MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH

ÉCOLE NATIONALE SUPÉRIEURE DE MANAGEMENT

ENSM. University Tipaza, Kolea

GRADUATION DISSERTATION

Masters in Management of E-Government

The Impact of digital communication on enhancing customer satisfaction

Developed by :

Ouldsaid Nour elimane

supervised by :

Professor. Messaid Amina

Mme. Fadel Lynda

Year 2019/2020

Abstract:

Digital transformation has changed the way we do things impacting all the different aspect of lives, new digital technologies like social networks, mobile, big data, internet of things, and other innovations like block-chain, society overall is facing a radical change due to the development of those technologies and their extensive implementations of all markets.

We're currently living in a world in which the way people communicate has changed dramatically social networks have redefined the way we collaborate in groups or more precisely in communities while making information continuously available. Every aspect of it including its channels keeps evolving by the year, the technological evolution has completely and radically shaped & changed our communication possibilities it has break geographical barriers that limited their expansion in the past.

This dissertation's main purpose is to showcase the importance of digital communication and its diverse tools in business and its great role in improving service quality and enhancing customer satisfaction.

In order to achieve that, this work was split into two parts, first theoretical part, which focuses on the emergence of digital communication and how this digital transformation changed the way we do business precisely in service quality and customer management. and the second part that is a study case conducted after an internship at Mobilis using a quantitative study carried out over a portion of costumers to better understand their expectation and service perception, in order to spot the light on the major importance of digital communication in the telecommunication field and public sector globally and the need to master its strategies and tools to excel at their business.

Keywords: Digital Communication, Digital Transformation, Service Quality, Customer Satisfaction, Customer Engagement.

Résumé:

La transformation numérique a changé notre manière de faire les choses, ce qui a eu un impact sur tous les aspects de la vie, les nouvelles technologies numériques comme les réseaux sociaux, la téléphonie mobile, les données volumineuses, l'internet des objets et d'autres innovations comme la chaîne de blocs, la société dans son ensemble est confrontée à un changement radical en raison du développement de ces technologies et de leur mise en œuvre à grande échelle sur tous les marchés.

Nous vivons actuellement dans un monde où la façon dont les gens communiquent a changé de façon spectaculaire ; les réseaux sociaux ont redéfini la façon dont nous collaborons en groupe ou plus précisément en communauté tout en rendant l'information disponible en permanence. Chaque aspect de ce monde, y compris ses canaux, continue d'évoluer d'année en année ; l'évolution technologique a complètement et radicalement modifié nos possibilités de communication ; elle a brisé les barrières géographiques qui limitaient leur expansion dans le passé.

L'objectif principal de cette thèse est de montrer l'importance de la communication numérique et de ses divers outils dans les entreprises, ainsi que son grand rôle dans l'amélioration de la qualité du service et de la satisfaction des clients.

Pour ce faire, ce travail a été divisé en deux parties, une première partie théorique qui se concentre sur l'émergence de la communication numérique et sur la manière dont cette transformation numérique a changé la façon dont nous faisons des affaires précisément en matière de qualité de service et de gestion des clients. La seconde partie qui est un cas d'étude réalisé après un stage chez Mobilis en utilisant une étude quantitative menée sur une partie des clients pour mieux comprendre leurs attentes et leur perception du service, afin de mettre en lumière l'importance majeure de la communication numérique dans le domaine des télécommunications et du secteur public au niveau mondial et la nécessité de maîtriser ses stratégies et ses outils pour exceller dans leurs affaires.

Mots clés : Communication numérique, Transformation numérique, Qualité du service, Satisfaction du client, Engagement du client.

ملخص:

لقد غيّر التحول الرقمي الطريقة التي نؤدي بها الأشياء مؤثرا على جميع جوانب الحياة المختلفة، التقنيات الرقمية الجديدة مثل الشبكات الاجتماعية، والهواتف المحمولة، والبيانات الضخمة، وإنترنت الأشياء، والابتكارات الأخرى مثل سلسلة الكتل، جعلت المجتمع يواجه تغييرًا جذريًا لما توصلت اليه هذه التقنيات واستخداماتها من تطور على نطاق واسع في جميع الأسواق.

نحن نعيش حاليًا في عالم تغيرت فيه طريقة تواصل الأشخاص بشكل كبير، حيث أعادت الشبكات الاجتماعية تحديد الطريقة التي نتعاون بها في مجموعات أو بشكل أكثر دقة في المجتمعات مع إتاحة المعلومات باستمرار. يستمر كل جانب من جوانبها بما في ذلك قنواتها في تطور مع تغير الوقت، وقد أدى التطور التكنولوجي إلى تغيير إمكانات التواصل لدينا بشكل كامل وجذري، فقد كسر الحواجز الجغرافية التي حدت من توسعها في الماضي.

الهدف الرئيسي من هذا البحث العلمي هو إظهار أهمية الاتصال الرقمي وأدواته المختلفة في الشركات، وكذلك دوره الكبير في تحسين جودة الخدمة ورضا العملاء.

