



Master's Degree in Management

Final Thesis

# **SOCIAL MEDIA AUTOMATION EFFECTS ON BRAND REPUTATION**

“A study of social media automation effects on brand reputation in the digital age”

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## SUMMARY

The research aims to find out how Social Media Automation effects Brand Reputation. It is accepted in both academia and industry that Social Media has had disruptive implications on marketing. This research hypothesis postulates; that the use of social media bots expands brand engagement & reach, thus generating brand reputation benefits resulting in a recursive customer relationship.

Social Media Marketing has a close alignment between theory and practice. So is well suited to the employment of empirical analysis and structuring of research findings to build the framework to test this hypothesis. In the Theoretical Framework 'Brand Reputation' is set out based on a review of present prevailing attitudes. This thesis examines the underlying concepts of social media communication channels. It looks at the behaviours of receptors when they are exposed to brands via social media, examining their engagement journey and identifies the key performance indicators of online marketing funnels. It also looks at the reasons businesses use socialbots, what the possible purposes are and at automated marketing applications. These findings form the a priori concepts that are imposed upon the data collected in a review of the sample business, for the Socialbot usage and of the Market Place in terms of the Brand Reputation. The resulting marriage of the data and concepts thus constitutes the world of experience that is, in this matter, the effect of social media automation on Brand Reputation. Interestingly it is the realisation that the recursive nature of these phenomena and their inherent effects each upon the other have a compounding implication.

The case company is an architectural and visualisation practice operating in Australia. It was selected because it is operating at the forefront of a mature market that is, like many others, facing a new wave of digital disruption. This provides an emerging context where active automated social media marketing implementation has direct and measurable results. The case study provides an active context in which to apply these literary theories and test the outcomes through their direct adoption. The empirical findings are generated through rigorous qualitative and quantitative analysis of the collected data for both case study company (primary data related to agreed KPIs) and market research (secondary data related to Brand Awareness) and online customer journey survey.

Conclusions are drawn from the empirical analysis; theoretical contributions are outlined, followed by the presentation of the extended model- "Relation Loop of Automated Social Media Marketing, KPIs and Customer Journey". Finally, the research presents a set of recommendations for further research.



## CONTENTS

SUMMARY	2
Acknowledgements	5
1. Introduction	6
1.1 Pertinence of the Topic	6
1.2 Purpose of the Study & Research Question	7
1.2.1 Empirical Data:	7
2. Theoretical Framework	8
2.1 Brand Reputation	8
2.1.1 Interconnectedness between Brand Engagement & Brand Reputation within online platforms	9
2.2 Social Media	12
2.2.1 Social Media Management Systems	18
2.2.2 The Role of Social Media in Brand Engagement Process	21
2.3 Online Customer Experience	23
2.3.1 Digital Consumer Behaviour	26
2.3.2 ‘Moments of Truth’ in the Online Environment	30
2.3.3 Evaluation of “Mapping KPIs to the Marketing Funnel and Customer Journey”	31
2.4. Social Media Automation & SOCIALBOTS	32
2.4.1 The Use of Social Media BOTs in Business	35
3. Case Study	38
3.1 Research Aim & Objectives of Study	38
3.2 Research Strategy & Research Design	39
3.3 Data Collection & Analysis	41
3.3.1 Qualitative Research	41
3.3.1.1. “Follow” Arrangments of the Socialbot	41
3.3.1.2. “Unfollow” Arrangments of the Socialbot	43
3.3.1.3. “Like” Arrangments of the Socialbot	44
3.3.1.3. “Like Comments” Arrangments of the Socialbot	45
3.3.2. Quantitative Research: Stage of Exploration	45
3.3.2.1. Data outcome of organic Instagram activities	46
3.3.2.2. Data outcome on “Follow”/ “Unfollow” Activities of the Socialbot	46
3.3.2.3. Data outcome on “Like”/ “Like Comments” Activities of the Socialbot	47
3.3.2.2. Data outcome of Overall Activities of the Socialbot	48
4. Comparative Analysis of Research Findings	48
5. Evaluation of Research Findings	54
5.1. Evaluation on Brand Engagement & Reach	54
5.2. Evaluation of Automated Online Marketing, Mapping KPIs to the Brand Reputation and Customer Journey	55



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5.2.1 Brand Reputation Element: Awareness	56
5.2.2 Brand Reputation Element: Consideration	56
5.2.3 Brand Reputation Element: Preference	57
5.2.4 Brand Reputation Element: Purchase	57
5.2.5 Brand Reputation Element: Loyalty	58
5.2.6 Brand Reputation Element: Advocacy	58
5.2.7 “Instagram Poll” Survey	59
5.3. Implications- Theoretical Contribution: Relation Loop of Automated Social Media Marketing, KPIs and Customer Journey	60
6. Conclusion & Overall Evaluation	61
7. Suggestion for Further Research	67
8. List of abbreviations, figures, tables	68
9. Bibliography	69



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# 1. Introduction

Social media automation is increasingly recognised as an effective and efficient means of growing a brand's reputation. Generations of users, since the turn of the millennium, have adapted to the commercialisation of the internet through the creation of online markets. An implicit relationship has formed between the brands and their customers propagated through social media. Digital platforms employed and engaged prolifically have disrupted traditional twentieth century marketing processes.

It remains constantly true in both academia and professional practice that recognition of the relationship between brand engagement and reach are important catalysts for generating brand reputation. The payback generating a cyclical relationship akin to a recursive program or routine of which a part requires the application of the whole, so that its explicit interpretation requires in general many successive executions.

A recent evolution of social media is the development and proliferation of Socialbots. These artificial intelligence (AI) persona's are agents generated to communicate ostensibly autonomously on social media. Tasked often as influencers Socialbots (also social bot or socbot) are activated to engage online with people.

The hypothesis "that the use of social media bots expands brand engagement & reach, thus generating brand reputation benefits resulting in a recursive customer relationship" has been tested through the case study of a small architectural and visualisation practice. There have been interesting findings that align with the theoretical research focused on this specific topic.

## 1.1 Pertinence of the Topic

Social media marketing now has the power to influence the brand position of every company in every industry sector. A company's overall quality of communication is enhanced through broader competition generated over social media. When it comes to online marketing automation is a powerful tool that allows you to get more done in less time. Automation of social media marketing allows companies to focus on their core delivery and up-cycle this as content to connect with their community. Investigating how this can be implemented so a company benefits commercially and culturally is of interest.

Social Media Marketing provides exciting opportunities to position a company brand by impacting on the positive creation of brand reputation and as a result receptor's decision-making process. Recently, marketing bots have become a popular form of automation across

most industry sectors. A social media bot is an autonomous program in this case on the internet, that a company can direct to carry out a certain set of actions following predefined rules. In this online context a company's brand identification and reputation is enhanced with their community because they are immediately present and actively engaged. This automated journey maintains their following and directly and indirectly provides the company feedback because their users can get what they want when they want it.

## 1.2 Purpose of the Study & Research Question

Social media marketing now has the power to influence the brand position of every company in every industry sector. It is postulated that a company's overall quality of communication is enhanced through broader competition generated over social media. When it comes to online marketing, automation is considered a powerful tool that allows you to get more done in less time.

The method of the study is to test current theories on Social Media Marketing Automation through the case study of an established company in a developed market that is keen to adapt in a disrupted environment. Australia is a globally recognized early adopter of technology and is measured as one of the leading economies adapting to changing paradigms across all sectors. The Architecture Engineering and Construction (AEC) Industry is a major contributor to the Australian economy; measured by average wealth per person Forbes puts Australia's per capita wealth as the second highest in the world after Switzerland.

Thus, the following question has been derived:

- Does the use of socialbot expands brand engagement, brand awareness, and reach on social media?
- Does the number of followers on Instagram can lead to a positive brand reputation?
- How does social media automation affect brand reputation?

### 1.2.1 Empirical Data:

The empirical findings are generated through rigorous qualitative and quantitative analysis of the collected data for both case study company (primary data related to agreed KPIs) and market research (secondary data related to Brand Awareness) and online customer journey survey.

## 2. Theoretical Framework

Having outlined the summary and distribution of the thesis, the theoretical basis that guides the research at hand is aimed. It is the result of a literature review in the fields of brand reputation, Interconnectedness between Brand Engagement & Brand Reputation within online platforms, social media as well as the online customer journey.

Furthermore, social media automation and the use of social media bots in business are outlined. The theoretical framework forms the foundation for the subsequent implementation of empirical research.

### 2.1 Brand Reputation

Brand reputation is now more significant than ever. Previously it was more often identified with crisis management and public relations, so administrators focused on their reputation only when it was essential. Brand reputation is now core and is deliberately considered with a long-term mindset (Aaker D. A., 2014). Credibility is synonymous with a brand's positive reputation as a base to originate a profitable and prosperous brand. It is consistently observed that there is a high likelihood for organizations having fulfilled clients in circumstances where they have acquired a solid reputation over a long period of time (Fombrun C., 1990). Fombrun (1996) defines reputation as “the overall estimation in which a company is held by its constituents”.

Both practitioners and academics agree that a positive reputation facilitates a profitable brand and leads to competitive advantages (Herbig & Milewicz, (1995); Ngwese, (2007); Roper & Fill, (2012). Generating a positive reputation can decrease doubts about the organization's performance capabilities, encourage customers to buy products, entice top notch employees, urge investors, and hold fundamental transaction partners (Fombrun, (2006). With regards to building reputation (Urde, 2014) point out that companies need to evaluate how they are perceived in their environment. In this way, brand reputation represents ‘the charm’ of the brand as recognised by employees, suppliers, investors, communities and customers. To achieve ‘the charm’ a brand is purposed with identifying their services and products and making efforts to differentiate themselves from their competitors (Bodeklint K., 2017).

Substantive elements influencing the reputation of a brand are “customer satisfaction, employee satisfaction, comprehensive reputation, customer service, market position, innovation, profitability, corporate social responsibility, and vision and leadership” (Roper & Fill, (2012). A positive reputation represents a key differentiator from market competitors



therefore enhancing competitive advantages. Consequently, customers may become more faithful to a brand where a company delivers on its articulated purposes (Milewicz & Herbig, (1994); Roper & Fill, (2012). Milewicz and Herbig (1995) articulate that reputation emerges predominantly through ‘market signalling’, this describes all forms of activities that inform the specific motives and intentions of a brand to the market.

Moreover, Bennett & Gabriel (2001) established the “averaging” principle of brand reputation. Accordingly, consumers tend to be more forgiving of unfavourable information when they have already built a positive attitude towards the brands’ reputation. For example, a poor experience is likely to be overlooked by a customer holding an overall positive view about the brand. (Roper & Fill, (2012)

### **2.1.1 Interconnectedness between Brand Engagement & Brand Reputation within online platforms**

‘Engagement’ has received considerable attention across various academic disciplines as illustrated in the following Table 1. Engagement conceptualizations in the marketing literature. This table points to engagement concepts in the marketing literature relevant to the aims of this thesis.

Table 1. Engagement conceptualizations in the marketing literature.

Author(s)	Research type	Concept	Definition	Dimension
Algesheimer, Dholakia, and Hermann (2005)	Empirical: Quantitative	Brand community engagement	Positive influences of identifying with the brand community through the consumer's intrinsic motivation to interact/ cooperate with community members.	Cognitive Emotional Behavioral
Calder, Malthouse, and Schaedel (2009)	Empirical: Quantitative	Online engagement	A second-order construct manifested in various types of first order 'experience' constructs, with 'experience' being defined as "a consumer's beliefs about how a (web)site fits into his/her life."	Emotional Cognitive
Brodie et al. (2013)	Empirical: Qualitative	Consumer engagement (online brand community)	A multi-dimensional concept comprising cognitive, emotional, and/or behavioral dimensions, and plays a central role in the process of relational exchange where other relational concepts are engagement antecedents and/or consequences in iterative engagement processes within the brand community.	Cognitive Emotional Behavioral
Hollebeek et al. (2014)	Empirical: Quantitative	Consumer brand engagement (Social media)	A customer's cognitive, emotional and behavioral investment in specific brand interactions.	Cognitive Emotional Behavioral

A content on companies' social pages can be the first interaction a potential customer has with a business. Though, brand related content is not the monopoly of the brand anymore. Everybody with web access can discuss about your brand. Companies need to give a consistent message over every single social platform that coordinates all different touchpoints customers may have with your brand. Companies content strategy should include listening and analyzing what is being said about the brand online. From that point, companies can improve their social and website content, and email campaigns. (Nuvi, 2020)

Tracy L Tutetn Michael R Solomon (2018) indicate that through social media brands can engage consumers, enhance brand reputation and image, build positive brand attitudes,

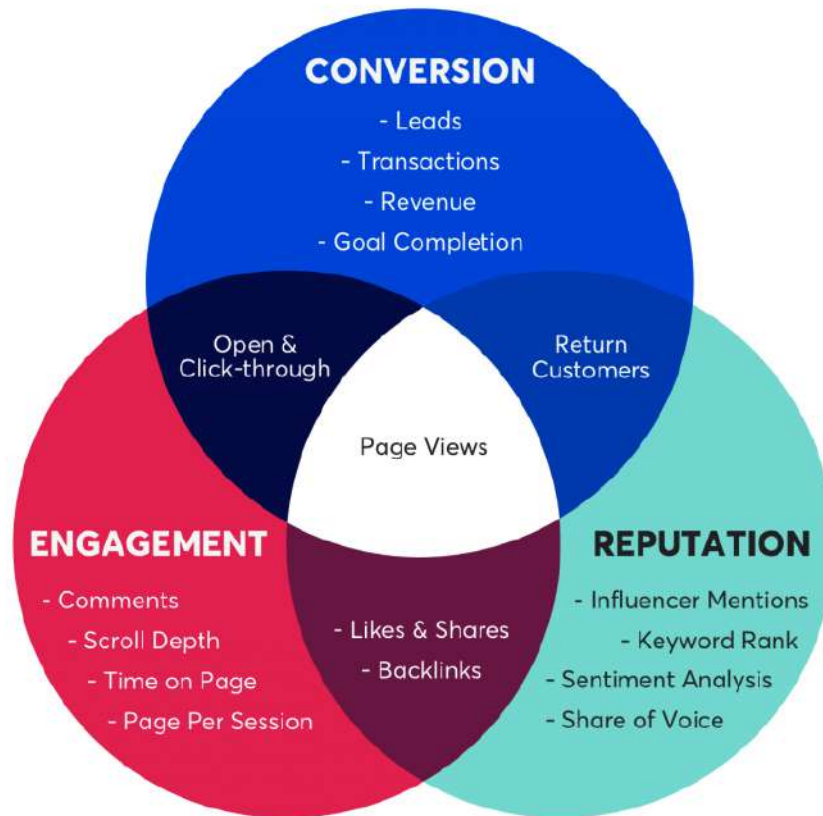
improve organic search rankings, service customers, and drive traffic to brand locations, both online and offline.

Since 2007 The Situational Crisis Communication Theory (SCCT) has generated thousands of publication citations because of its reliability for predicting how crisis communication strategies utilised in traditional media effect brand reputation. However, a theoretical gap exists in how this SCCT strategy can be applied on social media. Considering brand reputation management online (Falcigno , 2020) stands that a brand reputation management strategy dynamically monitors and influences a company's reputation online. Companies can find a way to monitor their brand on their own or they can utilize one of the tools that will look the web for brand mentions online. Several services will considerably offer to react to negative feedback on company's behalf.

In a 2019 interview with Curtin University Michael Ziviani discussed Business Brand Engagement highlighting the importance of monitoring and being a part of conversations affecting the subject organisation's reputation. He proposes the "citizen journalism", that is the reality of the digital revolution, makes monitoring and participating even more necessary. Online media reputation monitoring and response is a modern-day reality and an essential tool of defensive reputation management. (Ziviani, 2019)

In recent times, we've seen many cases of social media heavily influencing a brand as well as driving positive and/or negative conversations. Social media and online technologies now provide tools that enable everyone to engage publicly, pass judgement on a business's activities and the people that represent the organisations. This open access is most often without administrative approval or filters. Almost anything can be said at any time online. And this effects businesses reputation. (Conner, 2018) Figure 1. Chart of Portent's Favorite Content KPI's' chart provides an illustration showing how content KPI's can be broken down according to the different stages of the customer journey and overlap of brand engagement and reputation.

Figure 1. Chart of Portent's Favorite Content KPI's



Source: (Mckinight, 2019)

Brands cannot engage, convert or build any kind of online reputation with customers without visitors. The more individuals view the company's platform, the more people are engaging and the more their brand reputation spreads. When companies extend their reach, it is more likely they'll generate conversions. (Mckinight, 2019)

## 2.2 Social Media

People increasingly look at social media applications as an important part of their daily life and are becoming increasingly likely to move their interactions to virtual platforms. This, in turn, positively reflect on their orientations and behaviours toward all kinds of social media technology as reported by Alalwan et al. (2016), Dwivedi et al (2015), Rathore et al. (2016), Taylor et al. (2011), Zhu and Chen (2015). As a result the implications of social media applications have been observed to be both highly efficient and influential in progressively engaging in most aspects of people's lives (Alalwan et al., (2016); Algharabat et al., (Algharabat, 2017); Abed et al., 2015; Hawkins and Vel, (2013). The January 2020 Global Digital Report (Hootsuite, 2020) states over 4.5 billion people are using the internet, with social media users passing 3.8 billion. Almost 60 percent of the world's population is online.

The latest trends suggested more than half of the world’s population will use social media by the middle of 2020. On average, the world’s internet users spend 2 hours and 24 minutes using social media across all devices each day, accounting for more than one-third of total internet time. The following “Table 2. Social media concepts in the marketing literature” illustrates relevant social media concepts in the marketing literature.

Table 2. Social media concepts in the marketing literature

Concept	Definition	Reference
Social networking	Using social media as a means to directly contact and have interaction with other personnel thereby having a real relationship with them.	(Wells, 2011)
Social Media	New media technologies facilitating interactivity and co-creation that allow for the development and sharing of user-generated content among and between organisations (e.g. teams, government agencies and media groups) and individuals (e.g. customers, athletes and journalists).	(Filo, Lock, & A, 2015)
Social media marketing	A dialogue often triggered by consumers/audiences, or a business/ product/services that circulate amongst the stated parties to set in motion a revealing communication on some promotional information so that it allows learning from one another’s use and experiences, eventually benefitting all of the involved parties.	(Dwivedi, Kapoor, & Chen, 2015)
Social media marketing	The utilization of social media technologies, channels, and software is to create, communicate, deliver and exchange offerings that have value for an organization’s stakeholders.	(Tuten, Solomon, & Tracy, 2018)

Social media marketing has expanded rapidly as much for its efficiency as for its potential business applications. The efficiency is derived from its low absolute cost. The business application tools catch customer attention, manage the relationships, develop new product ideas, promote the brand, drive online and offline store traffic whilst converting consumers to customers. (Blair, 2020)

Traditional marketing channels gained awareness among customers however this established method becomes more outdated as time moves on. The main disadvantage identified in examining traditional tools for delivering advertising and promotional materials is that they are (were) used only to catch consumers’ attention. Assuming that attention was attracted there is still a scenario where there is severely limited possibility of direct feedback and proper communication between customers and businesses. (Pride, 2015).

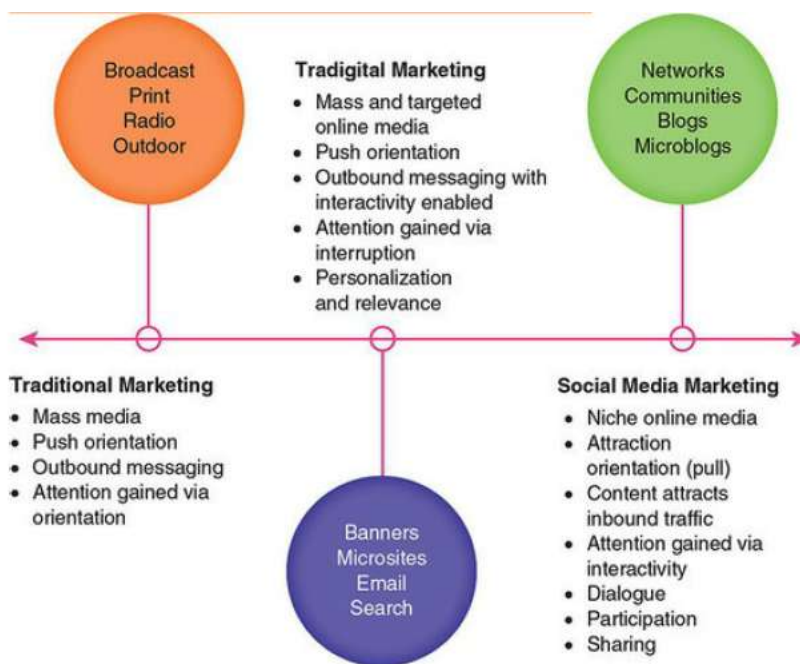
Digital marketing communication exploits the rise of the Internet. It includes various emergent digital tools, such as social media, e-mail, and mobile. Currently, social media plays

a starring role. There are several prevailing types to consider; social community media, social publishing media, social commerce media and social entertainment media. Social community media covers such platforms enabling users to share their hobbies, create personal profiles and chat with other people. Social publishing media enables users to generate and distribute interactive content (videos, photos, audio). E-mail and mobile marketing are used to reach the target audience of the brand via advertising e-mails or newsletters and mobile devices. (Efendioglu, 2016)

Digital marketing, unlike traditional, affects the shift from “push” strategies to “pull” strategies. Customers are provided with opportunities to interface with the brand in any channel they want to seek information. This is very different from traditional marketing offerings of clear messaging requiring little, or no, education and conversation. (Strutton & Lumpkin, 2002) It leads us to the conclusion that digital marketing best fits the expectations of today’s consumers.

This shift from traditional to tradigital to social media is illustrated in Figure 2. The Evolution of Marketing Communications

Figure 2. The Evolution of Marketing Communications



Source: (Tuten, Solomon , & Tracy , 2018)



Respective contemporary subject matter and statistics will be illustrated below.

The CMO survey’s February 2020 Highlight & Insight report is taken here as a reference to reveal and make sense of the meaning of today’s social media landscape. As an objective source of information about marketing and a non-commercial service this survey is dedicated to the field of marketing, recognizing;

- 2631 top marketers at for-profit U.S. companies
- 265 responded for a 10.1% response rate
- 98% of respondents VP-level or above

Survey participants (n=265)

Figure 3. February 2020 Highlight / insight” reports participants insight



Source: (Survey, 2020)

Results from the February 2020 CMO Survey indicate that marketing leaders are experiencing higher levels of responsibility in their organizations. Marketing leads social media in 80.7% of the participant companies, which is increased 2.9 % in six months (See Figure 4. Percentage of companies in which marketing leads activity. In following Figure 4. Percentage of companies in which marketing leads activity; Red reflects a decrease and Green reflects an increase of more than 2% between Aug-19 and Feb-20.

