



UNIVERSITI PUTRA MALAYSIA

***DETERMINANTS OF INTENTION TO ADOPT SOCIAL CUSTOMER
RELATIONSHIP MANAGEMENT SERVICES AND THEIR EFFECTS ON
MARKETING PERFORMANCE AMONG MALAYSIAN START-UP
COMPANIES***

TAHEREH HASANI

GSM 2016 24



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By

TAHEREH HASANI

**Thesis Submitted to the Graduate School of Management, Universiti Putra
Malaysia, in Fulfillment of the Requirements for the Degree of
Doctor of Philosophy**

September 2016

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the Degree of Doctor of Philosophy

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September 2016

Chairman : Associate Professor Jamil Bojei, PhD
Faculty : Graduate School of Management, UPM

Social networking technologies and social media have changed almost all aspects of our lives and created a lot of business opportunities. The rise of social media affected Customer Relationship Management (CRM) by developing a new concept called “social CRM” (SCRM). SCRM merges traditional CRM and Web 2.0 tools with collaborative elements. SCRM changed one-way communications with customers into two-way, real-time interactions. This shift engages customers in collaborative conversations in order to provide mutually beneficial value in a trusted & transparent business environment.

The fast rate of advancement in technologies gives space to the development of new breed of temporary companies striving towards developing a scalable, repeatable and profitable business models which are called start-up businesses. Naturally, these companies are having very limited advertising, marketing, and customer service capabilities. SCRM technologies may provide these companies with efficient and low-cost capabilities to manage their customers and reach to the new markets.

In spite of the vital importance of adopting SCRM solutions in start-up companies very limited scholarly research was conducted to investigate factors affecting SCRM adoption in start-up companies and effects of SCRM adoption on marketing performance of start-up businesses. The purpose of this study is two-folded. First, detecting and investigating the relationships between factors affecting SCRM adoption among start-up companies and second investigating the mediating role of SCMR adoption on start-up companies marketing performance in Malaysia.

This research primary data was collected from 389 start-up companies in Malaysia. The unit of analysis was individuals who are working in start-up companies. Collected data was first summarised using Exploratory Factor Analyses (EFA) and then evaluated in two stages. In the first stage, Confirmatory Factor Analysis (CFA) technique was utilised to confirm the measurement model. Afterward, hypothesised relationships were analysed through multivariate analysis process using Structural Equation Modelling (SEM) via Analysis of Moment Structures (AMOS) software.

The findings of this research indicated direct positive effects of all hypothesised technological and environmental characteristics and availability of internal financial resources on both SCRM adoption and marketing performance of start-up companies. However, managerial characteristic and availability of business incubation solutions did not have any positive effect on SCRM adoption or marketing performance. Moreover, it was detected that SCRM adoption mediates the relationship between technological, environmental and organisational (only availability of internal financial resources) characteristic and marketing performance of start-up companies in Malaysia.

This study showed that adopting SCRM technologies would promote marketing performance of start-up companies. Moreover, it was shown that among different SCRM solutions, start-up companies should choose the one with the highest perceived advantage as it would have the most significant positive effect on their marketing performance. Compatibility, observability, and trialability are the next important factors to choose between different SCRM solutions. In addition, it was detected that venture capitalists support has the most positive influence on marketing performance and SCRM adoption even more than governmental supports in the context of Malaysia.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk Ijazah Doktor Falsafah

**PENENTU-PENENTU NIAT UNTUK MENGGUNA PERKHIDMATAN
PENGURUSAN HUBUNGAN PELANGGAN SOSIAL DAN KESAN
PENGUNAANNYA TERHADAP PRESTASI PEMASARAN SYARIKAT
PERMULAAN DI MALAYSIA**

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Teknologi rangkaian sosial dan media sosial telah mengubah hampir semua aspek kehidupan kita dan mencipta banyak peluang perniagaan. Kebangkitan media sosial telah mengubah Pengurusan Hubungan Pelanggan (CRM) dengan pengenalan konsep baru yang dikenali sebagai "CRM sosial" (SCRM). SCRM menggabungkan alat-alat CRM dan web 2.0 tradisional dengan unsur-unsur kolaboratif. SCRM telah mengubah komunikasi sehalu dengan pelanggan kepada interaksi dua hala dan masa nyata. Peralihan ini membolehkan pelanggan membuat perbualan kolaborasi untuk memberikan nilai yang saling menguntungkan dalam persekitaran perniagaan yang dipercayai dan telus.

Kemajuan teknologi yang pesat memberikan ruang kepada perkembangan syarikat-syarikat sementara baru yang berusaha untuk membangunkan model perniagaan berskala, berulang dan menguntungkan yang juga dikenali sebagai "perniagaan permulaan". Sememangnya, syarikat-syarikat ini mempunyai keupayaan pengiklanan, pemasaran dan khidmat pelanggan yang terhad. Teknologi SCRM boleh menyediakan keupayaan yang efisien dan kos rendah kepada syarikat-syarikat ini untuk mengurus pelanggan dan mencapai pasaran baru.

Walaupun pentingnya mengguna pakai penyelesaian SCRM di syarikat permulaan, penyelidikan ilmiah mengenai faktor-faktor yang mempengaruhi penerimaan SCRM di syarikat permulaan dan kesan penggunaan SCRM terhadap prestasi pemasaran perniagaan permulaan adalah terhad. Tujuan kajian ini adalah dua kali ganda. Pertama, mengesan dan menyiasat hubungan antara faktor-faktor yang mempengaruhi penerimaan SCRM dalam kalangan syarikat permulaan dan kedua,

menyiasat peranan mediasi penggunaan SCRM terhadap prestasi pemasaran syarikat permulaan di Malaysia.

Data utama penyelidikan ini telah dikumpulkan dari 389 syarikat permulaan di Malaysia. Unit analisis adalah individu yang bekerja di syarikat permulaan. Data yang dikumpul telah diringkaskan menggunakan Analisis Faktor Eksplorasi (EFA) dan kemudian dinilai dalam dua tahap. Pada peringkat pertama, teknik Analisis Faktor Pengesahan (CFA) telah digunakan untuk mengesahkan model pengukuran. Selepas itu, hubungan hipotesis dianalisis melalui proses analisis multivariate menggunakan Model Persamaan Struktural (SEM) melalui perisian Analisis Moment Struktur (AMOS).

Hasil kajian ini menunjukkan kesan langsung dari semua ciri teknologi dan persekitaran yang dinyatakan dalam hipotesis dan ketersediaan sumber kewangan dalaman dalam penerimaan SCRM dan prestasi pemasaran syarikat permulaan. Walau bagaimanapun, ciri pengurusan dan ketersediaan penyelesaian inkubasi perniagaan tidak mempunyai kesan positif terhadap penerimaan atau prestasi pemasaran SCRM. Selain itu, hasil kajian ini juga menunjukkan bahawa penggunaan SCRM mengamati hubungan antara ciri-ciri teknologi, alam sekitar dan organisasi (hanya ketersediaan sumber kewangan dalaman) dan prestasi pemasaran syarikat permulaan di Malaysia.

Kajian ini menunjukkan bahawa penggunaan teknologi SCRM akan meningkatkan prestasi pemasaran syarikat permulaan. Selain itu, syarikat permulaan perlu memilih penyelesaian SCRM yang mempunyai kelebihan yang dianggap paling tinggi kerana ia akan memberi kesan positif yang paling signifikan terhadap prestasi pemasaran. Keserasian, pemerhatian, dan percubaan adalah faktor penting untuk memilih antara penyelesaian-penyelesaian SCRM yang berbeza. Di samping itu, kajian ini juga menunjukkan bahawa sokongan kapitalis teroka memberikan pengaruh yang paling positif terhadap prestasi pemasaran dan penerimaan SCRM, lebih daripada sokongan kerajaan dalam konteks Malaysia.

ACKNOWLEDGEMENTS

I would like to extend my grateful thanks to Associate Professor Dr. Jamil Bojei for his insights, guidance, and encouragement as my supervisor. I would like to appreciate all efforts of my co-supervisors Professor Dr. Rosmimah Mohd Roslin and Associate Professor Dr. Yuhanis Abdul Aziz in the successful development of this thesis. This success was not possible with all their contributions.

Thanks are owed to those start-up companies who responded to my questionnaires and provided insights and made useful suggestions. Finally, I would like to give continuing thanks to my family and my husband for their ongoing and unwavering demonstrations of support, patience, understanding, belief, and encouragement. Without these gifts, it would have been impossible to find either the time or the resolve to complete this endeavor.

I certify that a Thesis Examination Committee has met on 23 September 2016 to conduct the final examination of Tahereh Hasani on her thesis entitled “Determinants of Intention to Adopt Social Customer Relationship Management Services and their Effects on Marketing Performance Among Malaysian Start-Up Companies” in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U. (A) 106] 15 March 1998. The Committee recommends that the student be awarded the Doctor of Philosophy.

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CHAPTER 1

INTRODUCTION

1.1 Preamble

This chapter provides an introduction to this research by discussing research background, research problem, expected research contributions and scope of the work and serves as an overview of the whole thesis. The chapter starts with providing background knowledge which helps an understanding statement of the research problem and objectives of the study. It continues with reviewing very relevant researches and precisely determining research problems and move on with explaining research questions, expected contributions and importance of the research. This chapter concludes by defining the scope of this study and present structure of this thesis.

1.2 Background of the Study

Customer Relationship Management (CRM) has evolved through lots of researches in a long time. Although initially, everyone considered CRM as part of relationship marketing, it is now a necessary part of any organization customer management system. The concept of Customer Relationship Management (CRM) first emerged in the mid 1990s, building on the work of Relationship Marketing (RM) to describe the connections between firms and their customers, and to promote commitment and loyalty from those customers (Lee et al., 2014; Payne & Frow, 2006; Verhoef & Lemon, 2013). RM can be defined as “attracting, maintaining and in multi-service organizations enhancing customer relationships” (Berry, 1995). RM principles which are customers as main assets, customers are different in profitability, and customers are unequally attractive, and lastly customers are different in their needs, wants, preferences, behaviour and price sensitivity that build the foundation to define CRM (Kutner & Cripps, 1997). CRM is broad in its scope, covering all activities that involve engaging with customers, ranging from sales, marketing and support at the front end; to finance, production, R&D, and human resources at the back end (Assimakopoulos et al., 2015; Keropyan & Gil-Lafuente, 2012).

Given this wide focus, CRM-related technologies are arguably among the most important services that assist in companies’ businesses (Coyle et al., 2013; Chao & Chandra, 2012) which aim to better understand customer needs and offers products and services that meet customer requirements. CRM seeks to understand customers by focusing on customer retention and relationship development. Customer relationship management composed of three main components, namely people, processes and technologies (Chen & Popovich, 2003). The purpose of CRM is to gain a competitive advantage in managing customers and increase company profits (Gartner Group., 2005) by preparing customized commodities and services and magnifying customers’ lifetime values (Ko et al., 2004).

CRM is a business strategy that enables companies to create, keep and increase customers through better customer experience. CRM contains four levels, namely identifying, attracting, keeping and expanding customers. Better customer relationship management can increase customer loyalty, customers retention, and promote overall company profit (Eunju, Kim & Woo, 2008). CRM includes precise tactics and the processes for discovering, keeping, and communicating with chosen customers to make higher worth for customers and companies (Parvatiyar & Sheth, 1996). From technological prospect, CRM provides technologies for organizations to develop closer communications with their customers (Wu et al., 2009). CRM scope consists of all activities that deal straightly with customers ranging from sales, marketing and support at the front end to information technology, finance, production, R&D and human resources at the back end (Greenberg, 2004).

The usage of CRM systems is becoming significant to improve customer lifetime value (Winer, 2001). Understanding requirements of customers and offering value-added services are identified as factors that distinguish between success or failure of companies (King & Burgess, 2008). Therefore, CRM consists of processes to satisfy customer requirements, recognize customer priorities, eliminate customer protests, enable services to customers after the sale, and create long-term connections with customers (East et al., 2005).

CRM promotes customers' value and company profitability by building, expanding and fostering relationships with clients (Payne & Frow, 2004). In addition, CRM is a strategy that focuses on customer satisfaction and customer loyalty with responding to customer needs and providing customized offerings (Croteau & Li, 2009). Customer relationship management enables companies to collect, save and use customers' data via communication channels by dividing customers into different distinct groups based on their differences that can be used for filtering good customers and their buying behaviours (Chen, 2003).

There were several generations of CRM, namely traditional CRM, Electronic CRM (eCRM), Mobile CRM (mCRM) and very recently Social CRM (SCRM) (Awasthi & Sangle, 2012). In traditional CRM telephone, mailers, tele-text, and call centre are used to keep contacts with potential clients. In Mobile CRM (mCRM) short message services, text messaging, and wireless applications are used for communication with clients. mCRM enables customer relationship management through mobile networks and allows companies to develop dialogues with their customers using hand-phone devices (Sinisalo et al., 2006). Electronic CRM (ECRM) utilizes e-mail, Internet, and web-enabled call centres (Payne & Frow, 2005) to improve customer acquisition, development, and retention and simplify customer-related processes (Chang, Liao & Hsiao, 2005). With advancements in technologies, more businesses are starting to emphasize on eCRM and consider customers as the main core of business (Fingar, 2000).

The rise of social networking platforms has significantly changed relationships between companies and their customers (Harrigan et al., 2015). The pervasive use of social media platforms such as Facebook, Twitter, YouTube, Instagram, Snapchat, and Tumblr, amongst others, has brought both new opportunities and challenges for those seeking to manage their relationships with customers, and has subsequently led to the development of a new branch of CRM: social CRM (SCRM) (Malthouse et al., 2013). The concept of SCRM first emerged in 2007 as part of the utilisation of Web2 tools, to add collaborative elements to existing customer relationship management services (Greenberg, 2010). Greenberg described SCRM as both a philosophy and a business strategy, supported by Web 2.0 technologies (Hennig-Thurau et al., 2010), business rules, processes and social characteristics, which together are designed to engage customers in a collaborative conversation and provide mutually beneficial values (Greenberg, 2010). SCRM functionalities can be described as creating customer communities, monitoring customers, sharing customer contacts, and reviewing community feedback (Cui et al., 2012; Schultz et al., 2012). SCRM applications can be divided into sales applications, which are usually used internally; customer service and marketing applications, which are used both internally and externally; and social e-commerce applications, which are most often used externally (Gartner et al., 2011).

Traditional CRM focus was on marketing oriented processes through one-way communication channels that are controlled by the company. However, social CRM enables two-way interactions which have never been possible with previous CRM technologies. In SCRM customers are considered as a partner in the company and as such they are actively engaged in the company activities, discussions, and offerings (Greenberg, 2010). SCRM can be defined as a philosophy and a business strategy that is supported by a technology platform, business rules, processes and social characteristic, designed to engage customers in a collaborative conversation to provide mutually beneficial value in a trusted & transparent business environment (Greenberg, 2009).

Every year many start-up companies are established all around the globe. In the U.S only, 394,000 new start-up businesses were established during 2010 (Reynolds et al., 2010) while it is estimated that about 4000 start-up businesses are created in Malaysia every year (“Suruhanjaya Syarikat Malaysia (SSM),” 2015). These start-up companies are usually having very limited budget for their marketing, customer management, and sales activities and as such adoption of SCRM applications can be considered a cost-effective customer management solution which could play a vital role in their success.