للقيام بذلك، تم تقسيم هذا العمل إلى جزأين، الجزء النظري الأول الذي يركز على ظهور الاتصالات الرقمية وكيف غيّر هذا التحول الرقمي الطريقة التي نؤدي بها أعمالنا بدقة من حيث الجودة. خدمة العملاء والإدارة. الجزء الثاني هو دراسة حالة تم إجراؤها بعد فترة تدريب في موبيليس باستخدام دراسة كمية أجريت على بعض العملاء لفهم توقعاتهم وتصورهم للخدمة بشكل أفضل، من أجل تسليط الضوء على الأهمية الرئيسية للاتصالات التكنولوجيا في قطاع الاتصالات والقطاع العام عالمياً والحاجة إلى إتقان استراتيجياتها وأدواتها للتفوق في أعمالهم.

الكلمات الرئيسية: الاتصال الرقمي، التحول الرقمي، جودة الخدمة، رضا العملاء، إشراك العملاء.

Acknowledgement

I am grateful to have the opportunity to write this master dissertation on this particular and interesting subject, for it's the perfect combination between management of e-government, digitalization and digital marketing.

I am thankful for both Mme Messaid Hasna Amina , Mme Fadel Lynda & Mme Tasaedit for not only supervising me in creating this paper but mainly for the motivation and being such an inspiration as a hard working successful ladies and leaders in their fields .

I am grateful for all the support I got from my close friends who pushed me to work hard and achieve my goals, and my new friends from school who made the experience much more meaningful.

And last but not least I am mostly thankful for my family, for my parents for being so supportive of me and the decisions I make, and my two sisters for being a source of motivation and power all my life .

Table of Contents:

Summary ……I

Acknowledgment ……II

List of tables ……III

List of figures ……..IV

List of abbreviations ……V

Introduction ……1

Chapter One: Problematic and Research Context……2

Research concept and objectives **……....3**

Research relevance **……4**

Theoretical contribution **……..4**

Managerial contribution **……..4**

Problematic & Research questions **……5**

Research hypotheses **……...5**

Organizational context **……5**

Presentation of Mobilis **……..5**

History **……....6**

Activities of the company **…….....7**

Mission of Mobilis **……7**

Objectives of mobilis **……..…8**

Mobilis values **……...….8**

Visual identity **……...….9**

Organizational structure **…….....10**

Brand and communication department **……...…11**

Chapter two: Literature Review & conceptual frame …….……15

Introduction **……...15**

Literature review **……..……16**

Conceptual frame**……...……20**

Section one: communication in the age of digital ……20

The internet as a mass communication medium ……..20

Digital transformation ……23

Digital communication ……....25

Digital communication tools ……..…....27

Website ……..……27

Blog ……..…28

Email …….…..…28

Text messages …….…....…29

Mobiles application ……..……30

Social media ……...……...31

Section two: service quality and customer satisfaction …….....36

Service quality ……..36

Customer satisfaction ……...38

Customer engagement.……...…...40

Conclusion …..……..……44

Chapter three: Methodology ……..…… 46

Introduction ……47

Epistemology ……..…… 47

Theoretical perspective ……..….48

Research reasoning……..…48

Methodology ……...50

Methods ……..51

Data collection ……..51

Data analysis ……54

Research limits ……...54

Chapter four: results and discussion……55

Result analysis ……..….57

Summary of results **……85**

Suggestion & recommandations **……86**

Conclusion ……88

Bibliography ……..90

Annexes ……..97

List of figures

Number	Figure title	Page
1	Mobilis new logo	9
2	Mobilis organizational chart	9
3	brand & communication department	10
4	organizational chart	12
5	epistemological research steps	43
6	positivism approach	44
7	deductive vs inductive reasoning	45
8	sample distribution by gender	69
9	Sample distribution by age	70
10	Sample distribution by education level	71
11	Sample distribution by socio-profession	72
12	Sample distribution by followers on social media	73
13	Sample distribution by most followed social media account	74
14	Sample distribution by information source	75
15	Sample distribution by active engagement	76
16	Sample distribution by quick response time	77
17	Sample distribution by content language diversity	78
18	Sample distribution by interest in content	79
19	Sample distribution by trust in provided information	80
20	Sample distribution by information availability	81
21	Sample distribution by service information availability	82
22	Sample distribution by information update	83
23	Sample distribution by coverage quality	84
24	Sample distribution by internet quality	85
25	Sample distribution by employee professionalism	86
26	Sample distribution by problem resolution expectation	87
27	Sample distribution by continuous quality improvement	88
28	Sample distribution by service awareness	89
29	Sample distribution by intention to continue business with Mobilis	90
30	Sample distribution by commercial activities fans	91
31	Sample distribution by customer loyalty to the brand	92
32	Sample distribution by recommendation intention	93