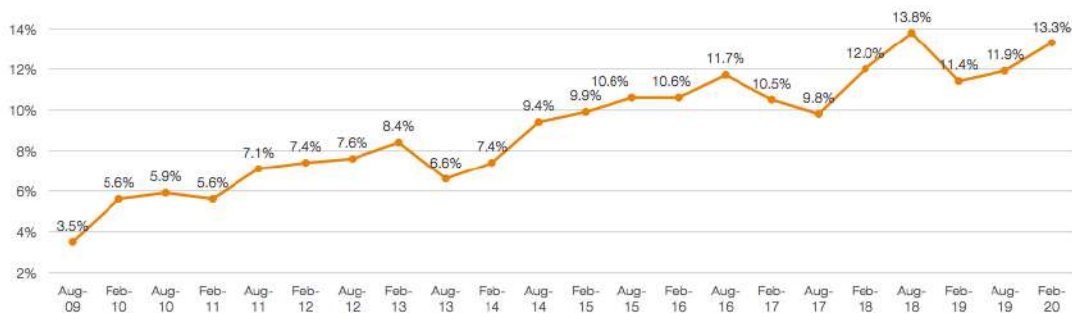
Figure 4. Percentage of companies in which marketing leads activity

Activity	Aug-19	Feb-20
Brand	91.0 %	90.0 %
Digital marketing	85.7 %	86.0 %
Advertising	84.1 %	86.0 %
Social media	77.8 %	<b>80.7 %</b>
Public relations	62.4 %	<b>69.3 %</b>
Promotion	70.4 %	<b>65.3 %</b>
Positioning	64.6 %	64.7 %
Marketing research	67.7 %	<b>60.7 %</b>
Lead generation	61.9 %	<b>59.3 %</b>
Marketing analytics	75.1 %	<b>66.7 %</b>
Insight	52.9 %	53.3 %
Competitive intelligence	51.9 %	<b>47.3 %</b>
Customer experience	45.4%	<b>49.3 %</b>
CRM	36.5 %	<b>40.0 %</b>
Market entry strategies	37.0 %	<b>31.3 %</b>
Revenue growth	36.0 %	<b>32.7 %</b>
New products	31.7 %	<b>22.7 %</b>
Pricing	23.3 %	<b>20.7 %</b>
Innovation	24.3 %	<b>22.0 %</b>
e-commerce	23.3 %	<b>25.3 %</b>
Market selection	20.6 %	18.0 %
Sales	19.0 %	18.7 %
Customer service	8.5 %	<b>16.0 %</b>
Distribution	10.6 %	<b>12.7 %</b>
Stock market performance	2.1 %	1.3 %

Source: The CMO Survey, February 2020 Highlight & Insight Report; (Survey, 2020)

Spending on social media grows to 13% of marketing budgets, reaching the second-highest point in survey history. (See Figure 5. Current social media spending as percent of marketing budget)

Figure 5. Current social media spending as percent of marketing budget



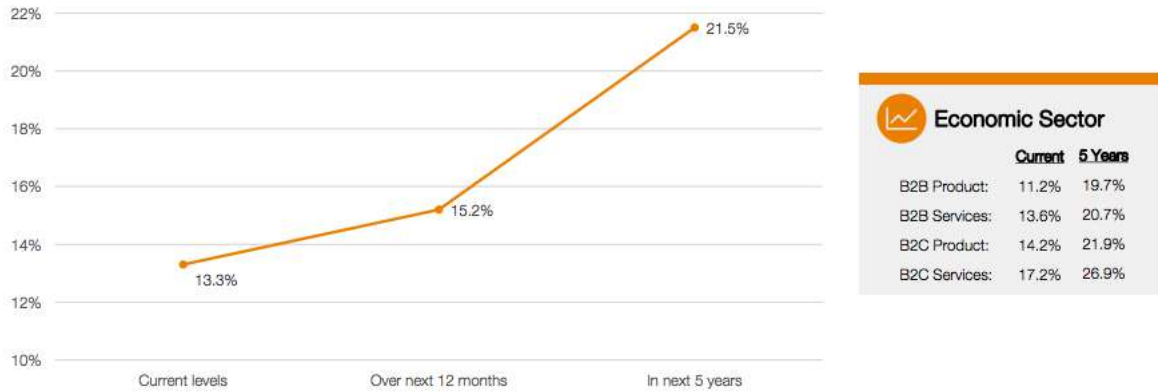
Source: The CMO Survey, February 2020 Highlight & Insight Report; (Survey, 2020)

Social media spending is expected to rise to 21.5% in the next five years. Though, expected spending on social media rises across industries and company sizes. Not



unexpectedly, companies with 10% or more of their sales from the internet spend more than twice as much as companies with no online sales and expect to continue spending more (29.7% vs. 18.3%). The Communications Industry plans to grow expenditure the peak, up to 32.2% in five years. (Survey, 2020)

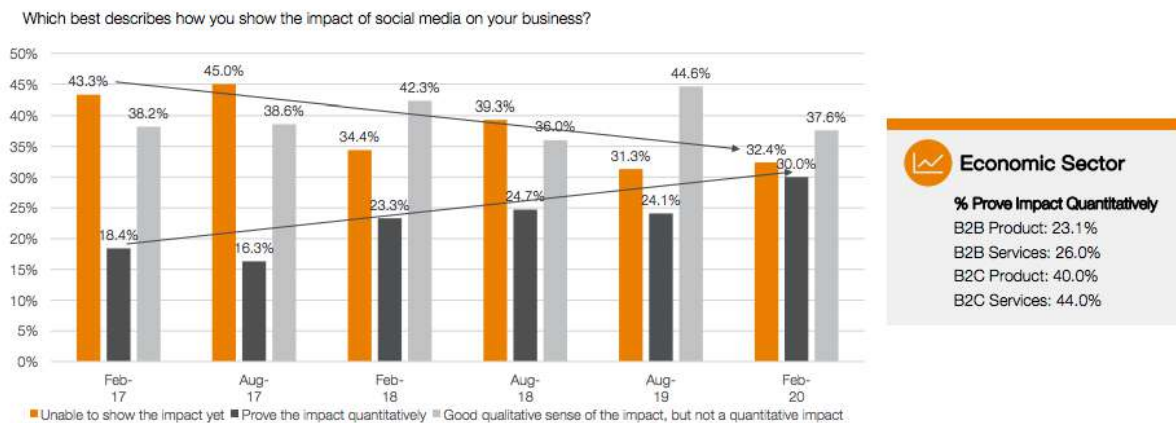
Figure 6. Social media spending as percent of marketing budget



Source: The CMO Survey, February 2020 Highlight & Insight Report; (Survey, 2020)

The report (Survey, 2020) highlight improvement in ability to show the impact of social media on business. Participants asked to describe which is best how they show the impact of social media on their business (See Figure 7. Improvement in ability to show the impact of social media on business). Following three industry sectors able to demonstrate impact (Communications, Technology, Services Consulting); whereas bottom 3 industry sectors unable to demonstrate impact are (Manufacturing, Healthcare, Retail).

Figure 7. Improvement in ability to show the impact of social media on business

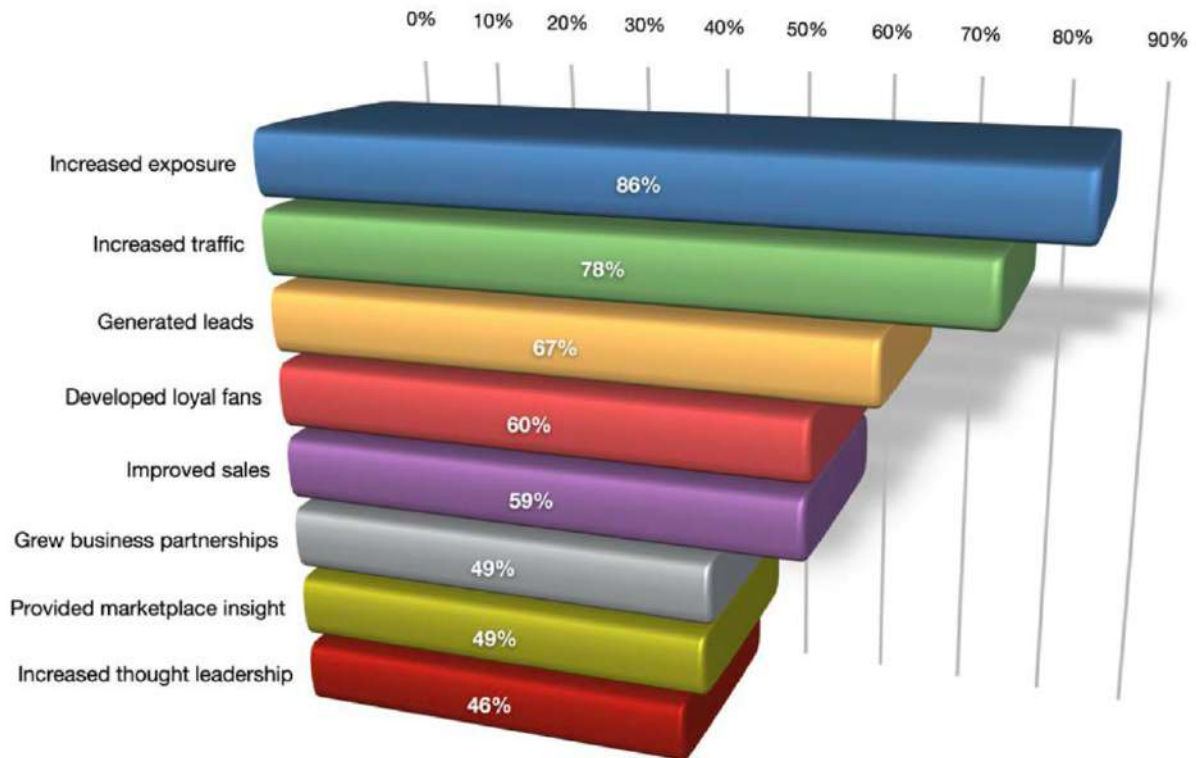


Source: The CMO Survey, February 2020 Highlight & Insight Report; (Survey, 2020)

2020 social media marketing industry report (Stelzner, 2020) which is surveyed more than 5,200 marketers with the goal of understanding how they're using social media to grow and promote their businesses indicates benefits of social media marketing, according to the

data surveyed 86% of all marketers' social media efforts have generated more exposure for their businesses. Increased traffic was the subsequent significant advantage, with 78% announcing positive outcomes. These advantages have stayed in the best two spots throughout the previous 6 years. (See Figure 8. Benefits of social media marketing).

Figure 8. Benefits of social media marketing



Source: (Stelzner, 2020)

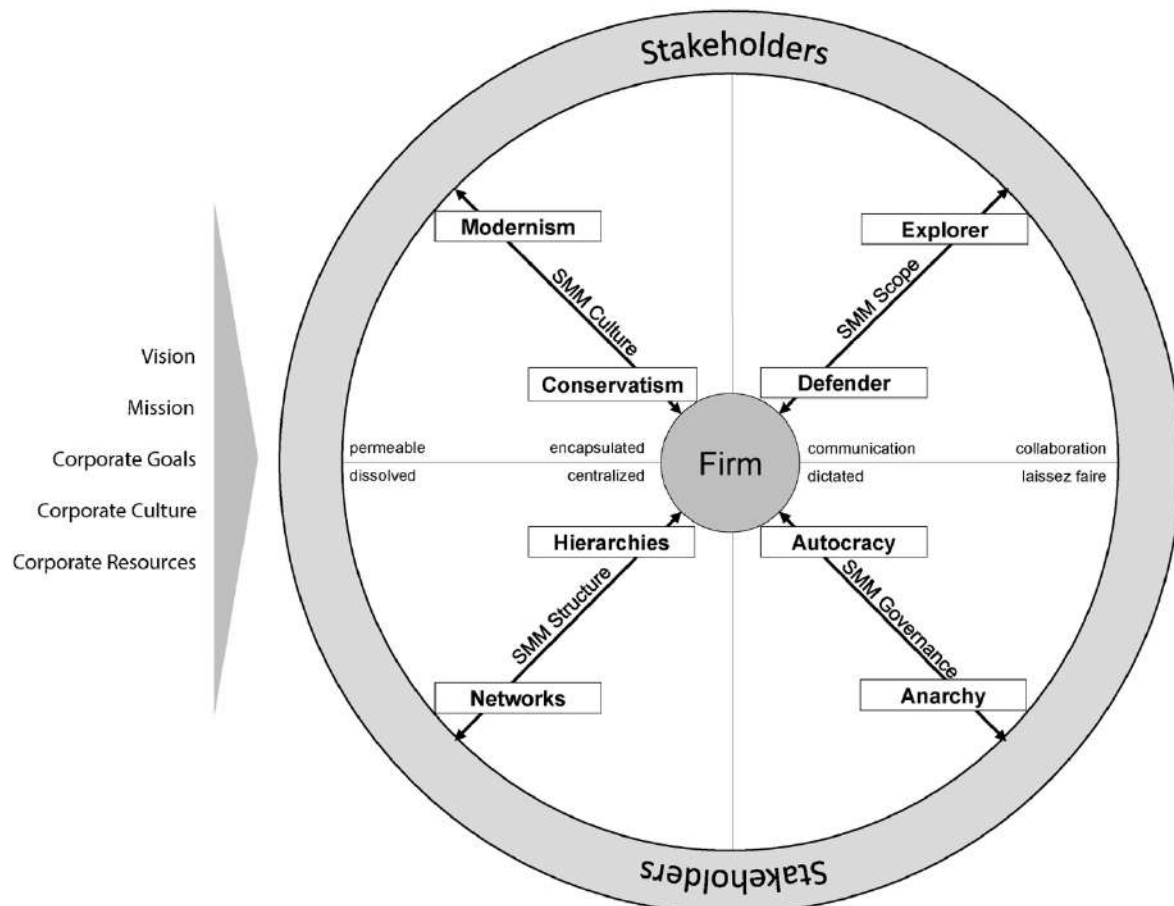
### 2.2.1 Social Media Management Systems

Social media marketing is an integral element of 21st-century business. Social media activities require a system that is accessible and capable of managing social media activities, tracking through the content life cycle, orchestrating the campaigns and analysing social data for market research. This needs to occur regardless of company structure and developed policy. (Reto , Rauschnabelb, & Hinsc, 2017) (Tuten, Solomon , & Tracy , 2018)

*“Companies may also use vendors to aid in social customer relationship management (social CRM), host owned social sites, generate reviews and ratings, facilitate influencer marketing tactics, and provide content. In particular, companies benefit from incorporating cloud services for social media management, social monitoring and listening, social ad management, and social media analytics and modeling”.* (Tuten, Solomon , & Tracy , 2018)

The framework for social media marketing depicted in Figure 9. A Framework for Strategic Social Media Marketing describes an organization’s use of social media marketing along four dimensions as scope, culture, structure, and governance. (Reto , Rauschnabelb, & Hinsc, 2017)

Figure 9. A Framework for Strategic Social Media Marketing



Note: SMM=Social Media Marketing

Source: (Reto , Rauschnabelb, & Hinsc, 2017)

**Scope** (defenders to explorers) addresses the question of whether companies use social media marketing predominantly for communication with one or a few stakeholders or comprehensively (both externally and internally) as a genuine tool for collaboration. (Reto , Rauschnabelb, & Hinsc, 2017) (Tuten, Solomon , & Tracy , 2018)

Defenders use social media marketing primarily as a one-way communication tool to entertain consumers or to inform stakeholders. Explorers focus on a collaborative approach with many different stakeholders such as clients, employees, and suppliers. (Reto , Rauschnabelb, & Hinsc, 2017) (Tuten, Solomon , & Tracy , 2018) (Payne & Frow, 2005)

**Culture** (conservatism to modernism) distinguishes between conservatism (represented by an encapsulated, traditional, mass advertising) and modernism (characterized

by permeable, open, and flexible social media marketing culture) (Tuten, Solomon , & Tracy , 2018) (Reto , Rauschnabelb, & Hinsc, 2017)

Management and organizational behavior researchers (Zheng, Yang, & McLean, 2010) as well as marketing academics and practitioners (Deshpandé & Farley, 2004) recognize the importance of culture and organizational climate for financial and non-financial firm performance. Companies engaging in social media marketing must acknowledge that stakeholders can take control of and manipulate social media content (Labrecque, Vor dem Esche, Mathwick, Novak, & Hofacker, 2013)

**Structure** addresses the organization and departmentalization of the social media marketing assignments, structure has two positions examined which are hierarchical (representing a centralized and concentrated social media marketing structure) and networked (which control of social media marketing is fragmented, decentralized, dissolved, and cross-functional). (Tuten, Solomon , & Tracy , 2018)

The idea of a networked structure for social media marketing implies that social media activities are a common responsibility for all employees regardless of the department to which they are assigned. This idea is similar to the concept of modern quality management in which quality is the job of every employee in the firm, not simply the purview of a “quality department” (Lai & Cheng, 2005) This perspective suggests that social media marketing should be a function that permeates all processes and departments of the organization, and thus a social media marketing director or specialist would take the role of directing, rather than executing, a firm's social media marketing efforts if his or her services are required at all.

**Governance** refers to how the company establishes rules and guidelines and how social media marketing responsibilities are controlled in the company. In autocracy; organizations define social media regulations and employee practices, in anarch organization allow norms to develop organically. (Tuten, Solomon , & Tracy , 2018) . (Reto , Rauschnabelb, & Hinsc, 2017)

As an example of how social media marketing governance can increase the overall social media marketing success of the firm, the fashion retailer Nordstrom’s policies provides employees with the knowledge, direction, and expectations are worth examining. (Nordstrom, 2015)

Decisions on social media marketing should be guided by the firm’s internal influencers (e.g., general vision, mission, corporate goals, corporate culture, available resources), which in turn should be in line with external influencers (e.g., communities,

competition, government regulation). The framework doesn't suggest a right or wrong choice. Rather, depending upon the organization's overall strategic focus and stakeholders, social media marketing should be organized for fit and congruence with the organization's design. (Tuten, Solomon , & Tracy , 2018)

### **2.2.2 The Role of Social Media in Brand Engagement Process**

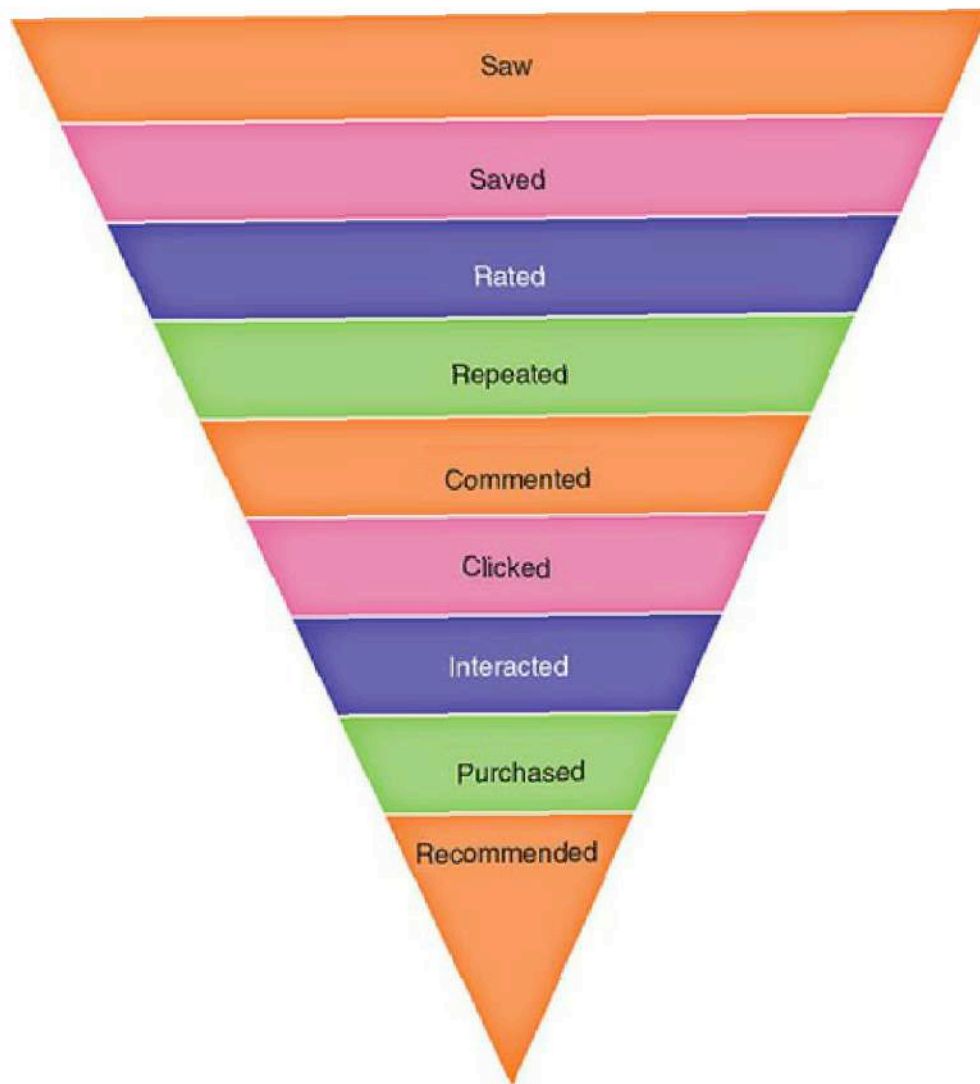
Social media activity allows brands to engage with consumers seeking to enhance their brand reputation and image, generate positive brand attitudes, lift organic search rankings, deliver to customers, and direct traffic to brand sites, both online and offline. (Tuten, Solomon , & Tracy , 2018)

Consumers are trending away from communicating with brands via phone or email. Individuals are adopting social media and messaging applications in their private lives and they are gravitating to companies who are adapting to these channels as well. The use of social media affects prevailing attitudes towards communication. People have become accustomed to receiving replies immediately. Such tendency is forcing businesses to come up with conversational solutions that can rapidly respond with information (Ubisend, 2017).

Social media facilities make it easier to communicate with brands via direct links ad personal messaging platforms. Consumers are displaying preferences for utilising messaging platforms. Texting was the major communication trend in the beginning of 2017 (Accenture, 2017). This trend toward more personal messaging platforms brings many efficient functionalities and exciting opportunities for companies. Businesses need to adapt to this evolution and respond with communication tools, possibly powered by machines (artificial intelligence), that will be able to meet customer expectations (Ubisend, 2017).

Often advertisers aim to drive consumers' brand engagement on social media. By stimulating consumers engagement with branded content, they believe that the content might spread into the consumers' social network (Scheinbaum, 2016). To reach the point of customer recommendation, the target audience will progress through a social media process that has been called "The Engagement Food chain". (See Figure 10.)

Figure 10. “The Engagement Food Chain”



**The Engagement Food Chain shows each specific engagement action to be taken willingly as the target audience moves through the customer journey.**

Source: (Tuten, Solomon , & Tracy , 2018)

In addition to behavior, Forrester Research encourages marketers to measure engagement in a way that captures emotion and potential influence. Its interpretation of engagement incorporates four dimensions; involvement, interaction, intimacy, and influence. Multiple dimensions can better illustrate the construct in more meaningful ways. Such dimensions and metrics used to capture dimensions are shown in (Figure 11. The Dimensions of Engagement), (Tuten, Solomon , & Tracy , 2018).

Figure 11. The Dimensions of Engagement

Engagement Dimension	Explanation	Metrics
Involvement	The presence of a person at each social touch point	Page or profile visits; content views
Interaction	The actions people take while present at the social touch point	Likes, shares, completion rates (e.g., watching entire video); average time spent per interaction (e.g., time spent playing a social advergame); comments; downloads
Intimacy	The affection or aversion a person holds for the brand	Sentiment, complaints posted in social channels, compliments posted, contribution quality, emotion expressed in UGC, brand perception, brand attitudes
Influence	The likelihood that a person will advocate for the brand	Quantity, frequency, and score of reviews and ratings; number of recommendations in social word-of-mouth communication and impressions reached due to influencer network size; referrals

Source: (Tuten, Solomon , & Tracy , 2018)

### 2.3 Online Customer Experience

Progress in information and communication technologies is constant. The rapid development of Web 2.0 signals chances as well as challenges for brands. Revaluation of conventional decision-making models in terms of digital consumer behaviour is required (Moran, Muzellec, & Nolan , 2014); Wind, 2015). Further, traditional approaches to consumers' "Moments of Truth" should be reviewed in respect to digital technologies (Moran, Muzellec, & Nolan , 2014).