1.3 Problem Statement

The fast changes in online, and Internet technologies have evolved one-way communication concept of CRM into two-ways collaborative communications of Web 2.0 in SCRM. These days companies are not only receiving feedbacks from clients but engage them in mutual communications and development collaboration on their services and products (Fuchs et al., 2010). Previous CRM generations

(eCRM and mCRM) were focused on marketing oriented processes and one-way communications that are controlled by the company only. Social-CRM (SCRM) enables two-way interactions which have never been possible in previous CRM technologies. In SCRM, customers are considered as a partner in the company and as such they are actively engaged in company activities, discussions, and offerings (Greenberg, 2010). In spite of the vital importance of adopting SCRM solutions for start-up companies, there are not many valuable scholarly researches in this direction. There were several literatures on CRM, eCRM, and mCRM adoption in Small-Medium-Enterprises (SMEs) as will be explained later on but not about SCRM adoption in the context of start-up companies. The relative newness of SCRM technologies as well as fast changing nature of start-up companies - which made them difficult cases to study – may justify the lack of research in this direction.

The TOE (Technological, Organisational, and Environmental) framework made the basis for many new technologies adoption models (Tornatzky and Fleischer, 1990). This framework considered technological characteristics, environmental characteristics, and organizational characteristics as important elements affecting technologies adoption in different businesses. Technological characteristic reflects available technologies and expertise within a company, organizational characteristic reflects companies' demographic information, and environmental characteristic reflects the context that the company is operating at (Premkumar, 2003). The TOE framework was extended by Thong (1999) by an addition of managerial characteristic as an element reflecting managers' perceptions. Different range of constructs was suggested for each of these characteristics in different researches. TOE framework and its extended version made the basis for many technological adoption researches in CRM, eCRM, and mCRM.

Ko et al. (2008) used Rogers' (2003) innovation-decision process to detect organizational characteristics that are relevant to CRM adoption. They have analyzed effects of firm characteristics (size, strategy, the maturity of an information system), product characteristic (category, fashion position, seasonality) and CEO characteristics (age, education) on CRM adoption. They found that organizational strategy, the maturity of an information system, and product category significantly affect CRM adoption. Peltier and Schibrowsky (2009) investigate technological, organizational, owner characteristics and environmental antecedents that affect adoption of CRM technologies in small companies. They found that CRM adopters have higher class product knowledge, greater risk orientation, stronger relative advantage, and higher environmental hostility. Hung et al (2010) determined critical managerial and organizational factors that affect CRM adoption in hospitals. They found that hospital size, IS capabilities of staff, innovation of senior management, knowledge management capabilities, and relative advantage significantly influence CRM adoption. Alshawi et al (2011) conducted an investigative study to detect technical and organisational factors affecting CRM adoption in SMEs.

With the evolvement of eCRM, several models have been developed to explain factors affecting eCRM adoption. Chen et al (2004) explored factors that determine successful adoption of eCRM technologies. They have found a range of

technological and organizational factors that influence eCRM adoption. This research was continued by Kimiloglu et al., and they have identified significance and relation of these factors in eCRM adoption (Kimiloglu & Zarali, 2009).

With the emergence of mCRM, researchers tried to identify factors that are affecting its adoption. Camponovo et al (2005) explored factors that affect successful implementation of mobile CRM in Italy. They have analyzed the significance of environmental and technological antecedents in the adoption of mCRM in Italy. Zheng (2011) has conducted similar research in the UK to detect effects of mobile technological advantage, organizational context, external pressure, industrial characteristics, and managerial characteristics on mCRM adoption. Sangle & Awasthi (2013) investigated relation and significance of factors affecting mCRM adoption in mobile banking. They have found that perceived usefulness, the perception of benefits, and technological and environmental factors significantly affect mCRM adoption.

Synthesizing the above discussion shows that technological, organizational, environmental and managerial factors may affect SCRM adoption in start-up companies similar to the way they have affected CRM, eCRM and mCRM adoption in SMEs. Moreover, it reflects the lack of research in detecting factors that affect start-up companies' decision to adopt SCRM applications as reflected in the first problem of this research. Therefore, the first research problem of this study is detecting factors that affect SCRM adoption and marketing performance of start-up companies.

Since the introduction of CRM, there were several researchers investigating effects of CRM adoption on different aspects of companies. Reinartz et al (2004) measured the effects of CRM process on the economic performance of the companies. Wang et al (2004) and Izquierdo et al (2005) investigated effects of CRM adoption on companies in China and Spain. Wang et al (2004) considered both tangible and intangible effects of CRM adoption on Chinese companies marketing performance while Izquierdo (2005) focused on tangible benefits of CRM adoption on companies in Spain. Sin et al (2005) provided a very detailed examination of CRM effects on both marketing and financial performance of companies resided in Hong Kong. They have measured marketing performance regarding customer trust and satisfaction and financial performance regarding return on investment. Richard et al (2007) suggested a technical strategy for adopting CRM to increase company value. Keramati et al (2010) investigated the effects of CRM adoption on marketing performance and concluded that marketing performance is mostly affected by infrastructural and technological factors involved in CRM adoption. Reimann et al (2009) found that differentiation and cost leadership are factors linking marketing performance and CRM adoption.

Ernst et al (2010) investigated effects of new products in strengthening relations between CRM and marketing performance. Saini et al (2009) investigated organizational elements that affect utilizing CRM capabilities and optimize

companies' marketing performance. Rodriguez & Honeycutt (2011) and Ata & Toker (2012) examined effects of adopting CRM on Business to Business (B2B) marketing performance. Wu and Lu (2012) described relations between CRM and Relationship Marketing (RM) and their effects on business performance with the focus on the hotel industry in Taiwan. Vella et al (2012) show that behavioral activation and inhibition affects CRM adoption and Law et al (2013) proposed a CRM adoption framework for service sectors. James et al (2013) developed a linking model between customer data quality, CRM, and marketing performance. Lastly, Josiassen et al (2014) reported positive effects of adopting different dimensions of CRM on marketing performance of SMEs.

With the evolvement of eCRM, Paul Harrigan - the most profound researcher in eCRM adoption - first explored eCRM adoption in Ireland SMEs (Harrigan et al., 2008) and then detected eCRM related activities in these companies (Harrigan et al., 2009). Afterward, he utilized a quantitative approach to determine critical factors that underpinning eCRM activities (Harrigan et al., 2011) and key capabilities of eCRM in developing entrepreneurial marketing activities (Harrigan et al., 2012). Moreover, there were some researches on specific implementations of eCRM in different contexts, i.e., Sivarakas et al., investigated eCRM adoption effects on customer-bank relationship in Thailand (Sivarakas et al., 2011).

The above discussion may firstly reflect that SCRM adoption affects start-up companies' performance in the similar way that CRM, e-CRIM, and mCRM adoption affected SMEs. Secondly, it reveals the lack of research in investigating the effects of SCRM adoption on start-up companies' marketing performance. This further contributes to the existence and validity of the second problem of this research.

The above discussion made it clear that this research should move towards achieving following two objectives:

1. Detecting and investigating relations between factors that affect SCRM adoption and marketing performance of start-up companies. More precisely, effects of technological, environmental, organizational, and managerial variables on SCRM adoption and marketing performance need to be analyzed.
2. Investigating the effects of SCRM adoption on start-up companies' marketing performance. More specifically, the mediation effect of SCRM adoption on start-up companies' marketing performance would be investigated.

1.4 Research Objectives

Based on the problem statement discussed above, the broader purpose of this research is to determine factors affecting SCRM adoption in start-up companies in Malaysia. The next purpose of this study is to investigate the effects of SCRM

adoption on start-up companies' performance. Specifically, the following objectives are pursued in this research:

1. To determine the relationship between Technological Characteristics (TC), Organisational Characteristics (OC), Environmental Characteristics (EC), and Managerial Characteristics (MC) with SCRM adoption among start-up companies in Malaysia.
2. To assess the relationship between Technological Characteristics (TC), Organisational Characteristics (OC), Environmental Characteristics (EC) and Managerial Characteristics (MC) with Marketing Performance (MP) of start-up companies.
3. To evaluate the relationship between SCRM adoption and marketing performance of start-up companies.
4. To specifically investigate the mediating role of SCRM adoption on the relationship between Technological Characteristics (TC), Organisational Characteristics (OC), Environmental Characteristics (EC), and Managerial Characteristics (MC) and Marketing Performance (MP).

The first and the second objectives are addressing the first problem of this research which is detecting and investigating relations between factors that affect SCRM adoption among start-up companies. While the third and the fourth objectives are tackling the second problem of this study which is investigating the effects of SCRM adoption on start-up companies' marketing performance.

1.5 Research Questions

The following research questions will be answered in this study:

1. Is there any significant relationship between technological characteristics, organizational characteristics, environmental characteristics, managerial characteristics and SCRM adoption among start-up companies?
2. Is there any significant relationship between technological characteristics, organizational characteristics, environmental characteristics, managerial characteristics and marketing performance of start-up businesses?
3. Is there any significant relationship between SCRM adoption and marketing performance of start-up businesses?
4. Does SCRM adoption mediate the relationship between the technological characteristics, organizational characteristics, environmental characteristics, managerial characteristics and marketing performance?

The following research contributions are offered in meeting the previously mentioned objectives:

1. A framework that depicts the relationship between technological characteristics, organizational characteristics, environmental characteristics, and managerial characteristics with both SCRM adoption and marketing performance of start-up companies.

2. Detecting the relationship between SCRM adoption and marketing performance of start-up companies.
3. Elaborating mediating role of SCRM adoption on marketing performance of start-up companies.

Although all factors of this research are only studied in Malaysia start-up companies, the research findings may safely be extended to start-up companies in other contexts as well.

1.6 Significance of the Study

This study contributes to both theoretical and practical significance of business and marketing research. Theoretically, this research framework not only builds on top of previous adoption models but suggests several newly developed constructs to start-up companies' SCRM adoption. Existing theories such as Diffusion of Innovation (DOI) theory, Technology Acceptance Model (TAM), and TOE frameworks are only partially explaining relevant factors to adoption of SCRM technologies. The generalizability and extensibility of these models made them only partially capable of explaining factors relevant to the start-up businesses. These all give space to the theoretical contributions of this study proposed framework. By integrating DOI theory, TAM, and TOE frameworks and inclusion of many factors relevant to start-up companies business (i.e. venture capitalists support, business incubation, etc.) and inclusion of marketing performance as a dependent factor, this research framework is expected to comprehensively covers factors affecting SCRM adoption within and marketing performance of start-up businesses. Therefore, the proposed framework can be used as a research tool in future marketing research examining determinant factors in the adoption of social networking technologies and marketing performance of start-up businesses. This research is among very rare attempts that link SCRM technologies adoption to marketing performance and investigates mediating role of SCRM adoption regarding marketing performance of start-up companies. Given the lack of a comprehensive definition of SCRM applications adoption, this research framework is expected to contribute further to the comprehensive understanding of SCRM applications implementation. Finally, this research furthers attention to the effects of lesser-studied factors relevant to start-up companies marketing performance such as venture capitalists support, crowdfunding support, and business angels' support.

Practical significance is expected when the proposed framework is used in guiding adoption of social networking technologies in start-up companies, guiding software development companies on better marketing their SCRM solutions to start-up businesses, and to assist governments in optimal funding start-up companies. As stated by the president of Gryphon Networks (a start-up company in marketing based in the U.S) "*Without consistent usage of a CRM by a rep to update information, we end up with a 'garbage in, garbage out' scenario.*" (Gryphon Networks, 2015). Gartner predicted that CRM will be a \$36 billion market by 2017 (Coyle et al., 2013) far bigger than other marketing and sales technologies such as ERP systems. Adam Lewites, head of client partnerships at Insightpool highlighted that without a proper

CRM system, customer management was a tedious and cumbersome process (Insightpool, 2015). Dr. Laura Kozloski Hart, Chief Operating Officer (COO) of "My Community Alert" highlighted that it is impossible for start-up companies to manage their customer management, sales, and marketing activities without a proper CRM solution in place. In response of a start-up company complain that CRM solutions are very expensive, she has offered SCRM solutions as a more cost-effective alternative (MCAAlert, 2015). These are just a fraction of industry statements about the significance of CRM and SCRM adoption for start-up companies. Therefore, identifying factors that affect SCRM adoption and marketing performance would assist in the efficient utilization of social networking technologies in a variety of functions which could have a vital role in the success of start-up companies. On the other hand, start-up companies having very limited advertising, marketing, and customer service capabilities and it would be important for them to know how to adopt wisely an efficient SCRM solution. Therefore, a framework that illustrates factors that affect SCRM adoption in start-up businesses along with the relative effects of these factors on marketing performance would guide start-up companies to utilize their budgets smartly.

In addition, by determining and prioritizing factors that affect start-up companies decision on adopting SCRM solutions, this research results may serve as a useful guidance for software development companies on properly marketing their SCRM solutions. These companies may use this research detected ranking of factors affecting SCRM adoption in start-up businesses as guidance to focus on corresponding aspects of their SCRM solutions in their marketing campaigns. Many of CRM, eCRM, and SCRM solution development companies are start-up businesses i.e. SalesMesh (<http://appme.sh/>), Collabspot (<http://www.collabspot.com/>), Contactually (<http://www.contactually.com/>) and OnePageCRM (<http://www.onepagecrm.com/>).

Finally, as governments all around the globe are encouraging the development of start-up companies by offering different funding programs - i.e., Malaysia government offers Cradle, and Incubator grants to initiate start-up companies – it is important for them to understand real effects of such supports on marketing performance of start-up businesses. The governments may use proposed factors of this research (especially those that affect marketing performance of start-up companies) as a guide to appropriately decide about funding right companies.

1.7 Scope of the Study

This research only focuses on SCRM technologies adoption, so traditional CRM, eCRM, and mCRM technologies are excluded from the scope of this research. Start-up companies should usually reach to their stable business model within five years of establishment, and after that, they are usually ranked as a SME company. This research only focuses on high-tech start-up companies which are developing new products (i.e., BioTech start-up companies) or providing new services (i.e., IT start-up companies). Therefore, SMEs or newly established companies which merely

selling a product or service are not rank as start-up companies and are out of the scope of this research.

The intended respondents of this research are managers and executives in Malaysian start-up companies. For this research start-up companies all around Malaysia are randomly contacted regardless of their location. Start-up companies resided in Technology Park Malaysia (TPM) – Kuala Lumpur, Sunway Technology Park (Petaling Jaya), SENAI High Technology Park Iskandar Malaysia (Johor), Malaysian Defence Technology Park (Kuala Lumpur), Malaysia Kulim Hi-Tech Park (Penang), University College of Technology Sarawak (UCTS) Technology Park (Sarawak), Kota Kinabalu Industrial Park (KKIP) (Sabah), and University Putra Malaysia (UPM)- Malaysian Technology Development Corporation (MTDC) (Selangor) were among respondents of this research.

Since the researcher is residing in Malaysia and has good access to Malaysian start-up companies, this research questionnaire is distributed only to Malaysian start-up companies. However, the research findings may be extended safely to other countries start-up companies as well. It is notable that while some researchers used terms “adoption” and “implementation” interchangeably, in this study the term “adoption” is referring to accepting or obtaining a technology or an innovation while “implementation” is referring to routinely using technology or innovation as an integral part of the company activities. In this study, the term SCRM adoption expresses accepting and adopting, at least, one SCRM application in at least one of marketing, customer support, and sales functions of the company but not necessarily implementing it as an integral part of company’s daily activities. Therefore, the way that SCRM is implemented is beyond the scope of this research. In practice, there are many ways for companies to adopt SCRM applications ranging from simple development of a social networking page for communicating with customers to employing complicated SCRM solutions integrated into many company functions.