List of tables

Number	Title	Page
1	sample distribution by gender	69
2	Sample distribution by age	70
3	Sample distribution by education level	71
4	Sample distribution by socio-profession	72
5	Sample distribution by followers on social media	73
6	Sample distribution by most followed social media account	74
7	Sample distribution by information source	75
8	Sample distribution by active engagement	76
9	Sample distribution by quick response time	77
10	Sample distribution by content language diversity	78
11	Sample distribution by interest in content	79
12	Sample distribution by trust in provided information	80
13	Sample distribution by information availability	81
14	Sample distribution by service information availability	82
15	Sample distribution by information update	83
16	Sample distribution by coverage quality	84
17	Sample distribution by internet quality	85
18	Sample distribution by employee professionalism	86
19	Sample distribution by problem resolution expectation	87
20	Sample distribution by continuous quality improvement	88
21	Sample distribution by service awareness	89
22	Sample distribution by intention to continue business with Mobilis	90
23	Sample distribution by commercial activities fans	91
24	Sample distribution by customer loyalty to the brand	92
25	Sample distribution by recommendation intention	93

Introduction

If anything is dynamic in today's world, it is the concept and process of communication. Every aspect of it including its channels keeps evolving by the year. Fax, phone, and later the Internet, have radically changed our communication possibilities. More and more communication has been freed from the geographical barriers that formerly limited their speed and expansion. Now, it is (in principle) possible to instantly communicate with a large portion of the entire human population. Nevertheless, new means also generate new challenges due to Digital technology that is spreading unprecedented amounts of information to more people in more places than any time in human history (Ohiagu, O. P. (2011). The internet: the medium of the mass media)

People play the critical role in ensuring private, reliable, secure business communications – whether they are using collaboration tools or providing them.

Communicating is Evolving from Exchanging Information to Telling Stories – Susan Weinschenk, who pens the "Brain Wise" column for Psychology Today, once shared these observations regarding the rise of video conferencing in business: "Everyone likes stories. We like to listen to stories, read stories, watch stories (movies, TV, theatre) and tell stories. In fact, stories are our normal mode of information processing. Stories are so normal to us that we don't even stop to think about why that is". Following Weinschenk's reasoning, increasing use of digital technology – particularly for communication – is not automating humanity out of business operations – it's making these processes more human than ever. (Business communications essentials for digital transformation, west Unified communications services)

Digitally mediated communication has been around for more than 60 years, the communicative environment and the digital genres that came into existence in this environment are still new and unsettled. Language use and communication norms are in a constant state of change, reflecting and responding to the status of emerging social contexts, which are constantly changing themselves as a result of developing communicative technologies and the new communicative environments these technologies create. (Erika Darics 2015, Business communication in the digital age – Fresh perspectives)

Digital transformation and resultant business model innovation have fundamentally altered consumers' expectations and behaviors, pressured traditional firms, and disrupted numerous markets. Consumers have access to dozens of media channels, actively and effortlessly communicate with firms and other consumers, and pass through rapidly increasing number of touch points in their customer journey, many of which are digital

As digital technology spreads around the globe, more and more corporations are enabling employees to conduct business from remote locations with mobile devices. At the same time, more and more companies are moving significant aspects of their business operations to the cloud. And in the process, these firms are learning that, regardless of the type, complexity or cost of the technology involved, it is an inevitable evolution that will change the way of doing everything in our daily lives either on the personal or organizational aspect that we must adapt and take advantage of.

Chapter one: Problematic and Research Context

In this first chapter we will first of all set out the context of our theme, research relevance objectives and its theoretical and managerial contribution, secondly, we will present the organizational context.

1. Research context and objectives :

Digital transformation is one of the latest hot topics, though it is not new, it was first introduced by scientists including **Leibnitz (1689) and later Boole (1854**) many centuries ago, so why is digital transformation such a hot topic now? because the world & more precisely the consumer the world is changing and being pressured by the mobile internet social media big data and Cloud which when put together are completely redefining the way people consume information & even live their lives consequently this transformation is pushing organizations to change everything, now changing everything doesn't mean adding something on top of what's already there .companies need to reinvent themselves public and private alike and think of how they can harness the power of this Nexus of forces and give their employees, customers, and citizens what they want (digital transformation, Alcatel-Lucent Enterprise).

We're currently living in a world in which the way people communicate has changed dramatically social networks have redefined the way we collaborate in groups or more precisely in communities while making information continuously available. The internet provides universal access 24 hours a day 7 days a week what about the cloud! the cloud has changed the way we consume services & the way we are eventually charged for the services we use however one thing has not changed " real-time Communications " are still needed on top of these services and platforms, Communications play a vital role in digital transformation either it is in collaboration or digital engagement. (Digital communication, Alcatel-Lucent Enterprise, al-enterprise.com/en/blog).

with the Possibilities offered by digital transformation, customer service expands to the whole organization and is no longer limited to the walls of a contact center what we're talking about here is not just the next phase after call centers contact centers and customer success departments it's a totally a new approach to costumers engagement fully harnessing the power of digital forces with imperative of serving customers & citizens anytime from anywhere with the right solutions to their problems and questions .to be successful and provide expected positive business outcomes digital engagements. **(**Customer management, Alcatel-Lucent Enterprise, al-enterprise.com/en/blog).

