and infrastructure providers which could be considered as the key behind the success of Google AdSense program. (Chai et al., 2007) In the year ended in 2015, Google earned \$15 billion, or 20% of total revenue, through Google network members' websites including Google AdSense (Alphabet, 2016).

Advertisements can usually be paid based upon on amount of times the advertisement is displayed and/or the amount of times the advertisement has been clicked. (Chai et al., 2007). The Internet world has many advertising models: cost per impression (CPM) as well as cost for click (CPC) and cost for action (CPA). Advertisement revenue is based on the following methods for calculating what advertisers pay:

- ***Cost per impression***, usually measured as a cost per thousand (CPM), is a model in which advertisers pay a fixed amount for every one thousand views or impressions of their ad. The CPM rate will vary depending on the type of users the project enjoys; for instance, websites with broad audiences will have a low CPM of \$1 or less, while sites that attract a targeted demographic may command a higher CPM. Also, there are several variables that influence the rate of CPM including geography, website language and target audience. According to OKO (2016) audiences in English speaking countries tend to command the highest rates and the United States have a considerable lead at the head of the pile.

Geographic differences in CPM rates are influenced by the spending power of the individuals in those countries and also by how established the online advertising market is in those countries. For instance, as per Wahba (2016) CPMs in Egypt typically range from EGP5 to EGP80 (\$0.27 to \$4.40). This variation is influenced by factors such as the topic of the website, the language of the website and the targeted audience. All in all, this model is a safer bet for site owners than some of the others, since here ad revenue is not based on whether or not a viewer takes action, but merely on how many times the ad is viewed.

- ***Cost per click (CPC)***, also referred to as Pay per click (PPC), is a model in which advertisers pay every time a viewer clicks on the actual ad. CPC is very popular for search advertisement formats, where advertisers pay online publishers to link their ads to specific search words or phrases, so that their ads are targeted to viewers more likely to be interested in the advertisers' products; advertisers then pay up every time users click on their ads.
- ***Cost per action***, lead or inquiry (CPA) requires advertisers to pay for a specific performance, such as a sale, purchase, new registration, or inquiry, completed as

a result of the initial click. A sophisticated tracking system, usually run by the network provider, allows the publisher and the advertisers to track users and their actions after they leave the site. Advertisers pay only when their ads on a publisher's site have had a specific, measurable impact, and this also means that CPA rates are traditionally higher than CPM or CPC rates.

- **Flat rate fees** are charged to the advertiser for exposure to the audience for a fixed amount of time. The fee factors in the size of the ad, its position and the particular hours of the day when it will appear. Fixed rates are popular for particular online ad formats: display ads, classifieds and sponsorship ads.

To conclude, revenue models based on advertising require high levels of website traffic to be profitable (Canzer, 2006). Therefore, the key revenue driver for this model is the number of page views. In addition to the number of visitors or page views, stickiness is a critical element in creating a presence that attracts advertisers. If a website is sticky, people will spend more time on it, visit it often and bookmark it (add it to their list of favorite websites). (Ohene-Djan, 2008) To increase revenues from advertising models, the number of users has to be increased accordingly. The number of users depends on the existing user base and the stream of new members. As a result, the key implication for platform providers is to attract new members to the community. (Enders et al., 2008)

- **Transaction:**

Transaction has become a primary revenue model for many businesses (Harris, 2000). In literature, it is sometimes referred to as brokerage model. In that model, the firm receives a fee for each transaction that is enabled or executed through its e-business infrastructure. (Novak & Hoffman, 2001) For example, eBay.com creates an online auction marketplace and receives a small transaction fee from a seller if the seller is successful in selling the item. E-Trade.com, an online stockbroker, receives transaction fees each time it executes a stock transaction on behalf of a customer. (Laudon & Traver, 2004) In this model, businesses usually offer services and charge a fee based on the number or size of transactions they process (Ohene-Djan, 2008). Transaction fees generally range from 0.5% on the transaction to +8% on more complex transactions (Phillips & Meeker, 2000). Currently, several websites charge suppliers, rather than buyers, the transaction cost for transactions. (Harris, 2000)

In the past, travel agents used to earn commissions on each airplane ticket, hotel reservation or vacation that they book. These commissions were paid to the travel agent by the transportation or lodging provider. The travel agency revenue model involved receiving a fee for facilitating a transaction. The value added by a travel agent is that of information consolidation and filtering due to the great knowledge about traveler's destination that may become useful to the traveler. However, when the Internet emerged as a new way to

communicate and do business, several companies entered the online travel agency business such as Expedia.com and Hotels.com and adopted the transaction model. (Schneider, 2006) In this model, customers usually enter transaction information into website forms, these sites can provide options and execute transactions much less expensively than traditional transaction service providers due to the removal of traditional intermediaries such as human agents (Osterwalder & Pigneur, 2013).

- **Subscription:**

This model has existed for long time (e.g. newspapers, magazines, gym). It gained popularity in other domains, too: software, movies (e.g. Netflix), mobile carriers, and others. (BMN, 2013) For instance, a gym sells its members monthly or yearly subscriptions in exchange for access to its exercise facilities. World of Warcraft Online, the popular computer game, allows users to play its online game in exchange for a monthly subscription fee. Nokia's Comes with Music service gives users access to a music library for a subscription fee. (Osterwalder & Pigneur, 2013).

Companies that own written information (words or numbers) or rights to that information have embraced the Web as a highly efficient distribution mechanism. Most of these companies use a subscription revenue model where they sell subscriptions for access to the information they own. (Schneider, 2006) In that model, a website that offers its users content or services charges a subscription fee by selling continuous access to some or all of its offerings (Laudon & Traver, 2004). Users are charged a periodic — daily, monthly or annual — fee to subscribe to a service or access to information provided into the marketplace (Novak & Hoffman, 2001).

According to Chai et al. (2007), subscription is considered the second most popular revenue model in the software industry. In that model, software companies charge fees onto users for software usage or the use of exclusive software functions. Furthermore, subscriptions are used to be a typical revenue stream pursued by most companies in the online newspaper industry (Gallaughner et al., 2001). When it was believed that no revenue models was capable of generating reliable revenue streams for newspapers, many companies saw that the subscription model as a last resort for survival (Chyi, 2005). For example, NYTimes provides basic access to its content only to subscribers who have a choice of paying \$3.75/week or \$9.40/week for all access and home delivery. To successfully overcome the disinclination of users to pay for content on the Web, the content offered must be perceived as a high-value-added, premium offering that is not readily available elsewhere nor easily replicated (Harris, 2000). Yahoo, for instance, has broadened its business model to include a monthly \$9.95 subscription to Yahoo Platinum, which gives viewers access to CNN, NASCAR racing and other video feeds (Laudon & Traver, 2004).

In general, a subscription represents a contract between a supplier of an offer and its customer (the subscriber) about the claim of a specific amount of a specific offer within a

specific period for a specific price. The agreed amount represents the maximum the customer is allowed to obtain during the period. In the case that this amount is exceeded, additional entities are charged separately. Usually the subscriptions are extended automatically and the price is paid per period. (Gruhn & Weber, 2005)

- **Sales:**

Sometimes it is referred to as direct sales, direct online sales or direct sales of product or service; however, sales revenue model is the term that this paper utilizes in this study. In the sales model, firms derive revenue by selling goods, information, or services to customers. Firms such as Amazon.com (which sells books, music, and other products), LLBean.com, and Gap.com, all have sales revenue models. (Laudon & Traver, 2004). Boerrigter (2008) claims that sales is the secondly best known revenue model after advertising. Although it is not always the core business of an organization, but it often can be a side business in order to make more profit.

- **Affiliate:**

In the affiliate revenue model, sites that steer business to an “affiliate” receive a referral fee or percentage of the revenue from any resulting sales. In other words, the company offers some incentives to other affiliates who can redirect the customers to them (Abdollahi & Leimstoll, 2011). For instance, MyPoints.com makes money by connecting companies with potential customers by offering special deals to its members. When they take advantage of an offer and make a purchase, members earn “points” they can redeem for freebies, and MyPoints.com receives a fee. Community feedback sites such as Epinions.com receive much of their revenue from steering potential customers to Web sites where they make a purchase. (Laudon & Traver, 2004) The table below summarize these five major revenue models.

Table 6. Revenue models categorization.

Revenue Models	Description	Examples
Advertising	It allows companies to pay content providers in exchange for advertising space, based in either display or traffic-based commission.	Yahoo.com
Transaction	It allows companies to generate revenue through executing or enabling transactions.	eBay.com
Subscription	It allows content providers to earn revenue through user subscriptions.	NYTimes.com
Sales	It allows companies to drive revenue through selling goods, information or services to users.	Amazon.com
Affiliate	It allows companies to earn revenue through re-directing customers to other websites.	MyPoints.com

In addition, determining revenue models for commercial entities differs from non-profit entities in the measures of success. While commercial businesses define success in financial terms, non-profit entities identify success in terms of mission-based goals. However, both strive for a full sustainability model in order to maintain a renewable source of support to continue delivering value to users over time. On the web, there are several revenue models that suit non-profit platforms such as philanthropy and corporate sponsorships models. (Maron & Ithaka S+R, 2014)

- **Philanthropy:**

Philanthropy is defined as “*the act of improving the situation of others through charitable aids or donations*” (Dietlin, 2010). The philanthropy model shall include all sort of donations, grants and endowments. Therefore, this study addresses donation and charity models as philanthropy model that covers them all. According to Maron & Ithaka S+R (2014), philanthropy model has been a pillar of efforts to develop online platforms since the mid—1990s, and remains so today. The rise of social media in the past few years has given rise to new forms of philanthropy model and greatly facilitated charitable giving. However, a critical element in adopting this model is that online platform’s objectives need to be compatible with the philanthropists’ missions.

One interesting case that adopts philanthropy model to generate revenue is the Encyclopedia Virginia—an interactive online platform that explores the cultural, political, and economic history of Virginia— that was developed by the Virginia Foundation for the Humanities. In 2008, the platform succeeded to raise \$1.5 million from corporates and donors in order to create an endowment that would help the Encyclopedia to have an additional revenue stream, apart from the support it receives from the Virginia Foundation for the Humanities. (Maron & Ithaka S+R, 2014)

- **Corporate sponsorships:**

According to Maron & Ithaka S+R (2014), corporates began to adopt more strategic approaches to philanthropy. Instead of simply awarding grants to a variety of charities, more professionalized corporate social responsibility programs are applied. These programs, such as sponsorships or grants in the company’s name, are intended to have both social value and commercial benefit. These corporates may offer sponsorships and financial support for social projects that are compatible with their missions. Accordingly, a modern model has been developed under the name of corporate sponsorship model.

It is evident that philanthropy and corporate sponsorship models are different (SPARC, 2005) While philanthropy entails a donor’s contribution of cash, cash-equivalents, or in-kind goods and services with no “quid pro quo” expectation, corporate sponsorship is about business arrangements that entails the payment of fees for access to marketing assets. In philanthropy, funder would support projects or firms without any commercial incentive or explicit “pay-back”; however, In corporate sponsorship, commercial corporates donate money or in-kind resources to a non-profit organization in exchange for the

benefit of being associated with the non-profit and having some degree of access to its core audience. (SPARC, 2005; Maron & Ithaca S+R, 2014)

According to Maron & Ithaca S+R (2014), relying on corporate sponsorship model is associated with several risks. The models' risks can be summarized as followed:

- *Corporate sponsorships can arouse suspicions or negative perceptions* if the corporate identity is not a good fit with the platform's cause.
- *Sponsorship could lead to mission drift*, if the corporate sponsor asks to have a say in the ongoing operations of the project in exchange for its contributions.
- *Corporate sponsorship cannot guarantee a long-term solution* as corporate's priorities can change over time.
- *Finding sponsorship can be complicated* due to the long business development time and legal issues in the recruiting, setting up, and implementing processes.

To overcome the risks associated with revenue models of non-profit platforms, Carroll & Stater (2008) suggest that revenue diversification can lead to greater stability in the revenue structures. This approach shall reduce revenue volatility of platforms by equalizing their reliance on earned income, investments and contributions. Thus, relying on diversified revenue models encourages more stable revenues and consequently could promote greater organizational longevity.

2.4.2 Revenue models in review sites

The last section emphasized that Internet businesses use different revenue models such as advertising, transaction, subscription, sponsorships, or combinations of these models. (OECD, 2010) Also it was noted that research on review sites has focused on certain industries such as tourism, catering and movie due to the global reach of websites such as TripAdvisor, Yelp and IMDb. As a result, from the perspective of revenue models, most existed literature have been found to discuss these renowned websites.