1.8 Organisation of the Thesis

The thesis document is divided into Eight (8) chapters as follows:

Chapter One – Introduction

This chapter illustrates the background of the study, problem statement, research objectives, and hypotheses of the research. Moreover, research scope and importance of the study are also described in this chapter.

Chapter Two – Start-up Companies Landscape in Malaysia

This chapter introduces start-up companies' development process and methods that are used by start-up companies to finance their activities. Then it proceeds with describing potential costs and issues in establishing start-up businesses and looks at the role of customer relationship management technologies to these companies.

Subsequently, it focuses on start-up companies' situation in Malaysia and provides the description of available funding and supports for Malaysian start-up companies and lists successful Malaysian start-up businesses.

Chapter Three – Literature Review

This chapter presents the review of literatures related to this research. The chapter describes relationship marketing, illustrates CRM, eCRM, and mCRM adoption models, and rectifies current state of research in SCRM. Moreover, this chapter elaborates on related works on technological characteristics, organizational characteristics, environmental characteristics and managerial characteristics as fundamental elements of the proposed framework for this research.

Chapter Four – Research Design and Methodology

In this chapter justification of the selected research gaps identified from the literature review exercise will be elaborated in depth. Existing theories and adoption of relevant theories from other disciplines will be discussed and integrated to support the development of the theoretical framework and research hypotheses. Moreover, in this chapter procedures that are used in the development of measurements for SCRM adoption are presented. It comprises sampling design, questionnaire design, and data collection methods. In addition, it describes the statistical analysis procedures that are applied to test hypotheses of this study.

Chapter Five – Data Analysis and Results

This chapter reports the results of the quantitative data analysis and results of testing hypotheses developed in the prior chapter using different statistical analysis tools. The reported results include descriptive analysis and inferential statistics of collected data such as structural equation modeling (SEM) and exploratory and confirmatory factor analyses (CFA and EFA). Moreover, this chapter reports reliability and validity of the research constructs.

Chapter Six – Discussions

This chapter provides an overview of the research and discusses the major findings related to the results drawn from testing the research hypotheses. Detailed analysis of demographic characteristics of collected data as well as discussion of each and every research hypotheses is presented in this chapter. This chapter concludes with the list of confirmed research hypotheses and depicts final framework of this research.

Chapter Seven – Conclusions and recommendations

This chapter summarizes and synthesizes findings of the study align with research objectives and contributions. The chapter explains theoretical and practical implications of the research findings and discusses research limitations. Finally, the considerations for future researches of this study are discussed, and conclusion remarks will be presented.

1.9 Chapter Summary

This chapter provided an introduction to this research by discussing research background, problem statement and research contributions. Moreover, the research scope was elaborated, and the research hypotheses were described in light of proposed research framework. The next chapter provides an overview of start-up companies and start-up businesses in general with a focus on Malaysia start-up businesses.

REFERENCES

- 1 Malaysia Entrepreneur. (2014). Retrieved from <http://www.1met.org/>
- Aaker, D. A., Kumar, V., & Day, G. (2004). *Marketing research (8th ed.)*. New Jersey: John Wiley & Sons.
- Aboelmaged, M. G. (2014). Predicting e-readiness at firm-level: An analysis of technological, organizational and environmental (TOE) effects on e-maintenance readiness in manufacturing firms. *International Journal of Information Management*, 34(5), 639–651. doi:10.1016/j.ijinfomgt.2014.05.002
- Abou-Shouk, M. A., Lim, W. M., & Megicks, P. (2016). Using competing models to evaluate the role of environmental pressures in ecommerce adoption by small and medium sized travel agents in a developing country. *Tourism Management*, 52, 327–339. doi:10.1016/j.tourman.2015.07.007
- Agarwal, R., & Prasad, J. (1998). A conceptual and operational definition of personal innovativeness in the domain of information technology. *Information Systems Research*, 9(2), 204–215.
- Aggarwal, S., McCabe, L., Leary, B., & Aggarwal, A. (2012). 2012 Impact of Social Business in Small and Medium Business Study.
- Ajzen, I. (1985). From intentions to action: A theory of planned behavior. In & I. J. K. & J. Beckmann (Eds.), *Action control: From cognition to Behavior* (pp. 11–39). New York: Springer Verlag.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Ali Kara, J. E. S., & Jr., O. W. D. (2005). The Effect of a Market Orientation on Business Performance: A Study of Small-Sized Service Retailers Using MARKOR Scale. *Journal of Small Business Management*, 43(2), 105–118.
- Almoawi, A. R. N. (2011). E-Commerce Adoption Among Small and Medium Enterprises in Saudi Arabia. PhD thesis, Universiti Utara Malaysia.
- Alpar, P., & Reeves, S. (1990). Predictors of MS/OR application in small businesses. *Interfaces*, 20(2), 2–11.
- Alpkan L., Y. C.-, & N., K. (2007). “Market Orientation and Planning Flexibility in SMEs.”, *International Small Business Journal*, 25(2), 152–172.

- Al-Qirim, N. (2005). An empirical investigation of an e-commerce adoption-capability model in small businesses in New Zealand. *Electronic Markets*, 15(4), 418–437.
- Alshamaila, Y., Papagiannidis, S., & Li, F. (2013). Cloud computing adoption by SMEs in the North East of England. *Journal of Enterprise Information Management*, 26(3), 250–275.
- Anderson, C., & Gerbing, W. (1988). “Structural equation modelling in practice: a review and recommended two-step approach.” *Psychological Bulletin*, 103(3), 411–423.
- Andreu, L., Aldás, J., Bigné, J. E., & Mattila, A. S. (2010). An analysis of e-business adoption and its impact on relational quality in travel agency–supplier relationships. *Tourism Management*, 31(6), 777–787. doi:10.1016/j.tourman.2009.08.004
- Ang, J., & Pavri, F. (1994). A survey and critique of the impact of information technology. *International Journal of Information Management*, 14(2), 122–133.
- Aral, S., Dellarocas, C., & Godes, D. (2013). Social media and businesstransformation: a framework for research. *Information Systems Research*, 24(1), 3–13.
- Assimakopoulos, C., Papaioannou, E., Sarmaniotis, C., & Georgiadis, C. K. (2015). Online reviews as a feedback mechanism for hotel CRM systems. *Anatolia*, 26(1), 5–20. doi:10.1080/13032917.2014.933707
- Ata, U. Z., & Toker, A. (2012). The effect of customer relationship management adoption in business-to-business markets. *Journal of Business {&} Industrial Marketing*, 27(6), 497–507. doi:10.1108/08858621211251497
- Atherton, A. (2012). Cases of start-up financing: An analysis of new venture capitalisation structures and patterns. *International Journal of Entrepreneurial Behaviour {&} Research*, 18(1), 28–47. doi:10.1108/13552551211201367
- Audretsch, D. B. (2000). *The Economic Role of Small- and Medium-Sized Enterprises: The United States*.
- Awa, H. O., Ojiabo, O. U., & Emecheta, B. C. (2015). Integrating TAM, TPB and TOE frameworks and expanding their characteristic constructs for e-commerce adoption by SMEs. *Journal of Science & Technology Policy Management*, 6(1), 76–94.
- Awasthi, P. (2013). The importance of value and context for mobile CRM services in banking. *Business Process Management Journal*, 19(6), 864–891.

- Awasthi, P., & Sangle, P. S. (2012). Adoption of CRM technology in multichannel environment: a review (2006-2010). *Business Process Management Journal*, 18(3), 445–471. doi:10.1108/14637151211232641
- Ayrancı, A. E., & Ayrancı, E. (2015). Connections between Leadership Features and Attitudes Towards Innovativeness: A Research on Small and Medium-Sized Business Owners. *Procedia - Social and Behavioral Sciences*, 195(3), 1535–1542. doi:10.1016/j.sbspro.2015.06.456
- Babbie, E. R. (2004). *The practice of social research (10th ed.)*. Belmont: CA: Wadsworth Thomson Learning.
- Bagozzi, R., Baumgartner, H., & Yi, Y. (1992). State versus action orientation and the theory of reasoned action: An application to coupon usage. *Journal of Consumer Research*, 18(4), 505–518.
- Baker, W. E., & Sinkula, J. M. (1999). The synergistic effect of market orientation and learning orientation on organizational performance. *Journal of the Academy of Marketing Science*, 27(4), 411–427.
- Baron, R. M. and Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182.
- Bartkus, J. R., Kabir, M. H., & Ngene, G. (2013). Does venture capital portfolio size matter? *Studies in Economics and Finance*, 30(3), 192–208. doi:10.1108/SEF-01-2012-0005
- Bearden, W. O./Netemeyer, R. G. (1999). *Handbook of Marketing Scales, 2 ed., Thousand Oaks et al.*
- Beaulieu, T., Sarker, S., & Sarker, S. (2015). A Conceptual Framework for Understanding Crowdfunding. *Communications of the Association for Information Systems*, 37(1), 1–31. Retrieved from <http://aisel.aisnet.org/cais/vol37/iss1/1>
- Bentler, P. M. (1990). Comparative fit index in structural models. *Psychological Bulletin*, 107(2), 238–246.
- Bentler, P. M. (1995). EQS: Structural Equation Program Manual. Encino, CA: Multivariate Software, Inc.
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88(3), 588–606.
- Berry, L. L. (1983). Relationship Marketing of Services Perspectives from 1983 and 2000. *Journal of Relationship Marketing*, 1(1), 59–77.

- Berry, L. L. (1995). Relationship Marketing of Services--Growing Interest, Emerging Perspectives. *Journal of the Academy of Marketing Science*, 23(4), 236–245. doi:10.1177/009207039502300402
- Bianchi, C., & Andrews, L. (2015). Investigating marketing managers' perspectives on social media in Chile. *Journal of Business Research*, 68(12), 2552–2559. doi:10.1016/j.jbusres.2015.06.026
- Blomquist, T., & Wilson, T. L. (2007). Project marketing in multi-project organizations: A comparison of IS/IT and engineering firms. *Industrial Marketing Management*, 36(2), 206–218.
- Boström, G-O., Zackariasson, P., & Wilson, T. L. (2003). CAD and consequences in the Swedish architectural industry. *Services Marketing Quarterly*, 25(2), 25–41.
- Bove, L. L., & Johnson, L. W. (2006). Customer loyalty to one service worker : should it be discouraged? *International Journal of Research in Marketing*, 23(1), 79–91.
- Bradley, C. (2003). *Handbook of Psychology and Diabetes: A Guide to Psychological Measurements in Diabetes Research and Management*, 4 ed., Amsterdam.
- Bramorski, T. (2001). Privatization and technology transfer in Central and Eastern Europe. *International Journal of Technology Management*, 21(5-6), 637–652.
- Braojos-Gomez, J., Benitez-Amado, J., & Javier Llorens-Montes, F. (2015). How do small firms learn to develop a social media competence? *International Journal of Information Management*, 35(4), 443–458. doi:10.1016/j.ijinfomgt.2015.04.003
- Brown, J. R., Martinsson, G., & Petersen, B. C. (2012). Do financing constraints matter for R&D? *European Economic Review*, 56(8), 1512–1529. doi:10.1016/j.eurocorev.2012.07.007
- Buehrer, R. E., Senecal, S., & Pullins, E. B. (2005). Sales force technology usage—reasons, barriers, and support: An exploratory investigation. *Industrial Marketing Management*, 34(4), 389–398.
- Business Dictionary. (2014). What is startup? definition and meaning. *Business Dictionary*. Retrieved from <http://www.businessdictionary.com/definition/startup.html>
- Byrne, B. M. (2001a). *Structural Equation Modeling with AMOS*. Mahwah, NJ: Lawrence Erlbaum.
- Byrne, B. M. (2001b). *Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming*. Mahwah: Lawrence Erlbaum Associates.

- Byrne, B. M. (2010). *Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming*. New York, NY: Taylor and Francis Group.
- Campbell, C./Fiske, D. W. (1959). Convergent and Discriminant Validation by the Multitrait-Multimethod Matrix. *Psychological Bulletin*, 81–105.
- Carmines, E. G./Zeller, R. A. (1979). Reliability and Validity Assessment. Sage University Paper, Series: Quantitative Applications in the Social Sciences, Number 07-017, Newbury Park.
- Carol, T. (2013). 3 Top Startup Mistakes That Lead To Business Death. *Forbes*. Retrieved from <http://www.forbes.com/sites/caroltice/2013/07/09/3-top-startup-mistakes-that-lead-to-business-death/>
- Carter, L., & Belanger, F. (2005). The utilization of e-government services: citizen trust, innovation and acceptance factors. *Information Systems Journal*, 15(1), 5–25.
- Chandra, S., & Strickland, T. (2004). Technological differences between CRM and eCRM. *Issues in Information Systems*, 5(2), 408–413.
- Chang, H. H., & Chen, S. W. (2008). The impact of online store environment cues on purchase intention: Trust and perceived risk as a mediator. *Online Information Review*, 32(6), 818–841. doi:10.1108/14684520810923953
- Chang, T., Liao, L., & Hsiao, W. (2005). An Empirical Study on the e-CRM Performance Influence Model for Service Sectors in Taiwan. *IEEE International Conference on E-Technology, E-Commerce and E-Service*, 240–245. doi:10.1109/EEE.2005.33
- Chang, W., Park, J. E., & Chaivy, S. (2010). How does CRM technology transform into organizational performance? A mediating role of marketing capability. *Journal of Business Research*, 63(8), 849–855. doi:10.1016/j.jbusres.2009.07.003
- Chao, C.-A., & Chandra, A. (2012). Impact of owner's knowledge of information technology (IT) on strategic alignment and IT adoption in US small firms. *Journal of Small Business and Enterprise Development*, 19(1), 114–131. doi:10.1108/14626001211196433
- Chaouali, W. (2016). Once a user, always a user: Enablers and inhibitors of continuance intention of mobile social networking sites. *Telematics and Informatics*, 33(4), 1022–1033. doi:10.1016/j.tele.2016.03.006
- Chau, M., & Xu, J. (2012). Business intelligence in blogs: understanding consumer interactions and communities. *MIS Quarterly*, 36(4), 1189–1216.
- Chau, P. (1997). Reexamining a model for evaluating information center success using a structural equation modelling approach. *Decision Sciences*, 28(2), 309–34.