Digital engagement is making customer service enter into a new age while most of all Technics have been mastered. Digital forces are reinventing it waiting for the next

Revolution driven by artificial intelligence bots of all kinds and biometrics to name just a few of the emerging technologies to come but one Thing Remains Communications are the Cornerstone of everything. **(**Digital transformation, Alcatel-Lucent Enterprise, al-enterprise.com/en/blog**).**

Public sector organizations must also promote a positive reputation to initiate community outreach and engagement. "Citizens' trust and confidence are, in many ways, the bottom line for the public sector or a reasonable proxy for it" (Heitzman & Marson, 2005, p. 552) they've also stated that "citizens' trust and confidence in public institutions is one of the liveliest subjects of current debate among academics and practitioners in the fields of government, politics, and public administration" (p. 549).

Existing research on e-service quality confirms that high-quality websites can attract more browsers and shoppers compared to competing for low-quality sites (Park et al., 2007). Hence, knowledge about how digital communication and social media could improve e-service quality is very useful for both public and private organizations. Customers' perceived quality affects their satisfaction levels, behavioral intentions, loyalty, word-of-mouth behavior, and ultimately e-commerce profits (Park et al., 2007).

The intent of this research was to make an original contribution in explaining how innovative approaches such as the use of digital communication channels like social media can effectively link goods and services that are provided by public sector organizations and increase customer satisfaction.

2. Research relevance :

We have chosen this particular theme for our interest and passion in digital communication and digital marketing, on one hand, and the different digital management practices and theories that we learned at school during our current curriculum on the other hand & how could we apply this hybrid technic in the public sector, telecommunication sector in our case.

The technical and practical contributions that we would like to add to Mobilis will be beneficial in terms of management, as well as a theoretical contribution to research that will tackle the same subject in the future. This research will provide an analysis, with great theoretical and managerial value for students and professionals.

2.1.Theoretical contribution :

After reading the books and researches related to the theme we're tackling, several authors and researchers deal with the two fields, namely management, and communication or digital marketing, however, there is very little information on their application in the public sector, hence we will try to enrich this field by trying to combine the concepts management and digital communication in the public and semi-public organization.

2.2.Managerial contribution :

In this context, our research is part of a management consulting mission in the field of digital communication & marketing, starting with a diagnosis of the current process to detect malfunctions and propose a hybrid management approach that brings together between classic management techniques and digital communication & marketing techniques as a solution.

Faced with Mobilis' current communication and digital marketing project process, the solution can bring better results in terms of communication management, customer engagement, quality of results and services delivered, and delivery time.

Also, we ought to show through this research the need to adopt the digital communication strategy and its importance to the Algerian public and semi-public organizations as much as private companies.

3. Research questions :

To properly conduct our current study, as well as to have a logical and clear routing of our objectives, the following research questions were formulated:

The main problematic:

What's the impact of digital communication on value creation & customer satisfaction in the public organization?

Sub-questions:

- What's the impact of using digital communication on Mobilis consumers' satisfaction?
- Does the increase in the usage of social media result in improved engagement between Mobilis and the community?
- How could Mobilis online engagement impact customer satisfaction?

4. Hypotheses :

- Digital communication bring Mobilis closer to her costumers thus an increase in their satisfaction
- Mobilis can use social media to be closer and engage with their costumers
- The more Mobilis is engaged with their community the easier it is to build a relationship with them and satisfy them.

5. Organizational context :

5.1. Presentation of Mobilis :

A subsidiary of Algérie Télécom, Mobilis is the first mobile operator in Algeria, which became autonomous in August 2003.

Since its creation, Mobilis has set itself the main objectives of customer satisfaction, customer loyalty, innovation, and technological progress, which have enabled it to make profits and acquire nearly 20 million subscribers in record time.

Opting for a policy of change and innovation, Mobilis is constantly working on its brand image and is constantly striving to offer the best to its customers.

By deploying a high-quality network, by ensuring satisfactory customer service, and by creating innovative products and services, Mobilis is positioned as an operator close to its partners and customers, reinforced by its institutional signature: "Everywhere with you". Its slogan is a promise to listen and a sign of its commitment to assume its role in sustainable development through its participation in economic progress, its respect for cultural diversity, its commitment to assume its social role, and its participation in the protection of the environment.

It is equipped with values: Transparency, Loyalty, Dynamism, and Innovation. Mobilis optimizes its quality of service and ensures customer loyalty.

Mobilis is also:

- Total network coverage of the population.
- A commercial network in progress reaching 178 Mobilis Agencies.
- More than 60,000 indirect sales outlets.
- More than 4500 Radio Base Stations (BTS)
- Of the most efficient Service Platforms.
- Innovation and the development of several offers and services.

"Mobilis asserts itself as a dynamic, innovative, loyal, and transparent company and continues its healthy competition, in a very competitive market where seriousness, credibility, and proximity are the keys to success**. (Source: Mobilis website)**

5.2. Mobilis History :

In 2002, Algérie Télécom was granted a regularization license for its fixed and GSM mobile activities and entered into the operational phase as of January 1, 2003. The operation of the GSM network inherited from the Ministry of Posts and Telecommunications, and the provision of mobile services are provided by Algérie Télécom.