As review of customer experience; (Saudagar, Iyer, & Hildebrand, 2012) have characterized customer experience as the whole of meetings, visions and sentiments that client's structure from the organization's activities. Customer experience is normally gotten from a cooperation done between a client and an association, it is the collected blend of the business execution, feelings and notions estimated against the customer desire in the time of contact (Shaw & Ivens, 2002). Customer experience is additionally characterized as a subjective part of the association between an individual and a business or an product or an service whenever (Watkinson, 2013).

The study at hand requires to discuss the online customer experience, its' relevance to the social media, and brand engagement. One of the most significant and early online customer experience specialists were (Hoffman & Novak, 1996), they introduced a proposition on the idea of understanding customer behavior on the web to comprehend the online experience nature and their proposition made out of the absolute most talked about

papers, (Hoffman & Novak, 1996) examined a few qualities of the online system route which are; described by an arrangement of reactions by machine intuitiveness, having a diminished reluctance and fortification, and being pleasant (Hoffman & Novak, 1996). Besides, (McLean & Wilson, 2016) contended that customers do think about the timeframe accordingly from an exploration they did and inferred that the apparent time spent on the web makes an impact on the customers' online experience.

Google's zero moments of truth (ZMOT) model (Lecinski, 2011) is one of the observable ideas that portray the amended dynamic procedure of the brought together online client experience. As per zero moments of truth model, the moments of truth for customers to settle on choices are not, at this point consecutive; rather, customers are confronted with different data upgrades simultaneously to figure out what and where to purchase (purchase decision or repeat purchase) and what and where to state (WOM or eWOM).

Additional, this brought together online customer experience encourages customer engagement with the brand over the long haul (Brodie, Ilic, Juric, & Hollebeek, 2013); (Wirtz, den Ambtman, Bloemer, & Horváth, 2013). For case, innovated digital channels and customer touchpoints, e.g., social media empower brand advertisers to have stretched out intends to engage customers (Sashi, 2012); (Chan, 2012), and then again, customers have more access to interface with their preferred brands and to remain dynamic in the online brand networks (Brodie, Ilic, Juric, & Hollebeek, 2013). Figure 12. Outcomes of online customer experience below indicate outcomes of online customer experience.

Figure 12. Outcomes of online customer experience



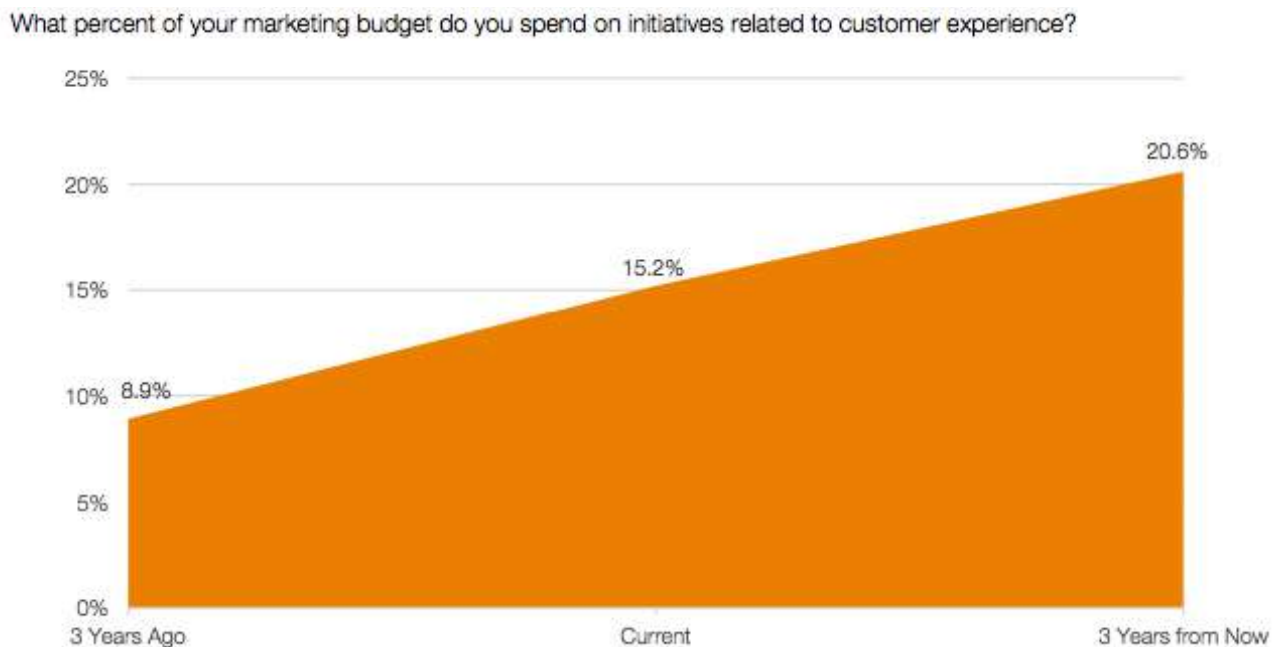
**Note:** Enhanced online customer experience will lead to repeat purchase, WOM, eWOM, brand engagement. These four outcome variables are inter-related with each other



Respective contemporary subject matter and statistics will be illustrated below.

Results from the February 2020 CMO Survey indicate that spending on the customer experience has expanded 71% throughout the most recent three years from 8.9% of marketing budgets to 15.2% at present. Marketers expect to spend to 20.6% (36% more) of their marketing budgets in the following three years (See Figure 13. Expected customer experience spending in next three years). The Banking business has the most elevated revealed spending on customer experience over the previous three years, right now, and later on. Companies with \$500-999M sales revenue and B2B Services likewise spend the vast majority of customer experience. (Survey, 2020)

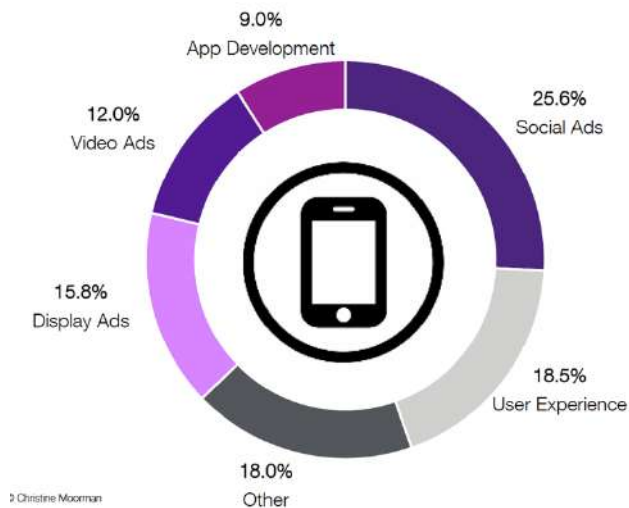
Figure 13. Expected customer experience spending in next three years



Source: (Survey, 2020)

(Survey, 2020) point out that marketers cite social ads and user experience as the highest categories of mobile spend. In essence, user experience is part of a broader customer experience, but customer experience contains some aspects that user experience does not. (White, 2020). According to (Survey, 2020) data, with 10% of their deals from the Internet tend to outspend different organizations on User Experience, Application Development, and Video Ads yet not Display and Social Ads. Services Consulting apportion the most to Social Ads, at 35.6%. Technology a top high-roller on User Experience, at 26.5%. (See Figure 14. Mobile Marketing Expense)

Figure 14. Mobile Marketing Expense



Source: (Survey, 2020)

(Survey, 2020) asks participants that how marketing has a strong strategic role in revenue growth and customer experience, how important is marketing’s role in each of the following strategic activities, (1 = not important, 7 = very important). (See Figure 15. Marketing Importance Rating on Strategic Activities)

Figure 15. Marketing Importance Rating on Strategic Activities

Strategic Activities	Marketing Importance Rating
Revenue Growth	5.4
Customer Experience	5.0
Innovation	4.6
Pricing	3.6

Source: (Survey, 2020)

### 2.3.1 Digital Consumer Behaviour

In the digital environment consumer behaviour involves empowered individuals who are searching for details of products and brands online as they move toward their purchase decision (Moran, Muzellec, & Nolan , 2014); (Vernuccio, 2014). Web 2.0 has emerged as a leading digital communication enabler providing high potential interaction capabilities between brands and individuals. With consumers engaging with websites that emphasise ease of use and participatory culture through interoperability there are clear indications that individuals are proactively engaging back and forth with brands. Extending the participation

was illustrated through the metaphorical “pinball” effect (Hennig-Thurau, Hofacker, & Bloching, 2013); in a traditional pinball game the player seeks to control the trajectory of the ball and increase their overall result within the confines of the environment, building overtime a strong corollary understanding of the potential rewards and responding to the stimuli that this evokes. This engagement builds an affinity and ultimate loyalty that perpetuates the cycle. In the same way consumers can now more opportunistically interact proactively with all kinds of brand messages. The online environment has moved beyond the redundant passive ‘message receivers’ model that used to keep consumers in their lane. Hennig-Thurau illustrate that individuals are being induced through the always-increasing interconnectedness of varying online digital platforms to shape their behaviour and share their experience with brands and products with other consumers.

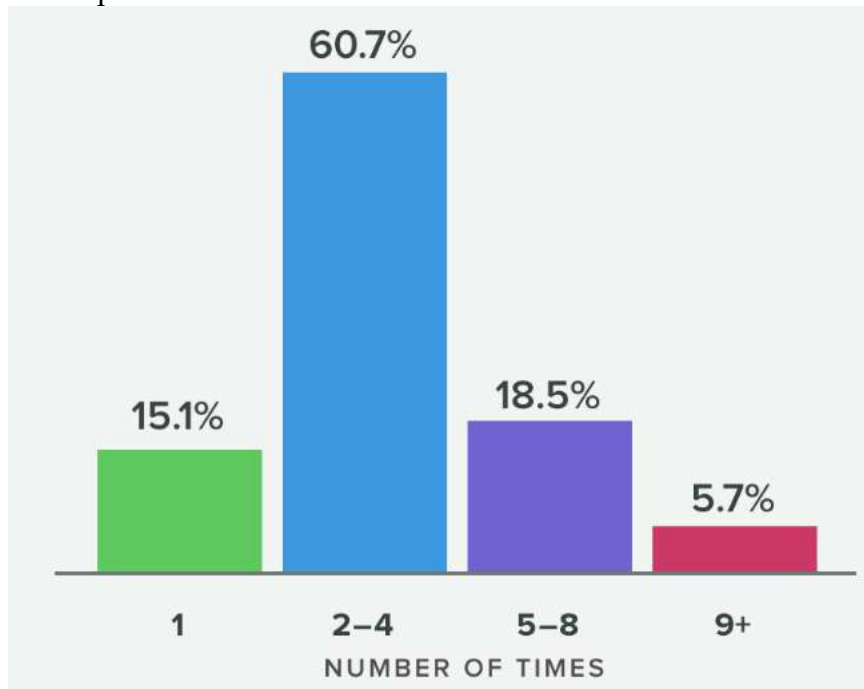
Face to face exchanges between individuals promote word of mouth assessments of brand offerings that lead to brand building. The digital equivalent of this is referred to as electronic word of mouth (eWOM) and is increasingly being utilised by consumers as they migrate to sharing their personal opinions online. (Hennig-Thurau, Gwinner, Walsh, & Gremler, 2004) recognised early on, in this transition toward an engaged online world, that consumers continue to engage in eWOM because of their inherent drive for social interaction and predilection to support others. Multiple platforms are accessed by consumers who are online exchanging views on brands and product preferences, engaging in peer-to-peer eWOM on networking sites like Facebook and Google (Moran, Muzellec, & Nolan, 2014). Because of the inherent social contract between people there is an expectation that this kind of brand related information is ostensibly authentic, so the credibility facilitates fellow consumer’s buying choices. On the other hand, the marketers are seen as complicit with the commercial interests of their client so are considered biased leaving the consumer potentially ill-advised. So, along the brand assessment journey, rather than taking the marketing communications *prima facie* consumers turn an appreciative ear to the opinions of their fellow consumers (Kozinets, De Valck, Wojnicki, & Wilner, 2010). eWOM is therein shown to be a key facilitator of brand awareness whilst raising the purchase decision making procedure (Moran, Muzellec, & Nolan, 2014).

Respective contemporary subject matter and statistics will be illustrated below.

(The Sprout Social Index, 2016) report indicates that 75% of people have purchased something because they saw it on social media. The vast majority need to see a product or service 2-4 times on social before they purchase it. What's more, almost 20% of individuals need to see a social post or notice 5-8 times. (See Figure 16. Number of times individuals

need to exposure product or services on social media before purchase). Buying choices provoked by social require significant investment. That is the reason its significant companies' image needs to engage to keep up a consistent network of contributed devotees and breaking down the measurements that can more readily educate companies' social substance techniques (The Sprout Social Index, 2016).

Figure 16. Number of times individuals need to exposure product or services on social media before purchase



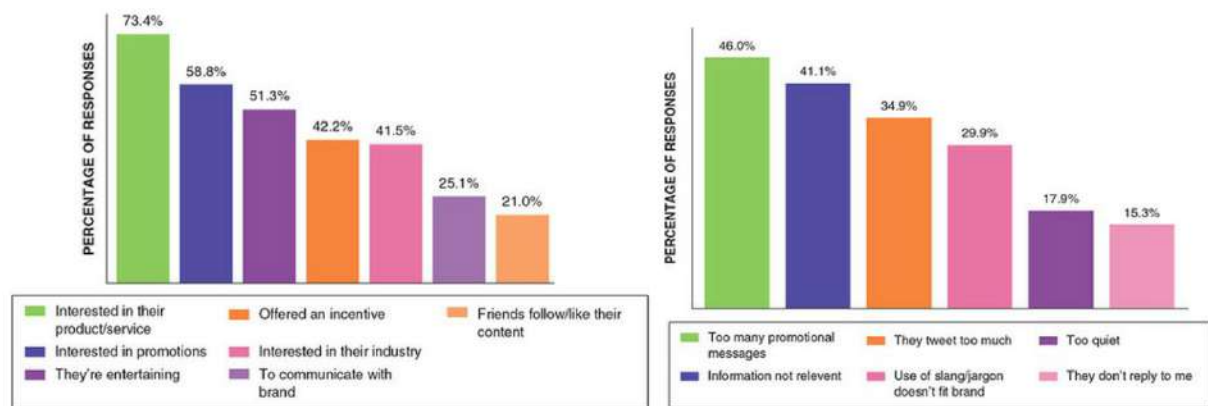
Source: (The Sprout Social Index, 2016)

(The Sprout Social Index, 2016) report also indicates that 57% of people are more likely to buy from a brand that they follow on social. (The Sprout Social Index, 2016) inference as a result of the data that on the off chance that 57% of individuals who engage you via web-based networking media are likely to purchase after see a post 2-4 times on social before they make a buy, it is better to ensure that your followers are seeing your posts more than once and your social strategy has to aim to solidify companies' brand recognition. This is one of the main aims of the study at hand for social media automation.

(The Sprout Social Index, 2016) takes part in a research on why individuals friend / unfriend brands on social media (See Figure 17. Why individuals friend / unfriend brands on social media. According to the data obtained, 73% of individuals reviewed said that liking a brand on social starts with being interested in a brand's products or services. Outside of basic interest, individuals want something more from a brand. The majority of followers will come to brands' social profile looking for deals and promotions (58%) or incentives (42%). Be that as it may, as (The Sprout Social Index, 2016) revealed, neither one of the tactics will get them

to stay. Moreover, 25% of individuals began following brand so they could have a two-way dialogue with them. Individuals need to interact with a brand, so brand should ensure they're set up for accomplishment in social customer care. Furthermore, additional evidence that a dynamic content strategy is a need, 41% of individuals will unfollow a brand that doesn't share relevant information. Regardless of whether that is through curating thoughtful third-party content, taking an interest in co-marketing opportunities or engaging your audience with interactive quizzes and contests (The Sprout Social Index, 2016).

Figure 17. Why individuals friend / unfriend brands on social media

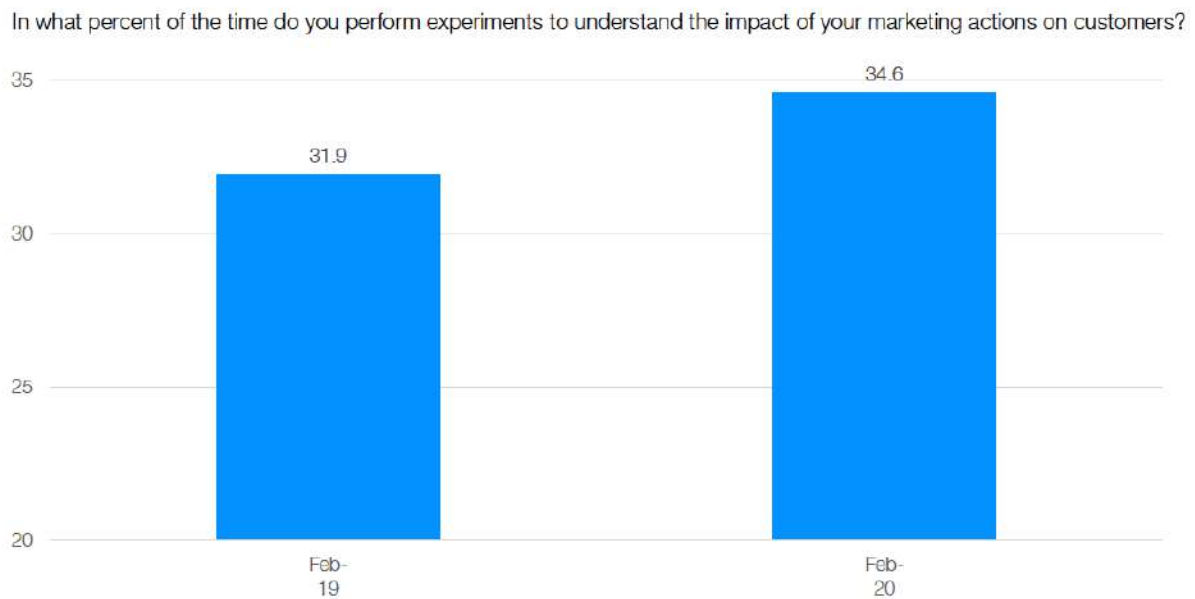


The left side of the image shows why individuals friends with brands, and the left side shows why they stopped following.

Source: (Tuten, Solomon , & Tracy , 2018); (The Sprout Social Index, 2016)

Also, businesses use experiments to understand the impact of their marketing actions on customers. The February 2020 CMO Survey (Survey, 2020) asked participants following question: In what percent of the time do you perform experiments to understand the impact of your marketing actions on customers? (See Figure 18. Percent of the time participants perform experiments to understand the impact of their marketing actions on customers. Survey results shows that participants' intension on perform experiments to understand the impact of their marketing actions on customers has increased 2.7 % in six months, (the term between Aug-19 and Feb-20).

Figure 18. Percent of the time participants perform experiments to understand the impact of their marketing actions on customers.



Source: (Survey, 2020)

### 2.3.2 ‘Moments of Truth’ in the Online Environment

The recursive nature of online environments is evident when reviewing the engagement cycle of consumer behaviour; prevalent digital technologies influence consumer behaviour whilst concurrently being guided by consumers. In this regard ‘Moments of Truth’ are points in time where brands and consumers touch. When this happens, the person forms an opinion about the brand possibly impacting the total consumer decision-making process (Moran, Muzellec, & Nolan , 2014) .Therein each occurrence of contact between the customer and brand leaves the individual with a certain impression. For consumers this may be actively or passively processed, either consciously or subconsciously influencing the overall perception of the brand (Esch et al. 2014). The Chief Executive Officer of Honeywell outlines the following brand guidelines: “With every customer contact and whenever we represent Honeywell, we have the opportunity either to strengthen the Honeywell brand or to cause it to lose some of its luster and prestige” (Honeywell, 2004, p. 2).

Esch et al. (2014), say brand managers need to pay high attention to many types of customer touch points with a brand. However, the Internet is increasingly affecting how consumers perceive brand, specifically online customer touch points that efficient management. Procter & Gamble defined their moment of product purchasing decision of a particular brand as the so-called ‘First Moment of Truth’ (Procter & Gamble, 2012). The post purchase phase of using the product as well as the related brand experience is referred to as the ‘Second Moment of Truth’ (Moran, Muzellec, & Nolan , 2014).

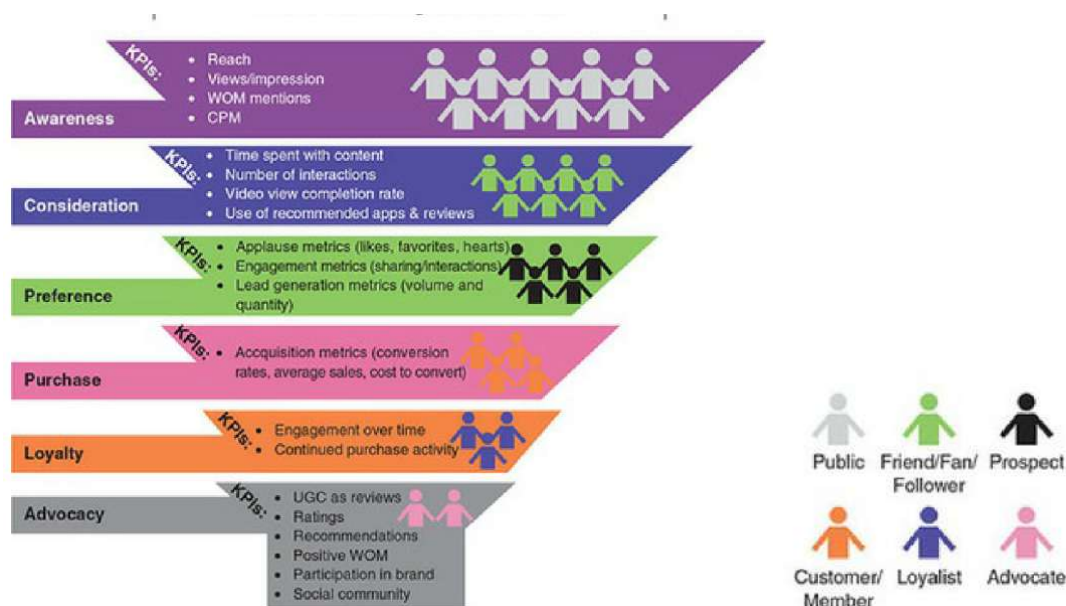
Google established another instance of contact in 2012 defined as the “Zero Moment of Truth” (ZMOT). The ZMOT designates the online- research activity, which occurs on consumers’ digital devices. During this decision-making process, consumers are likely to browse various online channels, for instance official brand websites, review sites, comparison platforms and social networking sites (Lecinski, 2011).

### 2.3.3 Evaluation of “Mapping KPIs to the Marketing Funnel and Customer Journey”

Social media marketing is ostensibly a facsimile of online advertising providing variable metrics that measure the effectiveness of messaging. The exposure of the population to the message can be measured by the advertisers so indicating the reach and frequency. The number of people exposed and the average number of times someone is exposed along with a site’s ‘stickiness’ and relative pull are important metrics (Jeffrey, 2013) (Tuten, Solomon , & Tracy , 2018) (Sterne , 2010). So too are the abilities to generate repeat visits and retain visitors on a site comparatively with the responses to alternative creative deliveries. Clickthrough’s are monitored by companies when people exposed to online ads or links do click on them. Analysis of the numbers of people who click through to ultimately purchase as well as those who are exposed and do not click through but later visit the brand’s website provide sales conversion data ( Roy , 2009); (Tuten, Solomon , & Tracy , 2018); (Sterne , 2010).