- Chebrolu, S. B., & Ness, L. R. (2012). "Impact of cloud aspects on IT effectiveness." *Journal of Information Technology Management*, 23(1), 1–12.
- Chen, H., Chiang, R. H. L., & Storey, V. C. (2012). Business intelligence and analytics: from big data to big impact. *MIS Quarterly*, 36(4), 1165–1188.
- Chen, I., & Popovich, K. (2003a). "Understanding customer relationship management (CRM) People, process, and technology." *Business Process Management Journal*, 9(5), 672–688.
- Chen, I., & Popovich, K. (2003b). Understanding customer relationship management (CRM): People, process and technology. *Business Process Management Journal*, 9(5), 672–688. doi:10.1108/14637150310496758
- Cho, C., Halford, J. T., Hsu, S., & Ng, L. (2016). Do managers matter for corporate innovation? *Journal of Corporate Finance*, 36, 206–229. doi:10.1016/j.jcorpfin.2015.12.004
- Chong, S., & Pervan, G. (2007). Factors Influencing the Extent of Deployment of Electronic Commerce for Small-and Medium Sized Enterprises. *Journal of Electronic Commerce in Organizations*, 5(1), 1–29. doi:10.4018/jeco.2007010101
- Christopher, M., Payne, A., & Ballantyne, D. (2002). *Relationship marketing: Creating stakeholder value*. Oxford: MA: Butterworth-Heinemann.
- Chuang, T., Nakatani, K., & Zhou, D. (2013). An exploratory study of the extent of information technology adoption in SMEs: an application of upper echelon theory. *Journal of Enterprise Information Management*, 22(1/2), 183–196.
- Churchill, G. A. (1979). A Paradigm for Developing Better Measures of Marketing Constructs. *Journal of Marketing Research*, 64–73.
- Churchill, G. A. J., & Iacobucci, D. (2005). *Marketing research: Methodological foundations (9th ed.)*. Mason: Thomson-South Western.
- Chwelos, P., Benbasat, I., & Dexter, A. (2001). Research report: Empirical test of an EDI adoption model. *Information Systems Research*, 12(3), 304–321.
- Clarke-Sather, A. R., Hutchins, M. J., Zhang, Q., Gershenson, J. K., & Sutherland, J. W. (2011). Development of social, environmental, and economic indicators for a small/medium enterprise. *International Journal of Accounting and Information Management*, 19(3), 247–266. doi:10.1108/18347641111169250
- Clement K. Wang and Bee Lian Ang. (2004). Determinants of Venture Performance in Singapore. *Journal of Small Business Management*, 42(4), 347–363.
- Clow, K., & Cole, H. (2004). Small Retailers' Road to Success The Customer Value Concept. *Services Marketing Quarterly*, 26(2), 69–81.

- Coach&Grow Programme. (2014).
- Coorley, W. W. (1978). "Explanatory observation studies." *Educational Researcher*, 9–15.
- Cordova, A., Dolci, J., & Gianfrate, G. (2015). The Determinants of Crowdfunding Success: Evidence from Technology Projects. *Procedia - Social and Behavioral Sciences*, 181, 115–124. doi:10.1016/j.sbspro.2015.04.872
- Coyle, Laurie F. Wurster, Yanna Dharmasthira, Chad Eschinger , Bianca Francesca Granetto, Joanne M. Correia, Federico De Silva, Tom Eid, Ruggero Contu, Colleen Graham, Fabrizio Biscotti, Chris Pang, D. S. (2013). Forecast: Enterprise Software Markets, Worldwide, 2012-2017, 2Q13 Update. *Gartner Inc.* Retrieved from <https://www.gartner.com/doc/2515815>
- Cradle Investment Programme | Catalysing Successful Entrepreneurs. (2014). Retrieved from <http://www.cradle.com.my/>
- Cravens, D. W. (1995). Introduction to the special issue. *Journal of the Academy of Marketing Science*, 23, 235.
- Croteau, A.-M., & Li, P. (2009). Critical Success Factors of CRM Technological Initiatives. *Canadian Journal of Administrative Sciences / Revue Canadienne Des Sciences de l'Administration*, 20(1), 21–34. doi:10.1111/j.1936-4490.2003.tb00303.x.
- Cui, G., Lui, H.-K., Guo, X. (2012). The effect of online consumer reviews on new product sales. *International Journal of Electronic Commerce*, 17(1), 39–57.
- Cunningham, W. M. (2012). Crowdfunding. In *The Jobs Act* (pp. 61–81). Apress. doi:10.1007/978-1-4302-4756-2_5.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and end user acceptance of information technology. *MIS Quarterly*, 13(3), 318–339.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35(8), 982–1003.
- Davis, F. D., & Davis, B. F. D. (1989). Perceived Usefulness , Perceived Ease of Use , and User Acceptance of Information Technology, 13(3), 319–340.
- Deborah Gage. (2012). The Venture Capital Secret: 3 Out of 4 Start-Ups Fail. *The Wall Street Journal*. Retrieved from <http://online.wsj.com/news/articles/SB10000872396390443720204578004980476429190>.
- Dess, G. G., & Lumpkin, G. T. (2005). The role of entrepreneurial orientation in stimulating effective corporate entrepreneurship. *Academy of Management Executive*, 19(1), 147– 156.

- DeTienne, D. R., McKelvie, A., & Chandler, G. N. (2015). Making sense of entrepreneurial exit strategies: A typology and test. *Journal of Business Venturing*, 30(2), 255–272. doi:10.1016/j.jbusvent.2014.07.007.
- Dholakia, R., & Kshetri, N. (2004). Factors impacting the adoption of the Internet among SMEs. *Small Business Economics*, 23(4), 311–322.
- Diamantopolous, A., & Siguaw, J. A. (2000). Introducing Lisrel: A Guide for the Uninitiated, Thousand Oaks.
- Dick, A. and Basu, K. (1994). Customer loyalty: Toward an integrated conceptual framework. . *Journal of the Academy of Marketing Science*, 22(2), 99–113.
- Ding, Z., Au, K., & Chiang, F. (2015). Social trust and angel investors' decisions: A multilevel analysis across nations. *Journal of Business Venturing*, 30(2), 307–321. doi:10.1016/j.jbusvent.2014.08.003.
- Ding, Z., Sun, S. L., & Au, K. (2014). Angel investors' selection criteria: A comparative institutional perspective. *Asia Pacific Journal of Management*, 31(3), 705–731. doi:10.1007/s10490-014-9374-z.
- Drnovšek, M., Wincent, J., & Cardon, M. S. (2010). Entrepreneurial self-efficacy and business start-up: developing a multi-dimensional definition. *International Journal of Entrepreneurial Behaviour {&} Research*, 16(4), 329–348. doi:10.1108/13552551011054516
- Dutta, S., & Evrard, P. (1999). Information technology and organisation within European small enterprises. *European Management Journal*, 17(3), 239–251.
- Dwyer, F., Schurr, P., & Sejo, O. (1987). “Developing Buyer-Seller Relationships.” *Journal of Marketing*, 51(2), 11–27.
- E.M., G., J.S., H., & P.Y., K. (2012). “Crowdfunding: why the people are motivated to post and fund projects on crowdfunding platforms”.*Northwestern University Creative Action Lab, Sheridan Drive, Evanston. Gompers, P., Lerner, J., 2004. The venture capital cycle. MIT Press.*
- East, R., Gendall, P., Hammond, K., & Lomax, W. (2005). Consumer Loyalty: Singular, Additive or Interactive? *Australasian Marketing Journal (AMJ)*, 13(2), 10–26. doi:10.1016/S1441-3582(05)70074-4.
- El Ouiridi, M., El Ouiridi, A., Segers, J., & Pais, I. (2016). Technology adoption in employee recruitment: The case of social media in Central and Eastern Europe. *Computers in Human Behavior*, 57, 240–249. doi:10.1016/j.chb.2015.12.043.
- Ellahi, A., & Bokhari, R. H. (2013). Key quality factors affecting users' perception of social networking websites. *Journal of Retailing and Consumer Services*, 20(1), 120–129. doi:10.1016/j.jretconser.2012.10.013.

- Elliot, B., Alex, C., & Benn, K. (2007). Internal infrastructural impacts on RFID perceptions and commitment: knowledge, operational procedures, and information-processing standards. *Decision Sciences*, 38, 423–449.
- Entrepreneur Weekly. (2014). Startup Business Failure Rate By Industry. *Small Business Development Center*. Retrieved from <http://www.statisticbrain.com/startup-failure-by-industry/>.
- Ernst, H., Hoyer, W. D., Krafft, M., & Krieger, K. (2010). Customer relationship management and company performance—the mediating role of new product performance. *Journal of the Academy of Marketing Science*, 39(2), 290–306. doi:10.1007/s11747-010-0194-5.
- Faase, R., Helms, R., & Spruit, M. (2011). Web 2.0 in the CRM domain: defining social CRM. *Int. J. Electronic Customer Relationship Management.*, 5(1), 1–22.
- Fathian, M., Akhavan, P., & Hoorali, M. (2008). E-readiness assessment of non-profit ICT SMEs in a developing country: The case of Iran. *Technovation*, 28(9), 578–590.
- Feinberg, R. A., & Kadam, R. (2002). E-CRM web service attributes as determinants of customer satisfaction with retail web sites. *International Journal of Service Industry Management*, 13(5), 432–451.
- Field, A. (2006). *Discovering Statistics Using SPSS*, Second Edition edn, SAGE Publications, London.
- Fillish, I., & Wagner, B. (2005). E-business development: An exploratory investigation of the small firm. *International Small Business Journal*, 23(6), 604–634.
- Fingar, P. (2000). Component-based frameworks for e-commerce. *Communications of the ACM*, 43(10), 61–67.
- Fink, D. (1998). Guidelines for the successful adoption of information technology in small and medium enterprises. *International Journal of Information Management*, 18(4), 243–253.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Fishbein, M., & Ajzen, I. (1977). Belief, attitude and behavior: An introduction to theory and research. *Philosophy & Rhetor*, 10(2), 130–132.
- Foa, U. G. (1976). “Resource Theory of Social Exchanges,” *Contemporary Topics in Social Psychology*, eds. John S. Thaibut, Janet Spence, and Rachel Carson. Morristown, NJ: General Learning Press.

- Fornell, C. & Larcker, D., F. (1982). "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error." *Journal of Marketing Research*, 18(1), 39–50.
- Fuchs, C., Hofkirchner, W., & Schafranek, M. (2010). Theoretical foundations of the Web: Cognition, communication, and co-operation. Towards an understanding of Web 1.0, 2.0, 3.0. *Future Internet*, 2(1), 41–59.
- Fuller, E. (1996). "The Application of Complexity Theory to Supply Chain Management",. *Institution of the Chair in Operations and Procurement Strategy, Durham University Business School*, 10.
- Fuller-Love, N. (2006). Management development in small firms. *International Journal of Management Reviews*, 8(3), 175–190.
- Gable, G. G. (1991). Consultant engagement for first time computerization: A proactive client role in small businesses. *Information {&} Management*, 20(2), 83–93.
- Gangwar, H., Date, H., & Ramaswamy, R. (2015). Understanding determinants of cloud computing adoption using an integrated TAM-TOE model. *Journal of Enterprise Information Management*, 28(1), 107–130.
- García-Quevedo, J., Pellegrino, G., & Vivarelli, M. (2014). R&D drivers and age: Are young firms different? *Research Policy*, 43(9), 1544–1556. doi:10.1016/j.respol.2014.04.003.
- Gartner, Maoz, M., Sarner, A., Sussin, J., & Thompson, E. (2011). "The concise social CRM Vendor guide for 2012" Gartner,.
- Géczy, P., Izumi, N., & Kôiti, H. (2012). "Cloudsourcing: managing cloud adoption",. *Global Journal of Business Research*, 6(2), 57–70.
- GenQuest. (2014). Startup company: Revision history. *WIKIPEDIA*. Retrieved from <http://en.wikipedia.org/wiki/Special:Contributions/GenQuest>
- Ghauri, P., & Grønhaug, K. (2002). *Research methods in business studies: A practical guide (2nd ed)*. London: Prentice Hall.
- Ghobakhloo, M., Arias-Aranda, D., & Benitez-Amado, J. (2011). Adoption of e-commerce applications in SMEs. *Industrial Management & Data Systems*, 111(8), 1238–1269. doi:doi: 10.1108/02635571111170785
- Ghobakhloo, M., Hong, T. S., Sabouri, M. S., & Zulkifli, N. (2012). Strategies for successful information technology adoption in small and medium-sized enterprises. *Information*, 3(1), 36–67.
- Ghobakhloo, M., & Sabouri, M. S. (2011). Information Technology Adoption in Small and Medium-sized Enterprises; An Appraisal of Two Decades Literature. *Interdisciplinary Journal of Research in Business*, 1(7), 53–80.

- Ghobakhloo, M., & Tang, S. H. (2014). The role of owner/manager in adoption of electronic commerce in small businesses. *Journal of Small Business and Enterprise Development*, 20(4), 754 – 787.
- Gibbs, J. L., & Kraemer, K. L. (2004). A cross- country investigation of the determinants of scope of e-commerce use: an institutional approach,. *Electronic Markets*, 14(2), 124–137.
- Gleasure, R. (2015). Resistance to crowdfunding among entrepreneurs: An impression management perspective. *Journal of Strategic Information Systems*, 24(4), 219–233.
- Goh, K. Y., Heng, C. S., & Lin, Z. (2012). Social Media Brand Community and Consumer Behavior: Quantifying the Relative Impact of User- and Marketer-Generated Content. *SSRN Electronic Journal*. doi:10.2139/ssrn.2048614
- Gordon, I. H. (1999). *Relationship marketing: New strategies, techniques and technologies to win the customers you want and keep them forever*. Ontario, Canada: John Wiley {&} Sons.
- Gosney, J., & Boehm, T. (2000). *Customer Relationship Management Essentials*. Indianapolis, IN: Prima Publishing.
- Grandon, E. E., & Pearson, J. M. (2004). E-commerce adoption: Perceptions of managers/owners of small and medium sized firms in Chile. *Communications of the Association for Information Systems*, 13, 81–102.
- Grandon, E. E., & Pearson, J. M. (2004). Electronic commerce adoption: an empirical study of small and medium US businesses. *Information & Management*, 42(1), 197–216. doi:10.1016/j.im.2003.12.010.
- Greenberg, P. (2004). *Crm at the speed of light: essential customer strategies for the 21st century*. Osborne: McGraw-Hill.
- Greenberg, P. (2009). *CRM at the Speed of Light : for Engaging Your Customers, 4th edn*. McGraw-Hill Osborne Media, USA.
- Greenberg, P. (2010). The impact of CRM 2.0 on customer insight. *Journal of Business {&} Industrial Marketing*, 25(6), 410–419. doi:10.1108/08858621011066008
- Grönroos, C. (1994). From marketing mix to relationship marketing: Toward a paradigm shift in marketing. *Management Decision*, 32(2), 4–20.
- Gu, V. C., Cao, Q., & Duan, W. (2012). Unified Modeling Language (UML) IT adoption — A holistic model of organizational capabilities perspective. *Decision Support Systems*, 54(1), 257–269. doi:10.1016/j.dss.2012.05.034
- Guadagnoli, E., & Velicer, W. (1988). Relation of Sample Size to the Stability of Component Patterns. *Psychological Bulletin*, 103(2), 165–175.

- Gualandris, J., & Kalchschmidt, M. (2014). Customer pressure and innovativeness: Their role in sustainable supply chain management. *Journal of Purchasing and Supply Management*, 20(2), 92–103. doi:10.1016/j.pursup.2014.03.001
- Guesalaga, R. (2016). The use of social media in sales: Individual and organizational antecedents, and the role of customer engagement in social media. *Industrial Marketing Management*, 54, 71–79. doi:10.1016/j.indmarman.2015.12.002
- Guiltinan, J. (1989). “A Classification of Switching Costs with Implications for Relationship Marketing. In: Childers TL, Bagozzi RP, Peter JP, editors. AMA Winter Educators’. In *Marketing Theory and Practice* (Ed.), (pp. 216–20.). Chicago, IL: American Marketing Association,.
- Gummesson, E. (1997). Relationship marketing as a paradigm shift: some conclusions from the 30R approach. *Management Decision*, 35(4), 267–272.
- Gummesson, E. (2002). Relationship marketing and a new economy: It’s time for deprogramming. *Journal of Services Marketing*, 16(7), 585–589.
- Gupta, P., Seetharaman, A., & Raj, J. R. (2013). The usage and adoption of cloud computing by small and medium businesses. *International Journal of Information Management*, 33(5), 861–874. doi:10.1016/j.ijinfomgt.2013.07.001
- Haas, P., Blohm, I., & Leimeister, J. M. (2014). An Empirical Taxonomy of Crowdfunding Intermediaries.
- Hair, J., Babin, B., Money, A., & Samouel, P. (2003). *Essentials of business research methods*. New Jersey: John Wiley & Sons. Retrieved from <http://www.amazon.com/Essentials-Business-Research-Methods-Hair/dp/0471271365>
- Hair, J., Black, W., Babin, B., & Anderson, R. (2010). *Multivariate Data Analysis (7th Edition)*. Prentice Hall.
- Hair, J., Black, W., Babin, B., Anderson, R., & Tatham, R. (2006). *Multivariate Data Analysis (6th Ed.)*. New Jersey: Prentice Hall.
- Hameed, M. A., Counsell, S., & Swift, S. (2012). A conceptual model for the process of IT innovation adoption in organizations. *Journal of Engineering and Technology Management*, 29(3), 358–390.
- Hamilton, R. H. (2001). E-commerce new venture performance: how funding impacts culture. *Internet Research: Electronic Networking Applications and Policy*, 11(4), 277–285.
- Han, S. (1992). “Antecedents of Buyer-Seller Long Term Relationships: An Exploratory Model of Structural Bonding and Social Bonding.” *University Park, PA: Institute for the Study of Business Markets, Pennsylvania State University*, (6).