The subsidiary was created in August 2003 as a joint-stock company. But was not fully operational until September 2004. This, thanks to the implementation of new commercial and technical strategies which allowed the effective start of the Mobilis (ATM) activity.

On December 15, 2004, Mobilis launched the first experimental UMTS (Universal mobile telecommunications system) network, joining the club of operators who master 3G technology. To offer quality services with ideal coverage, Mobilis has launched a vast project to deploy its network throughout the national territory. After a period of passivity, the operator set up new management in August 2003, with the main objective of trying to gain greater market share. As a reminder, AT (Algérie Telecom) had only 1500000 customers in 2011. But the permanent efforts of the new management team of Mobilis, which was given more means and, thanks to its good management, ended up obtaining results, today, nearly 96.7% of the Algerian population is covered by the network.

5.3. The Activities of the company :

Mobilis is a telecommunications and mobile telephony operator specializing in the marketing of telecommunications equipment and services for individuals, professionals, and companies (via Mobils corporate). It offers these clients:

- Post and pre-paid offers
- UMTS / GPRS / GSM /SMS / MMS
- International roaming
- Voicemail
- Mobile Internet
- Fax Data
- Viewing the invoice on the internet
- Free balance notification after each call
- Free call to one or more favorite numbers ...etc.

The operator also offers its customers the possibility to connect to the Internet via its mobile phone network using GPRS/EDGE technologies thanks to its MobiConnect offer, which consists of a USB modem in which a DATA chip is inserted that can be connected to a laptop or desktop computer and the new 3G++/ 4G technology.

5.4. The missions of Mobilis :

- ATM Mobilis' main mission is to offer a high-quality mobile phone service that is simple, efficient, and accessible to the largest number of people covering the entire population throughout the national territory.
- Routing in the best conditions all calls whatever the requested destination.
- To propose simple, clear, transparent, and no-surprise offers. To constantly improve its products, services, and technology.
- Remain permanently attentive to customers and respond as quickly as possible to all complaints.
- To constantly innovate: to be at the technological forefront, to adapt its network and services to the needs of tomorrow's information society.
- To keep its promises.

It carries out its activity on the whole national territory for:

- Install, develop, operate and manage mobile telephony networks;
- Maintain and assemble mobile telephony equipment;

- Provide services and make mobile telephony products available to its customers;
- Establish, operate and manage interconnections enabling any national or international mobile telephone network operator to ensure communication between customers;
- To ensure the permanent availability of its products for all customers throughout the country;
- To carry out its activities in compliance with the competition;
- To offer its products and services in the mobile sector to and from foreign countries in compliance with the rules defined by international regulations in the field of activity

5.5. ATM objectives:

Mobilis has set itself general objectives, namely Customer satisfaction and financial profitability, but also basic objectives in the following areas:

- Organization: To ensure a high quality of future development of Mobilis at the level of international standards, methods, and policies of internal management.
- Network: The deployment of the network that makes the difference, both in terms of coverage of the territory and in terms of the responsibility of the network and the quality of communications.*
- Commercial offer: Multiplication of post-paid offers to meet the demand of different market segments.
- Distribution: Multiplication of direct sales points, the establishment of a distribution network in partnership with professionals.
- Customer service: Implementation of available and efficient customer service (agencies and call center).
- Invoicing system allowing simple, readable, and reliable invoicing.

The simple and transparent communication, without false promises, regular but without excess also reinforces the footprint of the Mobilis brand on the Algerian market.

5.6. Mobilis' values:

Being a citizen telephone operator is a difficult character to acquire, but by acquiring values such as Mobilis has done and embodied them in its behavior has made this status obvious to the Algerian population and its values are:

- DYNAMISM: Mobilis' approach is entirely forward-looking. By believing in the speed of change management and by constantly adapting our organization. The training and motivation of the staff are key factors of success. Their clients perceive their involvement and our know-how. In this sense, enthusiasm and optimism are communicative.
- TRANSPARENCY: by being open and explaining their choice. Their principle is to say what they do and do what they say. They share spontaneously and practice team spirit. They roll out the network uniformly across the country and offer simple, clear,

and no-surprise offers. They listen to our clients and respond to any complaints as quickly as possible.

- INNOVATION: by valuing change in all areas and encouraging creativity. They are in tune with the technological evolutions of the market and are constantly improving their products and services. They make converge their network and its services to propose to the Algerian society the Information of tomorrow.
- LOYALTY: Mobilis protects and defends the interests of the Algerian consumer and works to create wealth and generate progress. The team is united and respects its commitments by practicing ethics in their actions and by recognizing merit, excellence, and honesty. They provide the customer with a high-quality network with the strongest proven coverage.

These four values form the basis of Mobilis communication and reflect their commitment to always be as close as possible to their partners and customers.