Figure 19. Mapping KPIs to the Marketing Funnel and Customer Journey illustrates the relationship between the stages in the customer journey and the marketing funnel and identifies the KPIs that are relevant at each stage.

Figure 19. Mapping KPIs to the Marketing Funnel and Customer Journey



Source: (Tuten, Solomon , & Tracy , 2018)

The quantity of interactions counted only tells a part of the story, so it is necessary to determine the degree of engagement people feel during and after their participation. The interaction with the brand and experiences they have ultimately influence their emotional response to the brand. (Schwager & Meyer, 2007) (Tuten, Solomon , & Tracy , 2018) (Jeffrey, 2013). Companies are seeking knowledge of how their social media activity assists prospects along the sales funnel. Diagnostics are required to determine these metrics. These numbers can relate to measures of brand likeability brand image, brand awareness, brand loyalty, brand affiliation, congruency, and purchase intent. Without context simple quantities are merely a number. They need to be compared with such objectives as a best result, or some articulated expectations, or your competitors' results thus creating a metric indicating a change of value or importance. (Sterne , 2010) (Tuten, Solomon , & Tracy , 2018)

#### **2.4. Social Media Automation & SOCIALBOTS**

Successful companies must maintain a good relationship with their existing customers, anticipating their future needs, to stave off their competitors. To achieve this end individuals are now targeted rather than groups. Websites, social media and direct calls allow companies to gather information about their customers so they can evolve their analysis and forecasting. However, to be able to use this data, companies need to use marketing automation tools. (Todor, 2016)

Marketing uses software to automate processes involving customer segmentation, customer data integration and campaign management. Marketing automation makes processes previously performed manually far more efficient also allowing for new processes. At its best, “marketing automation is a software but also tactics that allow companies to buy and sell like Amazon – that is, to nurture prospects with highly personalized, useful content that helps convert prospects to customers and turn customers into delighted customers. This type of marketing automation typically generates significant new revenue for companies and provides an excellent return on the investment required.” Business intelligence is the key to efficient automated processes. Automation solutions go beyond the customer lifecycle working behind the scenes to enhance customer experience. (Hubspot, 2015)

“Smart companies in the 21st century use business intelligence (BI) solutions to gain a clearer picture of their internal operations, customers, supply chain, and financial performance. They also derive significant ROI by using BI to devise better tactics and plans, respond more effectively to emergencies, and capitalize more quickly on new opportunities.



In short, they are using BI to become intelligent about the way they do business.” (Eckerson, 2013)

A socialbot is an automation software that controls an account on a specific OSN (Online Social Network), depending on the niche and platform they are used on, social bots can perform perform basic activities, for example, answering and sending direct messages, helping human users find information online, liking posts or sending a connection request and so on. (DMI Blog, 2020); (Robert W. Gehl, 2016). What makes a socialbot not quite the same as self-declared bots like Twitter bots, weather forecasts and spambots is that it is intended to be secretive, that is, it can make itself look like an individual (Robert W. Gehl, 2016).

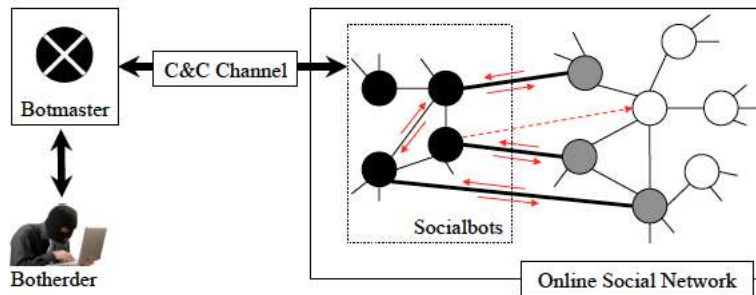
The socialbot is ostensibly a mechanical incarnation of a persona. It is a Personal Computing (PC) program designed to collaborate online in the same way that people do with each other. However, the socialbot is not a substance in its own right, but a bogus unit professing to speak to something that doesn't exist. The socialbot is to the individual it claims to be as PC produced components are to genuine human manifestations. Its success is predicated by its capacity to fool its human observers and questioners, to 'breeze through the Turing Assessment'. (Robert W. Gehl, 2016)

Marketers spend billions of dollars every year on social media to build up and maintain a presence on online social networking sites (Moorman, 2015). 80% of Fortune 500 companies are on Facebook, with many having great more than one million fans (Barnes & Lescault , 2013); Companies can utilize the fans network to influence their networks via word of mouth by connecting and engaging user in the social media. Integrating the business with the social media will be the the new pattern of business (Leunga, Schuckertb , & Yeung, 2013).

As conceptual overview of a Socialbot Network (SbN), (Yazan , Ildar, & Konstantin , 2011) define a Socialbot Network (SbN) as a set of socialbots that are owned and kept up by a human controller called the botherder (i.e., the adversary). An SbN comprises of three parts: socialbots, a botmaster, and a Command & Control (C&C) channel. Each socialbot controls a profile in a targeted OSN and is fit for executing orders that result in operations related to social interactions (e.g., posting a message) or the social structure (e.g., sending a connection request). These orders are either sent by the botmaster or predefined locally on each socialbot. All information gathered by the socialbots are known as the bot cargo and are constantly sent back to the botmaster. A bot master is an OSN-independent software controller that the botherder interacts with so as to define and afterward send orders through the C&C channel (Yazan , Ildar, & Konstantin , 2011). At following

Figure 20. A Socialbot Network., Each node in the OSN represents a profile. The socialbots are marked in black. Infiltrated profiles are marked in gray. Edges between nodes represent social connections. The dashed arrow represents a connection request. The small arrows represent social interactions.

Figure 20. A Socialbot Network.

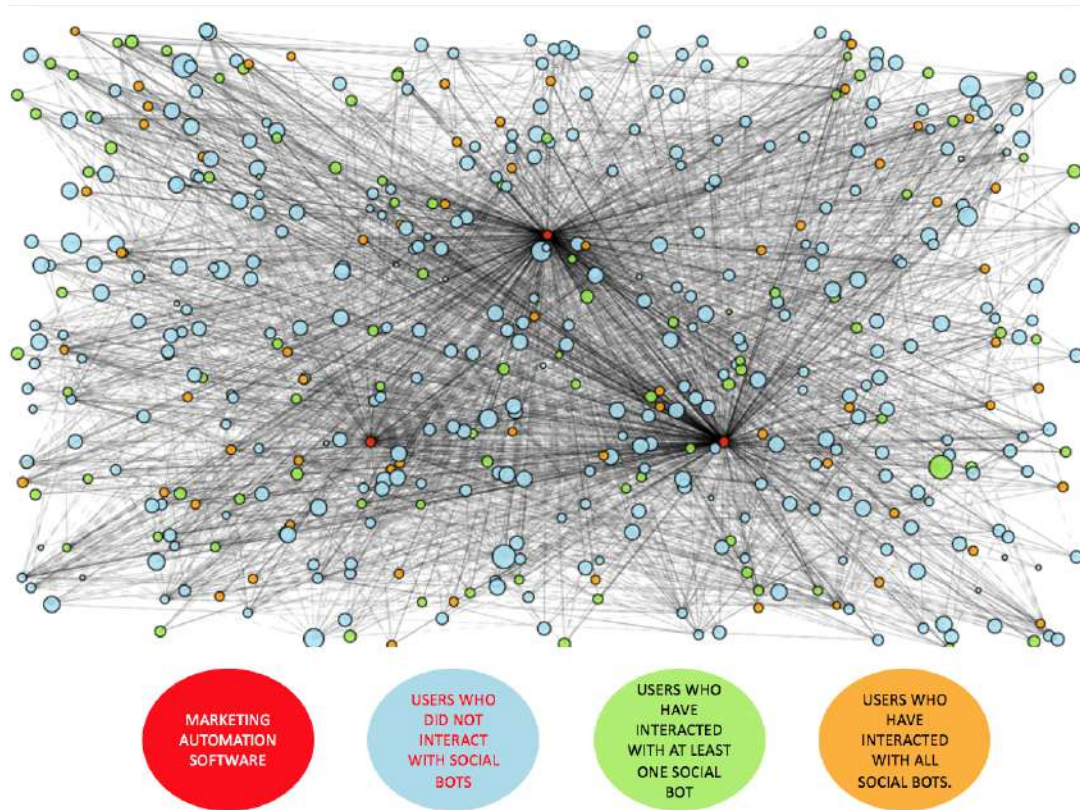


Source: (Yazan , Ildar, & Konstantin , 2011)

The botherder is an individual or an organization that builds and operates an SbN for two principle goals. The the first goal aims to connect with an enormous number of either random or targeted OSN users to build up an engagement. The second objective means to produce profit by gathering individual users' data that money related worth. Notice that this information can be then used to make customized messages. (Yazan , Ildar, & Konstantin , 2011); (Tokdemir, Nitin , & Nima , 2019)

Markus Strohmaier (Strohmaier, 2012)' study analyze data from the Socialbot Challenge 2011 organized by T. Hwang and the WebEcologyProject. As a result of study network visualization which shows network of users and socialbots in study dataset and how they link to each other is generated, (See Figure 21. Network of users and socialbots). In Figure 21. Network of users and socialbots. blue nodes represent users who did not interact with social bots, green nodes represent users who have interacted with at least one social bot, orange nodes represent users who have interacted with all social bots. Dashed edges represent social links between users which existed prior to the challenge, solid edges represent social links that were created during the challenge. Large nodes have a high follower/followee ratio (more popular users), small nodes have a low follower/followee ratio (less popular users), (Strohmaier, 2012).

Figure 21. Network of users and socialbots.



Source: (Strohmaier, 2012).

### 2.4.1 The Use of Social Media BOTs in Business

In the light of social media commonness and influences, most organisations worldwide have started thinking strategically how they can advantage from social media to make sure they reach their target audience as well as contributing to their customers' experience (Leeflang, Verhoef, Dahlström, & Freundt, 2014); (Leung, Yeung, & Schuckert, 2013); (Tuten, Solomon, & Tracy, 2018). It's reasonable for state that similarly as social media are changing the way consumers live on a daily basis, so too these online platforms transform how marketers continue on ahead their business. Regardless of whether companies' focus is to improve customer service, maintain customer relationships, inform consumers of their benefits, promote a brand or related special offer, develop a new product, or influence brand attitudes, new social media opportunities assume a job. (Tuten, Solomon, & Tracy, 2018). Please check the "Social Media" section of the thesis for detailed information and recent statistics on the benefits of social media to businesses.

Social bots have occupied social media platforms for the most recent decade and and have gotten progressively inescapable. (Varol, Ferrara, Davis, Menczer, & Flammini, 2017). Usage of social bots by businesses are not universally designed for intentional malice, as many bots serve in benign or even helpful roles. Socialbots can help businesses to facilitate

growing process of their social media page by providing more reach, engagement and customer support. (Appel , Lauren , Hadi, & Stephen, 2019); (DMI Blog, 2020) The motivation behind automation and social media bots is not to completely replace the interactions between humans, yet to support business owners and marketers in connecting with customers more frequently and productively. (DMI Blog, 2020)

Brands without a committed social media team may struggle with posting on a regular basis if marketers end up shuffling various obligations. Automating social media engagement and management reduces the time spent on maintaining and expanding brand accounts. Social media automation allows companies upload their content calendar so they can concentrate on other tasks. Consequently, time and resources could be allocated toward other areas of the marketing budget and/or meeting strategic goals. (Sprout, 2020)

Respective contemporary subject matter and statistics will be illustrated below.

Results from the February 2020 CMO Survey indicate that over 80% of reported marketing budgets contain social media marketing and only 13.7% of marketing organizations included sales employees in their marketing budgets. (See Figure 22. Marketing expenses)

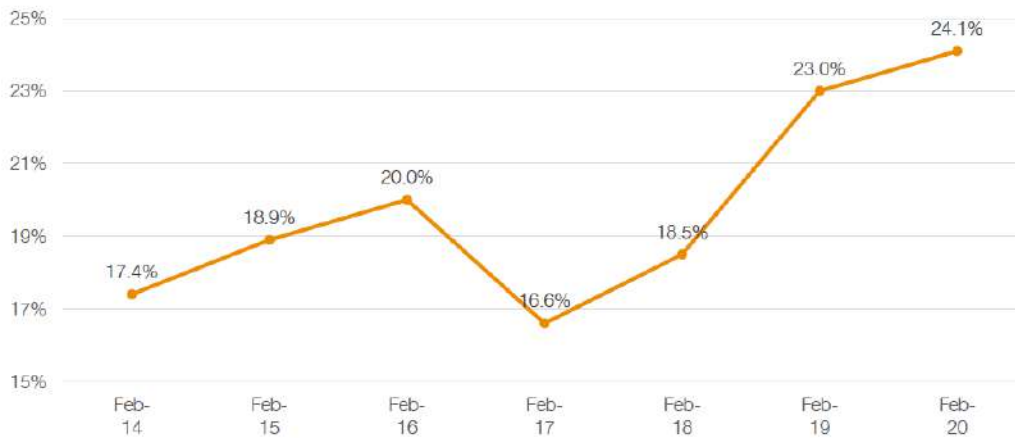
Figure 22. Marketing expenses

Marketing Expenses	% Reporting in Budget
Direct expenses of marketing activities	92.8%
Social media marketing	86.9%
Brand-related expenses	80.4%
Marketing employees	79.1%
Marketing analytics	72.5%
Marketing research	69.9%
Other overhead costs associated with marketing	65.4%
Mobile marketing tools	56.2%
Marketing training	54.2%
Sales support tools	40.5%
Sales employees	13.7%

Source: (Survey, 2020)

(Survey, 2020) indicates that role of outside agencies in social media activities reaches highest point in the highest level since the question was first asked in 2014. (See Figure 23. Percent of company’s social media activities performed by outside agencies)

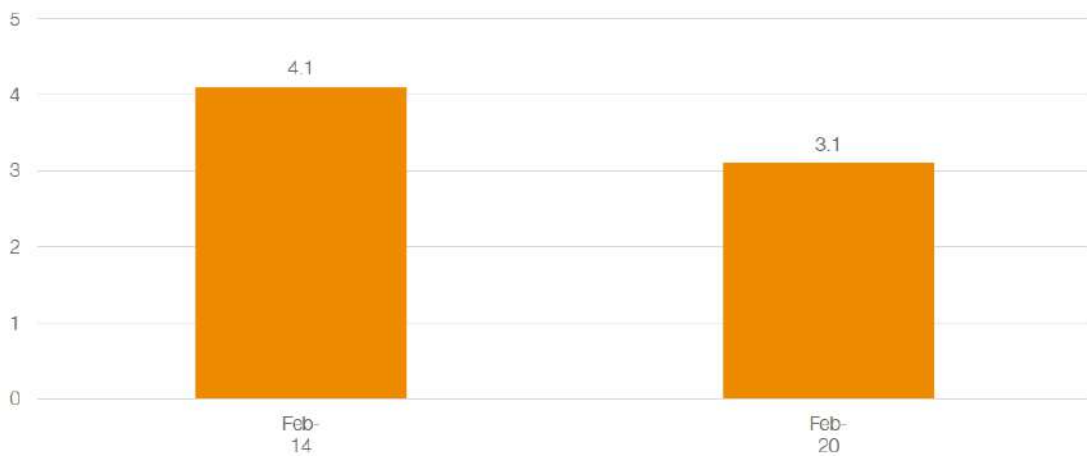
Figure 23. Percent of company’s social media activities performed by outside agencies



Source: (Survey, 2020)

Corresponding with outsourcing, internal social media staff has dropped 25% over the last 6 years. (See Figure 24. Number of people does in-house social media)

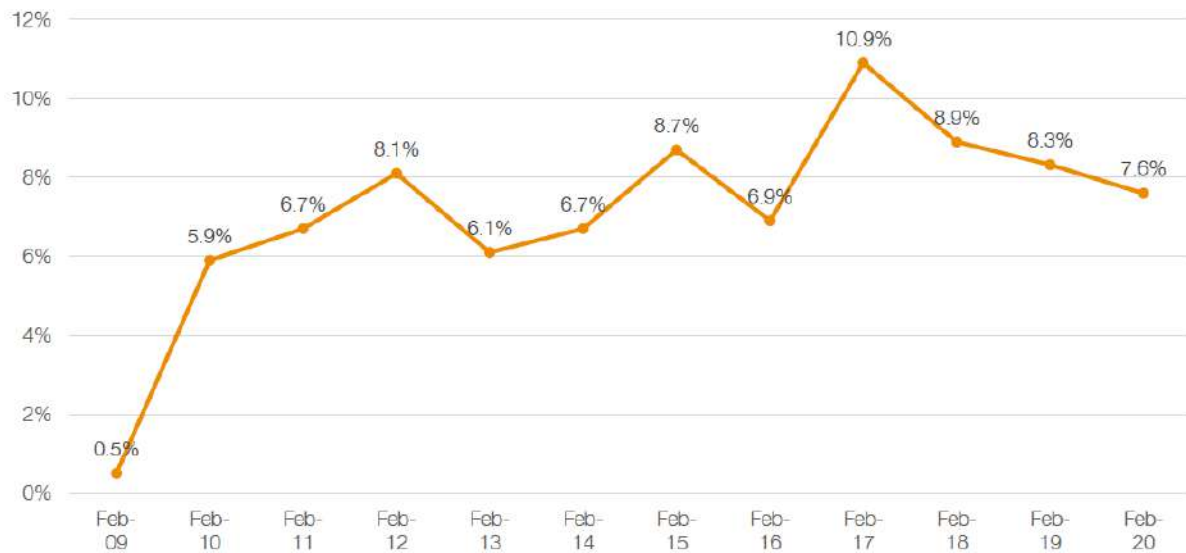
Figure 24. Number of people does in-house social media



Source: (Survey, 2020)

(Survey, 2020) also indicates that marketing budget growth expected to decline to 7.6% growth in next 12 months. (See Figure 25. Percent change in marketing budgets expected in next 12 months)

Figure 25. Percent change in marketing budgets expected in next 12 months



Source: (Survey, 2020)

### 3. Case Study

The case company is a small established Architectural and Visualisation Practice which undertake their business around Australia in the Property Industry. The selection criteria for the case study seeks an established company in a mature market location and sector now facing a new wave of digital disruption. This provides an emerging context where active automated social media marketing implementation has direct and measurable results. . Case study research designed to target activities on Instagram, the company had an Instagram page which was not so active in terms of use with 520 followers.

#### 3.1 Research Aim & Objectives of Study

Social media marketing now has the power to influence the brand position of every company in every industry sector. It is postulated that a company’s overall quality of communication is enhanced through broader competition generated over social media. When it comes to online marketing, automation is considered a powerful tool that allows you to get more done in less time.

The method of the study is to test current theories on Social Media Marketing Automation through the case study of an established company in a developed market that is

keen to adapt in a disrupted environment. Australia is a globally recognized early adopter of technology and is measured as one of the leading economies adapting to changing paradigms across all sectors. The Architecture Engineering and Construction (AEC) Industry is a major contributor to the Australian economy; measured by average wealth per person Forbes puts Australia's per capita wealth as the second highest in the world after Switzerland.

The accelerating rate of digital transformation in the marketplace necessitates a constant and sustained academic body of research to inform the university of the evolving adaptation and adoption of Social Media.

Thus, the following question has been derived:

- Does the use of socialbot expands brand engagement, brand awareness, and reach on social media?
- Does the number of followers on Instagram can lead to a positive brand reputation?
- How does social media automation affect brand reputation?

It is accepted in both academia and industry that Social Media has had disruptive implications on marketing. This research hypothesis postulates; that the use of socialbot expands brand engagement & reach, thus generating brand reputation benefits resulting in a recursive customer relationship. The case study at hand will test;

- If social Media Marketing automation creates greater brand awareness/ engagement and reach
- If the number of followers on Instagram can lead to a positive brand reputation.

The case study will evaluate and implicate;

- Evaluation of Automated Online Marketing, Mapping KPIs to the Brand Reputation and Customer Journey
- Implications- Theoretical Contribution: Relation Loop of Automated Social Media Marketing, KPIs and Customer Journey

### **3.2 Research Strategy & Research Design**

The research proposes a “Growth Strategy” as a model. The growing technique is considered to increase the growth probability on social networks. It is a strategy made from a set out of exercises that assists with having better outcomes over the chosen social network. Growing Technique can typically be of two different natures; the first one is organic which

occurs if users only use tools provided by social media and the second one is inorganic which occurs if users utilize the social media promotions or automated tools, like socialbots. It is unlikely that all social network users can be interested in the user content so usually, the growing techniques are applied to a niche which are accounts potentially interested in the user content. (Chen, 2019)

Case study research designed to target activities on Instagram as seven weeks in total, the first two weeks were carried out without using socialbot, and the remaining five weeks were carried out using socialbot.

Figure 26. Timeline of the Case Study



Source: Case Study

Socialbot activities on Instagram designed to test how “Benign” Socialbot usage can contribute to Instagram optimization. General strategy Instagram mainly focuses on search optimization, creating specific content, hashtag strategy, experience strategy, activation plan, executing, and measuring. On the other hand, Growth Strategy is made out of the following strategies and operational steps, to be repeated over time:

- 1) Follow the target audience
- 2) Adopt a Follow/Unfollow Strategy
- 3) Publish new contents frequently: Instagram search optimization

4) Creating specific content and relevant #hashtags: Being specific with Instagram is important because Instagram looks at the hashtags used in the posts and categorize our content correctly to display it to the correct users who may be showing interest in it. The Instagram algorithm can detect if the content relevant to hashtag.

5) Like, comment, post on #instastory: Being active and engaged with other profiles get recognized by the Instagram algorithms and have positive effects on the post diffusion over Instagram.

6) Stay consistent: these activities must be done for a long period time (i.e. some months) to be really effective;

- 7) Measuring

Case study research designed through both qualitative and quantitative research. The empirical findings are generated through rigorous qualitative and quantitative analysis of the



collected data for both case study company (primary data related to agreed KPIs) and market research (secondary data related to Brand Reputation).

Conclusions are drawn from the empirical analysis; theoretical contributions are outlined, followed by the presentation of the extended model- “Relation Loop of Automated Social Media Marketing, KPIs and Customer Journey”. Finally, the research presents a set of recommendations for further research.

### 3.3 Data Collection & Analysis

Data collections consist of organic Instagram activities and socialbot activities on Instagram.