- Handen, L. (2000). Putting CRM to work: The rise of relationship. In S. A. Brown (Ed.). In *Customer relationship management: A strategic imperative in the world of e-business* (pp. 7–18). Toronto, Canada: John Wiley & Sons.
- Harrigan, P., Ramsey, E., & Ibbotson, P. (2008). e-CRM in SMEs: an exploratory study in Northern Ireland. *Marketing Intelligence & Planning*, 26(4), 385–404. doi:10.1108/02634500810879296
- Harrigan, P., Ramsey, E., & Ibbotson, P. (2009). Investigating the e-CRM activities of Irish SMEs. *Journal of Small Business and Enterprise Development*, 16(3), 443–465. doi:10.1108/14626000910977161
- Harrigan, P., Ramsey, E., & Ibbotson, P. (2011). Critical factors underpinning the e-CRM activities of SMEs. *Journal of Marketing Management*, 27(5-6), 503–529. doi:10.1080/0267257X.2010.495284
- Harrigan, P., Ramsey, E., & Ibbotson, P. (2012). Exploring and explaining SME marketing: investigating e-CRM using a mixed methods approach. *Journal of Strategic Marketing*, 20(2), 127–163. doi:10.1080/0965254X.2011.606911
- Harrigan, P., Soutar, G., Choudhury, M. M., & Lowe, M. (2015). Modelling CRM in a social media age. *Australasian Marketing Journal*, 23(1), 27–37. doi:10.1016/j.ausmj.2014.11.001
- Harrison, D. A., Mykytyn, P. P., & Riemenschneider, C. K. (1997). Executive decisions about adoption of information technology in small business: Theory and empirical tests. *Information Systems Research*, 8(2), 171–195.
- Hassan, S., Mourad, M., & Tolba, A. (2010). “Conceptualizing the influence of lead users and opinion leaders on accelerating the rate of innovation diffusion”. *International Journal of Technology Marketing*, 5(3), 203–218.
- Hassan, S., Nadzim, S. Z. A., & Shiratuddin, N. (2015). Strategic Use of Social Media for Small Business Based on the AIDA Model. *Procedia - Social and Behavioral Sciences*, 172, 262–269. doi:10.1016/j.sbspro.2015.01.363
- Hatcher, L. (1994). A step-by-step approach to using the SAS System for factor analysis and structural equation modeling. Cary, NC: SAS Institute Inc.
- Hawkins, T. (1993). *Marketing Research: Measurement And Method 6Th Ed.* Prentice Hall Of India. Retrieved from <http://books.google.com.my/books/about/Marketing{ }Research{ }Measurement{ }And{ }Metho.html?id=Z7hPYgEACAAJ{ }&pgis=1>
- He, W., Zha, S., & Li, L. (2013). Social media competitive analysis and text mining: A case study in the pizza industry. *International Journal of Information Management*, 33, 464–472. doi:10.1016/j.ijinfomgt.2013.01.001

- Holmes-Smith, P., Coote, L., & Cunningham, E. (2012). *Structural Equation Modelling (using AMOS): From the Fundamentals to Advanced Topics*. Melbourne: SREAMS.
- Hossain, M. A., & Quaddus, M. (2011). "The adoption and continued usage intention of RFID: an integrated framework." *Information Technology {&} People*, 24(3), 236–256.
- Hoyle, R. H. (Ed. . (1995). *Structural Equation Modeling*. Thousand Oaks, CA: Sage.
- Hsbollah, H. M., & Idris, K. M. (2009). E-Learning Adoption: The Role of Relative Advantages, Trialability and Academic Specialisation. *Campus-Wide Information Systems*, 26(1), 54–70.
- Hsieh, Y., Chiu, H., & Chiang, M. (2005). Maintaining a committed online customer: A study across search-experience-credence products. *Journal of Retailing*, 81(1), 75–82.
- Hung, S.-Y., Hung, W.-H., Tsai, C.-A., & Jiang, S.-C. (2010). Critical factors of hospital adoption on CRM system: Organizational and information system perspectives. *Decision Support Systems*, 48(4), 592–603. doi:10.1016/j.dss.2009.11.009
- Hussein, R. M. S., & Mourad, M. (2014). The adoption of technological innovations in a B2B context: an empirical study on the higher education industry in Egypt. *Journal of Business & Industrial Marketing*, 29(6), 525–545.
- Hutchinson, G., & Sofroniou, N. (1999). *The Multivariate Social Scientist*. London: Sage Publications.
- Hyytinen, A., Pajarinen, M., & Rouvinen, P. (2015). Does innovativeness reduce startup survival rates? *Journal of Business Venturing*, 30(4), 564–581.
- Iacovou, C. L., Benbasat, I., & Dexter, A. S. (1995). Electronic data interchange and small organizations: Adoption and impact of technology. *MIS Quarterly*, 19(4), 465–485.
- Igbaria, M., Zinatelli, N., Cragg, P., & Cavaye, A. L. M. (1997). Personal computing acceptance factors in small firms: A structural equation model. *MIS Quarterly*, 21(3), 279–305.
- Insightpool. (2015). *Driving Word Of Mouth Through Intelligent Social Solutions Powered by Data*. Retrieved from <http://insightpool.com/>
- Intan Salwani, M., Marthandan, G., Daud Norzaidi, M., & Choy Chong, S. (2009). E-commerce usage and business performance in the Malaysian tourism sector: empirical analysis. *Information Management & Computer Security*, 17(2), 166–185. doi:10.1108/09685220910964027

- Investopedia. (2014). Startup Definition. Retrieved from <http://www.investopedia.com/terms/s/startup.asp>
- Jaccard, J., & Wan, C. K. (1996). LISEREL Approaches to Interaction Effects in Multiple Regression. Thousands Oaks, CA: Sage publications.
- Jackson, D. (2003). Revisiting Sample Size and Number of Parameter Estimates: Some Support for the N:q Hypothesis Structural Equation Modelling, *10*(1), 128–141.
- Jaworski, B. J., & Kohli, A. K. (1993). Market orientation: Antecedents and consequences. *Journal of Marketing*, *57*(3), 53–70.
- Jeffrey, G., & Slevin, D. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal*, *10*(1), 75–87.
- Jeon, B. N., Han, K. S., & Lee, M. J. (2006). Determining factors for the adoption of e-business: The case of SMEs in Korea. *Applied Economics*, *38*(16), 1905–1916.
- Jeyaraj, A., Rottman, J. W., & Lacity, W. C. (2006). “A review of the predictors, linkages, and biases in IT innovation adoption research.” *Journal of Information Technology*, *21*(1), 1–23.
- Ji, G., & Yang, G. (2014). Constructing sustainable supply chain under double environmental medium regulations. *International Journal of Production Economics*, *147*, 211–219. doi:10.1016/j.ijpe.2013.04.012
- Ji, H., & Liang, Y. (2016). Exploring the Determinants Affecting E-Government Cloud Adoption in China. *International Journal of Business and Management*, *11*(4), 81. doi:10.5539/ijbm.v11n4p81
- Jones, M. A., Mothersbaugh, D. L., & Beatty, S. E. (2000). Switching barriers and repurchase intentions in services. *Journal of Retailing*, *76*(2), 259–274.
- Jöreskog, K. G., & Sörbom, D. (1984). Analysis of linear structural relationships by maximum likelihood, instrumental variables, and least squares methods. Uppsala: University of Uppsala.
- Kane, G. C., Palmer, D., Phillips, A. N., Kiron, D., & Buckley, N. (2014). Moving beyond marketing: Generating social business value across the enterprise. *MIT Sloan Management Review*, 1–39.
- Kaplan, D. (2000a). Structural Equation Modeling: Foundations and Extensions, Thousand Oaks et al.
- Kaplan, D. (2000b). *Structural Equation Modelling: Foundations and Extensions*. London: SAGE Publication.

- Kaplan, D. (2004). *The SAGE Handbook of Quantitative Methodology in the Social Sciences*. Newbury Park, CA: SAGE Publications.
- Karahanna, E., Straub, D. W., & Chervany, N. L. (1999). Information technology adoption across time: A cross-sectional comparison of pre-adoption and postadoption beliefs. *MIS Quarterly*, 23(2), 183–213.
- Karimi, J., Somers, T. M., & Gupta, Y. P. (2001). Impact of information technology management practices on customer services. *Journal of Management Information Systems*, 17(4), 125–158.
- Kaynak, E., Tatoglu, E., & Kula, V. (2005). An analysis of the factors affecting the adoption of electronic commerce by SMEs: Evidence from an emerging market. *International Marketing Review*, 22(6), 623–640.
- Kelloway E. (1998). *Using LISREL for SEM: A Researchers Guide* Sage. Publications: London.
- Kelloway, E. (1998). *Using LISREL for SEM: A Researchers Guide*. London: Sage Publications:
- Keramati, A., Mehrabi, H., & Mojir, N. (2010). A process-oriented perspective on customer relationship management and organizational performance: An empirical investigation. *Industrial Marketing Management*, 39(7), 1170–1185. doi:10.1016/j.indmarman.2010.02.001
- Keropyan, A., & Gil-Lafuente, A. M. (2012). Customer loyalty programs to sustain consumer fidelity in mobile telecommunication market. *Expert Systems with Applications*, 39(12), 11269–11275. doi:10.1016/j.eswa.2012.03.069
- Keuschnigg, C. (2004). Venture Capital Backed Growth. *Journal of Economic Growth*, 9(2), 239–261. doi:10.1023/B:JOEG.0000031428.35711.fc
- Khan, G. F., Yoon, H. Y., & Park, H. W. (2012). Social media use in public sector: A comparative study of the Korean & US Government Paper presented at the ATHS panel during the 8th International Conference on Webometrics, Informatics and Scientometrics & 13th COLLNET Meeting, 23–26 October 2012, Seoul.
- Kim, C., Lee, I.-S., Wang, T., & Mirusmonov, M. (2015). Evaluating effects of mobile CRM on employees' performance. *Industrial Management & Data Systems*, 115(4), 740–764.
- Kim, M. K., & Jeong, D. H. (2004). The effects of customer satisfaction and switching barriers on customer loyalty in Korean mobile telecommunication services. *Telecommunications Policy*, 28(2), 145–159.
- Kim, M., & Park, H. W. (2012). Measuring Twitter-based political participation and deliberation in the South Korean context by using social network and Triple Helix indicators. *Scientometrics.*, 90(1), 121–140.

- Kim, S., & Garrison, G. (2010). Understanding users' behaviors regarding supplychain technology: determinants impacting the adoption and implementation of RFID technology in South Korea. *International Journal of Information Management*, 30(5), 388–398.
- Kim, S. K., Park, M. J., & Rho, J. J. (2013). Effect of the government's use of social media on the reliability of the government: focus on Twitter. *Public Manage. Rev.* 1, 1. <http://dx.doi.org/10.1080/14719037.2013.822530>.
- Kim, S. S., & Malhotra, N. K. (2005a). A longitudinal model of continued IS use: An integrative view of four mechanisms underlying postadoption phenomena. *Management Science*, 51(5), 741–755.
- Kim, S. S., & Malhotra, N. K. (2005b). Predicting system usage from intention and past use: Scale issues in the predictors. *Decision Sciences*, 36(1), 187–196.
- Kimiloglu, H., & Zarali, H. (2009). What signifies success in e-CRM? *Marketing Intelligence {&} Planning*, 27(2), 246–267. doi:10.1108/02634500910945011
- Kincaid, J. W. (2003). *Customer relationship management: Getting it right!* New Jersey: Prentice-Hall.
- King, S. F., & Burgess, T. F. (2008). Understanding success and failure in customer relationship management. *Industrial Marketing Management*, 37(4), 421–431. doi:10.1016/j.indmarman.2007.02.005
- Kirtiş, A. K., & Karahan, F. (2011). To Be or Not to Be in Social Media Arena as the Most Cost-Efficient Marketing Strategy after the Global Recession. *Procedia - Social and Behavioral Sciences*, 24, 260–268. doi:10.1016/j.sbspro.2011.09.083
- Kline, R. (2005). *Principles and Practices of Structural Equation Modelling (2nd Ed.)*. New York: The Guilford Press.
- Kline, R. B. (2005). *Principles and Practice of Structural Equation Modelling*. New York: The Guilford Press.
- Kline, R. B. (2010). *Principles and practice of structural equation modeling (3rd ed.)*. New York: Guilford Press.
- Ko, E., Kim, S. H., Kim, M., & Woo, J. Y. (2008). Organizational characteristics and the CRM adoption process. *Journal of Business Research*, 61(1), 65–74. doi:10.1016/j.jbusres.2006.05.011
- Ko, E., Lee, S. J., & Woo, J. Y. (2004). Current CRM adoption in the Korean apparel industry. Seoul: Spring conference proceedings of Korean Society of Clothing {&} Textiles.

- Kotler, P. (2000). *Marketing management: Analysis, planning, implementation, and control*, (10th ed.). Upper Saddle River: Prentice Hall.
- Kuan, K., & Chau, P. (2001). A perception-based model for EDI adoption in small businesses using a technology-organization-environment framework. *Information & Management*, 38(8), 507–521.
- Kurnia, S., Karnali, R. J., & Rahim, M. M. (2015). A qualitative study of business-to-business electronic commerce adoption within the Indonesian grocery industry: A multi-theory perspective. *Information and Management*, 52(4), 518–536. doi:10.1016/j.im.2015.03.003
- Kutner, S., & Cripps, J. (1997). “Managing the Customer Portfolio of Healthcare Enterprises,” *The Healthcare Forum Journal*, 40(5), 52–54.
- Kwon, S.-W., & Arenius, P. (2010). Nations of entrepreneurs: A social capital perspective. *Journal of Business Venturing*, 25(3), 315–330. doi:10.1016/j.jbusvent.2008.10.008
- Lacoste, S. (2016). Perspectives on social media and its use by key account managers. *Industrial Marketing Management*, 54, 33–43. doi:10.1016/j.indmarman.2015.12.010
- Landry, T. D., Arnold, T. J., & Arndt, A. (2005). A Compendium of Sales-Related Literature in Customer Relationship Management: Processes and Technologies with Managerial Implications. *Journal of Personal Selling & Sales Management*, 25(3), 231–251.
- Lang, J., R. Calantone, & Gudmundson, D. (1997). “Small Firm Information Seeking as a Response to Environmental Threats and Opportunities,” *Journal of Small Business Management*, 35, 11–23.
- Laroche, M., Habibi, M. R., & Richard, M.-O. (2013). To be or not to be in social media: How brand loyalty is affected by social media? *International Journal of Information Management*, 33(1), 76–82. doi:10.1016/j.ijinfomgt.2012.07.003
- Lasrado, L. A., & Lugmayr, A. (2013). Crowdfunding in Finland. In *Proceedings of International Conference on Making Sense of Converging Media - AcademicMindTrek '13* (pp. 194–201). New York, New York, USA: ACM Press. doi:10.1145/2523429.2523490
- Law, A. K. Y., Ennew, C. T., & Mitussis, D. (2013). Adoption of Customer Relationship Management in the Service Sector and Its Impact on Performance. *Journal of Relationship Marketing*, 12(4), 301–330. doi:10.1080/15332667.2013.846204
- Leary, B. B. (2008). White Paper Social CRM : Customer Relationship Management in the Age of the Socially-Empowered Customer, (October).