5.7. Visual identity:

Mobilis unveiled on Wednesday 29th June 2010, a new visual identity, the subsidiary of Algérie Télécom with a new logo, new colors, and a new slogan. Mobilis through this change also has a new communication strategy and new values. Goal: to accompany the re-launch strategy implemented by the new management of the company led by Azwaw Mehmel, the new CEO. In the new visual identity of Mobilis, green will replace blue. The slogan "And let everyone speak", which dates from 2004, will also be abandoned. And replaced by the signature "everywhere with you". This new identity reflects the values and commitments of Mobilis in terms of communication behavior. It guides their communication actions and dictates their principles. Each actor, each Mobilis employee must be fully and sustainably involved in this approach. Mobilis, through this strategy, seeks to reposition itself on the national mobile phone market, after a difficult period.

Figure n°1: Mobilis old logo from 2003 to 2010

Figure n°2: Mobilis new (current) logo after 2010

5.8. ATM's different organizational structures :

ATM Mobilis' company is managed by a CEO and 4 central directors:

1- Director of the brand and communication.

2- Director of Strategy, Programming, and Performance.

3- Director of finance and accounting.

4- Director of the information system.

The CEO's office is composed of advisors each in charge of tasks conferred by the CEO. He is also assisted by a legal counsel in charge of legal resolutions.

Mobilis organizational chart:

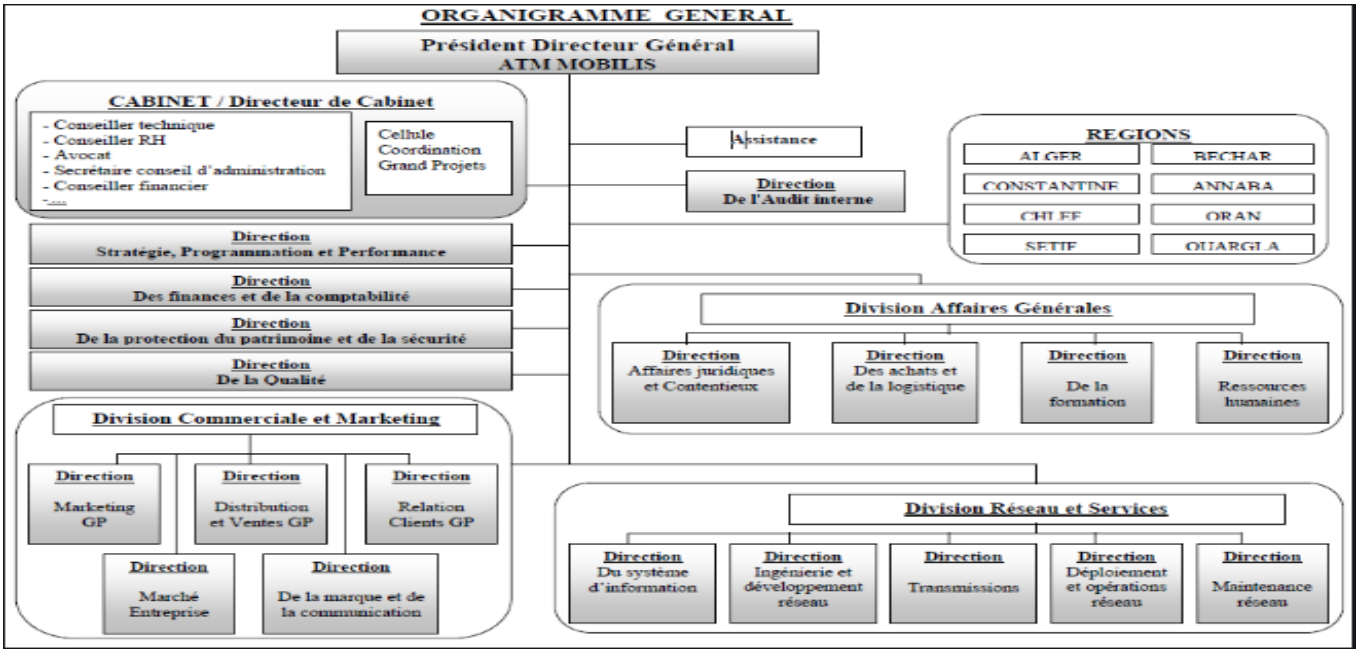


Figure n°3: presentation of Mobilis organizational chart (internal document from Mobilis)

5.9. Brand & communication department : (DMC)

It is the reflection of the company towards the staff internally and the general public externally, which is why it works for the reinforcement of the operator's values to justify the brand image in the eyes of consumers. Among its main activities, the development of the communication strategy and action plan. It ensures the control of the annual communication budget and carries out the necessary communication actions and various events. To ensure the control of sponsoring and sponsorship actions, the management validates and closely follows the realization of the different communication supports, intending to participate in public events such as fairs, exhibitions, congresses, seminars, etc. to be seen and accessible to the general public. The management is in charge of the image and the strategic development of the internal structure of the operator, so it ensures the relay of its communication regarding the values and results of the operator. One of the main missions of the management is the elaboration of the dashboards and reporting to ensure the good progress of the action plan and the respect of the operator's objectives, as well as the strategic and political follow-up of the brand. Besides, the management team designs and manages its mass communication through various events, sponsoring, and patronage actions.