To start with, TripAdvisor—the largest travel community in the world—connects users wishing to plan and book trips with providers of travel accommodations and services. It attracts 350 million unique monthly visitors, and provides more than 320 million reviews covering more than 6.2 million properties, restaurants and attractions. The latest annual report shows that hotel segment accounted for 85% for the company's consolidated revenue in 2015. Other segments including attractions, restaurants and vacation rentals accounted for the remainder 15%. In addition to the flagship TripAdvisor brand, the company manages and operates 23 other travel media brands such as BookingBuddy, Tingo and Viator. (TripAdvisor, 2016)

According to the latest annual report, the majority of revenue is driven from the sale of advertising, primarily through click-based advertising and, to a lesser extent, display-based

advertising. The remainder of revenue is generated through a combination of subscription and transaction-based offerings as well as content licensing as shown in the following figure. (TripAdvisor, 2016)

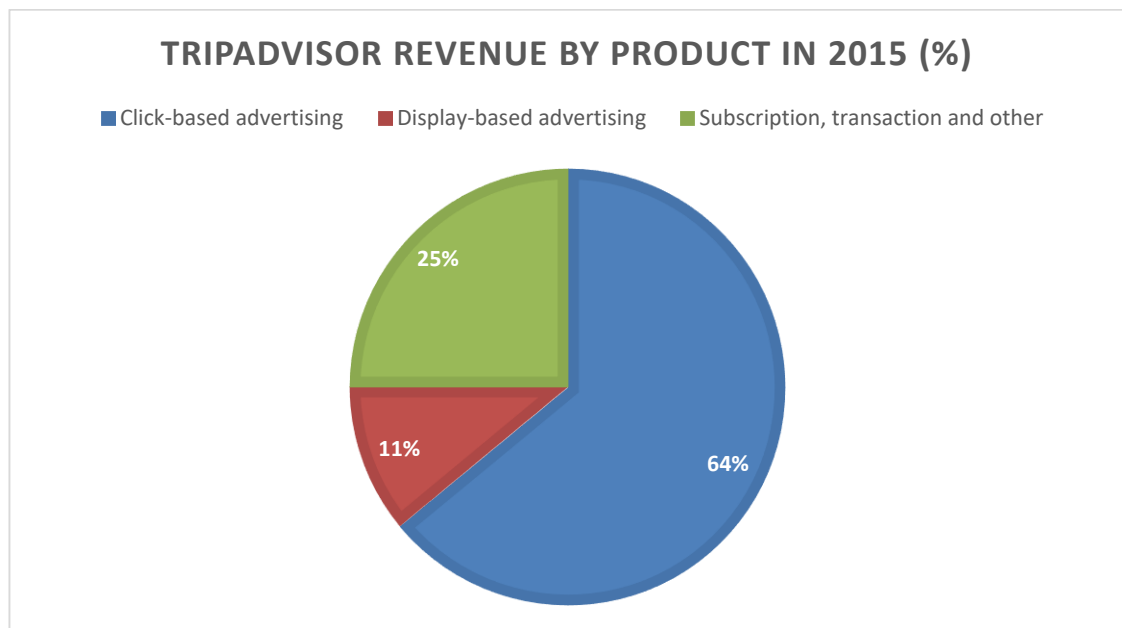


Figure 10, TripAdvisor revenue by product in 2015. (TripAdvisor, 2016)

The figure above illustrates that click-based advertising is the largest source of revenue among the three different models which accounted for 64% of total revenue. However, this revenue ratio was nearly the same for the last three years as shown in Figure 11.

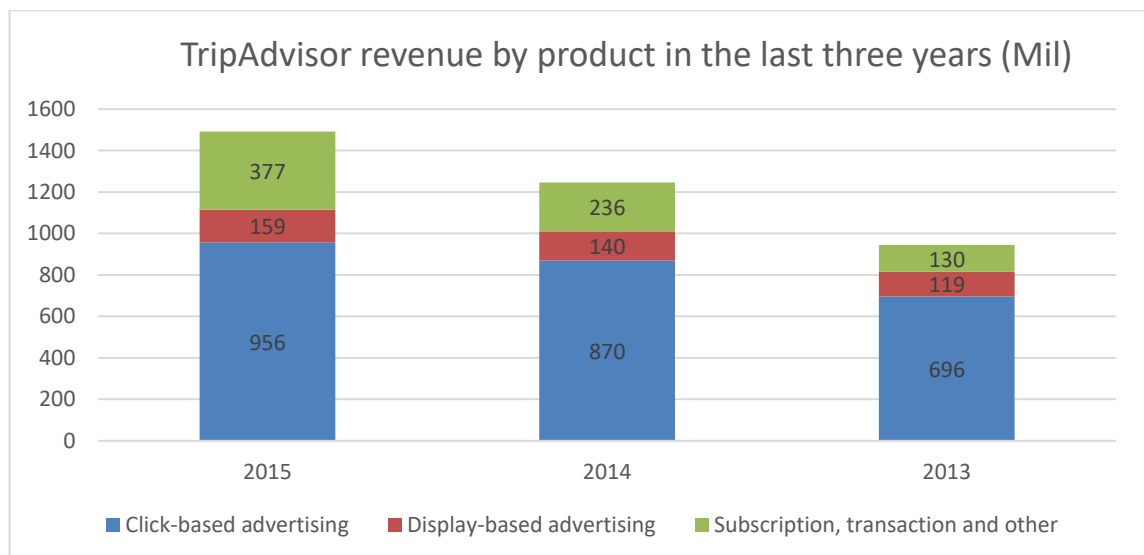


Figure 11, TripAdvisor revenue by product in the last 3 years. (TripAdvisor, 2016)

First, the click-based advertising model includes links to partners' bookings sites. These partners are predominately online travel agencies (OTAs) and direct suppliers in the travel industry. This type of advertising is generally priced on a cost-per-click (CPC) basis with payments from advertisers based on the number of users who click of each type of link.

When a partner submits a CPC bid, they agree to pay the amount of that bid each time a user subsequently clicks on the URL link to the partner's website. Click-based advertising also includes revenue from instant booking feature, which enables the merchant of record, generally an OTA or hotel partner, to pay a commission rate for a user that completes a reservation of TripAdvisor. (TripAdvisor, 2016)

CPC pricing for click-based advertising depends, in part, on competition between advertisers. If the large base of advertisers become less competitive with each other, or merge with each other or with competitors, this could have an adverse impact on the company's click-based advertising revenue. The key drivers of CPC revenue include the growth in monthly unique hotel shoppers. Average monthly unique hotel shoppers on TripAdvisor sites increased 16% in 2015 over 2014. The increase in hotel shoppers is primarily due to success in marketing strategy. For the year ended 2015, TripAdvisor earned \$956 million or 64%, in revenue from click-based advertising. (TripAdvisor, 2016)

Second, advertising partners can promote their brands in a contextually-relevant manner through a variety of display-based advertising placements on TripAdvisor. Those partners are predominately direct suppliers in the travel industry. Destination marketing organization, resorts and attractions are also sources of display-based advertising. This type of advertising is sold predominately on a cost-per-thousand impressions (CPM) basis. For the year ended in 2015, TripAdvisor earned \$159 million or 11%, in revenue from display-based advertising. (TripAdvisor, 2016)

Third, business listings is a subscription-based advertising product offered to hotel properties. This product is sold for a flat fee and allows subscribers to list, for a contracted period of time, their contact information on the website. In addition, revenue is generated from making hotel room nights available for booking on transaction-based sites such as Jetsetter for which TripAdvisor is the merchant of record. The key drivers for display-based advertising revenue include the growth in number of impression sold, or the number of times an ad is displayed on the website. The number of impressions sold increased 14% in 2015 over 2014. In 2015, TripAdvisor earned \$377 million or 25%, in revenue from subscription-based, transaction-based and other revenue. (TripAdvisor, 2016)

Similarly, Yelp, a popular review site in the catering industry, connects people with great local businesses by bringing "word-of-mouth" online and providing a platform for businesses and consumers to engage and transact (Yelp, 2016). Statistics show that Yelp receives approximately 130 million unique visitors per month, and counts over 95.2 million reviews not only of restaurants but also of barbers, mechanics, and other services, in its collection (Luca & Zervas, 2015). The strong brand of Yelp and the quality of its content have enabled it to attract this large audience with low traffic acquisition costs (Yelp, 2016).

In 2015, Yelp's net revenue was \$549.7 million, which represented 46% growth over 2014; while in 2014, the net revenue was \$377.5 million, which represented an increase of 62% over 2013 as shown in the following figure.

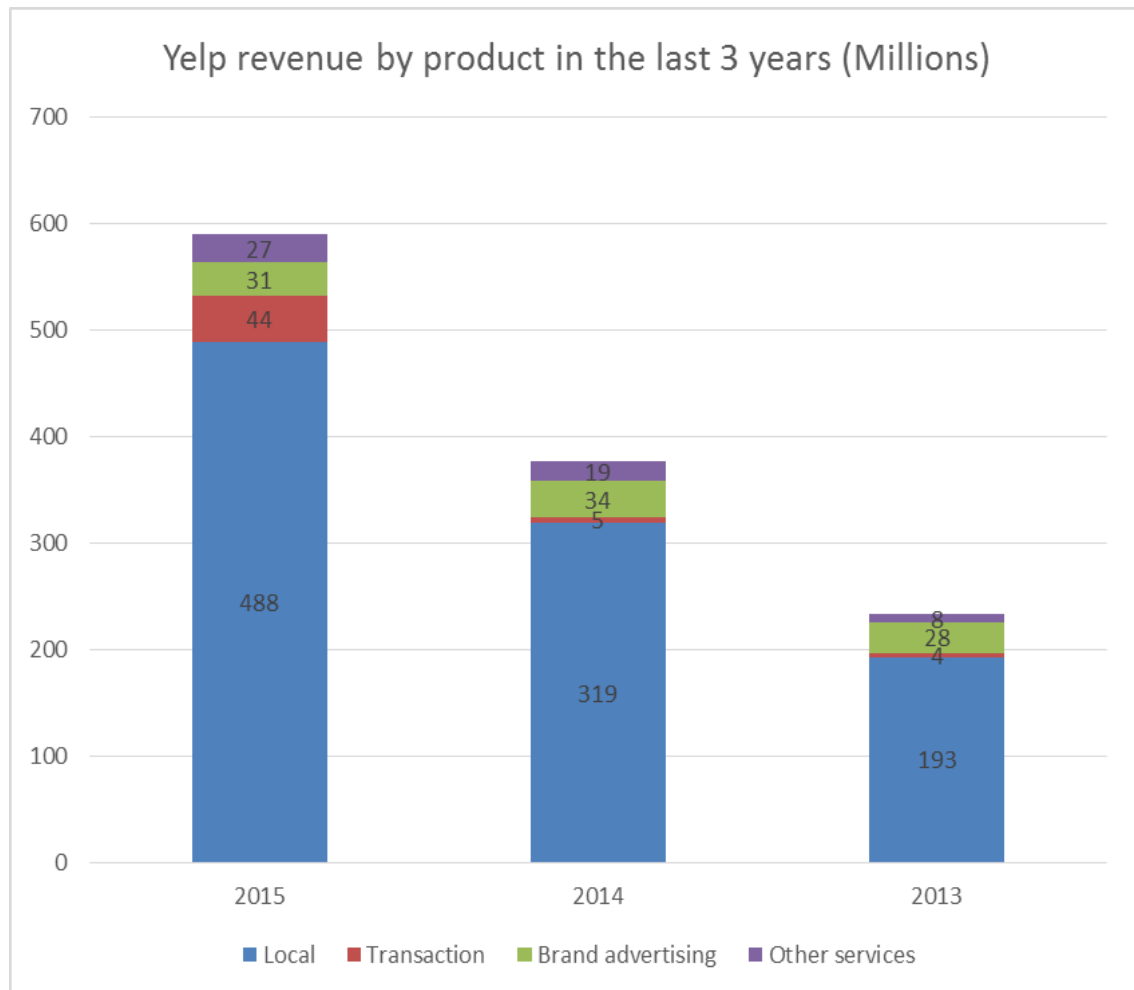


Figure 12, *Yelp revenue by product in the last three years. (Yelp, 2016)*

As illustrated in the last figure, Yelp derives revenue through four different channels: local advertising, transaction, brand advertising and other services. It is clear from the figure above that Yelp's core strength is local advertising business. Businesses that want to reach Yelp's large audience of purchase intent-driven consumers can also pay for premium services to promote themselves through targeted search advertising, discounted offers and further enhancements to their business listing pages. According to the latest annual report, Yelp derives substantially all of revenue from the sale of advertising products on website and mobile app to local businesses due to the high traffic as shown in the next figure. Thus, slower traffic shall have an adverse impact on financial performance of Yelp.

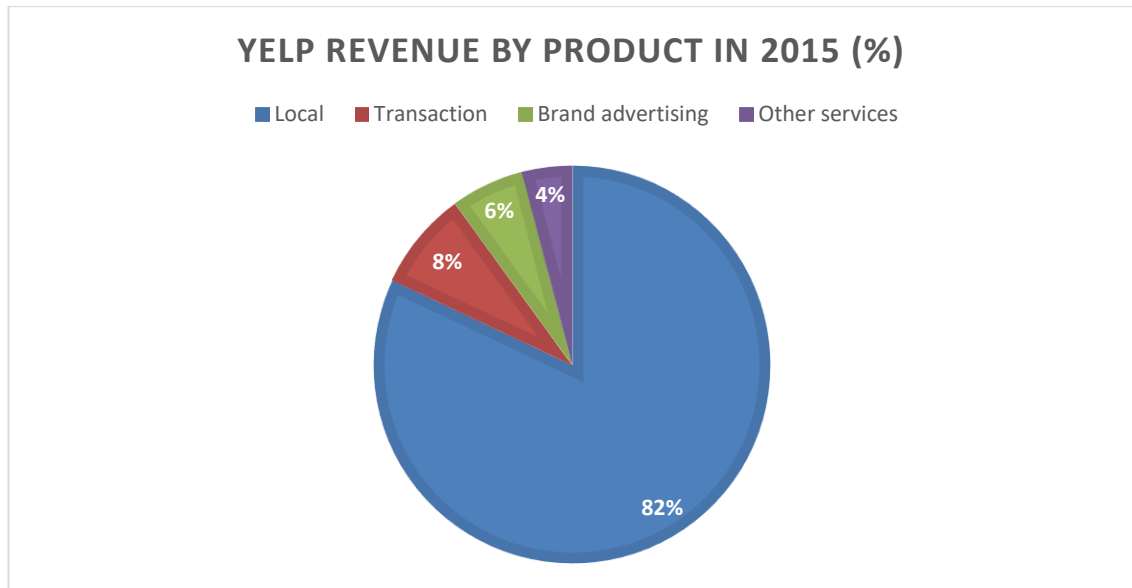


Figure 13, *Yelp revenue by product in 2015. (Yelp, 2016)*

First, Local advertising, Yelp generates local revenue primarily through the display of advertising products, including enhanced listing pages and performance and impression-based advertising in search results on its website and mobile app. Local revenue is also generated from its SeatMe reservation product, a monthly subscription service. In 2015, local revenue was recognized from approximately 111,000 local advertising accounts with approximately 63 million local businesses on Yelp platform. This business has a significant and growing base of revenue, and therefore, Yelp plans to continue to pursue initiatives to enhance opportunities in this area. For example, in 2015 Yelp phased out brand advertising products, allowing it to focus on its local advertising products. (Yelp, 2016)

Last year, local revenue increased \$129.1 million, or 40% over 2014. The increase was primarily due to a significant increase in the number of customers purchasing local advertising products as sales force was expanded to reach more businesses. This growth was driven primarily by purchases of CPC advertising, and by purchases of CPM advertising products. Thus, it is observed that the company derives substantially all of its revenue from the sale of CPM and CPC advertising. Because traffic to platform determines the number of ads Yelp is able to show, slower traffic growth rates may harm business and financial results. As a result, Yelp's ability to grow its business depends on its ability to increase traffic to and user engagement on its platform. (Yelp, 2016)

Second, Transactions, the acquisition of Eat24, a leading online food ordering service, in 2015 by Yelp allowed it to generate transactions revenue through different channels. In 2015, Yelp's transactions revenue increased \$38.6 million, or 736%, over 2014. The increase in 2015 was primarily the result of revenue from Eat24. According to Yelp (2016), the adopted channels in the transaction model are as follows:

- *The Eat24 business* generates revenue through arrangements with restaurants, in which restaurants pay a commission percentage fee on orders placed through Eat24's platform. Also,
- *Revenue-sharing partnerships* provide consumers with the ability to complete food delivery and other transactions through third parties directly on Yelp.
- *Yelp Deals* allow merchants to promote themselves and offer discounted goods and services on a real-time basis to consumers directly on Yelp. Yelp earns a fee on Yelp Deals for acting as an agent in these transactions.
- *Gift Certificates* allow merchants to sell full-priced gift certificates directly to consumers through their business listing pages. Yelp earns a fee based on the amount of the Gift Certificate sold.