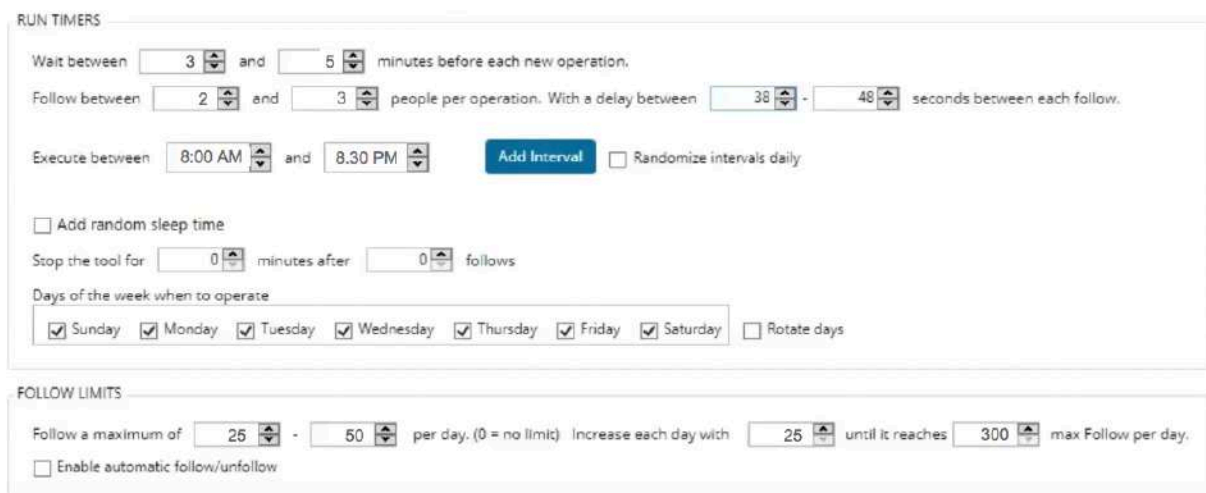
#### 3.3.1 Qualitative Research

The qualitative research study consists of doing description is the fundamental act of data collection in a qualitative study. A role of qualitative research at hand is to complement quantitative research through concept clarification, interpretation and, process evaluation to find out in own words reasons for an action, motives behind a decision and to explore range and variety of experience. The qualitative research method applied facilitates the working personally on observation and analysis of individual instances.

##### 3.3.1.1. “Follow” Arrangments of the Socialbot

The first thing we want to do is run through the actual run timers. We changed settings from the default into new settings to not running into blocks and having any issues, also to make sure everyone's having a great user experience overall. So, our settings are as in Figure 27.Follow Arrangments / Run Times.

Figure 27.Follow Arrangments / Run Times



The screenshot displays the configuration interface for a socialbot, divided into two main sections: RUN TIMERS and FOLLOW LIMITS.

**RUN TIMERS:**

- Wait between 3 and 5 minutes before each new operation.
- Follow between 2 and 3 people per operation. With a delay between 38 - 48 seconds between each follow.
- Execute between 8:00 AM and 8:30 PM. Includes an "Add Interval" button and a checkbox for "Randomize intervals daily".
- Checkbox for "Add random sleep time".
- Stop the tool for 0 minutes after 0 follows.
- Days of the week when to operate: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday (all checked). Includes a checkbox for "Rotate days".

**FOLLOW LIMITS:**

- Follow a maximum of 25 - 50 per day. (0 = no limit). Increase each day with 25 until it reaches 300 max Follow per day.
- Checkbox for "Enable automatic follow/unfollow".

Source: Socialbot of case study



As a business account, we chose to be in contact with people at convenient times and our social bot run hours are 8:00 AM-8.30 PM, seven days a week.

In order to mimic human behavior;

- Our wait between arranged as 3-5 minutes before each new operation
- Our follow between 2 and 3 people per operation, also then we want our delayed to be between 38 to 48 seconds.

What these arrangements do each time we follow people, socialbot go pick a random (some factors affect like hashtags, target accounts' followers) between two and three users. Between each follows socialbots waits between 38 and 48 seconds.

As follow limits, we arranged between 25 and 50 per day. What socialbot does is follow a range between 25 and 50 people on the first day we run then increase the number by 25 until it reaches 300 per day slowly. The advantage on that we don't have to change the settings each day, socialbot do it automatically for us, it starts off this and slowly builds our account up. We don't prefer to enable automatically to follow/ unfollow, we set that up ourselves and manually put arrangements on this matter.

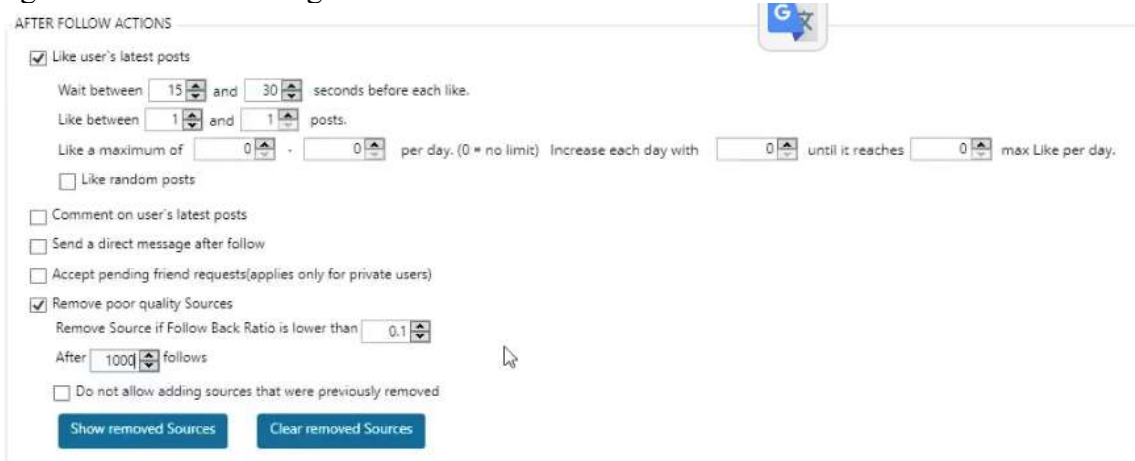
Next up of the 'Following Arrangements', is the user filters. Manual arrangements were taken to define the user we target and to optimize our following quality. We arranged whom to follow through the following criteria:

- Hashtags, keyword searches.
- Competitor accounts' followers are targeted in two ways, firstly is entering manually the competitor we aware of, and secondly same sector accounts' followers with us.
- Geo location filter.
- Business accounts category defined. We aimed at some target sectors to create B2B contacts.
- We also put filters on to skip non-English users, users without profile image, users haven't posted in five months, and users already following us. We target all gender users.

As the last step on 'Follow Arrangements,' there is 'After Follow Actions'. It is important to remove poor-quality sources and create engagement after the following. We decided to give a like user's latest post right after we follow to increase engagement. To take a humanistic approach, we aimed to wait between 15 to 30 seconds before each like after our

follow actions. Removing poor quality sources is important, for example, we follow people who have interacted on a certain user's post, if we get a ratio of followed back less than 0.1, we remove them. Simply, after following a thousand people if a hundred of them have not followed us back so it's a bad source we remove them.

Figure 28. Follow Arrangements / After Follow Actions



Source: Socialbot of case study

### 3.3.1.2. “Unfollow” Arrangements of the Socialbot

Unlike following actions unfollow actions designed a bit of pacer. We decided to unfollow accounts that are followed by socialbot who did not follow back after two days the socialbot has followed them. Yet, we don't unfollow commenters on the last any of our last 12 posts. To take a humanistic approach, we unfollowed between 2 to 5 accounts per operation with a delay between 38 to 48 seconds. We executed it on the night time to reduce activities during the day. (See Figure 29. Unfollow Arrangements of the Socialbot)

Figure 29. Unfollow Arrangments of the Socialbot

**RUN TIMERS**

Unfollow items after a minimum of  days after the application followed them.

Wait between  and  minutes before each new operation.

Unfollow between  and  items per operation With a delay between  -  seconds between each unfollow.

Execute between  and  Add Interval  Randomize intervals daily

Add random sleep time

Days of the week when to operate

Sunday  Monday  Tuesday  Wednesday  Thursday  Friday  Saturday  Rotate days

---

**UNFOLLOW LIMITS**

Unfollow a maximum of  -  per day. (0 = no limit) Increase each day with  until it reaches  max Unfollow per day.

Enable automatic follow/unfollow

---

**USER FILTERS**

Unfollow all users followed by Jarvee (leave unchecked to only unfollow those that did not follow back )

Delay unfollow for followers

Also target users followed from outside Jarvee

User has a follow ratio (followers/following) greater than

User has a follow ratio (followers/following) smaller than

User has a number of followers/followings in a specific range

Do not unfollow likers

Do not unfollow commenters That commented on any of your last  posts

Use whitelist

Unfollow specific users

Source: Socialbot of case study

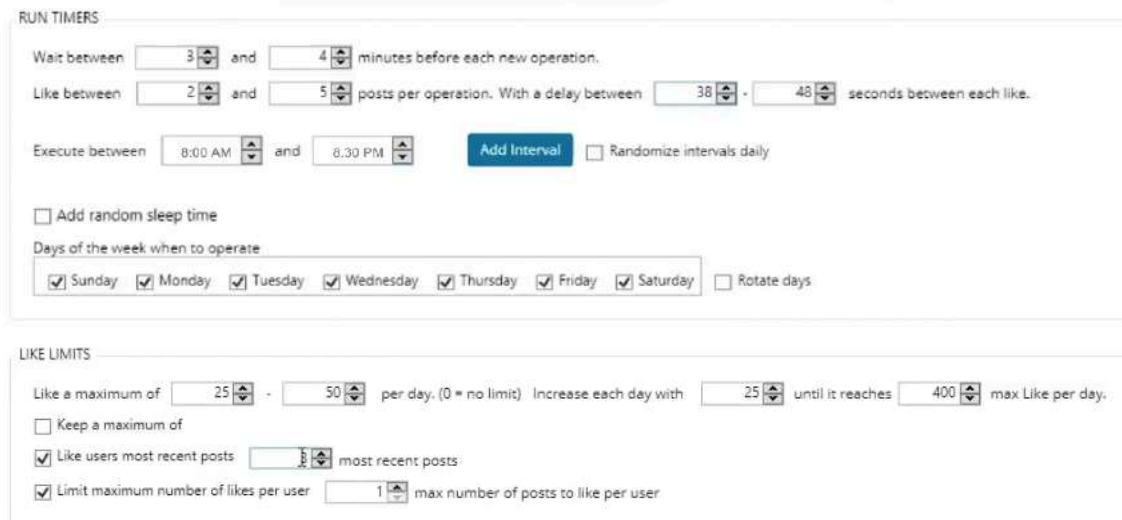
### 3.3.1.3. “Like” Arrangments of the Socialbot

Like settings have been adjusted to achieve two goals; the first one is to set up liking in a way that engages with our current followers, tactic to reward people for engaging with our content, and the second goal is to engage the target audience. Related settings are shown in Figure 30. Like Arrangments of the Socialbot. Socialbot settings arranged to wait between 3 and 4 of the new operation to like between 2 to 5 posts per operation with a delay between 38 to 48 seconds. We set socialbot to like a maximum of 25 to 50 on your first day increasing by 25 until it reaches 400 per day (includes “Following” likes).

We arranged what to like through the following criteria:

- Hashtags, keywords.
- Geo location filter.
- Business accounts posts on the category defined. We aimed at some target sectors to create B2B contacts.
- We also put filters on to skip non-english users, users without profile images, posts with over 700 likes.

Figure 30. Like Arrangements of the Socialbot



The screenshot displays the configuration interface for a socialbot, divided into two main sections: 'RUN TIMERS' and 'LIKE LIMITS'.

**RUN TIMERS:**

- Wait between 3 and 4 minutes before each new operation.
- Like between 2 and 5 posts per operation. With a delay between 38 - 48 seconds between each like.
- Execute between 8:00 AM and 8:30 PM. Includes an 'Add Interval' button and a checkbox for 'Randomize intervals daily'.
- Checkbox for 'Add random sleep time'.
- Days of the week when to operate: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday (all checked). Includes a checkbox for 'Rotate days'.

**LIKE LIMITS:**

- Like a maximum of 25 - 50 per day. (0 = no limit). Increase each day with 25 until it reaches 400 max Like per day.
- Checkbox for 'Keep a maximum of'.
- Checked checkbox for 'Like users most recent posts' with a value of 10 most recent posts.
- Checked checkbox for 'Limit maximum number of likes per user' with a value of 1 max number of posts to like per user.

Source: Socialbot of case study

### 3.3.1.3. “Like Comments” Arrangements of the Socialbot

In the same running time of “Following” and “Like” arrangements’ running time we liked comments, we get from the audience between 25-100 likes per day. It is important to get engaged with the comments we get but we put some filters on it to be in a safe zone.

Filters we applied as follows;

- Skipping non-English comments
- Not to like our own comments
- Putting a list of bad words filter, there are comprehensive lists online available which covers various bad word with symbols, emojis, and abbreviations. Even there are additional lists specific to the sectors.

### 3.3.2. Quantitative Research: Stage of Exploration

The socialbot settings implemented in the quantitative research section were tested over five weeks (13/04/2020- 17.05.2020). Data collections consist of organic Instagram activities and socialbot activities on Instagram are presented.

### 3.3.2.1. Data outcome of organic Instagram activities

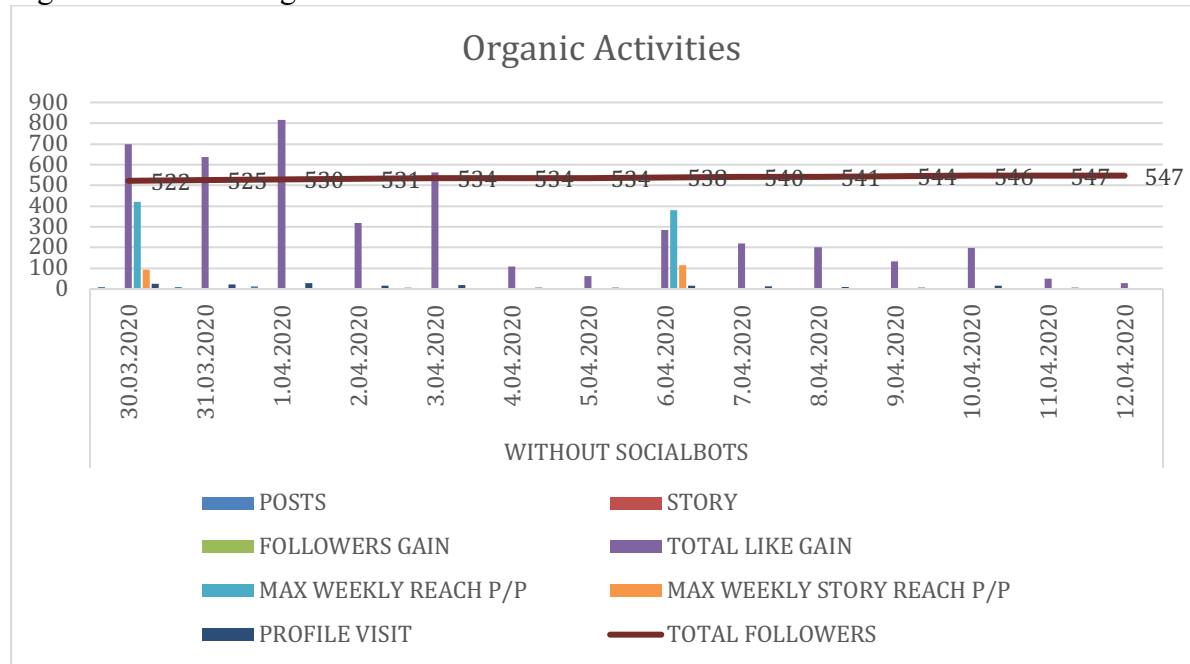
Organic activities were carried out in the first two weeks of the study and started with 520 followers. Raw data is presented.

Table 3. Major data outcome of organic Instagram activities

Normal Activity	
Period	2 weeks
Followers gain	27
Post like average	71
Max liked post	91
Max reach per post	420
Daily average profile visit	14
Engagement rate (by post)	%13,3
Engagement rate reached (by reach)	%17,7

Source: Case Study

Figure 31. Overall Organic Activities



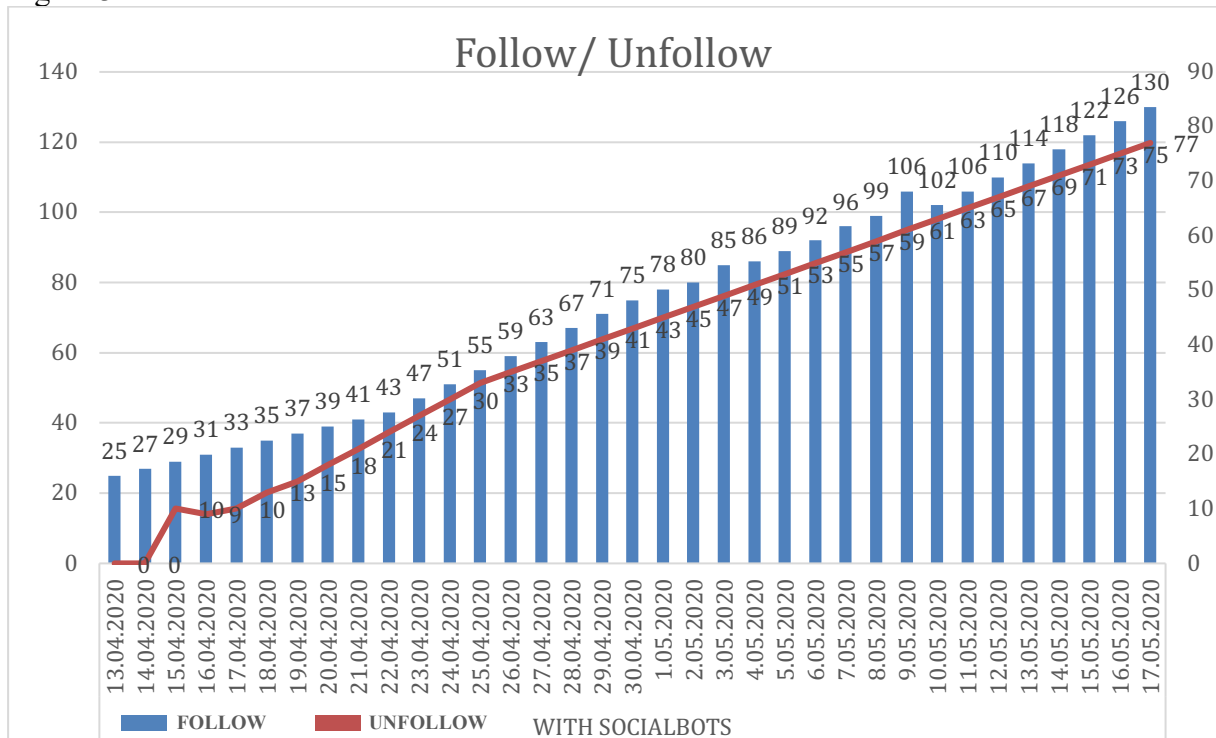
Source: Case Study

The results obtained by raw data will be explained comparatively in the next sections.

### 3.3.2.2. Data outcome on “Follow”/ “Unfollow” Activities of the Socialbot

The adjustments and inferences made in the qualitative research section were tested and the following results were obtained for the “Follow”/ “Unfollow” Activities. Social Bot ended its activities doing 2567 follow and 1442 unfollow.

Figure 32. Follow/ Unfollow actions of the socialbot

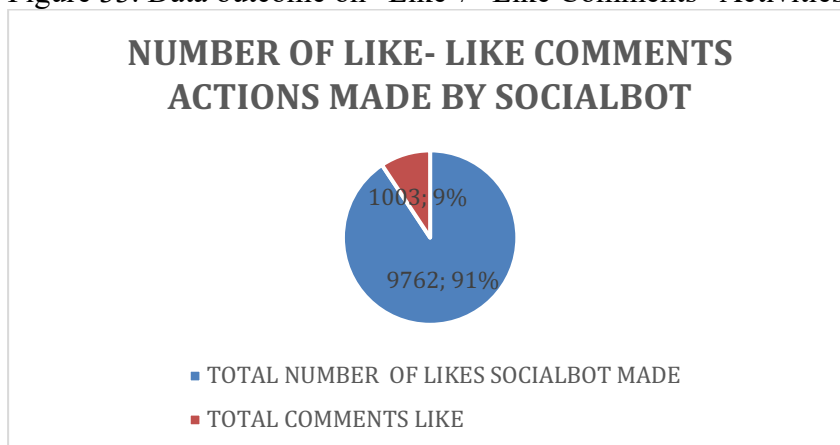


Source: Case Study

### 3.3.2.3. Data outcome on “Like”/ “Like Comments” Activities of the Socialbot

The adjustments and inferences made in the qualitative research section were tested and the following results were obtained for the “Like”/ “Like Comments”. Social Bot ended its activities doing 9762 like, 1003 like on comments.

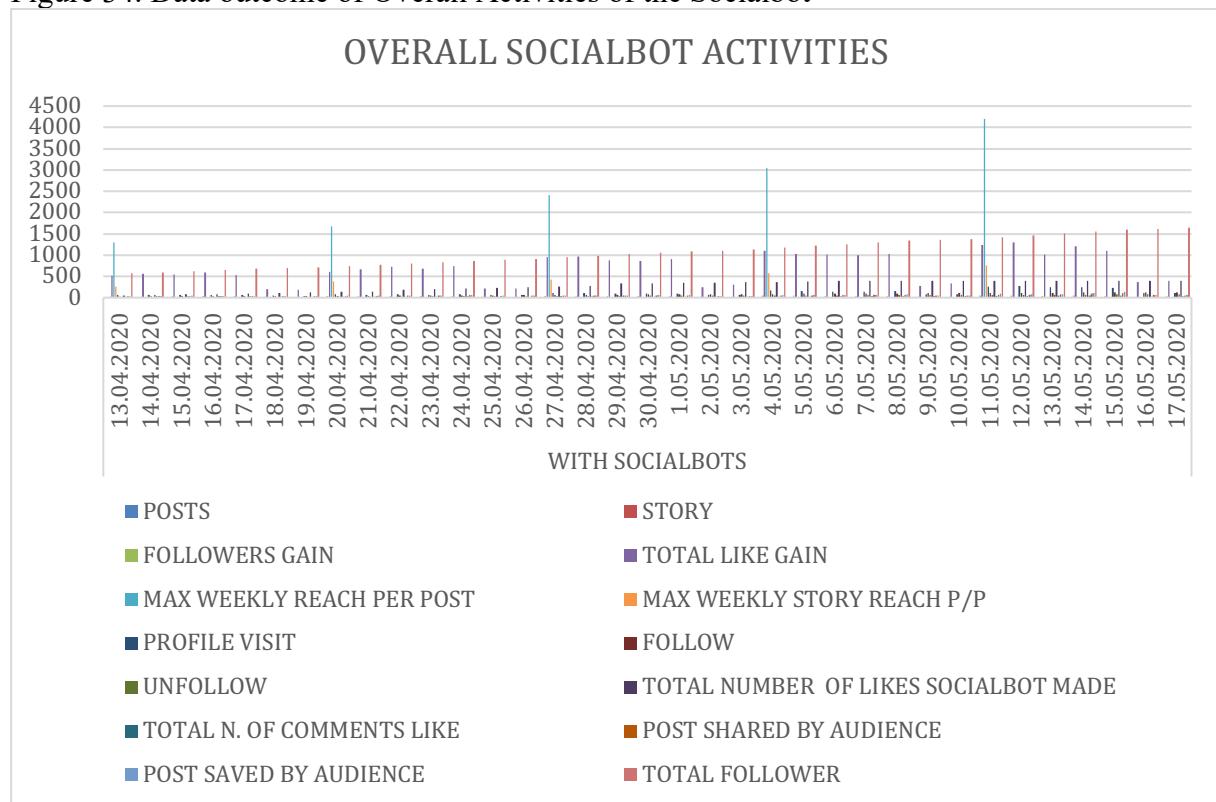
Figure 33. Data outcome on “Like”/ “Like Comments” Activities of the Socialbot



Source: Case Study

### 3.3.2.2. Data outcome of Overall Activities of the Socialbot

Figure 34. Data outcome of Overall Activities of the Socialbot



Source: Case Study

The results obtained by raw data will be explained comparatively in the next sections.