- Lee, J. (2004). Discriminant analysis of technology adoption behavior: A case of Internet technologies in small businesses. *Journal of Computer Information Systems*, 44(4), 57–66.
- Lee, J. (2004). Discriminant analysis of technology adoption behavior: A case of Internet technologies in small businesses. *Journal of Computer Information Systems*, 44(4), 57–66.
- Lee, J.-S., Kim, S., & Pan, S. (2014). The role of relationship marketing investments in customer reciprocity. *International Journal of Contemporary Hospitality Management*, 26(8), 1200–1224.
- Lee-Kelley, L., Gilbert, D., & Mannicom, R. (2003). How e-CRM can enhance customer loyalty. *Marketing Intelligence {&} Planning*, 21(4), 239–248.
- Lehtimäki, T., Salo, J., Hiltula, H., & Lankinen, M. (2009). “*Harnessing web 2.0 for business to business marketing – literature review and an empirical perspective from Finland.*” University of Oulu.
- Leonard L. Berry. (1991). *Marketing Services: Competing Through Quality*. New York: The Free Press.
- Lertwongsatien, C Wongpinunwatana, N. (2003). E-commerce adoption in Thailand: An empirical study of small and medium enterprises (SMEs). *Journal of Global Information Technology Management*, 6(3), 67–83.
- Lertwongsatien, C., & Wongpinunwatana, N. (2003). E-commerce adoption in Thailand: An empirical study of small and medium enterprises (SMEs). *Journal of Global Information Technology Management*, 6(3), 67–83.
- Let’s Accelerate | Official Portal of MSC Malaysia. (2014). Retrieved from <http://www.msomalaysia.my/seedstartups>
- Lewyn, M. (1994). Database marketing: a potent new tool for selling. *Business Week*, 56–62.
- Li, S., Ragu-Nathan, B., Ragu-Nathan, T. S., & Rao, S. S. (2006). “The impact of supply chain management practices on competitive advantage and organizational performance.” *Omega: The International Journal of Management Science*, 34(2), 107–24.
- Li, Y., Zhao, Y., Tan, J., & Liu, Y. (2008). “Moderating Effects of Entrepreneurial Orientation on Market Orientation-Performance Linkage: Evidence from Chinese Small Firms.” *Journal of Small Business Management*, 46(1), 113–133.
- Li, Y., Zhao, Y., Tan, J., & Liu, Y. (2008). “Moderating Effects of Entrepreneurial Orientation on Market Orientation-Performance Linkage: Evidence from Chinese Small Firms.” *Journal of Small Business Management*, 46(1), 113–133.

- Liang, C., & Wang, W. (2005). Integrative research into the financial services industry in Taiwan: Relationship bonding tactics, relationship quality and behavioural loyalty. *Journal of Financial Services Marketing*, 10(1), 65–83.
- Lilai, X. (2010). Business incubation in China Effectiveness and perceived contributions to tenant enterprises. *Management Research Review*, 33(1), 90–99. doi:10.1108/01409171011011599
- Lin, A., & Chen, N.-C. (2012). “Cloud computing as an innovation: Perception, attitude, and adoption.” *International Journal of Information Management*, 32(6), 533–540.
- Lin, H.-F. (2014). Understanding the determinants of electronic supply chainmanagement system adoption: using the technology–organization–environment framework. *Technological Forecasting and Social Change*, 86, 80–92.
- Ling, R., & Yen, D. C. (2001). Customer relationship management: An analysis framework and implementation strategies. *Journal of Computer Information System*, 41(3), 82–97.
- Li-tze Hua & Peter M. Bentler. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55.
- Lukkarinen, A., Teich, J. E., Wallenius, H., & Wallenius, J. (2016). Success drivers of online equity crowdfunding campaigns. *Decision Support Systems*, 87, 26–38. doi:10.1016/j.dss.2016.04.006
- Luo, X., Zhang, J. (Jennifer), & Duan, W. (2013). Social Media and Firm Equity Value. *Information Systems Research*, 24(1), 146 – 163.
- Lynskey, M. J. (2004). Determinants of Innovative Activity in Japanese Technology-based Start-up Firms. *International Small Business Journal*, 22(2), 159–196. doi:10.1177/0266242604041312
- MacCallum, R. C., & Browne, M. W. (1993). The use of causal indicators in covariance structure models: Some practice issues. *Psychological Bulletin*, 114(3), 533–541.
- Maduku, D. K., Mpinganjira, M., & Duh, H. (2016). Understanding mobile marketing adoption intention by South African SMEs: A multi-perspective framework. *International Journal of Information Management*, 36(5), 711–723. doi:10.1016/j.ijinfomgt.2016.04.018
- Maguire, S., Koh, S. C. L., & Magrys, A. (2007). “The adoption of e-business and knowledge management in SMEs.” *Benchmarking: An International Journal*, 14(1), 37–58.
- Malaysia StartUp Cup. (2014). Retrieved from <http://malaysia.startupcup.com/>

- Malaysia Venture Capital - Investing In Tomorrow. (2014). Retrieved from <http://www.mavcap.com/>
- Malaysian Business Angels Network | Responsible for the development of business angels in Malaysia. (2014). Retrieved from <http://www.mban.com.my/>
- Malaysian Technology Development Corporation. (2014). Retrieved from <http://www.mtdc.com.my/business-start-up-fund.php>
- Malhotra. (1988). Self Concept and Product Choice: An Integrated Perspective. *Journal of Economic Psychology*, 9(1), 1–28.
- Malhotra, N. K. (2007). *Marketing research: An applied orientation*. 5th ed. Upper Saddle River, NJ: Pearson Prentice Hall.
- Malthouse, E. C., Haenlein, M., Skiera, B., Wege, E., & Zhang, M. (2013). Managing Customer Relationships in the Social Media Era: Introducing the Social CRM House. *Journal of Interactive Marketing*, 27(4), 270–280.
- Mangold, G. W., & Faulds, J. D. (2009). “Social media: the new hybrid element of the promotion mix”, *Business Horizons*, 52, 357.
- Marc Nager. (2014). Helping increase the number of fundable startups. *Start-up Malaysia*. Retrieved from <http://www.startupmalaysia.org/>
- Marcus, A., Malen, J., & Ellis, S. (2013). The Promise and Pitfalls of Venture Capital as an Asset Class for Clean Energy Investment: Research Questions for Organization and Natural Environment Scholars. *Organization & Environment*, 26(1), 31–60. doi:10.1177/1086026612474956
- Marsh, H. W., & Hovecar, D. (1985). The application of confirmatory factor analysis to the study of self-concept: first and higher order factor models and their invariance across group. *Psychological Bulletin*, 97(3), 562–582.
- Massolution. (2015). 2015CF: The Crowdfunding Industry Report, 2015 (accessed May 7, 2015, available at) <http://www.crowdsourcing.org/editorial/global-crowdfundingmarket-to-reach-344b-in-2015-predicts-massolutions-2015cf-industry-report/45376>.
- Matching Grant for Business Start-ups - SME International. (2014). Retrieved from <http://smeinternational.org/2008/05/matching-grant-for-business-start-ups/>
- Matsuno, K., & Mentzer, J. T. (2000). The effect of strategy type of the market orientation-performance relationship. *Journal of Marketing*, 64(4), 1–16.
- Mattsson, L.-G. (1997). Relationship marketing and the markets-as-networks approach: A comparative analysis of two evolving streams of research. *Journal of Marketing Management*, 13(5), 447–461.

- Maxwell, A. L., Jeffrey, S. A., & Lévesque, M. (2011). Business angel early stage decision making. *Journal of Business Venturing*, 26(2), 212–225. doi:10.1016/j.jbusvent.2009.09.002
- MCAAlert. (2015). My Community Alert. *Mcalert.net*. Retrieved from <http://www.mcalert.net/>
- McCall, G. J. (1970). *The social organization of relationships*. In G. J. McCall et al. (Eds.), *Social Relationships*. Chicago: I L Aldine Publishing Company.
- McDonald, R. P., & Ho, M.-H. R. (2002). Principles and practice in reporting structural equation analyses. *Psychological Methods*, 7, 64–82.
- McGee, J. E., & Sawyerr, O. (2003). Uncertainty and information search activities: a study of owner-managers of small high-technology manufacturing firms. *Journal of Small Business Management*, 41(4), 385–401.
- Mehrtens, J., Cragg, P. B., & Mills, A. M. (2001). A model of Internet adoption by SMEs. *Information {&} Management*, 39(3), 165–176.
- Metagroup. (2001). *Integration: Critical issues for implementing of CRM solutions*. Stamford: CT: META Group Inc.
- Miles, J. and Shevlin, M. (2007). “A time and a place for incremental fit indices,” *Personality and Individual Differences*, 42(5), 869–74.
- Milovi, B. (2012). Social Media and eCRM as a Prerequisite for Hotel Success. *Management Information Systems*, 7(3), 26–31.
- Minetti, R. (2011). Informed Finance and Technological Conservatism. *Review of Finance*, 15(3), 633–692. doi:10.1093/rof/rfq024
- Miranda, M. Q., Farias, J. S., de Araújo Schwartz, C., & de Almeida, J. P. L. (2016). Technology adoption in diffusion of innovations perspective: introduction of an ERP system in a non-profit organization. *RAI Revista de Administração E Inovação*, 13(1), 48–57. doi:10.1016/j.rai.2016.02.002
- Mitchell, R., & Hall, C. M. (2004). “The Post-visit Consumer Behaviour of New Zealand Winery Visitors”,. *Journal of Wine Research*, 15(1), 39–49.
- Mittiness, C., Sudek, R., & Cardon, M. S. (2012). Angel investor characteristics that determine whether perceived passion leads to higher evaluations of funding potential. *Journal of Business Venturing*, 27(5), 592–606. doi:10.1016/j.jbusvent.2011.11.003
- Mogelefsky, D. (2000). “Smooth Operator” Incentive, 174(5), 104–105.

- Mohan, S., Choi, E., & Min, D. (2008). Conceptual Modeling of Enterprise Application System Using Social Networking and Web 2.0 “Social CRM System”. *2008 International Conference on Convergence and Hybrid Information Technology*, 237–244. doi:10.1109/ICHIT.2008.263
- Mohr, J., Sengupta, S., & Slater, S. (2009). *Marketing of High-Technology Products and Innovations (3rd Edition)*. Upper Saddle River: Pearson Prentice Hall.
- Mole, K. F., Ghobadian, A., O’Regan, N., & Liu, J. (2004). The use and deployment of soft process technologies within UK manufacturing SMEs: An empirical assessment using logit models. *Journal of Small Business Management*, 42(3), 303–324.
- Mollick, E. (2014). The dynamics of crowdfunding: An exploratory study. *Journal of Business Venturing*, 29(1), 1–16. doi:10.1016/j.jbusvent.2013.06.005
- Moore, G. C., & Benbasat, I. (1991). Development of an instrument to measure the perceptions of adopting an information technology innovation. *Information Systems Research*, 2(3), 192–222.
- Morgan, R. M., & Hunt, S. D. (1994). “The commitment-trust theory of relationship marketing.” *Journal of Marketing*, 58(3), 20–38.
- Moroni, I., Arruda, A., & Araujo, K. (2015). The Design and Technological Innovation: How to Understand the Growth of Startups Companies in Competitive Business Environment. *Procedia Manufacturing*, 3(Ahfe), 2199–2204. doi:10.1016/j.promfg.2015.07.361
- Morrisette, S. G. (2009). A Profile of Angel Investors. *The Journal of Private Equity*, 10(3), 52–66.
- Mourad, M. (2010). “Students’ adoption of online education service: empirical evidence from the Higher Education (HE) market”,. *Online Information Review*, 34(4), 604–617.
- Moya K. Mason. (2014). What is the Average Number of New Businesses That Start Up Worldwide Each Day? *Worldwide Business Start-Ups*. Retrieved from <http://www.moyak.com/papers/business-startups-entrepreneurs.html>
- MSC MALAYSIA. (2014). Related information on startup & entrepreneurship ecosystem.
- Mulaik, S. A., James, L. R., Van Alstine, J., Bennet, N., Lind, S., & Stilwell, C. D. (1989). “Evaluation of Goodness-of-Fit Indices for Structural Equation Models,.” *Psychological Bulletin*, 105(3), 430–45.
- Muller-Veerse, F., Kohlenbach, B., Bout, D., Singh, S., Golub, G., Hayrynen, J., ... Autio, E. (2001). UMTS Report -An Investment Perspective. Durlacher Research Ltd, Eqvitec Partners Oy.

- MVCA | Malaysia Venture Capital & Private Equity Association. (2014).
- Nachtigall, C., Kroehne, U., Funke, F., & Steyer, R. (2003). (Why) Should We Use SEM? Pros and Cons of Structural Equation Modeling, in: *Methods of Psychological Research Online*, 8(2), 1–22.
- Nagy, B. G., Pollack, J. M., Rutherford, M. W., & Lohrke, F. T. (2012). The Influence of Entrepreneurs' Credentials and Impression Management Behaviors on Perceptions of New Venture Legitimacy. *Entrepreneurship Theory and Practice*, 36(5), 941–965. doi:10.1111/j.1540-6520.2012.00539.x
- Naresh K. Malhotra. (1996). *Marketing Research: An Applied Orientation (2nd ed.)*. Upper Saddle River, N.J: Prentice Hall.
- Narver, J. C., & Slater, S. F. (1990). The effect of a marketing orientation on business profitability. *Journal of Marketing*, 54(4), 20–35.
- Ndubisi, N. O., & Sinti, Q. (2006). Consumer attitudes, system's characteristics and internet banking adoption in Malaysia. *Management Research News*, 29(1-2), 16–27.
- Ngai, E. W. T., Tao, S. S. C., & Moon, K. K. L. (2015). Social media research: Theories, constructs, and conceptual frameworks. *International Journal of Information Management*, 35(1), 33–44. doi:10.1016/j.ijinfomgt.2014.09.004
- Nguyen, T. U. H. (2009). Information technology adoption in SMEs: an integrated framework. *International Journal of Entrepreneurial Behaviour and Research*, 15(2), 162–186.
- Nugroho, M. A. (2015). Impact of Government Support and Competitor Pressure on the Readiness of SMEs in Indonesia in Adopting the Information Technology. *Procedia Computer Science*, 72, 102–111. doi:10.1016/j.procs.2015.12.110
- Nunnally, J. (1978). *Psychometric theory*, New York: McGraw-Hill.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory (3rd ed.)*. New York, NY: McGraw-Hill, Inc.
- OGL. (2014). Start your own business. *UK Government*. Retrieved from <https://www.gov.uk/starting-up-a-business/set-up-your-business>
- Olbrich, R., & Holsing, C. (2012). Modeling Consumer Purchasing Behavior in Social Shopping Communities with Clickstream Data. *International Journal of Electronic Commerce*, 16(2), 15–40. doi:10.2753/JEC1086-4415160202
- Oliveira, T., & Martins, M. F. (2010). "Firms patterns of e-business adoption: evidence for the European Union-27." *The Electronic Journal Information Systems Evaluation*, 13(1), 47–56.