Third, Brand Advertising, Yelp generates revenue from brand advertising through the sale of display advertisements and brand sponsorships to national brands. The company recognizes revenue from the sale of impression-based advertisements on its online network in the period in which the advertisements ("impressions") are delivered. However, Yelp phased out these products over the second half of 2015 to focus on its core strength of local advertising. As a result of the phase out, this type of revenue decreased \$3.5 million, or 10%, in 2015 over 2014. (Yelp, 2016)

Last, Other Services, Yelp generates revenue through partner arrangements and monetization of remnant advertising inventory through third-party ad networks. Yelp's partner arrangements include allowing third-party data providers to update business listing information on behalf of businesses and resale of local advertising products by certain partners. Yelp's other services revenue increased \$7.9 million, or 43%, in 2015 over 2014. The increase was primarily due to increases in revenue from added partnership arrangements and sales of remnant advertising inventory. (Yelp, 2016)

Similarly, in the context of the movie industry, IMDb is the world's most popular and authoritative source for movie, TV and celebrity content with more than 250 million monthly visitors who post millions of reviews on more than 3.5 million titles (IMDb, 2015). The website, which started in 1990, generates revenue through advertising, licensing and partnerships (Grogan, 2015). Few years ago, Amazon foresaw the opportunities that IMDb can provide in the movie industry. As a result, Amazon acquired the website and it became a subsidiary of Amazon, Inc... Currently, Amazon owns and operates IMDb and uses it as an advertising resource for selling DVDs and videotapes which is a form of corporate synergy. As IMDb becomes part of Amazon Inc., there are less information about specific data such as annual revenue, revenue models and revenue streams of IMDb; instead, integrated data of Amazon Inc are available that represent Amazon and its multiple subsidiaries. All in all, after the acquisition, it became easier to buy a film on Amazon through the film page of IMDb.

Studying and analyzing the website shows that IMDb relies on three revenue models to generate profits as follows. First, Transaction fees, IMDb derives revenue through commission for DVD/videogames sales on Amazon as discussed earlier. In addition, the company earns commissions for ticket sales of the new released film pages originating from the site. Second, Subscription, IMDb offers IMDb Pro— a subscription service designed for the entertainment industry (Amazon, 2016). IMDbPro provides entertainment industry workers with the information available on the free IMDb site, as well as additional features (including expanded in-development and in-production title information and contact details for individuals and companies). A Subscription to IMDbPro.com costs \$19.99 per month or \$149.99 per annum. (IMDb, 2016) Third, Advertising, with the great data it has, IMDb remains free and therefore draws massive traffic that can be monetized through advertising. However, advertising on the website is at a minimum and relevant to the website content. The addition of trailers’ for feature films is considered as a win-win for everyone, to promote the films for producers and to draw more traffic to the website (Grogan, 2015).

2.5 Synthesis

This section synthesizes the key concepts that have been addressed in this chapter while identifying the gaps between the previous studies and the research questions proposed in the first chapter. Despite the multiple concepts available for the main topics related to this thesis, key concepts have been selected in this chapter to create the framework of this study which aims to introduce possible revenue models of review sites in the school industry. These key concepts are summarized and presented in Table 7.

Table 7. Key concepts discussed in literature review.

Key concept	Description
Marketing communications	The means by which firms attempt to inform their customers - directly and indirectly - of products and brands they sell.
Review site	A website on which people post reviews for products & services
Revenue model	It describes the way a company makes money through a variety of revenue flows.

Firstly, the concept of marketing communications was described, constituting the framework on which this thesis is built. The concept refers to all types of tools that deliver planned messages via different media to audiences in order to build brand and boost sales. Several tools were identified which it was found that organizations shall adopt and integrate a variety of communication tools in order to maximize the communication impact on target consumers. Two main tools were selected to be relevant for the study: word of mouth and user-generated reviews in the form of review sites.

Word-of-mouth (WOM) was referred to as the act of consumers providing information to other consumers of goods and services. It was revealed that consumers have shifted to communicate online and thereby traditional WOM has also evolved to electronic-WOM. eWOM differs from WOM in the how information is transmitted which is via the Internet. It was appeared that eWOM to be more influential due to its ability to disseminate rapidly to many consumers via the Internet. The advent of the Internet and Web 2.0 technologies have empowered consumers to influence others through a variety of platforms to post user-generated content (UGC) tools (e.g., social networking sites, blogs, forums, shopping sites and review sites).

Review sites was identified to be the relevant platform for this study. The concept of review site was described as a website on which people post reviews for products and services. To begin with, this study chose to study TripAdvisor, Yelp and IMDb representing three different industries which are tourism, catering and movie respectively. Those sites are the most popular sites in each category. In addition, Rate My Professors, the renowned professor and school review site in USA was studied and analyzed as well. As per July, 30th 2016, a small comparison has been made between those four websites through Similar Web, a web analytics company, as shown in the next table.

Table 8. Comparison between major review sites (Adapted from SimilarWeb, 2016).

	TripAdvisor	Yelp	IMDb	RateMyProfessors
Total monthly visits (Millions)	147.9	155.3	641.8	7.5
Country Rank (USA)	59	36	27	1194

As per the table above, school review sites still lack the same reach of other review sites in other industries. While sites such as TripAdvisor, Yelp and IMDb are in the top 60 visited sites in USA, RMP only appears in the top 1,000. In addition, the visitors of IMDb, for instance, are approximately 85 times more than the visitors of RMP per month. These results explain the reasons behind the lack of existing literature on school review sites compared to other industries as the school industry is not yet considered mature and the targeted markets are not yet established.

Lastly, revenue model as an element of business model was also presented, as it describes the way a company makes money through a variety of revenue flows. In this study, it was realized that Internet revenue models has been widely discussed generically in literature. However, from the perspective of review site, research has rarely given an explanation for the methods these sites can generate profit. Instead, available information have been gathered from annual reports of the popular sites. It was observed that the majority of review sites agree to use a combination of models that best fit their product, customer and market as shown in the following table.

Table 9. *Revenue models of major review sites.*

	TripAdvisor	Yelp	IMDb
Main revenue models	Click-based advertising (64%)	Local (82%)	Transaction (NA)
	Display-based advertising (11%)	Transaction (8%)	Subscription (NA)
	Subscription, transaction and others (25%)	Brand advertising (6%) Other services (4%)	Advertising (NA)

As per the table above, advertising, transaction and subscription models are commonly used by the three selected review sites. However, it was found that there is still no consensus about a unique classification for online revenue models which Internet platforms categorize and label their models differently. For instance, the Local advertising revenue model of Yelp represents revenue coming from the display of advertising products and subscription; while TripAdvisor separates two forms of advertising (click-based and display-based) into two different models.

To summarize, the phenomenon of review sites as an element of eWOM is of great significance in the marketing communications context. While few review sites have succeeded to attract consumers and generate revenues through a multiple of revenue streams, plenty have failed to do the same success in several industries due to several limits. Yet, the trend is still moving toward exploiting UGC more extensively through consumer reviews, blogs and discussions on SNSs in broader industries.

Worldwide, the increase of shifting from public schools to private and independent schools prompts parents to search for information about targeted schools. This information shall help parents evaluating school services and tools and professors' performance. Nowadays, there are hot topics not only from an academic perspective but also from an industry perspective to discuss the effectiveness of school review sites and their implications for enhancing professors' performance and schools' tools. However, literature needs to address other areas including studying target market, revenue models, cost and pricing strategies of review sites generally and school review sites particularly.

From the perspective of revenue generation, it is assumed that RMP — the most popular teachers and schools reviewing site on the Internet— generates revenue through advertising and partnerships. Academically, literature have neglected to discuss how school review sites are able to generate revenue. Even the popular website RMP does not issue the annual reports publicly which can inform about what revenue models the school platform adopts to derive revenue. This is the gap this thesis tends to fill in the following chapters. The following chapters present the research methodology and empirical study of this thesis where the research question will be addressed and answered using the empirical information.

3. RESEARCH METHOD AND MATERIAL

This chapter's purpose is to explain and justify the nature of the thesis. The first section of the chapter explains what strategy is chosen and presents the rationale for selecting it, and justifies its adoption within the research. The later section goes into much more detail about how specifically the data was collected.

3.1 Research methodology and schedule

Research strategies are inherent components of research methodology (Wedawatta et al., 2011). There is a range of research strategies with which one could apply in a research project. Saunders et al. (2009) propose seven strategies a researcher shall consider in a research project. These strategies are experiment, survey, case study, action research, grounded theory, ethnography and archival research. It is agreed that all these strategies are of equal importance as there is no one best way for undertaking all research. Rather one needs to choose the strategy that is most suitable to the research project and be able to justify this choice. The selected strategy in this paper is presented and defined in the following table.

Table 10. Case study research's definition by Saunders et al. (2009).

Research Strategy	Description
Case study	It is a strategy concerned with the empirical investigation of a particular contemporary phenomenon within its real-life context using multiple sources of evidence.

As shown in the previous table, the primary research strategy chosen for this study is case study research. This strategy enables a researcher to closely examine the data within a specific context (Zainal, 2007). According to Saunders et al. (2009), this strategy type is most often used in explanatory and exploratory research and requires a rich understanding of the context of the research. There are two dimensions of case study strategy; single case and multiple case. This research adopts a single case study strategy which incorporates a unique single case of Check My School Egypt (CMSE). CMSE is a digital feedback platform that publishes reviews about schools in Egypt. This platform is an adaptation to the original Check My School platform in the Philippines that was inceptioned in 2011. Today, CMSE is still in the conception design phase and the online platform is not yet established. The objective of this platform is to improve quality, transparency and social accountability in the education sector through a digital feedback service for schools. This platform shall make use of all sort of user-generated content (UGC) created

by parents, students and teachers to highlight the most critical issues of concern in the education sector and provide the relevant solutions.

To conclude, the author undertaking the research is involved in the project since the conception design phase. The findings of the research are resulted from investigating and analyzing a particular contemporary phenomenon. These findings also shall inform review sites in other industries. In addition, as this research takes place in the home country of the author, it touches on areas that the author is involved in and aims at investigating. Therefore, in this paper, it is found adopting the case study research strategy shall provide better opportunities to answer the research questions and better evaluate the research findings.

Due to the recent conception of the school review sites, there has been relatively little research conducted on the topic so far. Furthermore, most of the conducted research has applied very specific viewpoints (e.g. ratings assessment, professors' online cyberbully, or rating's implications on studies); however, to the author's knowledge, there is no research that has empirically looked at the revenue models of school review sites. Therefore, besides the case study research strategy, it is decided to collect data through three different methods: survey, interviews and process-benchmarking. Further explanation on data collection techniques is discussed in the following sections. Besides, a general timeline of the research process is shown in Figure 14.

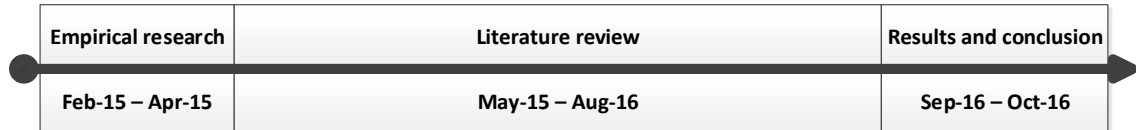


Figure 14, Research timeline.

The research process started in February 2015, when the author took interest in participating in the conception stage of implementing an online educational project in Egypt. On a general level, the project aimed to benchmark an innovative educational platform that was previously applied in the Philippines, in the Egyptian context. In March 2015, the author participated into an international conference in Cairo in order to introduce the concept of the project in Egypt. Representatives of the ministry of education in Egypt, schools, organizations, academics, teachers and students were among the attendees of the conference. After the end of the conference, positive feedback from the attendees towards the project was collected through surveys. Later on, online interviews were conducted with several representatives from different online school review projects. Then, from May 2015 till August 2016, a thorough literature review was prepared. After the data was collected, it was analyzed and the preliminary results were evaluated.

3.2 Survey data collection and analysis

Survey method is a commonly utilized method of collecting information from a population of interest (The Health Communication Unit, 1999). Further, a survey as defined by the Pennsylvania State University (2006) is a research method for collecting information from a selected group of people using standardized questionnaires or interviews. Surveys help to identify customer expectation, measure satisfaction levels, and determine specific areas for improvement.