The Mobilis digital cell has several specialists who share the following missions:

- Web: its main mission is the management of ATM sites (Mobilis.dz 3g.dz mobilebymobilis.dz) of their ergonomics of its content and its update and all that is needed to attract more and more visitors.
- Mobile, application/ games: his task is the design of mobile applications and games and also the management of the app store.
- Social Media: the management of the news feed in the heart of social media is his main mission, he manages the storytelling on the different media and networks where Mobilis is located such as (Facebook, Twitter, Viadeo ...).
- Web designer: the web designer is in charge of the visual design of social media and adapts graphically the web and takes care of the graphic declination of web campaigns.
- E-Reputation and monitoring: To ensure a better presence on the web Mobilis does national and international monitoring on the web as it analyzes the statistics of its digital projects and measures the influence of its virtual companions on the behavior of Internet users.

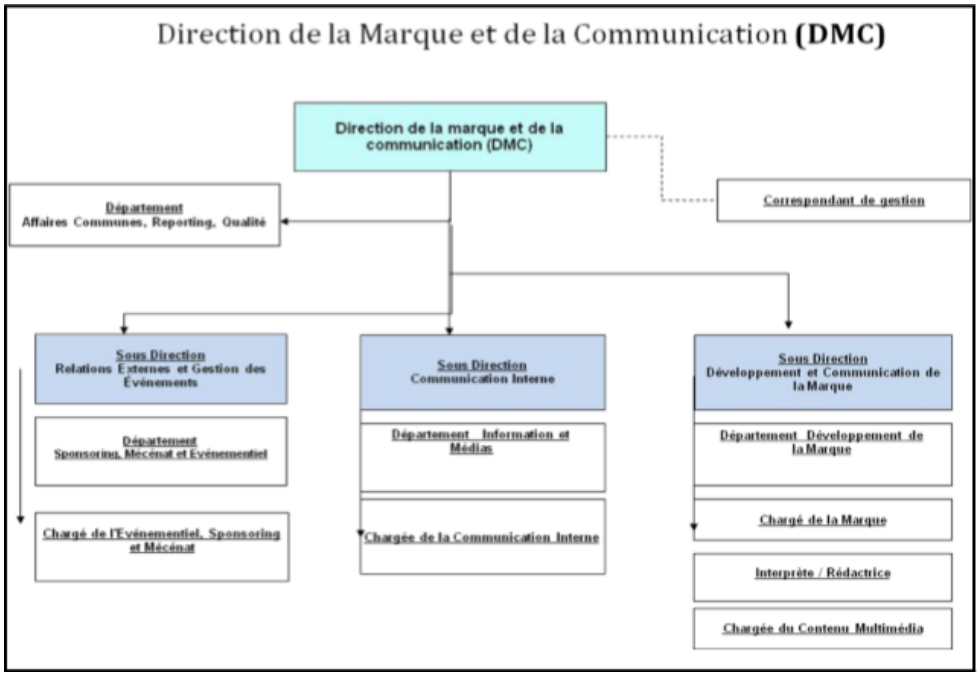


Figure n°4: Presentation of the organization chart of the Brand and Communication Department (internal document from Mobilis)

Chapter two: literature review

Introduction:

Despite the ubiquity and visible impact of digital transformation and resultant new digital business models, the academic literature has so far paid surprisingly little attention to these developments, only recently starting to address the topics of digitization, digitalization, and digital transformation

And although Digital Communication is popular concept among managers and practitioners, this term tends to be forgotten and unused in the academic literature. And so the theoretical background and conducted literature review was raised in this chapter. which main aim was bringing insight into the basic understanding of theoretical background of digital communication , in a mean of digitization and current megatrends in the world increasingly , the digital communication tools used the most by business and consumers, pointing the light on its contribution and the role it plays in service quality and satisfying costumers .Many of the publications may bring up to readers to concern this terms as managerial trendy slogans for IT-enabled changes within new version.

Literature review:

Within recent years, the concept of “digital transformation (DT)” reached a solid and high position in the discussion of leading elements that influence the development and survival of contemporary organizations.

One may argue that DT is not a new concept, but merely a commercially driven refreshment of a previous trend, similar in shape and intensity to the "Web 1.0/dotcom" trend we experienced in the years 1995–2001. There are many resemblances between the "dotcom era" and today's intensive digital development: the emergence of several core technologies that started gathering the critical mass of users, enormous and unjustified investments in innovative enterprises (despite their nebulous financials), rapid 1 In numerous publications available on the Internet, there are different acronyms used for the digital transformation. While the academia uses the "DT" as a shortcut, the industry is commonly using the "DX" term. The DX is, however, also referred to as the "digital economy." onboarding of technological tools by consumers and businesses, and the parallel, tech-driven growth of stock prices and profit expectations.[1]

The technological revolution can provide businesses with competitive advantages that can lead to many potential benefits (Mosconi, Packmohr & Antonio De Santa-Eulalia, 2019)[2]. The initial benefit of digitalization is the improvement of the relationship between the business and customers by enabling a higher level of connectivity (Berman & Marshall, 2014)[3]. Businesses on one side can focus their digital initiatives to better understand the consumer behavior and to meet the changing consumer needs (Piccinini, Gregory & Kolbe, 2015; Van Belleghem, 2017)[4] while consumers on the other side can use the new technologies to be better informed about the product and services and to decide whom to trust and where to make the purchases (Berman, 2012)[5].