- Olson, J. R., & Boyer, K. K. (2003). Factors influencing the utilization of Internet purchasing in small organizations. *Journal of Operations Management*, 21(2), 225–245.
- Ozsomer, A., Roger, J., & Di, A. (1997). “What makes firms more innovative? A look at organizational and environmental factors,” *Journal of Business {&} Industrial Marketing*, 12(6), 400.
- Palmatier, P., Dant, R. P., Grewal, D., & Evans, K. R. (2006). Factors influencing the effectiveness of relationship marketing: A meta-analysis. *Journal of Marketing*, 70(4), 136–156.
- Park, M. J., Choi, H., Kim, S. K., & Rho, J. J. (2015). Trust in government’s social media service and citizen's patronage behavior. *Telematics and Informatics*, 32(4), 629–641. doi:10.1016/j.tele.2015.02.006
- Parvatiyar, A., & Sheth, J. N. (2001). Customer relationship management: Emerging practice, process, and discipline. *Journal of Economic & Social Research*, 3(2), 1–34.
- Parvatiyar, A., & Sheth, J. N. (1996). *Contemporary knowledge of relationship marketing, Research Conference Proceedings*. Atlanta: GA:Emory University.
- Parveen, F., & Noor Ismawati, J. (2015). Social media usage and organizational performance: Reflections of Malaysian social media managers. *Telematics and Informatics*, 32(1), 67–78.
- Paul D. Reynolds and Richard T. Curtin. (2009). *New Firm Creation in the U.S.: Initial Explorations with the PSED II Data Set*. New York: Springer.
- Paul D. Reynolds and Richard T. Curtin. (2010). *New Firm Creation: An International Overview*. New York: Springer.
- Paul F. Tremblaya, & Gardnerb, R. C. (1996). On the growth of structural equation modeling in psychological journals. *Structural Equation Modeling*, 3(2), 93–104.
- Paul G. Patterson, T. S. (2003). A cross-cultural study of switching barriers and propensity to stay with service providers. *Journal of Retailing*, 79(2), 107–120.
- Payne, A. (2006). *Handbook of CRM: Achieving excellence in Customer Management*. Oxford: Butterworth-Heinemann.
- Payne, A., & Frow, P. (2004). The role of multichannel integration in customer relationship management. *Industrial Marketing Management*, 33(6), 527–538. doi:10.1016/j.indmarman.2004.02.002

- Payne, A., & Frow, P. (2006). A Strategic Framework for Customer relationship management. *Journal of Marketing*, 69(4), 167–176.
- Peltier, J. W., & Schibrowsky, J. a. (2009). Understanding the Antecedents to the Adoption of CRM Technology by Small Retailers. *International Small Business Journal*, 27(3), 307–336. doi:10.1177/0266242609102276
- Peltier, J. W., Yushan, Z., & Schibrowsky, J. A. (2012). Technology adoption by small businesses: An exploratory study of the interrelationships of owner and environmental factors. *International Small Business Journal*, 30(4), 406–431.
- Peng, R., Xiong, L., & Yang, Z. (2012). “Exploring tourist adoption of tourism mobile payment: an empirical analysis”, *Journal of Theoretical and Applied Electronic Commerce Research*, 7(1), 21–33.
- Peters, L., Rice, M., & Sundararajan, M. (2004). The Role of Incubators in the Entrepreneurial Process. *The Journal of Technology Transfer*, 29(1), 83–91. doi:10.1023/B:JOTT.0000011182.82350.df
- Pfeffer, J., & Leblebici, H. (1977). Information technology and organizational structure. *Pacific Sociological Review*, 20(2), 241–261.
- Pierce, J. L., & Delbecq, A. L. (1977). Organizational structure, individual attitudes and innovation. *Academy of Management Review*, 2(1), 27–37.
- pitchIN | Crowd Funding in Malaysia. (2014). Retrieved from <http://www.pitchin.my/>
- Poba-Nzaou, P., Lemieux, N., Beaupré, D., & Uwizeyemungu, S. (2016). Critical challenges associated with the adoption of social media: A Delphi of a panel of Canadian human resources managers. *Journal of Business Research*, 69(10), 4011–4019. doi:10.1016/j.jbusres.2016.06.006
- Poon, S., & Swatman, P. M. C. (1999). An exploratory study of small business Internet commerce issues. *Information {&} Management*, 35(1), 9–18.
- Porter, M. E., & Millar, V. E. (1985). How information gives you competitive advantage. *Harvard Business Review*, 63(4), 149–160.
- Potocan, V., & Nedelko, Z. (2013). Innovativeness of IT Managers - Exploring Influences of Personal Values on IT Managers' Innovativeness. *Procedia Technology*, 9, 291–303. doi:10.1016/j.protcy.2013.12.033
- Premkumar, G Ramamurthy, K. (1995). The role of interorgani- zational and organizational factors on the decision mode for adoption of interorganizational systems. *Decision Sciences*, 26(3), 303–336.
- Premkumar, G., & Roberts, M. (1999). Adoption of new information technologies in rural small businesses. *OMEGA, the International Journal of Management Science*, 27(4), 467–484.

- Premkumar, G., Ramamurthy, K., & Nilakanta, S. (1994). Implementation of electronic data interchange: an innovation diffusion perspective. *Journal of Management Information Systems*, 11(2), 157–186.
- Rahayu, R., & Day, J. (2015). Determinant Factors of E-commerce Adoption by SMEs in Developing Country: Evidence from Indonesia. *Procedia - Social and Behavioral Sciences*, 195, 142–150. doi:10.1016/j.sbspro.2015.06.423
- Ramayah, T., Ling, N. S., Taghizadeh, S. K., & Rahman, S. A. (2016). Factors influencing SMEs website continuance intention in Malaysia. *Telematics and Informatics*, 33(1), 150–164.
- Ramdani, B., Chevers, D., & Williams, D. A. (2013). SMEs' adoption of enterprise applications A technology-organisation-environment model. *Journal of Small Business and Enterprise Development*, 20(4), 735–753.
- Ramdani, B., Kawalek, P., & Lorenzo, O. (2009). Predicting SMEs' adoption of enterprise systems. *Journal of Enterprise Information Management*, 22(1/2), 10–24. doi:10.1108/17410390910922796
- Rangone, A. (1999). A resource-based approach to strategy analysis in small-medium sized enterprises. *Small Business Economics*, 12(3), 233–248.
- Ranjan, J., & Bhatnagar, V. (2011). Role of knowledge management and analytical CRM in business: data mining based framework. *The Learning Organization*, 18(2), 131–148. doi:10.1108/096964711111103731
- Rapp, A., Trainor, K. J., Trainor, K. J., & Agnihotri, R. (2010). Performance implications of customer-linking capabilities: Examining the complementary role of customer orientation and CRM technology. *Journal of Business Research*, 63(11), 1229–1236. doi:10.1016/j.jbusres.2009.11.002
- Rappaport, S. D. (n.d.). Listening Solutions. *Journal of Advertising Research*, 50(2), 197–213.
- Ratinho, T., Harms, R., & Groen, A. (2013). Business Incubators: (How) Do They Help Their Tenants? In *New Technology-Based Firms in the New Millennium*. Emerald Group Publishing Limited. doi:10.1108/S1876-0228(2013)0000010011
- Raubenheimer, J. E. (2004). An item selection procedure to maximize scale reliability and validity. *South African Journal of Industrial Psychology*, 30(4), 59–64.
- Raykov T. and Marcoulides G. (2000). On Desirability of Parsimony in Structural Equation Model Selection. *Structural Equation Modelling*, 6(3), 292–300.
- Raykov, T., & Marcoulides, G. (2000). *A First Course in Structural Equation Modelling*. London: Lawrence Erlbaum Associates.

- Reid, A., & Catterall, M. (2015). *Hidden data quality problems in CRM implementation marketing, technology and customer commitment in the new economy*.
- Reinhold, O., & Alt, R. (2011). Analytical Social CRM: Concept and Tool Support. In Proceedings of the 24th Bled eConference eFuture: Creating Solutions for the Individual, Organisations and Society, Bled.
- Reuters. (2012). U.S. business startups rate at record low. Retrieved from <http://www.reuters.com/article/2012/05/02/us-usa-economy-businesses-idUSBRE84113G20120502>{#}
- Reynolds, P. D. (2007). *Entrepreneurship in the US: The Future is Now*. New York: Springer.
- Reynolds, P. D. (2012). Entrepreneurship in Developing/ Economies: The Bottom Billions and Business Creation. *Foundations and Trends in Entrepreneurship*, 8(3), 141–277.
- Riemenschneider, C. K., Harrison, D. A., & M. P. P. J. (2003). Understanding IT adoption decisions in small business: Integrating current theories. *Information {&} Management*, 40(4), 269–285.
- Riemenschneider, C. K., & McKinney, V. R. (2001). Assessing belief differences in small business adopters and non-adopters of web-based ecommerce. *Journal of Computer Information Systems*, 42(2), 101–107.
- Robehmed, N. (2013). What Is A Startup? *Forbes*. Retrieved from <http://www.forbes.com/sites/natalierobehmed/2013/12/16/what-is-a-startup/>
- Rodriguez, M., & Trainor, K. (2016). A conceptual model of the drivers and outcomes of mobile CRM application adoption. <http://dx.doi.org/10.1108/JRIM-12-2014-0075>.
- Rogers, E. M. (1983). *Diffusion of innovation (3rd ed.)*. New York: The Free Press.
- Rogers, E. M. (1995). *Diffusion of innovation (4th ed.)*. New York: the Free Press.
- Rogers, E. M. (2003a). *Diffusion of innovation*. New York: The Free Press.
- Rogers, E. M. (2003b). *Diffusion of innovation (5th ed.)*. New York: the Free Press.
- Rogoff, E. G., Lee, M. S., & Suh, D. C. (2004). Who done it? Attributions by entrepreneurs and experts of the factors that cause and impede small business success. *Journal of Small Business Management*, 42(4), 364–376.
- Romano, N. C. J., & Fjermestad, J. (2001). Electronic commerce customer relationship management: An assessment of research. *International Journal of Electronic Commerce*, 6(2), 6(2), 61–113.

- Rossi, M. (2014). The New Ways to Raise Capital: An Exploratory Study of Crowdfunding. *International Journal of Financial Research*, 5(2), p8. doi:10.5430/ijfr.v5n2p8
- Rossomme, J. (2003). "Customer satisfaction measurement in a business-to-business context: a conceptual framework." *Journal of Business {&} Industrial Marketing*, 18(2), 179–195.
- Sales Intelligence and Marketing Compliance | Gryphon Networks. (2015). Retrieved from <http://www.gryphonnetworks.com/>
- Salkind, N. J. (2000). *Exploring Research*. Saddle River, NJ: Prentice Hall.
- San-Martín, S., Jiménez, N. H., & López-Catalán, B. (2016). The firms benefits of mobile CRM from the relationship marketing approach and the TOE model. *Spanish Journal of Marketing - ESIC*, 20(1), 18–29. doi:10.1016/j.reimke.2015.07.001
- San-Martína, S., N.H.Jiméneza, & B.López-Catalánb. (2016). The firms benefits of mobile CRM from the relationship marketing approach and the TOE model. *Spanish Journal of Marketing - ESIC*, 20(1), 18–29.
- Sarner, A., Thompson, E., Sussin, J., Drakos, N., Maoz, M., Davies, J., & Mann, J. (2012). Magic Quadrant for Social CRM, (September), 1–20.
- Saunders, M., Lewis, P., & Thornhill, A. (n.d.). *for business students fi fth edition*.
- Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research methods for business students (4th ed.)*. Essex, England: Pearson Education.
- Scharl, A., Dickinger, A., & Murphy, J. (2005). "Diffusion and success factors of mobile marketing." *Electronic Commerce Research and Applications*, 4(2), 159–173.
- Schepers, J., & Wetzels.M. (2007). A meta-analysis of the technology acceptance model: Investigating subjective norm and moderation effects. *Information {&} Management*, 44(1), 90–103.
- Schermelleh, K., Moosbrugger, H., & Müller, H. (2003). Evaluating the Fit of Structural Equation Models. MPR-online. *MPR-Online*, 8(2), 23–74.
- Schultz, M., & Pick. (2012). From CM to CRM to CN2 : A research agenda for the marketing communications transition,. In *Advances in Advertising Research (Vol. III)* (pp. 421–432).
- Schumacker R. and Lomax R. (2004). *A Beginners Guide to Structural Equation Modelling*. Lawrence Erlbaum: New York.
- Schumacker, R. E., & Lomax, R. G. (2010). (2010). *A beginner's guide to structural equation modeling (3rd ed.)*. New York: Routledge.

- Segars, A. H., and Grover, V. (1993). "Re-examining Perceived Ease of Use and Usefulness: A Confirmatory Factor Analysis," *MIS Quarterly* (17:4), 517–525.
- Sekaran, U. (2003). *Research Methods for Business: A Skill-Building Approach*. 4th ed. U. S. A.: John Wiley and Sons, Inc.
- Sengupta, S., & Krapfel, R. E. (1997). "Switching Costs in Key Account Relationships," *Journal of Personal Selling and Sales Management*, 17(4), 9–16.
- Senk, C. (2013). "Adoption of security as a service",. *Journal of Internet Services and Applications*, 4(11), 1–16.
- Seyal, A. H., Awais, M. M., Shamail, S., & Abbas, A. (2004). Determinants of electronic commerce in Pakistan: Preliminary evidence from small and medium enterprises. *Electronic Markets*, 14(4), 372–387.
- Sharma, S., Mukherjee, S., Kumar, A., & Dillon, W. R. (2005). "A simulation study to investigate the use of cutoff values for assessing model fit in covariance structure models,." *Journal of Business Research*, 58(1), 935–43.
- Shimp, B. (2009). Social CRM. Say What?. [online] Available at: <http://allbizanswers.com/social-crm-say-what/>.
- Sila, I. (2013). Factors affecting the adoption of B2B e-commerce technologies. *Electronic Commerce Research*,. *Electronic Commerce Research*, 13(2), 199–236.
- Sin, K. Y., Osman, A., Salahuddin, S. N., Abdullah, S., Lim, Y. J., & Sim, C. L. (2016). Relative Advantage and Competitive Pressure towards Implementation of E-commerce: Overview of Small and Medium Enterprises (SMEs). *Procedia Economics and Finance*, 35, 434–443. doi:10.1016/S2212-5671(16)00054-X
- Sin, L., Tse, A., & Yim, F. (2005). "CRM: conceptualization and scale development." *European Journal of Marketing*, 39(11/12), 1264–90.
- Sinclair, J. K., & Vogus, C. E. (2011). Adoption of social networking sites: an exploratory adaptive structuration perspective for global organizations. *Information Technology and Management*, 12(4), 293–314. doi:10.1007/s10799-011-0086-5
- Sinisalo, J., Salo, J., Karjaluoto, H., & Leppäniemi, M. (2006). Managing Customer Relationships through Mobile Medium – Underlying Issues and Opportunities, 00(C), 1–10.