First, in March 2015, the author participated into an international conference about education in Cairo, EduCairo 2015. The aim of the participation was to introduce the concept of the Check My School Egypt (CMSE) project in Egypt. Representatives of the ministry of education in Egypt, schools, organizations, academics, teachers and students were among the attendees of the conference. Also speakers from Finland, Japan and Malaysia took part into the conference. After the end of the conference, a survey questionnaire has been collected from 49 attendees and speakers reflecting their opinions towards the project. In that questionnaire, attendees had to answer six questions, four of them were ordinal scale questions and the latter two were open-ended questions. On one hand, the ordinal feedback questions were based on a 5-point scale ranging from 5 (strongly agree) and 1 (strongly disagree). These questions were as follows:

- a) Did you like the project's presentation?
- b) Do you believe the project's idea can succeed in Egypt?
- c) Do you want to cooperate with the project?, and
- d) Will you recommend your organizations to partner with the project?

On the other hand, two open-ended questions were asked as follows:

- a) What will make the project a success?
- b) How can you contribute to the project?

After the conference, data was collected and analyzed from the survey questionnaire forms. This questionnaire chose to exclude filtering the results based on the respondents' age, sex or demography due to the limited data. It was clear that the questionnaire only attempted to collect a feedback over the project as a concept without addressing the possible generated revenue streams as it was irrelevant to discuss them in the conference. Yet, through the semi-structured interviews with several key members in the industry, it was possible to discuss the possible revenue models of school review sites.

In this paper, the goal of the semi-structured interviews was to identify the current business model generally and revenue model particularly of different school review sites worldwide. The research attempted to conduct semi-structured interviews with representatives of different school review sites such as RateMyProfessors, GreatShools, CheckMySchool and RateMySchool. However, only the latter two accepted to conduct

the interviews. These interviews were conducted by the researcher and they all were conducted online as shown in Table 11. The outline of the semi-structured interviews can be found in Appendix 1.

Table 11. *Summary of interviews.*

Interviewee	Organization (s)	Date
Ms. Jennifer Shkabatur	The World Bank	Mar-15
Mr. John Aldrich	ANSA-EAP CheckMySchool (Philippines)	Mar-15
Ms. Undral Gombodorj	DEMO (The Democracy Education Center) CheckMySchool (Mongolia)	Mar-15
Mr. Roman Chertes	RateMySchool	Aug-15

As this study contributes to the adaptation of CMS model for the Egyptian context; it was significantly important to conduct interviews with the people behind the original project. Altogether four interviews were held with personnel related to the project and the industry. First, an interview was made with Ms. J. Shkabatur, a consultant for the World Bank Institute and the author of *Check My School: A Case Study on Citizens' Monitoring of the Education Sector in the Philippines*. Second, another interview was made with Mr. J. Aldrich, a representative of the Affiliated Network for Social Accountability in East Asia and the Pacific (ANSA-EAP). ANSA-EAP is the main founder that implemented CMS in the Philippines. Several governments of different countries, including Mongolia, Indonesia, Kenya, and Moldova, were interested in adapting the CMS model to their country contexts. As a result, it was found important to also study the adapted cases; and therefore, an interview was conducted with Ms. U. Gombodorj, from the Democracy Education Center (DEMO), the foundation behind adapting CMS in Mongolia. Last, an interview with Mr. R.V. Chertes, the owner of RateMySchool.net, who had a wide knowledge regarding the online educational services was conducted.

Due to the nature of the study, it was impossible to collect data about the school review sites without conducting interviews. These interviews followed a general framework as shown in Figure 15. However, depending on the respondent's background, the questions had to be differed to some extent from session to session.

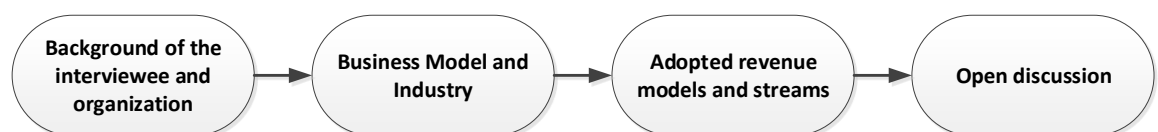


Figure 15. *Interviews' questions framework.*

The empirical data that was gathered through the semi-structured interviews aimed to identify the current revenue model of several school review sites worldwide; particularly of the CMS platforms. The collected data has been analyzed in several steps. During the online interviews, notes were taken as recording was not facilitated. The content of the notes was analyzed in order to identify the adopted models, their attributes, opportunities and challenges.

3.3 Benchmarking data collection and analysis

Parallel to survey method that was discussed in the previous section, this paper also utilizes benchmarking method to collect the empirical data. Benchmarking has established its position as a tool to improve an organization's performance and competitiveness by adopting and developing the best practices from others (Kyrö, 2004). Process benchmarking is a market research tool that is expected to grow in popularity in the highly competitive global marketplace of the new millennium. In the field of methodological choices, benchmarking process leads one to the action research strategy. In the online industry, benchmarking involves the systematic collection of data to determine how one website compared to other websites of related businesses. The results of the benchmarking study provides measures and ideas of how one organization can further enhance its businesses and evaluate its position compared to the related organizations. (Misic & Johnson, 1999) McWilliams (1995) in Ralston et al. (2001) argues that a process benchmarking methodology should follow five broad steps:

1. Identify organizations with similar challenges;
2. Identify measures;
3. Obtain these measures from these organizations;
4. Evaluate and rank all organizations' results; and
5. Identify and adapt the best practices to suit the individual needs and situation.

The empirical analysis in process benchmarking hinges on two approaches: the study of three different review sites from three different industries and the study of existing school review sites in the Egyptian context. In the first approach, this paper studies TripAdvisor from the tourism industry, Yelp from the catering industry and IMDb from the movie industry. In addition, Rate My Professors (RMP) that represents the most current popular school review site in the world is also addressed. Those selected websites were chosen to represent the most successful cases in these industries using the following measures:

1. Obtain the highest turnover in the selected industries;
2. Drive the highest traffic; and most importantly;
3. Obtain sufficient data on their revenue models.

As per July, 30th 2016, a small comparison has been made between TripAdvisor, Yelp, IMDb and RMP through Similar Web, a web analytics company. This comparison as

illustrated in the synthesis section measured two points: the websites' total monthly visits and the websites' country rank in the United States. United States has been specifically chosen as it is considered the main market for these review sites. Monthly visits and country ranking data are retrieved and analyzed to identify the reach, popularity and effectiveness of these review sites in USA. Also, this comparison shall inform if school review sites in general have the same opportunities of other industries.

Another comparison of how review sites derive revenues between TripAdvisor, Yelp and IMDb is also executed. This comparison highlights the main online revenue models employed in the selected websites. The retrieved data is collected from several sources such as organizations' annual reports, statistics and researches from previous scholars. Special emphasis was placed on the annual reports where websites explain how they derive and classify revenue. Annual reports of TripAdvisor and Yelp explained in detail the revenue models of which they rely on to generate profits. However, for IMDb, the company's annual report was not published for public use, and thereby no classification of revenue models addressed by the company was found. It is assumed that when IMDb became part of Amazon Inc., less information became available about specific data such as annual revenue, revenue models and revenue streams of IMDb; instead, integrated data of Amazon Inc became available that represent Amazon and its multiple subsidiaries. Therefore, the revenue models of IMDb described in this paper are addressed by the researcher through the study and observation of the website itself.

Through annual reports, this study utilized the retrieved data to know about the websites' background, market and online consumers, to highlight the adopted revenue models in these sites and to understand how much each model contributes to total revenue. The revenue models that can fit Check My School Egypt in the Egyptian context will be proposed in the discussion chapter. In short, process benchmarking was followed so that studying other review sites' attempts to generate revenue allows one to continue from what other people have ended rather than starting from scratch.

In the second approach, the empirical analysis in process benchmarking is also based on the study of existing school review sites in the Egyptian context. Through Similar Web, comparisons between the top visited websites in Egypt and the top operating school review sites in Egypt are executed. These comparisons as illustrated in the discussion chapter measure three points: the websites' total visits in six months, the websites' world rank and the websites' country rank in Egypt. Those data are retrieved and analyzed to identify the reach, popularity and effectiveness of these websites in Egypt. These comparisons present the difference between operating websites in Egypt and similar global websites in terms of reach, success and audience market. Also, these comparisons shall inform about the current status of school review sites compared to other websites in the Egyptian context.

On a general level, collecting reliable data from existing materials was challenging in order to introduce a convenient revenue model for school review sites based on the best practices employed in other industries and similar platforms. The research did not struggle to obtain and analyze data of the selected review sites in other industries. However, as discussed earlier, the research faced obstacles gathering data about similar school review sites including RMP. Thus, analysis of school review sites was conducted based on the availability of data.

Using the retrieved data from both semi-structured interviews and process benchmarking helped the research to select the best possible revenue models that could fit Check My School Egypt. The research takes into account the cultural and social characteristics and attributes as will be thoroughly discussed in the following chapter. The following chapter also presents background about school culture in Egypt, information and communications technology's status in Egypt and the case study CMSE. Later, it describes the findings after processing the collected data.

4. RESULTS

The purpose of this section is to present results obtained through the research of this thesis. First, a fully overview of the Egyptian context and the case study is provided. Then, the empirical findings from benchmarking and survey are addressed. Later, the revenue models of the selected review sites are analyzed.

4.1 Overview to the context and digital review platform

4.1.1 Schools in Egypt

With over 91 million, Egypt is the most populous country in the MENA region (UN, 2015). Egypt enjoys a young population, according to the Central Agency for Public Mobilization and Statistics (CAPMS) (2016), 31% of the population is under 15 years old, a total of 28 million, putting a lot of pressure on education and the labor market. The education system in Egypt is one of the largest in the world with 52,022 schools, about one million teacher and nearly 20 million students at different levels of schools (Egypt Ministry of Education, 2016).

The right to a free public education is enshrined in Egypt's constitution. The education system is largely public (86%), with some private (14%); however, both operate under the auspices of the Ministry of Education (Ministry of Education, 2016). Public schools are technically free of charge, but education spending tends to be substantial at every stage of instruction, especially for fees, supplies, and private tutoring that are essential to an adequate education (Krafft, 2015). For instance, a parent would pay annually EGP40,000 (\$2,200) to enroll his 3-years old son in a private nursery school in Cairo as shown in Appendix 2. The following figure shows the educational stages as per the Egyptian education system.

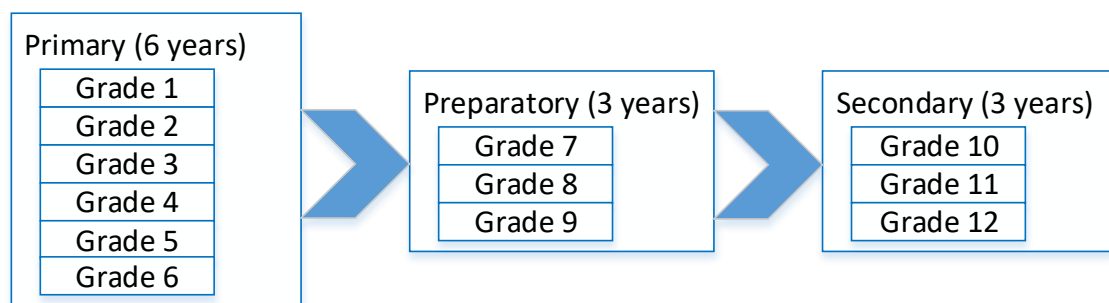


Figure 16. *Structure of schools' educational stages in Egypt.*

As shown in the figure above, there are six primary years, three preparatory and three secondary years which students need to complete before applying to universities. The new 2014 constitution mandates an increase in spending for basic education to reach 4% of GDP in the budget by 2016/2017. In 2012, spending on education in Egypt was 3.6%. (IMF, 2015). Even though there is notable progress in the education system in Egypt, education challenges are some of the highest in the country, leaving around 30% of the country's adults suffer from illiteracy according to the latest UNICEF statistics (UNICEF, 2015). Besides, the latest Global Competitiveness Report shows Egypt at the bottom of the scale in terms of quality of education as it ranks 139 out of 140 in quality of primary and higher education. The same report shows Egypt holding the same place as 139 out of 140 in the scale of quality of management schools. (World Economic Forum, 2015). All in all, Sywelem (2015) addresses five main challenges that face the education system including high illiteracy, increasing number of school dropouts, low school enrollment rates, high number of unemployed graduates and poor quality of public schools.

In Egypt, it is socially agreed that education is the most important expenditure in the budget for any Egyptian family as also addressed by Elwatan news (2013) where most parents provide whatever is needed in order for their children to get the highest possible scores in school exams. This school culture in Egypt has given parents a great influence and has prompted them to participate into discussions about schools, subjects and services on several online platforms such as schools' Facebook pages and groups, forums and school review sites. These discussions may address certain problems in some schools, or some issues related to a teacher's performance, school work load or exam evaluation. As a result, several school review sites such as MadaresEgypt.com and Schools-in-Egypt.com have appeared in Egypt in order to provide a venue for parents, students and teachers to share their concerns about certain educational issues and solutions with other people. Also, these platforms provide information about schools' services, locations and reviews. However, these platforms did not have enough reach and popularity as for Facebook's school pages and groups.

4.1.2 Information and communications technology in Egypt

The power of the Internet has redefined the global economy in the 21st Century. As of 2016, over three billion people around the world are connected. Egypt, in particular, is one of the highest growth potential information and communications technology (ICT) markets in the Middle East and Arab world which ICT is one of the most active sectors in the Egyptian economy. This is due to two factors: Egypt is the largest Arab market with more than 91 million where 60% out of total population are under 30 years and the measures adopted by the government in order to provide an Internet access for everyone. (AlexBank, 2015) The diffusion of the Internet in Egypt can be attributed to the collaborative efforts between the government and the private sector.