## 4. Comparative Analysis of Research Findings

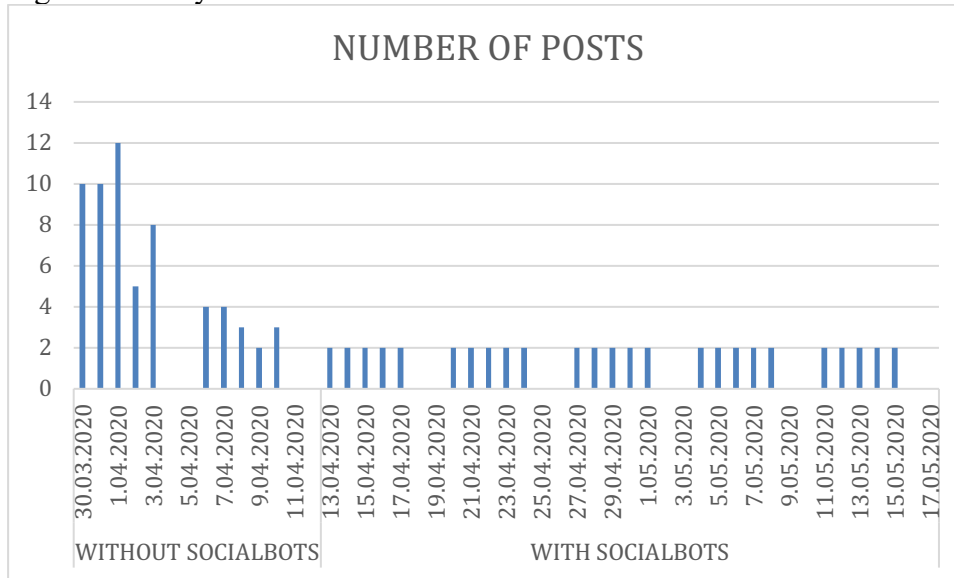
In order to analyze socialbot effects, the results before and after the use of socialbot distribution are compared.

### *Effects on Reach*

The Instagram algorithm is what decides which posts people see every time they open their feed. Instagram's algorithm is based on machine learning, so the way it ranks the posts is constantly evolving, (Hootsuite, 2020). In the period of not using social bots; sharing more posts daily (See Figure 35. Daily Number of Posts) and choosing the right hashtags according to the trend didn't give the user experience in regards to prominence expected in the algorithm. The highest reach of the week per post increased from the first week was 420, after using socialbot our highest reach of the week evolved to 4205 (+901%) last week. (See Figure 36. Highest Weekly Reach Per Post).

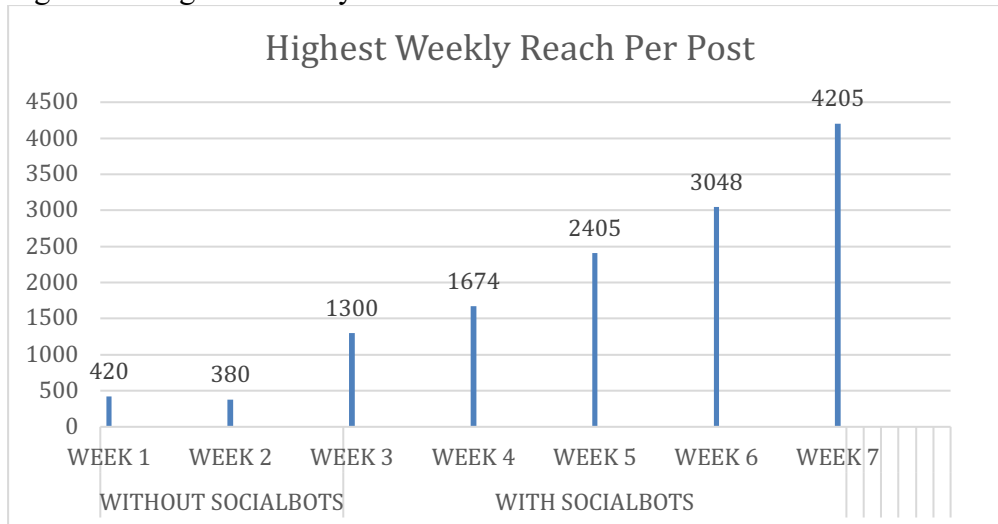


Figure 35. Daily Number of Posts



Source: Case Study

Figure 36. Highest Weekly Reach Per Post



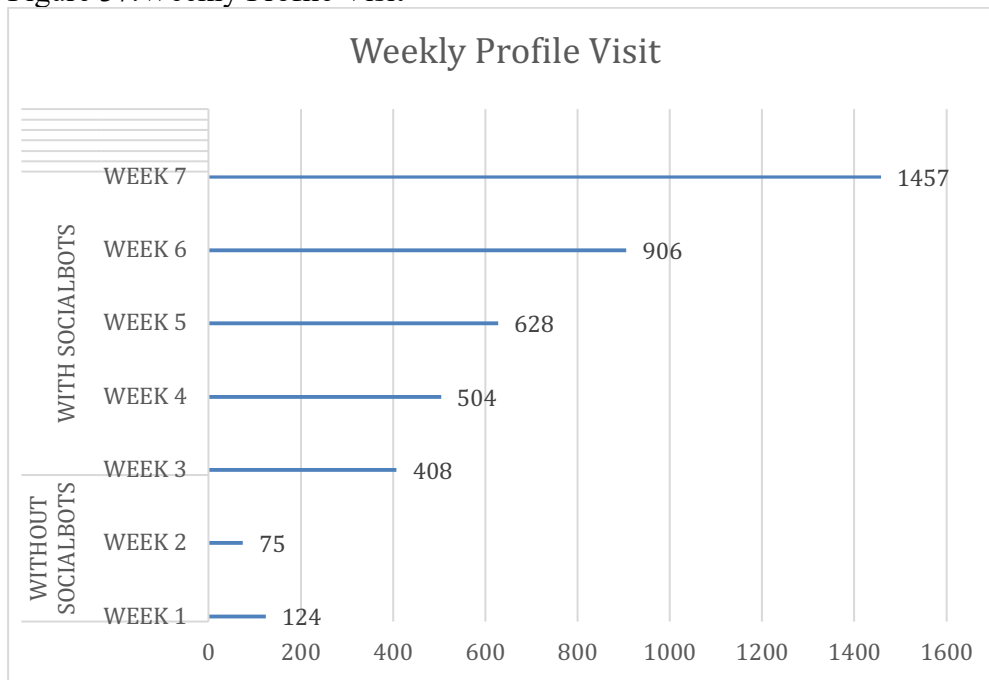
Source: Case Study

The Ratio of Reach/Follower increased from 0.78 (first week without socialbot) to 2.61 (last week with socialbot), increasing +235%. The number of people reached gained 235% efficiency comparing with the number of followers.

Reachability a marker for what number of accounts & user posts can reach. Low reachability has an undesirable consequence. Regardless of whether the user posts great content, visibility is the arbiter. In light of these evaluations, weekly profile visitor statics are presented.

Only 124 users (both through followers and hashtags) were visiting the profile by the end of the first week while we share posts more frequently. Following the use of social boots, a great momentum was gained. An increase of 1075% with "weekly profile visits" on 1457 was observed from the first week to the last week.

Figure 37. Weekly Profile Visit



Source: Case Study

- *Effects on Follower*

The comparison between the number of followers and following is called the follower/following ratio. The follower/following ratio is a metric, Instagram user, and Instagram algorithm pass judgment on the quality of an Instagram account, just as decide the processes and practices the account is using to increase a credible audience. Those with low follower/following ratio are normally low-quality accounts, evaluations are as follows (<0.5 Spammer, 0.5-1 Suspicious, 1-2 Normal, 2-10 Micro Influencer, 10+ Influencer), (Nicole, 2020); (Hootsuite, 2020).

Follower/Following ratio by the end of the two weeks (without socialbots) was 0.8%. After using socialbot our Follower/Following ratio by the end of the week increased to 1.03%. It means reliability that can be emphasized more to the users and in the Instagram algorithm resulting in higher reach.

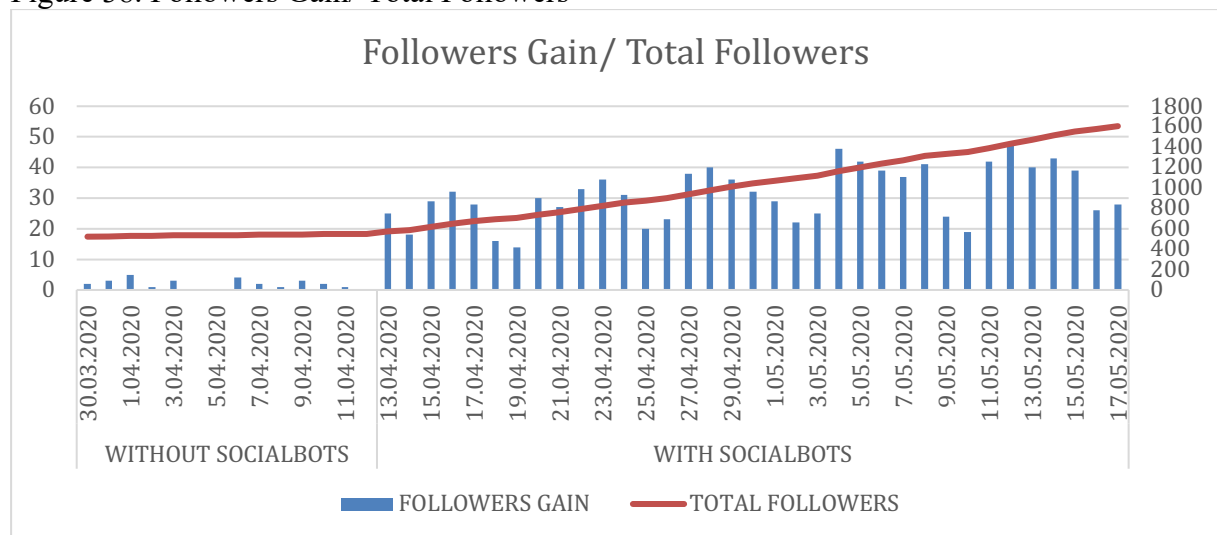
From the following graph (See Figure 38) we can point out that the follower growth, over the examined first two weeks was really slow and ineffective. In the first two weeks (without socialbot) we gained 27 followers (from 520 to 547) with follower gain ratio on 0,04, (Follower gain ratio=Follower Gain/Total Follower). In the end, an increase of 1058 followers (from 547 to 1605) is observed with the following gain ratio on 0,69 (+1625%). Our follower gaining process gets 1625% more effective.

Another measurement is follower growth rate (Follower Growth Rate = New Followers / Starting Follower Count x 100%) shows percentage growth, measures the speed at which your social media account is gaining (or losing) followers relative to your previous follower count. Evaluation of follower growth rates by InfluencerDB (Ehrhardt , 2017) as follows: <0% Very poor; 0%-2,5% Poor; 2,5%-5% Fair; 5%-7,5% Good; >7.5 % Very good.

The follower growth rate of the first week (without socialbot) measured as 2,1% considered as very poor according to the determined values, at the last (7th) week the rate has improved impressively, reaching 19,1% considered as very good.

This growth is represented in the following graph Figure 38. Followers Gain/ Total Followers where is highly visible the differences on the follower growth between the case in which the socialbot were not used and the case in which the Socialbot were used.

Figure 38. Followers Gain/ Total Followers

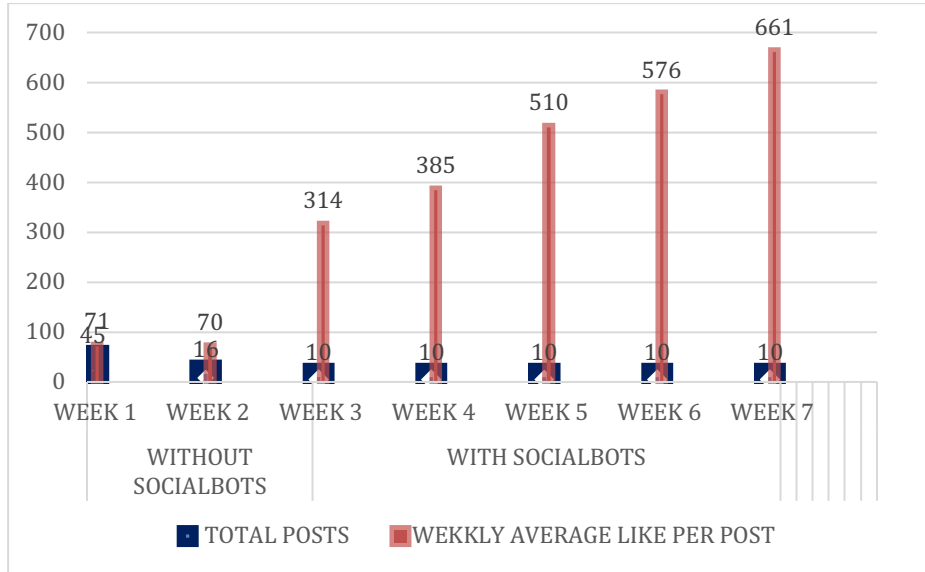


Source: Case Study

- *Evaluation on Likes*

Likes growth observed is visible with immediate results as evinced in the following the weekly average like we gain increased from 71 (like average of the first week) to the 661 (the like average of last week), increasing by +830%.

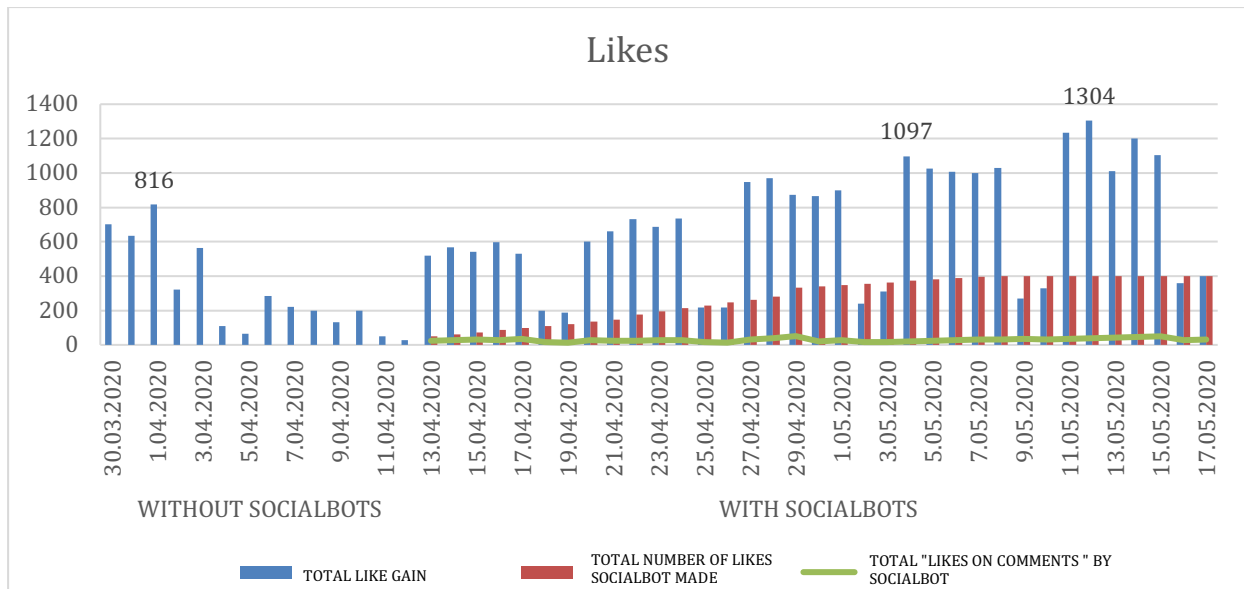
Figure 39. Weekly Average Like/ Post Comparison



Source: Case Study

During the 5-week observation, the socialbot performed 10765 likes activity to the target audience whereas gaining 24465 (+127%) likes. Comparison of the total number of like / like comment actions that socialbot made to the target accounts with the total like case study' Instagram page gain presented at following .Figure 40.Like Actions/ Gains.

Figure 40.Like Actions/ Gains



Source: Case Study

- *Evaluation on Engagement*

As the number of people reached increases, the “engagement rate” is expected to decrease. However, reaching more people based on action provides engagement with more people. There are many ways to calculate the "engagement rate", the main methods are listed below.

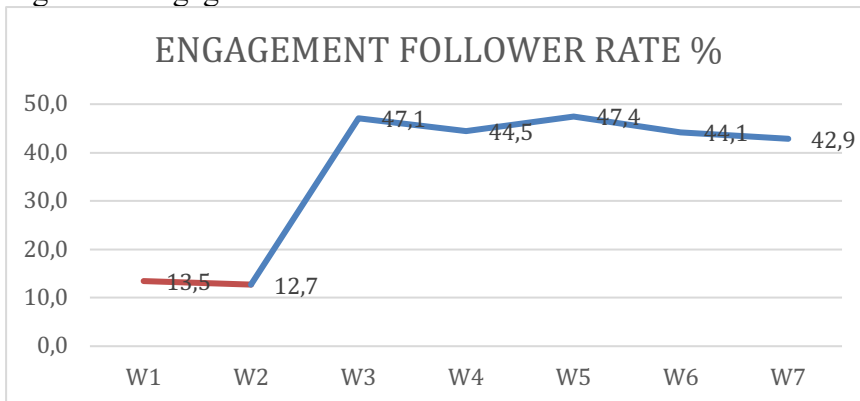
- Engagement /Followers rate=  $((\text{Likes}+\text{Comments})/\text{Followers}) * 100$
- Engagement / Reach rate=  $((\text{Likes}+\text{Comments})/\text{Reach}) * 100$

For reference values of Engagement /Followers rate, a market analysis carried out by (Influencer Marketing Agency, 2019) with 282 000 Instagram accounts is used and presented as follows.

- Up to 1.000 follower:  $ER \geq 16,01\%$ ;
- Up to 5.000 followers:  $ER \geq 8,23\%$ ;
- Between 20.000 to 4 million followers:  $ER \geq 3,68\%$  -  $ER \geq 2,50\%$

In order to eliminate the confusion may cause by the time difference between with and without socialbot usage time, the “engagement/follower rate” values collected from the Instagram insight part of each post and distributed to the weeks. (See Figure 41.Engagement follower rate); red line presents the first two weeks without a socialbot and the blue line presents five weeks with a socialbot.

Figure 41.Engagement follower rate



Source: Case Study

The average Engagement follower rate of the case study of the organic improvement period of two weeks is 13% (under reference value), whereas the socialbot improvement period is 45,2%, increasing +%247. Engagement / Reach rate for the organic period measured as 17,7%, while the socialbot period is 18,4%, increasing %3.

As the number of followers increases, the “Engagement /following rate” is expected to decrease, but the reason behind this improvement is reaching the right audience trough trend hashtags detected which optimize our visibility on Instagram algorithm results meeting with audience, targeting competitor accounts followers and potential B2B connections, connecting with acquaintances and our networks

## 5. Evaluation of Research Findings

### 5.1. Evaluation on Brand Engagement & Reach

This part of the evaluation answers the following question: Does the use of socialbot expands brand engagement, brand awareness, and reach on social media?

All the results obtained are summarized to provide completeness of the information at the following table.

Table 4. Overall Results

	Organic Activity	Socialbot Activity	Improvement
Period	2 weeks	5 weeks	+150%
Posts	61	50	-18%
Total Follower at the end of period	547	1605	+193%
Highest reach	420	4205	+901%
Reach/Follower Ratio	0.78	2.61	+235%.
Profile Visit (first-last week)	124	1457	+1075%
Follower/following ratio.	0.8%.	1.03%.	+28.7%
Follower gain ratio	0,04	0,69	+1625%
Follower Growth Rate	2,1%	19,1%	+809%
Average like gained (first/last week)	71	661	+830%.
Engagement follower rate	13%	45,2%	+%247.
Engagement / Reach rate	17,7%,	18,4%,	%3.

Source: Case Study

Due to the experimental results obtained, employing socialbot consistently optimized all the analyzed statistics and KPIs, achieving its initial purpose to increasing reach brand engagement and brand awareness over Instagram.

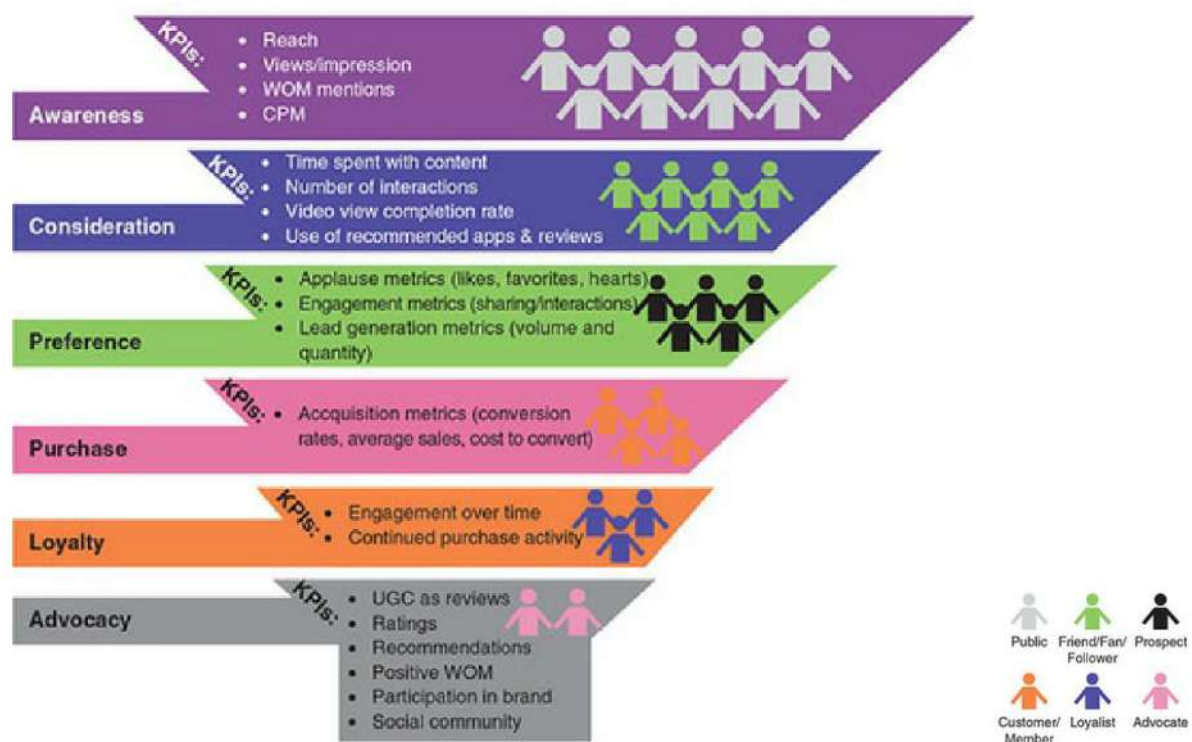
## 5.2. Evaluation of Automated Online Marketing, Mapping KPIs to the Brand Reputation and Customer Journey

This part of the study evaluates if the expanded brand engagement & reach by the use of socialbot generating brand reputation benefits through mapping KPIs to the brand reputation and customer journey.

While there is no equation extricate a solitary number or other quantifiable indicators of the state of a brand’s reputation on social media, (Mckinight, 2019), (Lyfe Marketing, 2019) and (Barragry, 2020) agree on the criteria of brand reputation as page views, return customers, likes, shares & saved, sentiment analysis and reach.

Social media monitoring able to measure some parts of brand reputation, numbers obtained by social media is valuable only when put in a context. As a point of reference, the model of Mapping KPIs to the Marketing Funnel and Customer Journey (Tuten, Solomon , & Tracy , 2018) is taken, (See Figure 42 below). Also, to support the study in terms of audience opinions, the following question was raised through the Instagram poll survey: Does the number of Instagram followers of a brand affect your perception of the brand reputation positively?