- Sivaraks, P., Krairit, D., & Tang, J. C. S. (2011). Effects of e-CRM on customer–bank relationship quality and outcomes: The case of Thailand. *The Journal of High Technology Management Research*, 22(2), 141–157. doi:10.1016/j.hitech.2011.09.006
- Small Business Trends. (2011). “Small Business Survey by Deluxe reveals snapshot of the social media savvy Entrepreneurs”. Retrieved from <http://smallbiztrends.com/2011/06/social-media-savvyentrepreneurs.html>.
- Sophonthummapharn, K. (2009). The adoption of techno-relationship innovations: A framework for electronic customer relationship management. *Marketing Intelligence {&} Planning*, 27(3), 380–412. doi:10.1108/02634500910955254
- Sørheim, R. (2005). Business angels as facilitators for further finance: an exploratory study. *Journal of Small Business and Enterprise Development*, 12(2), 178–191. doi:10.1108/14626000510594593
- Startup Weekend Malaysia MEGA. (2014). Retrieved from <http://malaysiamega.startupweekend.org/>
- Stelzner, M. A. (2011). social media marketing industry report: how marketers are using social media to grow their businesses. Available from: <http://www.socialmediaexaminer.com/SocialMediaMarketingReport2011.pdf>. Accessed 12 June 2014.
- Stephanie, A. M., & Robinson, J. (2009). Do business angels benefit their investee companies? *International Journal of Entrepreneurial Behaviour {&} Research*, 15(2), 187–208. doi:10.1108/13552550910944575
- Sterne, J. (2010). Text Analytics for Social Media - Evolving Tools for an Evolving Environment (pp. 1-17). North Carolina: SAS Institute Inc.
- Sudman, S. (1983). Applied sampling. In & A. B. P. H. Rossi., J. D. Wright. & Anderson (Eds.), *Handbook of survey research* (pp. 145–194). Orlando: Academic Press. Retrieved from <http://www.amazon.com/Applied-Sampling-Quantitative-studies-relations/dp/012675750X>
- Suruhanjaya Syarikat Malaysia (SSM). (2015). Retrieved from <http://www.ssm.com.my/>
- Swift, R. S. (2000). *Accelerating Customer Relationships— Using CRM and Relationship Technologies*. Upper Saddle River, NJ: Prentice Hall.
- Syed Shah Alam, A., Yunus, B., Mohd Fauzi, M., Alam, S. S., Ali, M. Y., & Jani, M. F. (2011). An empirical study of factors affecting electronic commerce adoption among SMEs in Malaysia. *Journal of Business Economics and Management*, 12(2), 375–399.

- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics (5th ed.)*. Boston : Pearson/Allyn & Bacon.
- Tan, K. S., Chong, S. C., Lin, B., & Eze, U. C. (2009). Internet-based ICT adoption: Evidence from Malaysian SMEs. *Industrial Management and Data Systems*, 109(2), 224–244.
- Tantow, M. (2014). Building Sustainable, High-Growth Startup Companies. *Startup America Partnership*. Retrieved from <http://www.s.co/blog/building-sustainable-high-growth-startup-companies>
- Tate, M., Evermann, J., & Gable, G. (2015). An integrated framework for theories of individual attitudes toward technology. *Information & Management*, 52(6), 710–727.
- Taylor, S. A., & Hunter, G. L. (2002). The impact of loyalty with e-CRM software and e-services. *International Journal of Service Industry Management*, 13(5), 452–474.
- Teh, A. (2014). How Startup Entrepreneur Fail in Malaysia. *NextUp.Asia*. Retrieved from <http://www.nextupasia.com/how-startup-entrepreneur-fail-in-malaysia/>
- Teo, T. S. H. and W. R. K. (1996). , “Key Dimensions of Facilitators and Inhibitors for the Strategic Use of Information Technology,.” *Journal of Management Information Systems*, 12, 35–53.
- Teo, T. S. H., Lin, S., & Lai, K. (2009). Adopters and non-adopters of e-procurement in Singapore: An empirical study. *Omega*, 37(5), 972–987. doi:10.1016/j.omega.2008.11.001
- Thakur, R., Angriawan, A., & Summey, J. H. (2016). Technological opinion leadership: The role of personal innovativeness, gadget love, and technological innovativeness. *Journal of Business Research*, 69(8), 2764–2773. doi:10.1016/j.jbusres.2015.11.012
- The World bank. (2013). New businesses registered (number). Retrieved from <http://data.worldbank.org/indicator/IC.BUS.NREG>
- Thomas, A. B., Judy, K. F., & Mahajan, V. (2003). Consumer switching costs: A typology, antecedents, and consequences. *Journal of the Academy of Marketing Science*, 31(2), 109–126.
- Thompson, E. (2005). Gartner’s top 54 CRM case studies, sorted by industry.
- Thompson, V. A. (2000). *Bureaucracy and Innovation*. Huntsville: University of Alabama Press.
- Thong, J. Y. L., & Yap, C. S. (1995). CEO characteristics, organizational characteristics and information technology adoption in small businesses. *Omega, International of Journal Management Sciences*, 23(4), 429–442.

- Thong, J. Y. L. (1999). An integrated model of information systems adoption in small businesses. *Journal of Management Information Systems*, 15(4), 187–214.
- Tornatzky, L.G., and Klein, K. . (1982). Innovation characteristics and innovation adoption implementation: ameta-analysis of findin. *IEEE Transactions on Engineering Management*, 29(1), 28–45.
- Tornatzky, L. G., & Fleischer, M. (1990). *The process of technological innovation*. Lexington: Lexington Books.
- Tozzi, J. (2013). To Fund a Startup, Go to Malaysia. *Businessweek*. Retrieved from <http://www.businessweek.com/articles/2013-02-21/to-fund-a-startup-go-to-malaysia>
- Trainor, K. J., Andzulis, J. (Mick), Rapp, A., & Agnihotri, R. (2014). Social media technology usage and customer relationship performance: A capabilities-based examination of social CRM. *Journal of Business Research*, 67(6), 1201–1208. doi:10.1016/j.jbusres.2013.05.002
- Trainor, K., Rapp, A., Skinner, L., & Schillewaert, N. (2011). Integrating information technology and marketing: An examination of the drivers and outcomes of e-marketing capability. *Industrial Marketing Management*, 40(1), 162–174.
- Trochim, W. M. (2006). *Deduction & induction: Deductive and inductive thinking*.
- Tsai, F.-S., Hsieh, L. H. Y., Fang, S.-C., & Lin, J. L. (2009). The co-evolution of business incubation and national innovation systems in Taiwan. *Technological Forecasting and Social Change*, 76(5), 629–643. doi:10.1016/j.techfore.2008.08.009
- Turner, R. H. (1970). *Family interaction*. New York: NY John Wiley.
- Ueki, Y. (2016). Customer pressure, customer–manufacturer–supplier relationships, and quality control performance. *Journal of Business Research*, 69(6), 2233–2238. doi:10.1016/j.jbusres.2015.12.035
- Ullman, J. (1996). *Structural Equation Modelling In Tabachnick B. And Fidell L. Using Multivariate Statistics (3rd Edition)*. Harper Collins Publishers Inc.: California.
- Unerasia. (2014). 20 Malaysian Global Tech Start-Ups You Should Know Today! SAYS. Retrieved from <http://says.com/my/tech/made-by-malaysian-do-you-know-that-the-3rd-company-being-acquired-by-facebook-was-a-malaysian-company>
- Urbaniak, G. C., & Plous, S. (2013). Research Randomizer (Version 4.0). Retrieved from <http://www.randomizer.org/>

- Valsecchi, M., Renga, F. M., & Rangone, A. (2007). "Mobile customer relationship management: an exploratory analysis of Italian applications." *Business Process Management Journal*, 13(6), 755–70.
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186–204.
- Venkatesh, V., Morris, M. G., & Ackerman P.L. (2000). A longitudinal field investigation of gender differences in individual technology adoption decisionmaking processes. *Organizational Behavior and Human Decision Processes*, 83(1), 33–60.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478.
- Verhoef, P. C., & Lemon, K. N. (2013). Successful customer value management: Key lessons and emerging trends. *European Management Journal*, 31(1), 1–15. doi:10.1016/j.emj.2012.08.001.
- Verma, D., & Verma, D. S. (2013). "Managing customer relationships through mobile CRM in organized retail outlets",. *International Journal of Engineering Trends and Technology*, 4(5), 1696–1701.
- Voges, K., & Pulakanam, V. (2011). Enabling factors influencing Internet adoption by New Zealand small and medium size retail enterprises. *International Review of Business Research Papers*, 7(1), 106e117.
- Voisey, P., Gornal, L., Jones, P., & Brychan, T. (2006). The measurement of success in a business incubation project. *Journal of Small Business and Enterprise Development*, 13(3), 454–468. doi:10.1108/14626000610680307
- Wade, M. and Hulland, J. (2004). The resource-based view and information systems research: review, extension, and suggestions for future research. *MIS Quarterly*, 28(1), 107–142.
- Wagner, D., & Wagner, H.-T. (2013). Online Communities and Dynamic Capabilities: A Cross-Case Examination of Sensing, Seizing, and Reconfiguration Research-in-Progress. *In Proceedings of Proceedings of the 19th Americas Conference on Information Systems Chicago, Illinois, USA*, (1), 1–8.
- Walczuch, R., Braven, G. V, & Lundgren, H. (2000). Internet adoption barriers for small firms in the Netherlands. *European Management Journal*, 18(5), 561–572.
- Waltham. (2008). What Every Researcher Should Know About Statistical Significance. *DataStar*. Retrieved from <http://www.surveystar.com/startips/oct2008.pdf>

- Wang, W., Liang, C., & Wu, Y. (2006). Relationship bonding tactics, relationship quality and customer behavioural loyalty-behavioural sequence in Taiwan's information service industry. *Journal of Service Research*, 6(1), 31–57.
- Wang, E. S.-T. (2014). Perceived control and gender difference on the relationship between trialability and intent to play new online games. *Computers in Human Behavior*, 30, 315–320. doi:10.1016/j.chb.2013.09.016
- Wang, W. T., & Lai, Y. J. (2014). Examining the adoption of KMS in organizations from an integrated perspective of technology, individual, and organization. *Computers in Human Behavior*, 38, 55–67.
- Wang, Y.-S., Li, H.-T., Li, C.-R., & Zhang, D.-Z. (2016). Factors affecting hotels' adoption of mobile reservation systems: A technology-organization-environment framework. *Tourism Management*, 53, 163–172. doi:10.1016/j.tourman.2015.09.021
- Wen, K.-W., & Chen, Y. (2010). E-business value creation in Small and Medium Enterprises: a US study using the TOE framework. *International Journal of Electronic Business*, 8(1), 80–100.
- Wheaton, B., Muthen, B., Alwin, D. F., & Summer, G. F. (1977). Assessing reliability and stability in panel models. In D. R. Heise (Ed.). In *Sociological Methodology* (pp. 84–136). San Francisco: Jossey-Bass.
- Wile, R. (2013). We Were Pretty Surprised To See Where America Finished On The Ranking Of Countries Where It's Easiest To Start A Business.
- Winer, R. S. (2001). A Framework for Customer Relationship Management. *California Management Review*, 43(4), 89–105. doi:10.2307/41166102
- Wonglimpiyarat, J. (2010a). Commercialization strategies of technology: lessons from Silicon Valley. *The Journal of Technology Transfer*, 35(2), 225–236. doi:10.1007/s10961-009-9117-3
- Wonglimpiyarat, J. (2010b). Incubator policy to support entrepreneurial development, technology transfer and commercialization. *World Journal of Entrepreneurship, Management and Sustainable Development*, 10(4), 334 – 351.
- Wonglimpiyarat, J. (2014). Technology Transfer and Entrepreneurial Development through University Business Incubation Process in Thailand. *World Technopolis Review*, 3(2), 78–88. doi:10.7165/wtr2014.3.2.78
- Wonglimpiyarat, J. (2016). The innovation incubator, university business incubator and technology transfer strategy: The case of Thailand. *Technology in Society*, 46, 18–27. doi:10.1016/j.techsoc.2016.04.002
- Wu, B., & Wang, B. (2009). Group CRM: a New Telecom CRM Framework from Social Network Perspective, 3–10.

- Wu, J., Lin, I., & Yang, M. (2009). The impact of a customer profile and customer participation on customer relationship management performance. *International Journal of Electronic Business Management*, 7(1), 57–69.
- Wu, K. L., & Wu, K. W. (2005). A hybrid technology acceptance approach for exploring e-CRM adoption in organizations. *Behaviour & Information Technology*, 24(4), 303–316.
- Wymer, S. A., & Regan, E. A. (2005). Factors influencing e-commerce adoption and use by small and medium businesses. *Electronic Markets*, 15(4), 438–453.
- Xu, M., & Walton, J. (2005). Gaining customer knowledge through analytical CRM. *Industrial Management & Data Systems*, 105(7), 955–971. doi:10.1108/02635570510616139
- Xu, Y., Yen, D., Lin, B., & Chou, D. (2002). Adopting customer relationship management technology. *Industrial Management & Data Systems*, 102(8), 442–452.
- Yaokuang, L., Ling, L., Juan, W., & Peng, L. (2014). Who is more likely to become business angels? Evidence of business angels and potential business angels from China. *Journal of Entrepreneurship in Emerging Economies*, 6(1), 4–20. doi:10.1108/JEEE-06-2013-0017
- Yap, C. S., Thong, J. Y. L., & Raman, K. S. (1994). Effect of government incentives on computerization in small business. *European Journal of Information Systems*, 3(3), 191–206.
- Yashisa, T. (2010). Business angels in Japan. In *Venture Capital: An International Journal of Entrepreneurial Finance* (pp. 259–273). doi:10.1080/136910699295893
- Ye, N., Yang, S. S., & Aranda, B. M. (2013). The analysis of service provider-user coordination for resource allocation in cloud computing. *Information-Knowledge-Systems Management*, 12(1), 1–24. doi:10.3233/IKS-2002-00214
- Yin, R. K. (2003). (2003). *Case study research: Design and method (3rd ed.)*. London: Sage.
- Yu, X., Nguyen, B., Han, S. H., Chen, C.-H. S., & Li, F. (2015). Erratum to: Electronic CRM and perceptions of unfairness. *Information Technology and Management*, 16(4), 363.
- Zhang, B., Wang, Z., & Lai, K. (2015). Mediating effect of managers' environmental concern: Bridge between external pressures and firms' practices of energy conservation in China. *Journal of Environmental Psychology*, 43, 203–215. doi:10.1016/j.jenvp.2015.07.002

- Zhao, L., Lu, Y., & Gupta, S. (2012). Disclosure Intention of Location-Related Information in Location-Based Social Network Services. *International Journal of Electronic Commerce*, 16(4), 53–90.
- Zheng, V. (2011). The value proposition of adopting mCRM strategy in UK SMEs. *Journal of Systems and Information Technology*, 13(2), 223–245. doi:10.1108/13287261111136025
- Zheng, V., Longbottom, D., & Brindley, C. (2009). “The value proposition of adopting mCRM strategy in UK SME service firms.” In *Proceedings of the 32rd Annual ISBE Conference*. Liverpool, 3-6 November.
- Zhu, Q., Sarkis, J., & Lai, K. (2013). Institutional-based antecedents and performance outcomes of internal and external green supply chain management practices. *Journal of Purchasing and Supply Management*, 19(2), 106–117. doi:10.1016/j.pursup.2012.12.001
- Zikmund, W. G. (2003). *Business Research Method*, 8th ed., Cincinnati, Ohio: Thomson/South-Western.