The latest official record by the Ministry of Communication and Information Technology (MCIT) states that the number of Internet users reached 27.25 million users with 31.7% penetration rate in 2014 in which Egypt continues to be the largest Internet market in the MENA region. However, Internet users in Egypt are centered in Cairo and the major provinces who can afford not only Internet access but also a computer or a mobile phone (Aboubakr, 2013). In addition, social networks exhibits a similar trend which according to the Arab Social Media report 2015, there are 19 million Facebook users in Egypt making it the 1st among the Arab countries and the 17th worldwide. Also, there are 1.1 million Twitter users and 1.6 million LinkedIn users. Worldwide, Egypt is currently ranked 12th in terms of best places to invest in Internet based commerce despite that the overall penetration of e-commerce is still low at 3.4%. (AlexBank, 2015)

According to a recent study by PayFort (2016), a Dubai-based online payment gateway, Egypt enjoys a very strong growth in online market size which the number of online buyers has increased by nearly 14% to reach 18 million customers in 2015. Further, the e-commerce sector has been increased by 16% over last year. This is a very positive sign that the Egyptian population is becoming more comfortable using e-commerce services in their daily lives. Carew (2015) believes that Egypt, in particular, has seen an impressive rise in their Internet economy over the last few years. This increase is a positive sign that ecommerce is continuing to gain traction across the country. According to Euromonitor, Egypt's online purchase are expected to grow more than triple by 2016. (AlexBank, 2015)

However, e-commerce in Egypt brings a range of challenges. For instance, despite the large number of online shoppers, in terms of proportion of population, Egypt remains behind many countries where only 8% of Internet users in Egypt are online consumers. This is due to several reasons including lack of knowledge of how to deal with e-commerce, lack of legal recognition of electronic contracts, fear of disclosure of financial transactions and lack of familiarity with foreign languages. Also, low credit card penetration continues to disrupt ecommerce with 39% of the population remaining offline due to a lack of credit card. Due to the heavy reliance on cash, instead of debit or credit cards, Cash on Delivery continues to be the most popular payment option in Egypt where 70% of the shopping population prefers this method of payment. This trend is most prominent in Egypt where 91% of offline transactions are settled with cash. To overcome this, several telecom companies and banks have launched mobile payment solutions in order to convert Egypt to a cashless society (AlexBank, 2015).

4.1.3 Check My School Egypt

Check My School Egypt (CMSE) is a digital feedback platform for schools in Egypt in the conception phase. The platform aims to open a venue for users such as parents, students and teachers to voice their opinions about schools and highlight the most critical educational issues of concern and provide the relevant solutions. The objective of this

project is to improve quality, transparency and social accountability in the education sector through a digital feedback service for schools.

It is assumed that a digital platform that opens a venue for this educational network is vital and has an opportunity to enable schools to perform better, students to learn what they need and parents to make informed decisions. CMSE's theory of change is to create accessible and community-driven data monitoring that enable citizens and government officials to highlight issues of concern in the education sector and identify potential solutions. CMSE builds on the capacity and learning from the Check My School platform that was incepted in the Philippines in 2011 and later was adopted in different countries with the support of the World Bank and different International Development Organizations (IDOs) such as the Open Society Foundations. CMSE aims to have the largest online school portfolio in Egypt, ranging from private schools to international, as well as public schools; therefore, CMSE helps users to make informed decisions by offering them the opportunity to browse thousands of schools by type, location, budget or scope and be confident they are getting the best results possible. In short, CMSE will be the first of its kind as a review-based website in education sector that allow users to search and choose schools based on reviews and feedback. All in all, CMSE's approach has four core objectives:

1. Data validation of schools' services.
2. Involve people in education governance.
3. Help solve school problems.
4. Provide a venue for citizens' voice and feedback.

CMSE brings the Egyptian education community online with the aim to be the largest online educational portal in Egypt. It brings together schools, students and parents on a single platform making the school-choosing experience simple, credible and hassle-free. CMSE enables increased transparency of schools' performances where parents can choose from a wide range of schools the most suitable one for their children.

The project shall create value for the parent-school-student triangle as following:

- **Schools:** will better understand their performance. They will be able to monitor their strengths and development opportunities and as a result enhance their quality.
- **Students:** will have a chance to give a constructive feedback on their schools in order to highlight development opportunities to improve schools' performance and identify needs to get better education.
- **Parents:** will also give constructive feedback on schools' services. In addition, they will have a chance to monitor a wide range of school services, tools and facilities and thereby make informed schooling decisions.

4.2 Possibilities with the digital review platform and its revenue model

4.2.1 Survey results

In March 2015, the author participated into an international conference about education in Cairo, EduCairo 2015. The aim of the participation was to introduce the concept of the CMSE project in Egypt. Representatives of the ministry of education in Egypt, schools, teachers, organizations, academics and students were among the attendees of the conference. Also speakers from Finland, Japan and Malaysia took part into the conference. After the end of the conference, a survey questionnaire has been collected from 49 attendees and speakers reflecting their opinions towards the project. In that survey, attendees had to answer six questions, four of them were ordinal scale questions and the latter two were open-ended questions. It was clear that the survey only attempted to collect a feedback over the project as a concept without addressing the possible generated revenue streams as it was irrelevant to discuss them in the conference. After the conference, the data was collected and analyzed. The following figure analyzes the attendees' responses of the four ordinal scale questions in which 5 is strongly agree and 1 is strongly disagree.

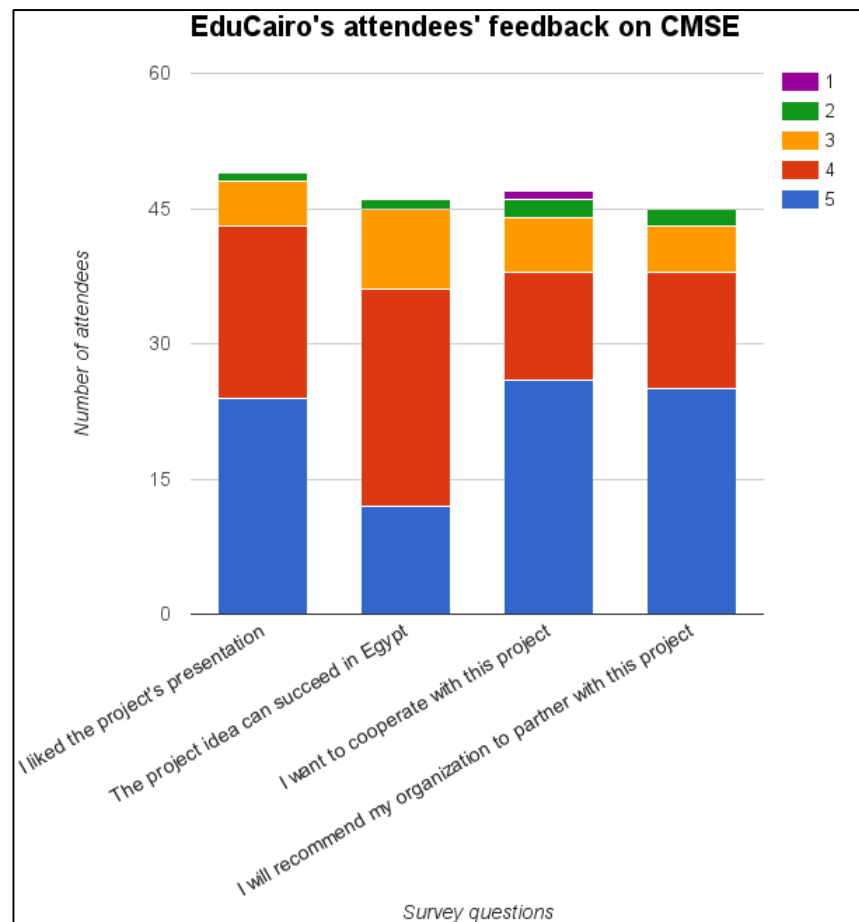


Figure 17, *EduCairo's attendees' feedback on CMSE.*

The figure above clearly shows a positive feedback from the attendees towards the CMSE's concept. The positive answers based on the four survey questions were 87%, 78%, 80% and 84% respectively. Despite the limited number of responses, these survey answers prove a positive opportunity of the concept as they reflect a diverse array of respondents.

In addition, two open-ended questions were asked; first, "*what will make the project a success?*" The recurrent answers focused on financial resources, community involvement and commitment of stakeholders as key success factors. For instance, Dr. L. El-moslemany and Dr. A. Mostafa from the National Center for Educational Research and Development (NCERD) agreed that sustainable financial resources is required for the project to succeed. Also, Mr. Robert Fogel from Intel believed that communication with the education community is a key success factor. Moreover, Mr. Motoe Nakajima from Japan International Cooperation Agency (JICA), assured that commitment of stakeholders is necessary to succeed. The second question was "*how can you contribute to the project?*" The majority of the attendees shared the willingness to provide consultancy, training and also expertise to connect people from the community with the project.

As providing sustainable financial resources was addressed by several attendees as one of the success key factors in the last survey. Yet, through the conducted interviews with several key members in the industry, it was possible to discuss the possible revenue models of school review sites. During the interviews, several topics were discussed including value proposition, project's partners, impact, opportunities and challenges and adopted revenue models and sustainability. However, this paper only focuses on analyzing the interviewees' responses regarding the adopted revenue models without addressing the rest of the responses.

During the interviews, it was asked "*what are the major revenue models adopted by your platform?*" The recurrent answer was that there is no existing perfect model that school review sites can rely on to generate revenue due to several factors including the adopted business model, targeted audience and context. However, many existing platforms such as CMS websites run as non-profit and thereby rely on philanthropies and corporate sponsorships to support the continuity of their services.

During the online interview with Ms. Shkabatur- a consultant for the World Bank Institute and the author of *Check My School: a case study on citizens' monitoring of the education sector in the Philippines*; she assured that reliance on philanthropies and sponsorship of the World Bank and Open society foundations was critical for the implementation of *Check My School* in the Philippines. The non-profit platform for schools reviewing and monitoring in the Philippines utilized this model to cover its expenses while achieving profits was not set as a primary objective. This aligns with what came in Shkabatur (2012) where she addressed that the website shall consider turning into the private sector in order to generate further revenue. The study also showed that private sector engagement in

school management has been commended in interviews with officials and school administrators as private organizations may be willing to sponsor the website activities.

During the interview with Mr. J. Aldrich, a representative of the Affiliated Network for Social Accountability in East Asia and the Pacific (ANSA-EAP). His response was in line with what Ms. Shkabatur had noted earlier as CMS had to fully rely on the financial support of the World Bank and Open society foundations in order to initiate the platform. He also mentioned that in the first year of implementation, CMS utilized the financial support mainly for the purpose of developing the online platform. This drove the author to ask Mr. Aldrich if CMS has major expenditures besides the online platform. So it was asked “*what are the major expenditures of CMS?*”. He responded that the online platform was the major expenditure in the entire project as it has to be developed twice due to its inconvenience with the users. In addition, CMS had to rely heavily on volunteers to gather and validate school data due to the low Internet penetration in the Philippines. He declared that it is challenging to rely on the long-commitment of volunteers who are likely to have other time-consuming responsibilities.

While during the interview with Ms. U. Gombodorj, from the Democracy Education Center (DEMO), the foundation behind adapting CMS in Mongolia, she noted that the project was in the planning phase and DEMO was seeking to receive funds from local and overseas organization to initiate and run the project. She added that DEMO reached out both of the World Bank and Open society foundations for possible sponsorship. However, she noted that DEMO would rely on offline work using volunteers rather than relying on the online platform in the beginning due to the lack of ICT capabilities and limited Internet penetration in the country.

Further, an interview was conducted with Roman V. Chertes, the owner of Rate-MySchool.net (RMS). RMS is a school review website that operates in the United States and is also a part of a group of educational sites such as TutoringServices.com. During the interview, he was asked about the revenue methods and streams that Rate-MySchool.net has implemented to sustain a competitive advantage. Although the website has been operated as nonprofit since 2008, Mr. Chertes claimed that revenues were generated through different streams, including:

- 1- Affiliate study guides sales,
- 2- Ad sense traffic,
- 3- Matchmaking tutors with students, and
- 4- Providing \$15 trial tutoring session revenue method on TutoringServices.com.

Figure 18 shows a synthesis of the types of answers collected.

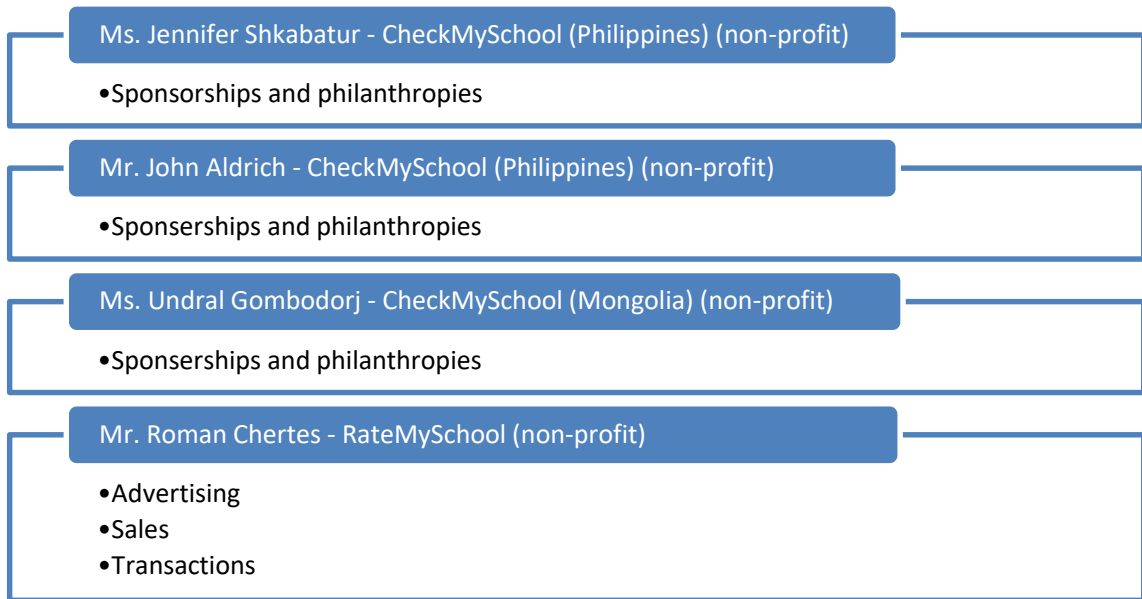


Figure 18. Summary of interviewees' answers.