Figure 42. Mapping KPIs to the Marketing Funnel and Customer Journey



Source: (Tuten, Solomon , & Tracy , 2018)

The model of “Mapping KPIs to the Marketing Funnel and Customer Journey” connects the customer journey to the relevant KPIs. Each customer journey step will be evaluated below with the relevant "KPI" below in terms of brand reputation, respectively.

### 5.2.1 Brand Reputation Element: Awareness

From the point of “public” audience; reach, views, and mentions are considered as KPIs. According to the data obtained from the case study, the effects of using socialbot on reach, views, and mentions are shown in Table 5. Mapping KPIs to the Awareness.

Table 5. Mapping KPIs to the Awareness

Criteria	KPI	Organic Activity	Socialbot Activity	Improvement
Reach	Highest reach per post	420	4205	(+901%)
Reach	Engagement / Reach rate	17,7%,	18,4%,	%3.
Views	Profile visit (first-last week)	124	1457	+1075%
Mentions	Share (first-last week)	8	532	+6550%

Source: Case Study

Due to the experimental results obtained, employing socialbot consistently optimized all the analyzed KPIs, achieving its mapped journey purpose to increasing awareness on brand reputation over Instagram.

### 5.2.2 Brand Reputation Element: Consideration

From the point of “friend/ fan/ follower” audience; likes, reviews, number of interactions are considered as KPIs. According to the data obtained from the case study, the effects of using socialbot on likes, reviews, number of interactions and, suggested KPI are shown in the following Table 6. Mapping KPIs to the Consideration.



Table 6. Mapping KPIs to the Consideration

Criteria	KPI	Organic Activity	Socialbot Activity	Improvement
Likes	Average like gained (first/last week)	71	661	+830%.
Reviews	Total Comments Weekly (first/last week)	12	268	+2133%
Number of interactions	Likes gained + comments+ Saved	3229	7412	+ 129.5%
Brand image (suggested)	Follower/following ratio.	0.8%.	1.03%.	+28.7%

Source: Case Study

The suggested KPI “follower/following ratio” is a metric user and Instagram algorithm pass judgment on the quality of an Instagram account, just as decide the processes and practices the account is using to increase a credible audience.

Due to the experimental results obtained, employing socialbot consistently optimized all the analyzed KPIs, achieving its mapped journey purpose to enhancing consideration on brand reputation over Instagram.

### 5.2.3 Brand Reputation Element: Preference

From the point of “Prospect” audience; likes, saved, are considered as KPIs. According to the data obtained from the case study, the effects of using socialbot on likes, saved, and suggested KPIs are shown in the following Table 7. Mapping KPIs to the Preference. Table 7. Mapping KPIs to the Preference

Criteria	KPI	Organic Activity	Socialbot Activity	Improvement
Likes	Average like gained (first/last week)	71	661	+830%.
Saved	Total Saved (first/last week)	3	628	+20833%
Preference (Suggested)	Engagement / Reach rate	17,7%,	18,4%,	%3.
Preference (Suggested)	Follower gain ratio	0,04	0,69	(+1625%).

Source: Case Study

Due to the experimental results obtained, employing socialbot consistently optimized all the analyzed KPIs, achieving its mapped journey purpose to elevating preference on brand reputation over Instagram.

### 5.2.4 Brand Reputation Element: Purchase

Since the case company is in the service sector and running page without using online sales, raw data cannot be provided. However, it was stated the number of quotations has been increased. How many clients reach us through social media is left in the dark and can not be determined with the current database.

### 5.2.5 Brand Reputation Element: Loyalty

From the point of “Loyalist” audience; engagement over time is considered as KPIs. According to the data obtained from the case study, the effects of using socialbot on engagement over time and suggested KPIs are shown in the Table 8. Mapping KPIs to the Loyalty.

Table 8. Mapping KPIs to the Loyalty

Criteria	KPI	Organic Activity	Socialbot Activity	Improvement
Engagement over time	Profile visit (first-last week)	124	1457	+1075%
Engagement of follower (Suggested)	Engagement follower rate	13%	45,2%	+%247.
Retention (Suggested)	Retention Rate $RR = (LSVC * 100) / FSVC$ LSVC: Last Story View Count FSVC: First Story View Count	60	74	+23%

Source: Case Study

Due to the experimental results obtained, employing socialbot consistently optimized all the analyzed KPIs, achieving its mapped journey purpose to improving loyalty on brand reputation over Instagram.

### 5.2.6 Brand Reputation Element: Advocacy

From the point of “Advocate” audience; positive comments and share are considered as KPIs. According to the data obtained from the case study, the effects of using socialbot on positive comments and share are shown on the following Table 9. Mapping KPIs to the Advocacy.

Table 9. Mapping KPIs to the Advocacy

Criteria	KPI	Organic Activity	Socialbot Activity	Improvement
Positive Comments	Total Positive Comments Weekly (first/last week)	12	260	+2066%
Share	Share (first-last week)	8	532	+6550%

Source: Case Study

Due to the experimental results obtained, employing socialbot consistently optimized all the analyzed KPIs, achieving its mapped journey purpose to creating advocacy on brand reputation over Instagram.

#### *Overall Results*

Through the evaluation provided above, the study at hand accepts that expanded brand engagement & reach by the use of socialbot generates brand reputation benefits resulting in a recursive customer relationship.

#### **5.2.7 “Instagram Poll” Survey**

This part of the research evaluates if the number of followers on Instagram can lead to a positive brand reputation.

A blogger friend from Azerbaijan who is a student in Venice with 37.5K follower (@byturkanhasanova), contributed to the study at hand with an Instagram poll to support the study in terms of audience opinions, the following question was asked through the Instagram poll survey: Does the number of Instagram followers of a brand affect your perception of the brand reputation positively?

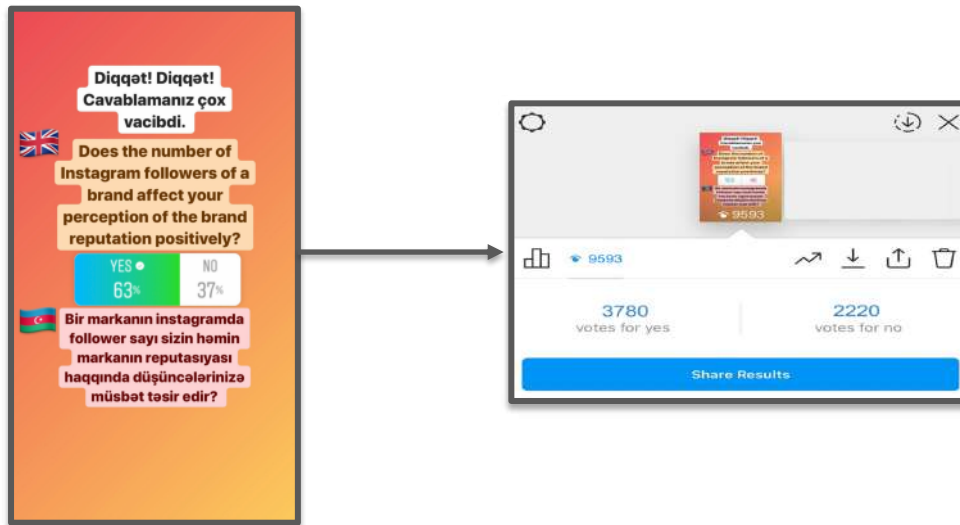
She directed the question both in her own language and English to reach more engagement on the question. The result of the Instagram Poll presented in Table 10. Instagram Poll Results.

Table 10. Instagram Poll Results

	Value	Percentage
Reach	9593	
Participant	6000	62%
Votes for “Yes”	3780	63%
Votes for “No”	2220	37%

Source: Figure 43. Instagram Poll Insight

Figure 43. Instagram Poll Insight



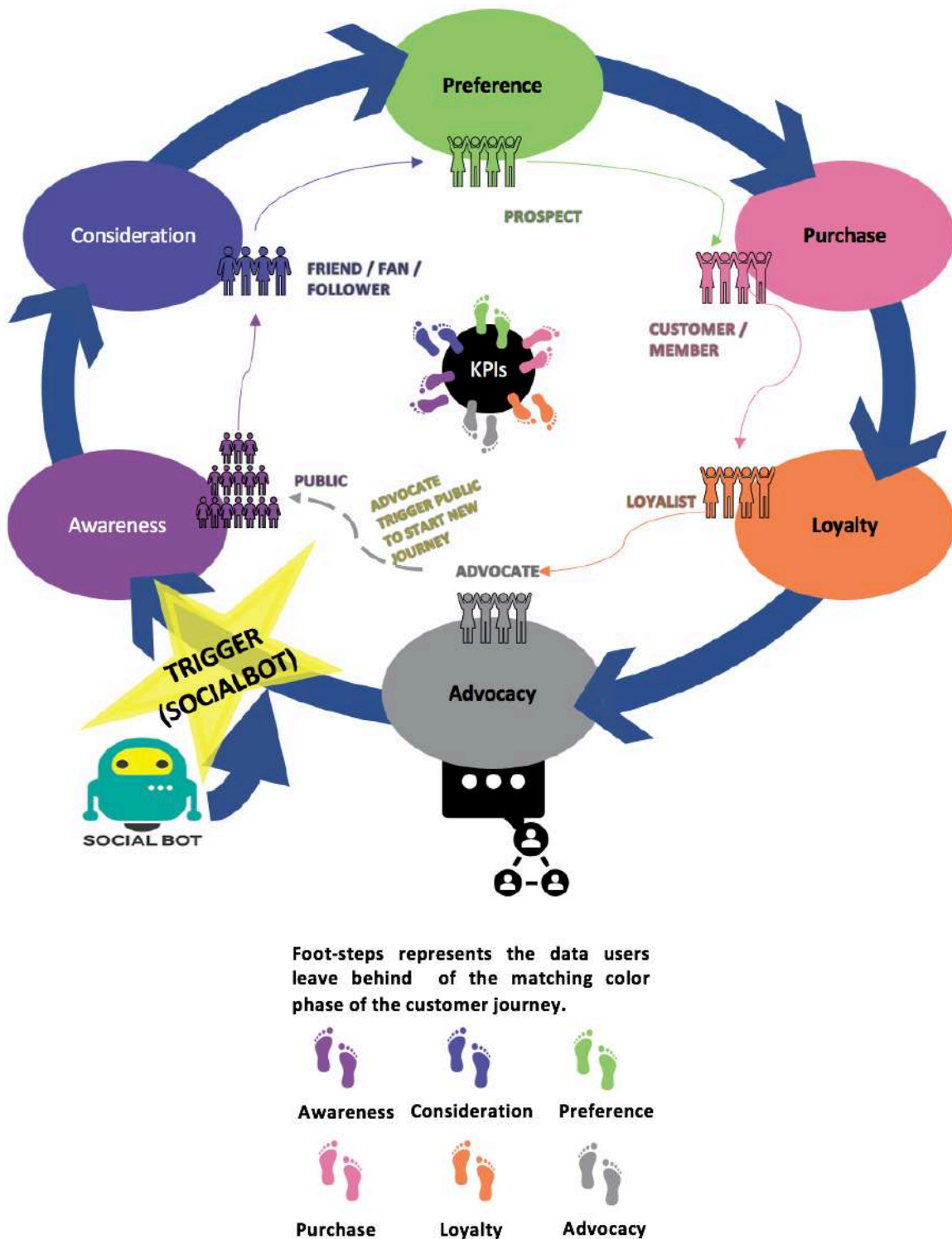
Source: @byturkanhasanova

Measuring the opinions of Instagram users about the number of Instagram followers of a brand seemed like it could provide more realistic results. Based on the majority of the percentage, the study at hand accepts that Instagram followers of a brand affect potential customers' perception of the brand reputation positively.

### 5.3. Implications- Theoretical Contribution: Relation Loop of Automated Social Media Marketing, KPIs and Customer Journey

The study at hand aims to deliver a theoretical contribution to the research field of social media automation. Through Mapping KPIs to the Marketing Funnel and Customer Journey (Tuten, Solomon , & Tracy , 2018), Figure 44. Relation Loop of automated Social Media Marketing, KPIs and Customer Journey is adapted and extended. Aim of the research showing use of socialbot expands brand engagement & reach, thus generating brand reputation benefits resulting in a recursive customer relationship. To give a meaning to recursive customer relationship following relation loop of automated social media marketing, KPI's and customer journey model created.

Figure 44. Relation Loop of automated Social Media Marketing, KPIs and Customer Journey



Source: Adapted from (Tuten, Solomon , & Tracy , 2018)

The main role of the socialbot in the model is being a trigger. From the previous data obtained we accepted that socialbot facilitates the process of reach resulting in bigger awareness. From that point brand starts to their engagement process and customer starts to their customer journey. The fact that the socialbot also facilitates reaching the target audience

is a factor that will accelerate the transition in these customer journey stages. Every online customer stage leaves some data behind. On the model created they named “Foot-steps and represented with the matching color phase of the customer journey. Each stage has its own specific KPIs, but which ones to use should be chosen based on the purpose of the page opened and what is desired to be achieved.

Customer Journey will start with awareness, following with initial consideration from that point they will become a follower or not. When customers become a prospect, they will start to an active evaluation where they check reviews of a brand online and engaging with the contents of social media. At their being customer (purchase) stage they will either happy with them and become loyal or unfollow. For bloggers and influencer accounts we can also evaluate purchase as engagement with contents. Loyal customers (from the point of social media long time followers) will feel connected more in time and start to leave reviews this is where they will be advocate customers. As advocate customer/ follower they will be a trigger for new customer journey trough e-wom. And this cycle of relation loop repeats itself. Thus, every time cycle repeats itself boost the brand reputation.

## 6. Conclusion & Overall Evaluation

This paper claims that utilizing good strategies and socialbot; facilitates, speeds up the improvement on Social Media results with effective outcomes. Social Media algorithms constantly changing, through my inference, I believe overcoming the limitation imposed by the Social Media algorithms is adapting a humanistic approach and keeping your algorithm knowledge up to date. Stating that the use of socialbot in the case study is definitely not used for a bad purpose but only build up engagement and facilitates the online marketing process. Personally, supporting that using malign socialbot must be countermeasures. On the other side, benign socialbots can provide various benefits to businesses.

Empirical results obtained through the case company which is a small established Architectural and Visualisation Practice which undertake their business around Australia in the Property Industry. The case study’ research applied “Growth Strategy” as a model in two different natures; organic and inorganic. Research activities on Instagram were seven weeks in total, the first two weeks were carried out as organic where the case company only used tools provided by social, and the remaining five weeks were carried out as inorganic through using socialbot.

The aforementioned sections illustrated and investigated how socialbot expands brand engagement & reach, thus generating brand reputation benefits resulting in a recursive

customer relationship. Though, overall evaluation aims at summarizing major findings that answer research questions and inquiries. Research questions & inquiries, evaluations and findings are discussed below.

### *Research Questions*

*1) Does the use of socialbot expands brand engagement, brand awareness, and reach on social media?*

Since the Instagram algorithm is what decides which posts people see every time they open their feed, case study adopted a strategy optimize our visibility over Instagram's algorithm through; following target audience, adopting a follow/unfollow strategy, publishing new contents frequently for Instagram search optimization, creating specific content and relevant #hashtags, liking-commenting, posting hashtags on the Instagram story, staying consistent and measuring. Initial implications on the relationship between reach, brand awareness, and brand engagement through case study experience, reach is a trigger of brand awareness resulting in brand engagement.

Even though we shared more posts (total number of 61) in an organic growth period of two weeks with visibility optimize strategy, results were not satisfying. The highest post reach of the week was 420 people, after using socialbot our highest reach of the week evolved to 4205 people (+901%) in the last week of study. On the other side, the Ratio of Reach/Follower increased from 0.78 (first week without socialbot) to 2.61 (last week with socialbot), increasing +235%. The number of people reached comparing with the number of followers gained 235% efficiency.

Low reachability has an undesirable consequence. Regardless of whether the user posts great content, visibility is the arbiter as we experienced from the organic growth period. The number of people we reach has a big impact on engagement, weekly profile visitor is a metric that gives us an opinion on how reach creates engagement. One of the reasons behind the case company wants to reach as many people as they can is the desire to be visible. When we examine weekly profile visits; only 124 users (both through followers and hashtags) were visiting the profile by the end of the first week while we share posts more frequently than in inorganic time. Following the use of social boots, a great momentum was gained. An increase of 1075% with weekly profile visits at 1457 was observed from the first week to the last week.

The number of followers is also an important metric that shows how many people brands engage and reach. Also, how many people follow you and how many people you follow are an image element that affects customer perception. Some likely people wouldn't

want to engage with a brand on the social platform because of the image created by that. This element will be also highlighted as a brand reputation element. The comparison between the number of followers and following is called the follower/following ratio. The follower/following ratio is metric pass judgment on the quality of an Instagram account to the users and Instagram algorithm. Accounts with low follower/following ratio are considered as low-quality accounts, value ranges on ratio are as follows (<0.5 Spammer, 0.5-1 Suspicious, 1-2 Normal, 2-10 Micro Influencer, 10+ Influencer), (Nicole, 2020); (Hootsuite, 2020).

Follower/Following ratio by the end of the two weeks (without socialbots) was 0.8% (considered as suspicious). After using socialbot our Follower/Following ratio by the end of the week increased to 1.03% (considered as normal), increasing (+28.7%). Thus, reliability can be emphasized more to the users, and the Instagram algorithm resulting in higher reach.

Follower growth is a significant metric that shows awareness is improving. To measure follower growth follower gain ratio (Follower gain ratio=Follower Gain/Total Follower) is implemented. Follower growth, over the examined first two weeks (without socialbot), was really slow and ineffective. First two weeks we gained 27 followers (from 520 to 547) with follower gain ratio on 0,04, In the end, an increase of 1058 followers (from 547 to 1605) is observed with the following gain ratio on 0,69 (+1625%). Our follower gaining process gets 1625% more effective.

From the market research comparison; another metric is follower growth rate (Follower Growth Rate = New Followers / Starting Follower Count x 100%) which shows percentage growth, measures the speed at which your social media account is gaining or losing followers comparative to your previous follower count. Evaluation of follower growth rates by InfluencerDB (Ehrhardt , 2017) as follow: <0% Very poor; 0%-2,5% Poor; 2,5%-5% Fair; 5%-7,5% Good; >7.5 % Very good. The follower growth rate of the first week (without socialbot) measured as 2,1% considered as very poor according to the determined values, at the last (7th) week the rate has improved impressively, reaching 19,1% (+809%), considered as very good.

The number of likes gained is a metric that gives an opinion on brand engagement, brand awareness, and reach. As mentioned before, reach is a trigger of brand awareness resulting in brand engagement. Growth on the number of likes case company gained was observed in visible and immediate results. The weekly average like case company gain increased from 71 (like average of the first week) to the 661(like average of last week), increasing by +830%. Meaning, more reach, awareness, and especially engagement.



Comparing the effectiveness of the number of like case company done with the "like" it gained; during the 5-week observation on the socialbot activities, it performed 10765 likes activity to the target audience has been coded, while gaining 24465 (+127%) likes. Meaning, case company engagement through its reach is effective.

As the number of people reached increases, the "engagement rate" is normally expected to decrease. However, reaching more people provides engagement with more people. There are many ways to calculate the "engagement rate", the main methods are as following; Engagement /Followers rate=  $((\text{Likes}+\text{Comments})/\text{Followers}) * 100$ , Engagement / Reach rate=  $((\text{Likes}+\text{Comments})/\text{Reach}) * 100$ . The reference values provided by (Influencer Marketing Agency, 2019) from 282 000 Instagram accounts are presented as follows; up to 1.000 follower:  $ER \geq 16,01\%$ , p to 5.000 followers:  $ER \geq 8,23\%$ , between 20.000 to 4 million followers:  $ER \geq 3,68\%$  -  $ER \geq 2,50\%$

To eliminate the confusion by the time difference between with and without the socialbot usage period, the "engagement/follower rate" values collected from the Instagram insight part of each post and distributed to the weeks. The average Engagement follower rate of the case study for the organic improvement is 13% (under reference value), whereas the socialbot improvement period is 45,2%, increasing +247%. Engagement / Reach rate for the organic period measured as 17,7%, while the socialbot period is 18,4%, increasing +3%.

While the number of followers increases, the "Engagement /following rate" is expected to decrease, but the reason behind case study' profile improvement is reaching the right audience through trend hashtags detected which optimize our visibility on Instagram algorithm results meeting with the target audience, targeting competitor accounts followers and potential B2B connections, connecting with acquaintances and our networks.

Due to the experimental results obtained, employing socialbot consistently optimized all the analyzed statistics and KPIs, achieving its initial purpose to increasing reach, brand awareness and brand engagement over Instagram.

## *2) Does the number of followers on Instagram can lead to a positive brand reputation?*

To evaluate whether the number of followers on Instagram leads to a positive brand reputation, user perception is needed. A blogger friend from Azerbaijan who is a student in Venice with 37.5K followers (@byturkanhasanova), contributed to the study at hand with an Instagram poll to support the study. The following question was asked through the Instagram poll survey: Does the number of Instagram followers of a brand affect your perception of the brand reputation positively?

The Instagram Poll was reached to 9593 people with 6000 participants. %63 (3780) of participants voted for “Yes”, while %37 of the participants voted for “No”. Measuring the opinions of Instagram users about the number of Instagram followers of a brand seemed like it could provide more realistic results. Based on the majority of the percentage, the study at hand accepts that the number of Instagram followers of a brand affects potential customers' perception of the brand reputation positively.

The Instagram Poll was reached to 9593 people with 6000 participants. %63 (3780) of participants voted for “Yes”, while %37 of the participants voted for “No”. Measuring the opinions of Instagram users about the number of Instagram followers of a brand seemed like it could provide more realistic results. Based on the majority of the percentage, the study at hand accepts that number of Instagram followers of a brand affect potential customers' perception of the brand reputation positively.

### *3) How does social media automation affect brand reputation?*

As mentioned before this research hypothesis postulates; that the use of socialbot expands brand engagement & reach, thus generating brand reputation benefits resulting in a recursive customer relationship. The First two research question is proved from the point of using socialbot expands brand engagement & reach, and the number of Instagram followers of a brand affect potential customers' perception of the brand reputation positively. To deeper examination on the brand reputation on customer journey; firstly, an evaluation has been made to map KPIs obtained through case study' data to the brand reputation and customer journey. After matching related KPIs to the customer journey and brand reputation, a relation loop of automated Social Media Marketing, KPIs, and Customer Journey model is created.

While there is no equation extricate a solitary number or other quantifiable indicators of the state of a brand's reputation on social media, (Mckinight, 2019), (Lyfe Marketing, 2019) and (Barragry, 2020) agree on the criteria of brand reputation as page view, return customers, likes, shares & saved, sentiment analysis and reach. The model of “Mapping KPIs to the Marketing Funnel and Customer Journey” connects the customer journey to the relevant KPIs. Through the model, customer journey steps and their related KPIs mapped to the matched KPIs of Brand reputation, thus numbers obtained by social media put in a context in terms of brand reputation. From that point, “A Relation Loop of Automated Social Media Marketing, KPIs, and Customer Journey” model are created to show where socialbot takes a role in that customer journey from the point of recursive customer relationship and brand reputation.

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## 7. Suggestion for Further Research

The duration of the research was limited due to the fact that the research was conducted during the internship period, a longer working period can yield more enlightening results.