To sum up, the interviewees that represent the original CMS platforms agreed on utilizing philanthropies and/or private sector's sponsorship in order to implement and run the platforms without any expectation of material return. It was noted during the interviews that the project's idea was still in the seed stage in most contexts which no conclusive business models were fully reached nor established. It was also a shared discussion that if CMS shall continue running as a nonprofit platform and utilize philanthropy and/or corporate sponsorships models or it shall reshape its business model, start generating revenue and pay for itself. Further results are covered in the following section.

4.2.2 Benchmarking results

Similarly to survey method, benchmarking method identifies philanthropy and corporate sponsorships models to be vital in the planning and implementation phases of Check My School in the Philippines in 2011. The CMS project would not have been possible without the aid and sponsorship of both the World Bank and Open society foundations and the organizational support of ANSA-EAP. Later in 2015, Making All Voices Count (MAVC) partnered with Transparency International in Indonesia (TI-I) to replicate CMS in the Indonesian context under the name Cek Sekolah-Ku. In Indonesia, the project aimed to improve transparency and accountability in the education sector. The project was temporary and ran on a period of 17 months from March, 2015 till July, 2016 (MAVC, 2016).

Following in the same steps, DEMO, a local organization in Mongolia, is seeking to attract different NGOs and IDOs to support building on the experience of CMS in the Philippines and develop an online platform specific to the Mongolian context. Meanwhile in Cambodia, a local organization, Kind, is imitating the CMS concept with scale of only 12 schools in Phnom Penh under the support of Open society foundation (SAATLAS, 2016). In all the upper cases, local host organizations- MAVC in Indonesia, DEMO in Mongolia

and Kind in Cambodia- have partnered with bigger organizations such as TI-I and ANSA-EAP to support and/or sponsor the projects financially.

As noted in literature review, the CMS platform in the Philippines and Cambodia aimed to improve the provision of services in public schools pursuing school data validation, community engagement and information provision of public education system as three major objectives. As the objectives of CMS were compatible with the missions of ANSA-EAP, the World Bank and other donors such as Open society foundations, sponsorship was the convenient model to be adopted. In Indonesia, the platform aimed to improve transparency and accountability in the education sector of Indonesia which was in line with the objectives of TI-I that supports anti-corruption activities and promotes transparency and accountability. The platform succeeded to obtain a sufficient support of more than £60,000 that was able to run the project for 17 months. The three cases in the Philippines, Cambodia and Indonesia prove that when the projects' objectives are compatible with the corporations or international development organizations' missions that operate in the country, monetary and organizational support can be obtained. Table 12 summarizes the list of host institutions and sponsors of all CMS platforms.

Table 12. *Summary of CMS platforms' hosts and sponsors.*

Platform	Host Organization (s)	Sponsors & donors
CMS Philippines	ANSA-EAP	The World Bank Open society foundations
CMS Indonesia	MAVC	Transparency International
CMS Mongolia	DEMO	-----
CMS Cambodia	KIND	Open society foundations

The author of this thesis was recently invited to participate in an interactive brainstorming session with researchers from World Bank in the writing preparation phase of the 2016 World Bank development report "Internet Dividends". The session was held in Cairo under the name of "Internet and development". This report found later that despite high expectations, CMS in the Philippines was disappointing as it failed to generate much citizen uptake or government resolution of the reported problems (World Bank, 2016). Based on the findings of this report, it is assumed that CMS in the Philippines and probably in the neighbor countries that try to adopt the same platform would fail to maintain the interest of sponsors and donors if they adopt the same business model.

Also as per literature review, through benchmarking, it was found that top review sites such as TripAdvisor, Yelp and IMDb have either adopted advertising, transaction or subscription models to generate revenue as shown in Table 13.

Table 13. *List of major revenue models for top review sites.*

Revenue Model(s)	Review site(s)
Advertising	TripAdvisor (Click-based advertising - Display-based advertising) Yelp (Brand advertising) IMDb
Transaction	TripAdvisor Yelp (local) IMDb
Subscription	TripAdvisor Yelp (local) IMDb

As per the table above, review sites rely mainly on revenue generated from advertising, transaction and subscription fees. However, those sites agree to utilize a mixed model that consists of a combination of revenue models in order to explore the value appropriation advantages of each model. Yet, each site recognizes a certain model as its core strength in generating revenue. For instance, TripAdvisor's long-term revenues are primarily dependent on the platform's ability to grow click-based (CPC) advertising revenue which includes instant booking revenue – 64% of revenue in 2015 is generated from CPC advertising. Therefore, TripAdvisor continues to invest in areas of potential CPC revenue growth (TripAdvisor, 2016). Besides, Yelp generates revenue principally from local advertising model (82%) in which revenue is primarily recorded from the sale of advertising on website. Thus, Yelp plans to pursue initiatives to enhance opportunities in local advertising model. This model is considered the core strength of Yelp and has a significant and growing base of revenue in which Yelp currently derive revenue from approximately 111.000 local advertising accounts. (Yelp, 2016)

As per the last table, all sort of advertising models are significantly important for review sites to derive revenue. 75% of TripAdvisor's revenue comes from click-based and display-based advertising models. Also, Yelp generates 82% of its revenue from local advertising model. However, it was noted in literature that the ability to acquire high traffic decides on the effectiveness of applying the advertisement model. Brand recognition and brand-direct efforts such as television, radio, e-mail and online search helps companies to attract users and thereby attract advertisers. The success of employing the advertising model is proved by the high number of visitors that those review sites attract every month. As per Similar Web, TripAdvisor, Yelp and IMDb attract monthly 147.9, 155.3 and 641.8 million visitors respectively.

As the advertising model appears to be effective for websites with a large and/or well-defined audience such, Maron & Ithaka S+R (2014) claims that non-commercial or academic websites cannot rely on this model as they cannot acquire enough high traffic to attract advertisers. A recent assessment showed that in 2015, the cost-per-impression

(CPM) rate (what an advertiser pays per thousand views of an ad) for online ads was an average of \$12.09 in the United States (Mane, 2016). In other words, in order to generate \$50,000 a year in advertising revenue, a website would need to draw around four million views annually. According to Maron & Ithaka S+R (2014), there was no industry for which the average CPM for online ads was greater than \$28.00.

In short, advertising model would be only suitable for websites that acquire high volume of traffic, attract users who spend a more than usual amount of time and deliver exceptional value that triggers high advertising rate. Also, offering free content is an important factor as it tends to generate more traffic and interest, which is what leads to higher advertising opportunities. Nevertheless, advertising model is associated with other challenges. For instance, some users may dislike the feel of ads on websites which may force them to use ads block application that remove all intrusive advertisements before showing them or stop visiting these websites.

Further, transaction model has been successfully employed by review sites. For instance, TripAdvisor recognizes transaction revenue primarily on a commission basis for transactions that are booked on the platform. When a commissionable transaction is booked on TripAdvisor, cash is received from the traveler that includes both TripAdvisor's commission and also the amount due to the property owner. (TripAdvisor, 2016) Similarly, in 2015, Yelp's revenue from transaction model has increased \$38.8 million, or 736%, compared to 2014. This was primarily due the acquisition of Eat24 platform. Eat24's transaction revenue is recognized through the arrangement with restaurant, in which restaurants pay a commission percentage fee on orders placed through Eat24's platform. Also Yelp acts as an agent for facilitating transactions through its platform that allow users, e.g. order flowers, book salon appointments. (Yelp, 2016) In addition, IMDb derives revenue through commission for DVD/videogames sales on Amazon and ticket sales of the new released film pages originating from the site.

Therefore, it is shown that transaction model is convenient to websites that are able to bring buyers and sellers together and facilitate transactions. Also, a website that adopts the transaction model should feature "sticky" content that retain the buyers at the website (Harris, 2000). Therefore, to exploit this model, websites shall offer attractive and unique services that stimulates sellers to list their offerings on the websites and also to attract buyers to spend time on the websites purchasing suitable services that fit their needs. The higher the number or size of transaction processed on the platform, the more profitable the model is. In short, websites that employ the transaction model shall deliver value to both sellers and buyers that prompt them to utilize their platforms.

In addition, subscription model appears to be one of the major employed models in review sites but to a lesser extent than advertising model. For instance, IMDb offers IMDb Pro, a subscription service designed for the entertainment industry (Amazon, 2016) which provides entertainment industry workers with the information available on the free IMDb

site, as well as additional features (including expanded in-development and in-production title information and contact details for individuals and companies). This service costs \$19.99 per month or \$149.99 per annum (IMDb, 2016). Further, Yelp also generates revenue from its SeatMe reservation product, a monthly subscription service. A standard subscription to the service costs a restaurant \$99/month (Eater, 2014). Also, TripAdvisor offers a subscription-based advertising product offered to hotel properties. This product is sold for a flat fee and allows subscribers to list, for a contracted period of time, their contact information on the website.

Subscription model also developed a unique model “pay-per-use” model that allows users to either purchase specific content or gain access for a limited amount of time without having to enter into longer-term agreements. On one hand, subscription is best for websites that offer unique content which stimulate users to pay to access them. On the other hand, subscription by definition restricts usage of content to those who subscribe to it. This is a disadvantage for non-profit websites with a commitment to provide wide-as-possible access to their content or services. Also, users in developing countries may lack both the financial resources and means (e.g. credit cards, bank accounts) to conduct transactions to access paid content and services. (Maron & Ithaka S+R, 2014) Table 14 sum up the key requirements of each revenue model discussed above.

Table 14. Key requirement of revenue model.

Revenue Model(s)	Key requirements
Advertising	<ul style="list-style-type: none"> - Websites with a large and/or well-defined audience. - Websites that offer free and attractive content. - Large market of potential customers.
Transaction	<ul style="list-style-type: none"> - Websites that offer unique services to buyers and sellers. - Websites with a large and/or well-defined audience. - Context that guarantee financial resources and means.
Subscription	<ul style="list-style-type: none"> - Websites that offer unique content. - Websites in developed countries. - Websites for commercial purpose. - Context that guarantee financial resources and means.

To sum up, through process benchmarking of CMS platforms, it is emphasized that philanthropy and corporate sponsorship are the main revenue models for non-profit causes. In addition, the study identified three major revenue models for commercial-driven platforms based on the analysis of TripAdvisor, Yelp and IMDb. These models were advertising, transaction and subscription models. The research revealed that no platform relies on a single revenue model. However, review sites agreed to utilize a mixed model that consists of a combination of revenue models in order to explore the value appropriation advantages of each model. Further discussions will be covered in the following chapter.

5. DISCUSSION

This thesis has focused on the revenue models of school review sites, which refers to all the possible methods school review sites can utilize in order to generate revenue. This models shall inform CMSE about the revenue models that can fit its structure. For this purpose, different popular and successful review sites in other industries have been analyzed from the perspective of revenue generation. This analysis is based on studying previous literature and companies' annual reports and benchmarking the best practice methods in addition to conducting interviews with different stakeholders in school review sites that were discussed in the previous chapter.

The findings are in line with what the major review sites utilize, taking into account the product, market and context's implications. According to the literature presented earlier, review sites often rely on advertising, transaction and subscription fees as main sources of revenues. In addition, philanthropy and corporate sponsorships models appeared to be vital models for non-profit platforms. The following sections describe the rationale behind using each revenue model in order to answer the main research question...

What kind of revenue models can school review sites use to generate revenue streams?

Further, to complement the main research question, those selected revenue models have been deeply analyzed in order to answer to the first sub-question, regarding the measures of success of revenue models. In addition, studying the case of CMSE helped to answer to the second sub-question, regarding the convenience of adopting those online revenue models in the Egyptian context generally and for CMSE particularly.

5.1 Models for non-profit platforms

In this context of this paper, school review sites that were included in the study were found to run as non-profit platforms and thereby utilize philanthropies and/or sponsorships models to derive revenues. In the cases of Check My School platforms in the Philippines, Indonesia and Cambodia, it was shown that the platforms had to rely on aid and support from organizations that share the same missions and goals. For a non-profit school review site, these revenue models can be helpful in financing the platform's operations and expenses. Further, it can also put the platform on track to a sustainable future where the non-profit can run itself relying on other sources of revenues. However, a platform shall recognize and mitigate the associated risks with these revenue models including finding suitable sponsors and donors, ensuring the continuity of donations and the great influence of sponsors that may harm the platform's direction.

In Egypt, building on the experience of CMS in the Philippines, CMSE has the opportunity to follow in the same steps of other versions of CMS and seek for possible philanthropies and sponsorships. The compatibility of the project's objectives with sponsors is the cornerstone of success in which CMSE's objectives have to align well with a host institution and/or key stakeholders' missions. Yet, Egypt is one of the top recipient countries of official development assistance (ODA) disbursements in the Middle East as shown in the following figure.

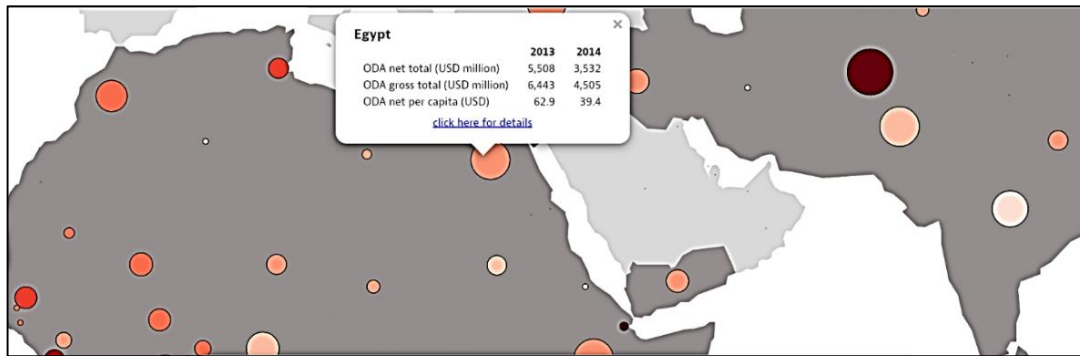


Figure 19. Net disbursements of ODA in Egypt in 2014 (OECD, 2016).

The last figure shows Egypt has received \$4,505 million in 2014 as ODA disbursements (OECD, 2016). Besides the matters of economic infrastructure, production and government and civil society, the education sector is considered one of the major fields that attracts funds and grants in Egypt. International organizations and large corporates support and fund different educational initiatives that are compatible with their missions as shown in Figure 20.

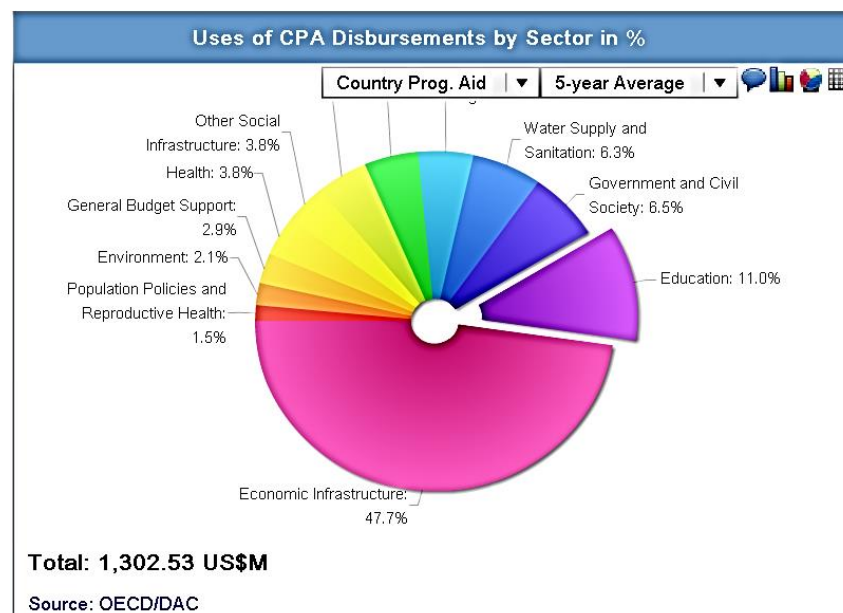


Figure 20. Uses of country programmable aid (CPA) by sector % (AidFlows, 2016).

The last figure shows the uses of country programmable aid (CPA) disbursements by sector in 5-year average from Development Assistance Committee (DAC) donors and

from multilateral organizations. As per the figure, education sector comes in the second place with 11% of total CPA disbursements. (AidFlows, 2016) Further, OECD (2016) illustrates the education-related aid by sector in Egypt in 2014 as in figure 21.

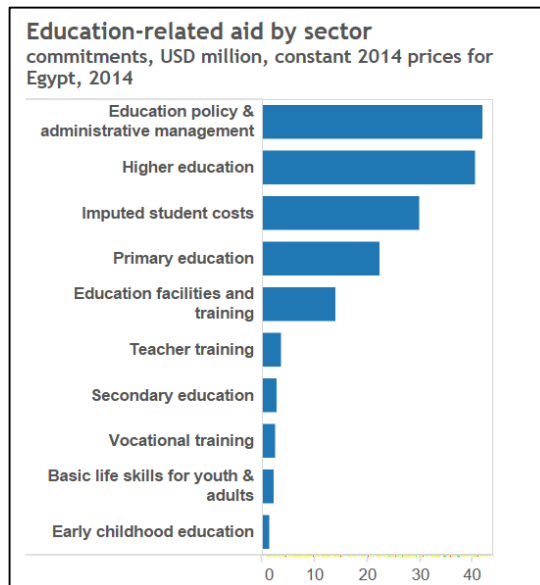


Figure 21. Education-related aid by sector in Egypt in 2014 (OECD, 2016).

As per the last figure, aid for education policy and administrative management was around \$40 million in 2014. Also, substantial aids were given to projects in higher and primary education, imputed student costs and education facilities and training. These aids were from governments, NGOs and corporates. For instance, in 2014, Germany supported several projects for capacity building in the field of education and research. Further, EU institutions supported initiatives that create low cost interactive electronic platform, using the wireless technology, as a model of modern education systems. (OECD, 2016) In addition, Intel partnered with the ministry of education and UNESCO to launch a significant educational project to develop the Egyptian education system via ICT in which teachers learn to integrate technology effectively in the classroom and students acquire the key 21st century skills (UNESCO, 2016).

Moreover, Microsoft launched educational project named “partners in learning” to improve learning and teaching outcomes through the power of ICT (Microsoft, 2014). In addition, Ahli United Bank participated with several NGOs in the “contribute in building 100 schools” project that aims to refurbish schools in low-income areas, provide them with new equipment and introducing new management and teaching techniques (Ahli United, 2008). Currently, Vodafone Egypt develops 50 schools in Upper Egypt under a project name “Schools: knowledge is power” (Vodafone Egypt, 2016). Also, National Bank of Egypt (NBE) sponsors a TV game show that offers large cash prizes up to EGP9 million for the development of Egyptian schools (ONAE, 2016).

Therefore, a non-profit CMSE shall follow the same footsteps of CMS in other countries. However, the role of local host institutions to run the platform was found to be highly

vital. The mission of the host institution shall be in line with CMSE's objectives. Also, the abundance of aids and donations to the education sector in Egypt from both local and international corporates, governments and NGOs gives CMSE the opportunity to rely on philanthropy and corporate sponsorship models. However, the project's cause shall be compatible with the philanthropists' and sponsors' missions. Yet, these models do not guarantee sustainable sources of revenue for the platform continuity.

Beside all sort of support that sponsors can offer to the project financially, technologically or professionally; this model can serve as a sort of controlled experiment for other types of advertising, a way to test the waters with regard to accepting advertising on the platform (Maron & Ithaka S+R, 2014). However, relying on philanthropy and corporate sponsorship models is also associated with several risks. According to Maron & Ithaka S+R (2014), the models' risks can be summarized as followed:

- *Corporate sponsorships can arouse suspicions or negative perceptions* if the corporate identity is not a good fit with CMSE's cause.
- *Sponsorship could lead to mission drift*, if the corporate sponsor asks to have a say in the ongoing operations of the project in exchange for its contributions.
- *Corporate sponsorship cannot guarantee a long-term solution* as corporate's priorities can change over time.
- *Finding sponsorship can be complicated* due to the long business development time and legal issues in the recruiting, setting up, and implementing processes.

5.2 Models for commercial platforms

The last section identified philanthropy and sponsorships to be possible revenue models for non-profit school review sites. Several online platform have utilized these models such as Check My School in the Philippines, Indonesia, Cambodia and Mongolia in addition to RateMySchool.net. Yet, commercial school review sites need to identify different revenue models to generate profit. It is proved that a commercial platform relies on a mixed-model to generate revenue that includes diversified revenue models. However, a platform shall identify one or two models to be the core strength that have significant base of revenue. A mixed-model can lead to greater stability in the revenue structures and reduce revenue volatility of platform by equalizing its reliance on earned income. In short, relying a mixed-model encourages more stable revenues and consequently could promote greater organizational longevity.

Today, several school review sites run to generate revenue. However, none of them has succeeded to establish market and attract enough audience except RateMyProfessor (RMP) that only operates in few countries. Yet, it was not possible for the author to collect data about how RMP derives revenue. Through process benchmarking, it was found that review sites rely on a mixed model to generate revenue that includes a combination of

models. It was noted that advertising, transaction and subscription models to be the major revenue models that review sites adopt to derive revenue.

Further, literature review proved that social networking sites are pervasive and influential source of product/service information as users can greatly affected by the information that appeared in SNS. It was noted that 70% of the consumers approaches SNS to access products and brands related information and 49% of them finalize their purchase decisions based on information they have retrieved from SNS. Therefore, a selected revenue model shall exploit the innovation of SNS. A school review site shall open a window on SNS such as Facebook and Twitter in order to reach and influence broader audience and thereby more likely to achieve higher revenues. For instance, information about latest school news, teachers' ratings and educational issues of concern on a Facebook page and/or Twitter account can direct relevant users to the platform and allow them to use the platform's services.

As the last section discussed the possible models that CMSE can adopt if it runs as a non-profit platform, CMSE also can shift from running as non-profit to a revenue-driven model. In that case, CMSE has to drift away from following the original CMS and act as a commercial platform with different missions and objectives. In the Egyptian context, it was mentioned that Egypt enjoys a young population in which 31% of the population is under 15 years old, a total of 28 million. Also, the education system in Egypt is one of the largest in the world with 52,022 schools, about one million teacher and nearly 20 million students at different levels of schools. It was also mentioned that the education system in Egypt faces numerous challenges including the substantial education spending, private tutoring and more importantly the poor quality of schools and education overall. Nevertheless, education is the most important expenditure in the budget for any Egyptian family. Parents strive to secure the best possible education opportunities for their children at the expense of other expenditure such as leisure. All these factors creates a significant market base to CMSE to be exploited.

Schools in Egypt are divided into public, private and recently international schools. The ministry of education in Egypt encourages further investment in building new private and international schools as the state strongly supports this trend (Egypt Independent, 2016). Unlike public schools, parents can enroll their children to any private school regardless its location as long as they can afford to pay the fees. Therefore, private schooling has become a business trend in Egypt where parents spend a substantial amount of money to enroll their children into the best schools. Moreover, parents spend more time searching for the schools that best fit their children based on reviews from experienced ones. Here, word-of-mouth appears to play a significant role in deciding what school a parent may choose to enroll his child in based on the reviews he collects.

Therefore, it is believed that CMSE can enjoy a large and well-defined audience consisted of nearly 20 million students and more than 52,000 schools and more importantly a great

base of parents that look for information and reviews about schools. The information provided by CMSE shall help parents to choose what school would best fit their children taking into account information about school services, fees and reputation. As TripAdvisor enables travelers to plan and book trips using advice from millions of travelers' reviews, Yelp creates an environment where consumers can communicate about their experience at a particular business and IMDb publishes information and user reviews about movie, TV and celebrity content, CMSE also can similarly publish school information including school contact tools, number of classes, school fees and services and list of teachers. The platform also can open a venue for users to voice their opinions and highlight the most critical issues of concern and provide the relevant solutions.

In order to exploit the *advertising* model, CMSE shall have the capability to acquire a large audience base that maintain higher return visits, in short CMSE shall perform as a "sticky" website that continue to deliver value to its users over time. This content shall be free and attractive in order to generate traffic and thereby attract advertisers. The following table presents a list of top visited websites in Egypt showing the total visits in six months (June-November, 2016).

Table 15. Top visited websites in Egypt.

Platform	Category	World rank	Country rank (Egypt)	Total visits in 6 months
Youm7.com	Online newspaper	1,433	9	33.80M
Yalla-Kora.com	Sports news	2,082	13	25.90M
Olx.com.eg	Online shopping	3,976	16	6.10M
Jumia.com.eg	Online shopping	4,852	20	7.20M
Yalla-shoot.com	Sports streaming	1,703	48	29.10M

Besides search engines and social media websites, Youm7.com -the leading online Egyptian newspaper- is the highest generating traffic website that only targets the Egyptian market. As per the visits illustrates in the table above, Youm7.com can receive approximately 65 million visitor annually. It is understandable that CPM rates vary from one site to another as factors including country, region and industry play an important role in determining the rate of CPM (SalesForce.com, 2013). As per Wahba (2016) CPMs in Egypt typically range from EGP5 to EGP80 (\$0.27 to \$4.40). Considering the highest rate of CPM in Egypt, Youm7.com can generate a maximum of \$286,000 annually based only on advertising revenue model. In short, advertising model would be only suitable for

websites that acquire high volume of traffic and attract users who spend a more than usual amount of time. Besides, Table 16 presents the top operating school review sites in Egypt showing the total visits in six months (June-November, 2016).

Table 16. *Top operating school review sites in Egypt.*

Platform	World rank	Country rank (Egypt)	Total visits in 6 months
Schools-in-Egypt.com	5,351,263	56,796	2.30K
edarabia.com	243,355	NA	153.50K
MadaresEgypt.com	214,580	1,549	145.3K
Egyptian-Schools.com	13,004,001	128,462	590
Egypt-Schools.com	3,738,873	32,967	4.10K

Similarly, based on the average global CPM rate, MadaresEgypt.com, an Egyptian school review site, can earn up to \$290,000 annually while Egypt-Schools.com can only generate a maximum of \$100 based on the advertising revenue model. Although the audience and market of school review sites is set including a large base of schools, students and parents, the role of ICT in Egypt remains challenging. On one hand, despite of the high number of Internet users (27.25 million in 2014), those users are centered in Cairo and the major provinces who can afford not only Internet access but also a computer or a mobile phone. Among those users, many are using Internet only to check Facebook and YouTube with no interest to check other websites. On the other hand, only 8% of Internet users in Egypt are online consumers. This is due to the low credit card penetration with 39% of the population remaining offline due to a lack of credit card. Also, Cash on Delivery continues to be the most popular payment option in Egypt where 70% of the shopping population prefers this method of payment. This trend is most prominent in Egypt where 91% of offline transactions are settled with cash.