It is possible to perform social bots in more than one social media platform, such as combining LinkedIn, Instagram, Facebook and Twitter. Combining these platforms in socialbot software together can provide a comparative “KPI” measurement in many ways, as well as better contributions for the case company.

Further investigations can be done on additional factors that can be included in the factors that affect the impact of socialbot usage on online brand reputation. For the purpose of generating more in-depth understanding and gaining benchmark information about the establishment of favourable brand reputation through efficient social media automation, further research could build upon the presented “Relation Loop of Automated Social Media Marketing, KPIs and Customer Journey”.

## 8. List of abbreviations, figures, tables

### List of Abbreviations

KPI: Key Performance Indicator

### List of Figures

Figure 1. Chart of Portent’s Favorite Content KPI’s .....	12
Figure 2. The Evolution of Marketing Communications .....	14
Figure 3. February 2020 Highlight / insight” reports participants insight .....	15
Figure 4. Percentage of companies in which marketing leads activity .....	16
Figure 5. Current social media spending as percent of marketing budget .....	16
Figure 6. Social media spending as percent of marketing budget.....	17
Figure 7. Improvement in ability to show the impact of social media on business .....	17
Figure 8. Benefits of social media marketing .....	18
Figure 9. A Framework for Strategic Social Media Marketing .....	19
Figure 10. “The Engagement Food Chain” .....	22
Figure 11. The Dimensions of Engagement.....	23
Figure 12.Outcomes of online customer experience .....	24
Figure 13. Expected customer experience spending in next three years.....	25
Figure 14. Mobile Marketing Expense.....	25
Figure 15. Marketing Importance Rating on Strategic Activities .....	26
Figure 16. Number of times individuals need to exposure product or services on social media before purchase .....	28
Figure 17. Why individuals friend / unfriend brands on social media.....	29
Figure 18. Percent of the time participants perform experiments to understand the impact of their marketing actions on customers.....	30
Figure 19. Mapping KPIs to the Marketing Funnel and Customer Journey .....	31
Figure 20. A Socialbot Network. ....	34
Figure 21. Network of users and socialbots. ....	35
Figure 22. Marketing expenses .....	36
Figure 23.Percent of company’s social media activities performed by outside agencies .....	37
Figure 24. Number of people does in-house social media .....	37
Figure 25. Percent change in marketing budgets expected in next 12 months .....	38
Figure 26. Timeline of the Case Study.....	40
Figure 27.Follow Arrangments / Run Times .....	41
Figure 28. Follow Arrangments / After Follow Actions.....	43
Figure 29. Unfollow Arrangments of the Socialbot.....	44
Figure 30. Like Arrangments of the Socialbot.....	45
Figure 31.Overall Organic Activities .....	46
Figure 32. Follow/ Unfollow actions of the socialbot.....	47
Figure 33. Data outcome on “Like”/ “Like Comments” Activities of the Socialbot.....	47
Figure 34. Data outcome of Overall Activities of the Socialbot.....	48
Figure 35.Daily Number of Posts.....	49
Figure 36. Highest Weekly Reach Per Post .....	49
Figure 37.Weekly Profile Visit .....	50
Figure 38. Followers Gain/ Total Followers .....	51
Figure 39.Weekly Average Like/ Post Comparasion.....	52
Figure 40.Like Actions/ Gains .....	52
Figure 41.Engagement follower rate .....	53
Figure 42. Mapping KPIs to the Marketing Funnel and Customer Journey .....	55
Figure 43. Instagram Poll Insight.....	60
Figure 44. Relation Loop of automated Social Media Marketing, KPIs and Customer Journey .....	61

## List of Tables

Table 1. Engagement conceptualizations in the marketing literature. ....	10
Table 2. Social media concepts in the marketing literature .....	13
Table 3. Major data outcome of organic Instagram activities.....	46
Table 4. Overall Results .....	54
Table 5. Mapping KPIs to the Awareness.....	56
Table 6. Mapping KPIs to the Consideration.....	57
Table 7. Mapping KPIs to the Preference .....	57
Table 8. Mapping KPIs to the Loyalty .....	58
Table 9. Mapping KPIs to the Advocacy .....	59
Table 10. Instagram Poll Results.....	60

## 9. Bibliography

- Aaker, D. A. (1996). *Building Strong Brands*. The Free Press New York.
- Aaker, D. A. (2000). *Brand leadership: The next level of the brand revolution*. New York, NY: Free Press.
- Aaker, D. A. (2014). *Aaker on branding*. New York: Morgan James Publishing.
- Accenture. (2017). *At Your Service: Embracing the Disruptive Power of Chatbots*. . Dublin: Accenture.
- Alalwan, A. R. (2016). A Systematic Review of Extant Literature in Social Media in the Marketing Perspective. *The 15th IFIP Conference on e-Business, e-Services and e-Society on Social Media*.
- Alalwan, A. R. (2016). A Systematic Review of Extant Literature in Social Media in the Marketing Perspective. *The 15th IFIP Conference on e-Business, e-Services and e-Society on Social Media*.
- Algesheimer, R. U. (n.d.). *Journal of Marketing*, vol: 69, July,, pp:19–34.
- Algharabat, R. A. (2017). Three dimensional product presentation quality antecedents and their consequences for online retailers: The moderating role of virtual product experience. *J. Retail. Consum. Serv*.
- Appel , G., Lauren , G., Hadi, R., & Stephen, A. T. (2019). The future of social media in marketing. *Journal of the Academy of Marketing Science*, vol:48, pages79–95
- Aulet, B. (2013). *Disciplined Entrepreneurship*. New Jersey: John Wiley & Sons, Inc.
- Balakrishnan, M. S. (2009). Strategic Brand of Destinations: A Framework. *European Journal of Marketing* , 43 (5–6): 611–29.
- Barnes, N., & Lescault , A. (2013). Fortune 500 are bullish on social media: Big companies get excited about Google+, Instagram, Foursquare and Pinterest. Retrieved from: [https://iresponze.com/sites/default/files/2013\\_Fortune\\_500.pdf](https://iresponze.com/sites/default/files/2013_Fortune_500.pdf)
- Barragry, T. (2020). *How to Measure Brand Reputation using Web and Social Media Monitoring*. Retrieved from Brand24: <https://brand24.com/blog/how-to-measure-brand-reputation/>
- Bennett, R. &. (2001). Corporate reputation, trait covariation and the averaging principle: the case of the UK pensions mis-selling scandal. *European Journal of Marketing*. 35(3/4):387-413
- Bilgihan, A., Kandampully, J., & Zhang, T. C. (2015). Towards a unified customer experience in online shopping environments, Antecedents and outcomes. *Emerald Insight*.

- Blair, I. (2020). *16 Awesome Marketing Strategies For Small Businesses*. Retrieved from buildfire: <https://buildfire.com/marketing-strategies-for-small-businesses/>
- Bodeklint K., L. A. (2017). *Crisis Management & Brand Reputation. An exploratory study on crisis management and its effects on brand reputation*. Retrieved from <http://www.divaportal.se/smash/get/diva2:1103637/fulltext01.pdf>.
- Brodie, R. I. (2013). Consumer engagement in a virtual brand community: an exploratory analysis. *Journal of Business Research*, 66(1)
- Brodie, R. I. (2013). Consumer engagement in a virtual brand community: an exploratory analysis. *Journal of Business Research*, 66 No. 1.
- Brodie, R. J., Ilic, A., Juric, B., & Hollebeek, L. (2013). Consumer engagement in a virtual brand community: an exploratory analysis. *Journal of Business Research*, 66 No. 1.
- Calder, B. J. (2009). An 1034 Experimental Study of the Relationship between Online Engagement and 1035 Advertising Effectiveness. *Journal of Interactive Marketing*, 23(4)
- Chan, T. Y. (2012). Mobile customer relationship management: factors affecting consumer mobile technology adoption within the hotel industry. *Studies by Undergraduate Researchers at Guelph*, 5 No. 2.
- Chen, J. (2019). *Organic/ Inorganic Instagram growth strategies for social*. Retrieved 2020, from <https://sproutsocial.com/insights/instagram-organic-inorganic-growth/>
- Conner, C. (2018). Troll Control: Twitter and Instagram Premier New Tools For Abusive Social Media Use. *Forbes*.
- de Chernatony, L. a. (2000). Developing Corporate Brands through Considering Internal and External Stakeholders.' *Corporate Reputation Review* . *Palgrave Macmillan*, 3 (3): 268–74.
- Deshpandé, R., & Farley, J. (2004). Organizational culture, market orientation, innovativeness, and firm performance: An international research odyssey. *International Journal of Research in Marketing*, 21(1), 3–22.
- DMI Blog. (2020). *GROW YOUR BUSINESS WITH SOCIAL BOTS*. Retrieved from <https://digitalmarketinginstitute.com/en-au/blog/grow-your-business-with-social-bots#:~:text=Social%20media%20bots%20are%20algorithms,content%20and%20anticipating%20user%20reactions>.
- Dwivedi, Y., Kapoor, K., & Chen, H. (2015). Social media marketing and advertising. *Market. Rev.*
- Eckerson, W. (2013). *BI in the cloud: Find your bliss*. Retrieved 2020, from [https://searchbusinessanalytics.techtarget.com/opinion/BI-in-the-cloud-Find-your-bliss?\\_ga=2.226598548.801644741.1592916595-694992076.1592916595](https://searchbusinessanalytics.techtarget.com/opinion/BI-in-the-cloud-Find-your-bliss?_ga=2.226598548.801644741.1592916595-694992076.1592916595)
- Efendioglu, D. Y. (2016). Travel from Traditional Marketing to Digital Marketing. . *Global Journal of Management and Business Research*. Vol 16, No 2-E
- Ehrhardt , J. (2017). *Sussing out Growth – How to Interpret Follower Growth Rates*. Retrieved from <https://influencerdb.com/blog/follower-growth-rates/#:~:text=So%20if%20an%20account%20has,explained%20in%20an%20additional%20article>.
- Falcigno , E. (2020). *Insights for Destination & Leisure Marketers*. Retrieved from <https://mascola.com/insights/brand-reputation-social-media-strategy/>
- Filo, K., Lock, D., & A, K. (2015). Sport and social media research: a review. *Sport Manage. Rev.*
- Fombrun C., S. M. (1990). What's in a name? Reputation building and corporate strategy. *academy of management journal*. 33, 233-259.
- Fombrun, C. (1996). *Reputation: Realizing the Value from the Corporate Image*. Boston: *Harvard Business School Press*.
- Fombrun, C. (2006). *10th Anniversary Conference on Reputati4 on, Image, Identity and Competitiveness*. New York: Te RepTrak system.

- Hawkins, K. V. (2013). Attitudinal loyalty, behavioural loyalty and social media: an introspection. *Market. Rev.*
- Hennig-Thurau, T., Gwinner, K. P., Walsh, G., & Gremler, D. D. (2004). Electronic Word-of-Mouth via Consumer-Opinion Platforms: What Motivates Consumers to Articulate Themselves on the Internet? *Journal of Interactive Marketing, 18, no.1.*
- Hennig-Thurau, T., Hofacker, C. F., & Bloching, B. (2013). Marketing the Pinball Way: Understanding How Social Media Change the Generation of Value for Consumers and Companies. *Journal of Interactive Marketing, 27, no.4.*
- Herbig, P. &. (1995). The relationship of reputation and credibility to brand success. *Journal of Consumer Marketing, Volume 12 (4).*
- Hoffman, D. L., & Novak, T. P. (1996). Marketing in hypermedia computer-mediated environments: Conceptual foundations. *Journal of Marketing, 60(3), 50–68.*
- Hollebeek, L. G. (2014). Consumer brand engagement in social media: conceptualization, scale development and validation. *Journal of Interactive Marketing, vol. 28(2), pages 149-165.*
- Hootsuite. (2020). *Digital 2020/ Global digital overview/ Essential insights into how people around the world use the internet, mobile devices, social media, and ecommerce.*
- Hootsuite. (2020). *instagram algorithm.* Retrieved from <https://blog.hootsuite.com/instagram-algorithm/>
- Hubspot. (2015). *Marketing automation information.* Retrieved 2020, from <https://www.hubspot.com/marketing-automation-information>
- Influencer Marketing Agency. (2019). *An engagement rate analysis of 282 000 Instagram accounts.* Retrieved from Tanke: <https://www.tanke.fr/en/an-engagement-rate-analysis-of-282-000-instagram-accounts/>
- Jeffrey, A. (2013). *Social Media Measurement: A Step-by-Step Approach;*” Murdough, “*Social Media Measurement.* Retrieved from <http://docplayer.net/4173988-Social-media-measurement-a-step-by-step-approach.html>
- Jones, J. (2000). How do You Understand a Financial Services Brand? *Branding in the Financial Services Industry conference 13 July.* London.
- K.R., N. (2007). *Masteris degree dissertation brand reputation in international marketing (case of mobile telephone companies).* Retrieved from <https://www.divaportal.org/smash/get/diva2:237981/fulltext01.pdf>
- Kapferer, J. N. (1997). *Strategic Brand Management: Creating and Sustaining Brand Equity Long Term.* 2nd ed. . London: Kogan Page.
- Kapferer, J. N. (1997). *Strategic Brand Management: Creating and Sustaining Brand Equity Long Term.* 2nd ed. London: Kogan Page.
- Konečnik Ruzzier, M. a. (2013). ‘Developing and Applying a Place Brand Identity Model: The Case of Slovenia.’ *Journal of Business Research . 66 (1): 45–52.*
- Kozinets, R. V., De Valck, K., Wojnicki, A. C., & Wilner, S. J. (2010). Networked Narratives: Understanding Word-of-Mouth Marketing in Online Communities. *Journal of Marketing, 74,no. 1.*
- Labrecque, L., Vor dem Esche, J., Mathwick, C., Novak, T., & Hofacker, C. F. (2013). Consumer power: Evolution in the digital age. *Journal of Interactive Marketing, 27(4), 257–269.*
- Lai, K. H., & Cheng, T. E. (2005). Effects of quality management and marketing on organizational performance. *Journal of Business Research, 58(4), 446–456.*
- Lecinski, J. (2011). *ZMOT: Winning the Zero Moment of Truth.* Google.
- Leeflang, P., Verhoef, P., Dahlström, P., & Freundt, T. (2014). Challenges and solutions for marketing in a digital era. *European Management Journal, 32, 1-12.*
- Leung, S., Yeung, E., & Schuckert, M. (2013). Attracting User Social Media Engagement: A Study of Three Budget Airlines Facebook Pages.
- Leunga, R., Schuckertb, M., & Yeung, E. (2013). Attracting User Social Media Engagement: A Study of Three Budget Airlines Facebook Pages.

- Lyfe Marketing. (2019). *12 Social Media KPIs You Should Not Ignore*. Retrieved from [https://www.lyfemarketing.com/blog/social-media-kpis/?\\_\\_cf\\_chl\\_captcha\\_tk\\_\\_=7de262feabb82d8144bc758e8a0efdc3d959cdec-1594599925-0-AX7TIIGLYnETrYHif8xdv9yY5Oa354rDe0I4sLIwSCcgaiXhyDzEzKYBqXZ2j8tLA-I9DCYK8BQfOROT1HdZ\\_4KCHqJKbkVXkSXZEm65p0sw324RkaCoKsgnUxgC6](https://www.lyfemarketing.com/blog/social-media-kpis/?__cf_chl_captcha_tk__=7de262feabb82d8144bc758e8a0efdc3d959cdec-1594599925-0-AX7TIIGLYnETrYHif8xdv9yY5Oa354rDe0I4sLIwSCcgaiXhyDzEzKYBqXZ2j8tLA-I9DCYK8BQfOROT1HdZ_4KCHqJKbkVXkSXZEm65p0sw324RkaCoKsgnUxgC6)
- Mckinight, T. (2019). Retrieved from portent: <https://www.portent.com/blog/internet-marketing/guide-choosing-content-kpis.htm>
- McLean, G., & Wilson, A. (2016). Evolving the online customer experience, is there a role for online customer support? *Computers in Human Behavior*.
- Melewar, T. C. (1993). Determinants of the Corporate Identity Concept. *Journal of Marketing Communications* 9 (4), 195–220.
- Melewar, T. C. (2002). Defining the Corporate Identity Construct.' *Corporate Reputation Review*. 5 (1): 76–90.
- Melewar, T. C. (2006). Seven Dimensions of Corporate Identity: A Categorisation from the Practitioners' Perspectives. *European Journal of Marketing*, 40 (7–8): 846–69.
- Milewicz, J. &. (1994). Evaluating the brand extension decision using a model of reputation building. *Journal of Product and Brand Management*, Vol.3, No.1, pp.39-47.
- Moorman, C. (2015). *Measuring The Impact Of Social Media On Your Business*. Retrieved 2020, from <https://www.forbes.com/sites/christinemoorman/2015/01/18/measuring-the-impact-of-social-media-on-your-business/#bd343cf15e5d>
- Moran, G., Muzellec, L., & Nolan, E. (2014). Consumer Moments of Truth In the Digital Context: How "Search" and "E-Word of Mouth" Can Fuel Consumer Decision Making. *Journal of Advertising Research*, 54, no. 2.
- Nicole. (2020). *What Your Follower/Following Ratio Says About*. Retrieved from <http://reactiontimemedia.com/instagram-follower-following-ratio/>
- Nordstrom. (2015). *Social media employee guidelines*. Retrieved 2020, from <http://shop.nordstrom.com/c/social-networking-guidelines>.
- Nuvi. (2020). *Nuvi Customer Experience and ROI*. [https://uploads-ssl.webflow.com/5e600648453eacc4fac348b1/5e600648453eac7ed3c34a17\\_Nuvi%20Customer%20Experience%20and%20ROI.pdf](https://uploads-ssl.webflow.com/5e600648453eacc4fac348b1/5e600648453eac7ed3c34a17_Nuvi%20Customer%20Experience%20and%20ROI.pdf).
- Payne, A., & Frow, P. (2005). A strategic framework for customer relationship management. *Journal of Marketing*, 69(4), 167–176.
- Pride, W. F. (2015). *Marketing Principles*. Melbourne: Cengage Learning.
- Rathore, A. I. (2016). Social media content and product co-creation: an emerging paradigm. . *J. Enter. Inf. Manage.*
- Reto, F., Rauschnabel, P., & Hinsc, C. (2017). Elements of strategic social media marketing: A holistic framework.
- Robert W. Gehl, M. B. (2016). *Socialbots and Their Friends: Digital Media and the Automation of Sociality*.
- Roper, S. &. (2012). Corporate reputation: brand and communication, . *Harlow: Pearson*.
- Roy, J. R. (2009). *Marketing Metrics and ROI: How to Set Up a Measurement System That Can Double Your Profitability*. Retrieved 2020, from <http://www.mktgsensei.com/AMAE/Marketing%20Research/Marketing%20Metrics%20Made%20Easy.pdf>
- Ruzzier, N. P. (2013). Brand Identity Development and the Role of Marketing Communications: Brand Experts' View. 64.
- Sashi, C. M. (2012). Customer engagement, buyer-seller relationships, and social media. *Management Decision*, 50 No. 2.
- Saudagar, R., Iyer, V., & Hildebrand, V. G. (2012). *The Customer Experience Edge*. USA: Mcgraw Hill.



- Scheinbaum, A. (2016). Digital engagement: Opportunities and risks for sponsors. *Journal of Advertising Research* 56, no. 4.
- Schwager, A., & Meyer, C. (2007). *Understanding Customer Experience*. Retrieved 2020, from <https://hbr.org/2007/02/understanding-customer-experience>
- Shaw, J., & Ivens, P. (2002). *Building great customer experiences USA*. New York: Palgrave Macmillan.
- Solomon, T. L. (2015). *Social Media Marketing 3rd Edition*.
- Sprout. (2020). *Social media automation*. Retrieved from SproutSocial: <https://sproutsocial.com/glossary/social-media-automation/>
- Stelzner, M. (2020, May). *2020 Social Media Marketing Industry Report/ How Marketers Are Using Social Media to Grow Their Businesses*. Retrieved from Social media examiner: <https://www.socialmediaexaminer.com/report2020/>
- Sterne, J. (2010). *Social Media Metrics: How to Measure and Optimize Your Marketing Investment*.
- Strohmaier, M. (2012). *Markus Strohmaier's Blog*. Retrieved from <https://mstrohm.wordpress.com/2012/04/15/when-social-bots-attack-modeling-susceptibility-of-users-in-online-social-networks/>
- Strutton, L. D., & Lumpkin, J. (2002). *Marketing Channels: A Relationship Management Approach. 1st edition*. Edinburgh: The McGraw Hill Companies, Inc.
- Survey, T. C. (2020). *Highlights & Insight Reports*. Moorman, Christine.
- Taylor, D. L. (2011). Do ads work on social networks? How gender and age shape receptivity. *J. Adv. Res.*
- The Sprout Social Index. (2016). *Turned Off: How Brands Are Annoying Customers on Social,* *The Q3 2016 Sprout Social Index, Sprout Social*, . Retrieved from The Sprout Social Index: <http://sproutsocial.com/insights/data/q3-2016>
- Todor, R. D. (2016). Marketing automation. *Bulletin of the Transilvania University of Braşov Series V: Economic Sciences • Vol. 9 (58) No. 2*.
- Tokdemir, S., Nitin, A., & Nima, D. (2019). *Emerging Research Challenges and Opportunities in Computational Social Network Analysis and Mining*.
- Tuten, Solomon, M., & Tracy, L. (2018). *Social Media Marketing*.
- Ubisend. (2017). *Chatbot Survey: We now live in an on-demand society, time to get prepared*. Norwich.
- Urde, M. &. (2014). The Nobel Prize: A 'Heritagebased' Brand-oriented Network. *Harvard Business School*.
- Van Riel, C. B. (1997). Corporate Identity: The Concept, Its Measurement and Management. *European Journal of Marketing*, 31 (5–6): 340–55.
- Varol, O., Ferrara, E., Davis, C., Menczer, A., & Flammini, F. (2017). *Online Human-Bot Interactions: Detection, Estimation and Characterization*. Retrieved from <https://arxiv.org/abs/1703.03107>
- Vernuccio, M. (2014). Communicating Corporate Brands Through Social Media: An Exploratory Study. *International Journal of Business Communication*, 51, no. 3.
- Watkinson, M. (2013). *The Ten Principles behind Great Customer Experiences*. UK: FT publishing.
- Wells, W. H. (2011). *Wells, W. H. (2011). Social media and social networking: What's the difference? Accessed from http://www.williamhwells.com/201*. Retrieved 04 2020, from <http://www.williamhwells.com/2011/06/18/social-mediaand-socialnetworking-whats-the-difference>
- White, C. (2020). *Usability Geek*. Retrieved from <https://usabilitygeek.com/confuse-user-experience-customer-experience/>
- Wirtz, J., den Ambtman, A., Bloemer, J., & Horváth. (2013). Managing brands and customer engagement in online brand communities. *Journal of Service Management*, 24 No. 3.
- Yazan, B., Ildar, M., & Konstantin, B. (2011). *The Socialbot Network: When bots socialize for fame and money*. Vancouver, Canada: University of British Columbia.



- 
- Zheng, W., Yang, B., & McLean, G. (2010). Linking organizational culture, structure, strategy, and organizational effectiveness: Mediating role of knowledge management. *Journal of Business Research*, 63(7), 763–771.
- Zhu, Y. C. (2015). Social media and human need satisfaction: Implications for social media marketing. . *Bus. Horiz.*
- Ziviani, M. (2019). (C. University, Interviewer) <https://youtu.be/hktyai46n0U>, <https://youtu.be/b2X86zVrDAY>.
- Ziviani, M. (2019). (C. University, Interviewer) <https://www.youtube.com/watch?v=hktyai46n0U&t=43s>.