As a result, it is shown that acquiring high traffic in Egypt is not an easy task and adopting advertising model does not guarantee a stable revenue source. For instance, the country leading online news platform cannot generate higher traffic than 70 million visits per annum. Further, existing school review sites cannot acquire enough traffic and as a result those platforms lack reviews that can help users to obtain useful information. Thereby, users currently cannot make informed decisions based on the available information on those websites. Also, as per the knowledge of the author, most of the operating websites in Egypt offer free content to derive high traffic and advertisers. While deriving high traffic for free content websites is already challenging, paid content websites are assumed to find great difficulty to obtain the necessary traffic to attract advertisers.

Moreover, among the top 20 visited websites in Egypt, there are three e-commerce websites, Souq.com, Olx.com.eg and Jumia.com.eg (SimilarWeb, 2016). Still, the majority of the conducted transactions are taking place in an offline mode. Thus, the status of ICT in Egypt makes it challenging for any website to rely on online transactions as a revenue model. Also, as Egypt is one of the developing countries where people are not used to pay for content or services on the web, subscription model may restrict the reach of websites. While the majority of Egyptian prefers to pay cash rather than using online methods due to the lack of knowledge and trust, transaction and subscription models with their traditional paying methods shall face obstacles to fit for CMSE. Therefore, adopting transaction or subscription models shall be associated with innovative means that allow the platform to collect the fees offline, which it differently would be a challenging task.

5.3 Synthesis

As discussed earlier in this chapter, Check My School Egypt (CMSE) builds on the experience of Check My School (CMS) in the Philippines and the late adaptations in other countries such as Indonesia, Cambodia and Mongolia. The digital feedback platform aims to improve the education performance through the power of reviews. The platform enables feedback from users including students, teachers and parents on the condition of education in their schools to highlight the most critical issues of concern and provide the relevant solutions. Further, it enables users to make informed decisions based on the information available on the platform.

The results' findings were used to explain and support the two model alternatives that CMSE can adopt. On one hand, the semi-structured interviews with key persons from the original CMS and its adaptations have emphasized that philanthropy and corporate sponsorship are the main revenue models for non-profit causes. However, the project's cause shall be compatible with the philanthropists' and sponsors' ideas and missions in order to succeed. Thereby, following in the steps of the original CMS, CMSE has the opportunity to run as a non-profit platform. To do so, CMSE shall seek for possible philanthropists and sponsors either from the Egyptian community or from IDOs that are interested into push the Egyptian education forward. The missions of the philanthropists and sponsors shall be in line with CMSE's cause. It was also found that the education sector has attracted several IDOs, NGOs and corporates where there are several previous and ongoing projects that intend to integrate ICT tools with education and develop school buildings and services. In sort, while there are models that CMSE can adopt to run as a non-profit platform, none of these models guarantee sustainable sources of revenue for long-term operations.

On the other hand, through process benchmarking, the study identified three major revenue models for commercial-driven platforms based on the analysis of TripAdvisor, Yelp and IMDb. These models were advertising, transaction and subscription models. The research revealed that no platform relies on a single revenue model. However, review sites

agreed to utilize a mixed model that consists of a combination of revenue models in order to explore the value appropriation advantages of each model. In addition, review sites can adopt, merge or phase revenue models based on the revenue generating effectiveness of these models. However, CMSE shall consider the capabilities and limitations of ICT in Egypt while adopting the right revenue model. The study emphasized on the convenience of adopting advertising model. However, acquiring enough traffic in Egypt seemed to be challenging. Also, adopting the transaction or subscription models shall be associated with innovative means that allow the platform to offer free content to users and collect fees for certain services offline, which it differently would be a challenging task for most businesses.

In this study, the main research question revolved around the types of revenue models that school review sites can utilize to generate revenue streams. To complement the main research question the following sub-questions were raised. The second research question was “*What are the key requirements of revenue models?*” the study proposed several key requirements of each model based on the analysis of TripAdvisor, Yelp and IMDb and Check My School platforms. Table 17 summarize these key requirements and identifies the conditions each revenue can fit.

Table 17. Key requirements of revenue models.

Revenue Model(s)	Key requirements
Advertising	<ul style="list-style-type: none"> - Websites with a large and/or well-defined audience. - Websites that offer free and attractive content. - Large market of potential customers.
Transaction	<ul style="list-style-type: none"> - Websites that offer unique services to buyers and sellers. - Websites with a large and/or well-defined audience. - Context that guarantee financial resources and means.
Subscription	<ul style="list-style-type: none"> - Websites that offer unique content. - Websites in developed countries. - Websites for commercial purpose. - Context that guarantee financial resources and means.
Philanthropy	<ul style="list-style-type: none"> - Websites that offer social value. - Websites that their objectives are in line with the philanthropists' missions.
Corporate sponsorship	<ul style="list-style-type: none"> - Websites that offer unique content. - Websites that their objectives are compatible with the corporates' missions. - Websites that target audience that corporates are interested to reach.

The third research question was “*How convenient utilizing the selected revenue models in the Egyptian context generally and for CMSE particularly?*” the study concluded several measures that discuss utilizing the advertising, transaction and subscription models in the Egyptian context. **First**, in order to exploit the advertising model, Internet businesses shall provide free and attractive content and have the capability to acquire a large audience base that maintains higher return visits. Nevertheless, acquiring high traffic in Egypt is found to be not an easy task. **Second**, the status of ICT in Egypt makes it challenging for any website to rely on online transactions as a revenue model as the majority of Egyptian prefers to pay cash rather than using online methods due to the lack of knowledge and trust. Therefore, adopting transaction or subscription models shall be associated with innovative means that allow the platform to collect the fees offline, which it differently would be a challenging task for most businesses.

Further, this paper theoretically proposed possible revenue models that CMSE can adopt either for running as non-profit or commercial business model. However, practically, CMSE can find more convenient models when it goes live based on the market and audience response. On one hand, the abundance of aids and donations to the education sector in Egypt from both local and international corporates, governments and NGOs gives CMSE the opportunity to rely on philanthropy and corporate sponsorship as models in short term. However, the project’s cause shall be compatible with the philanthropists’ and sponsors’ ideas and missions. On the other hand, CMSE can utilize several models as an experiment, a way to test the waters with regard to accepting these models on the platform. For instance, CMSE can start testing its earning potential at very little risk through options like Google AdSense. The advertising model in general proves to be beneficial as it includes a variety of formats such as display advertising and search advertising. Those formats allow CMSE to experiment with advertising to learn what format will fit it best.

6. CONCLUSIONS

6.1 Meeting objectives

Businesses use different marketing communication tools to promote their company, product or services. Traditionally there are five main offline marketing communication tools, which are: advertising, sales promotion, public relations and publicity, personal selling and direct marketing. However, new internet-based media are emerging thanks to technological breakthroughs such as review websites. These sites such as TripAdvisor, Yelp and IMDb create large source of information i.e. user generated contents in the form of blogs, comments, reviews etc. Academically, these sites have attracted considerable attention to study their business models and implications; however, critical elements such as revenue models have been overlooked, particularly for school review sites. This thesis studied the possible models that school review sites can utilize in order to derive revenue based on the empirical case study of Check My School Egypt. Increasingly, students and parents rely on eWOM through school review sites to aid in the process of information-gathering about schools and courses selection.

The objective of this thesis was to introduce possible revenue models that school reviews sites can utilize in order to derive revenue and to discuss the key requirements of these models. Nevertheless, this paper only focused on how school review sites can derive revenues without addressing the employed business models and their further elements. The theory framework has been developed bringing together the concepts of marketing communication tools, word-of-mouth communication, review sites and revenue models. The empirical data have been collected through three methods: semi-structured interviews with key persons in school reviews sites, survey a sample of education stakeholders in Egypt and process benchmarking the best practices of reviews sites.

In this study, the main research question was “*What kind of revenue models can school review sites utilize to derive revenue?*” It was found that there is still no consensus about a unique classification for online revenue models as Internet platforms categorize and label their models differently. However, this study showed three major common revenue models for commercial-driven platforms. These models were advertising, transaction and subscription models. However, for non-profit platforms, review sites can better adopt philanthropy or corporate sponsorship models to derive revenue. The research revealed that no platform relies on a single revenue model. Instead, review sites agreed to utilize a mixed model that consists of a combination of revenue models in order to explore the value appropriation advantages of each model.

Further, determining revenue models for non-profit entities differs from commercial entities in the measures of success. While non-profit entities identify success in terms of

mission-based goals, commercial businesses define success in financial terms. However, whether it is a non-profit or commercial entity, platforms shall strive for a full sustainability model to maintain a renewable source of support that the platform shall need in order to continue to deliver value to its users over time.

Moreover, online platforms including review sites are flexible in applying, shifting and/or modifying the adopted revenue models. This is due to several factors such as market dynamics, consumer behavior and usefulness of employing certain models as shown in the Yelp's case. In many years, Yelp was used to generate revenue from brand advertising through the sale of display advertisements and brand sponsorships to national brands. However, Yelp phased out brand advertising over the second half of 2015 due to certain negative trends in the broader market for brand advertising products and also to focus on its core strength of local advertising. Yelp believed that this act shall provide a long-term strategic advantage by allowing the company to focus on its core strength of local advertising that it principally generates revenue from. (Yelp, 2016)

6.2 Limitations and implications for future research

Despite meeting the objectives, it is important to be mindful of the limitations of the research and its implications on the research findings that affect its validity. Firstly, the novelty and specialty of school review sites have limited the opportunities to collect sufficient data about how school review sites derive revenues. There was no previous studies addressing specifically the models that review sites utilize in order to generate revenues. Literature review showed that a majority of review sites studies focused on certain industries such as tourism, catering and movie due to the global reach of websites such as TripAdvisor, Yelp and IMDb while other industries such as school review sites have received far less attention. Thus, it was challenging to find data about the cases addressing the main interests of the study. To reduce the effects, the author collected data about selected review sites in three different industries in order to better understand how review sites generates revenues. However, it is important to be mindful that the thesis have studied the revenue models adopted by big and global websites while the case study platform is relatively small and targeting local market that is significantly smaller than the US market.

Secondly, as a result of the nature of the study and the empirical research methodology selection, this thesis was subjected to the interpretation of limited data. Interviews as one of the main sources of empirical data were conducted with a relatively small sample of key persons from relative platforms. This was understandable as this research was performed individually and not part of a group project as it lacked sponsorships that would have helped to facilitate conducting more interviews and surveys. Excluding the CMS platform in the Philippines, the other CMS platforms were in the project design phase similarly to CMSE in which no platform was actually established and all activities were executed in an offline mode. As a result, the interviewees' responses lacked the support

of practical evidence that might have justified the choices of adopted revenue models and the reasons behind it. Further research could include a more thorough empirical case study of existed platforms to analyze the viability of the adopted revenue models and to justify the reasons behind choosing them. Similarly, it is emphasized that the research might need to collect data from the philanthropists and sponsors' perspective. Integrating their point of view could be a next step to verify the responses made by the key persons in school review sites.

The outcomes of the thesis can be utilized for marketing communication education, for developing innovative revenue models of review sites generally and school review sites particularly, and for studying the implications of context in identifying convenient revenue models. Further, this work could be extended in several directions. First, further research could take a similar approach to examine the business models that review sites can employ for both non-profit and for-profit purposes. This paper only addressed one key element of business models which is revenue models while other elements such as value proposition, customers and resources can provide interesting directions for future research. Also, future research could test whether school review sites can better run as non-profit or for-profit and identify the viability and sustainability of each revenue model. Finally, studying cost and pricing models of school review sites could be the next step in better analyzing the findings of this study as they also provide interesting directions for further research.

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APPENDIX A: INTERVIEW FRAME FOR REPRESENTATIVES OF SCHOOL REVIEW SITES

Background information

- a) Introduction about the researcher
- b) Introduction about the researcher's project
- c) Introduction about the interviewee
- d) Introduction about the interviewee's organization.

1- Open introduction about the back story of the interviewee's project.

2- Project Leadership

- What are the roles of the host organization in the project?
- What are the roles of the ministry of education in the project?
- What are the roles of the financers in the project?

3- Value proposition

- What is main value delivered by the project to different stakeholders?

4- Resources

- What was done in house?
- What was outsourced?

5- Partners

- What are the most important partners involved in the project?
- What were the incentives of these partners in order to help?

6- Revenue models and expenditures

- What are the major revenue models adopted by your platform?
- What were the sources of revenue at the beginning of the project?
- What are the sustainable sources of revenues the project relies on for continuity?
- What are the major expenditures of your platform?

7- Outcome and long term impact

- What are the differences between the reality outcome and the planned outcome?
- Today, do you recognize the project as a success?

Do you have any final words related to interview?

APPENDIX B: BIRTIISH INTERNATIONALSCHOOL, CAIRO- TUI- TION FEES (2016-2017)

British School: Tuition Fees (2016-2017)

Stage	Tuition Fees	
	Existing	Fees (L.E.) New Students
Pre School	40,000	40,000
Foundation Stage I (KGI)	38,500	45,800
Foundation Stage II (KGII)	38,500	45,800
Key Stages 1 & 2 (Years 1 – 6)	42,000	51,200
Key Stage 3 (Years 7, 8 & 9)	46,500	58,500
Key Stage 4 (IGI)	40,500	50,000
Key Stage 4 (IGII & IGIII)	Per Subject	
1 st Child	Full Tuition Fees	
2 nd Child	10% Discount	
3 rd Child	15% Discount	
4 th Child	Full Tuition Fees	

Admission Fees	
Pre School – Year 6	8,000
Years 7 & 8	5,000
Year 9 & IGI	3,000
1 st Child	Full Admission Fees
2 nd Child	50% Discount
3 rd Child	75% Discount
4 th Child	50% Discount

- Admission fee discount is **ONLY** applicable if you are applying for more than one child in the same academic year

Additional Fees	
Application Form Fee	800
Bus Fees	7,600 (Mohandessin, Zamalek & Giza)
	7,000 (all other areas)

- Uniform is **NOT** included in the fees
- **NO DISCOUNT** on bus fee for siblings