Companies are using the emerging technologies to add new revenue streams by delivering services digitally or extending their traditional products and services (Berman, 2012), to reshape their boundaries by developing new business models, and to transform their operations from multi-national companies to truly global (Westerman, Calméjane, Bonnet, Ferraris & McAfee, 2011)[6].

---

[1] : Marcin Kotarba ,2018, Digital Transformation Of Business Models Warsaw University Of Technology, Faculty Of Management, Warsaw, Poland

[2] / Mosconi, E., Packmohr, S. & Antonio De Santa-Eulalia, L. (2019). Making Digital Transformation Real. Grand Wailea, Hawaï: 52nd Hawaii International Conference on System Sciences.

[3] Berman, S. & Marshall, A. (2014). The next digital transformation: from an individual–centered to an everyone-to-everyone economy. Strategy & Leadership, 42(5), 9–17.

[4] Piccinini, E., Hanelt, A., Gregory, R. & Kolbe, L. (2015). Transforming Industrial Business: The Impact of Digital Transformation on Automotive Organizations. Fort Worth, Texas: International Conference on Information Systems

[5] Berman, S. J. (2012). Digital transformation: opportunities to create new business models. Strategy & Leadership, 40(2), 16–24.

[6] Westerman, G., Calméjane, C., Bonnet, D., Ferraris, P. & McAfee, A. (2011). Digital Transformation: A roadmap for billion–dollar organizations. MIT Center for Digital Business and Capgemini Consulting, 1–68.

From the early 1990s computerization of the processes has been introduced. After almost 30 years the mobility, cloud computing, Internet of Things (abrrev. IoT), augmented reality, social media and decentralized public ledgers of transactions like blockchain are driving enterprises to new digital customer engagement and IT-enabled processes. From the mid-2000s until today smart devices and social platforms are strongly influencing B2C communication methods and opening new communication channels with customers. Digital communication implicated high expectations regarding multi-channel availability and revolutionized Customer Service Experience within "Customer in the center" and real-time communication approach.[7]

As L. Flores (2012) explained "Digital communication is both media and non-media communication, and it corresponds to any communication on digital media (internet, social networks or mobile applications), and has been growing steadily over the last ten years or so"[8]. Resulting from the dynamic pace of technological progress and innovation that trigger changes in consumer and social behaviors. It is important to note that this definition is only one of the many approaches proposed by both academic and business communities. Even those who helped develop the technology had no idea that communication would be its most important asset (Metcalfe, 1992).

Keller (2009) provided several implications that build a strong brand in a contemporary environment of marketing communications: 1) being media neutral and adopt all options of possible communications 2) mix and match the options considered to optimize their strengths and weakness 3) make certain that interactive marketing is doing appropriate in total marketing communication catalog 4) how often marketers must rework on their communication gimmick to constitute a loyal customer base. In a turbulent environment, marketers must evolve with different ideas to offbeat their rivals and to increase customer loyalty and constitute brand resonance.[9]

Matthews (2010) discussed the industrial shift from the classical school of corporate communications to the new school of building public relations through digital connectivity. The swiftness in this transformation has separated the early adopters from those who were crawling to adopt digital communications. The companies that were slow in adopting the new catalog of communication to the public are going to be left behind. Consumers are also participating in this run with one another through digital media, even if those companies that are in their topics of discussion have missed the boat to tie in the digital communication game.[10]

Samson et al. (2014) conducted a study on digital communication management concerning the automobile industry-specifically the passenger car segment and stated that digital communication is the preferred source of information that is looking to have a car and it has a convincing influence on customer's buying decision. It was also concluded that digital

[7] Kamila Jurgielewicz, 2019, Digital transformation: theoretical backgrounds of digital change

[8] FLORÈS (Laurent) 2012, Mesurer l'efficacité du marketing digitale, Paris, Edition DUNOD, p 4.

[9] Keller, K. "Building strong brands in a modern marketing communications environment", Journal of Marketing Communications, Vol. 15, Nos. 2–3, April– July 2009, 139–1

[10] Matthews, L. "Social Media and the Evolution of Corporate Communications", The Elon Journal of Undergraduate Research in Communications, Vol. 1, No. 1, Winter 2010

information sources are efficient to provide detailed specifications, features, and comparative parameters about a particular car model.[11]

Danahar & Rossiter (2011) took a survey in which communication channels were compared from the perspective of receivers and senders of marketing and consumers and business markets. Secondly, the effectiveness of the 11 channels in drawing responses of two typical B-to-C and two B-to-B promotion offers was also conducted. The findings were taking the E-Mail as a well-established source but the traditional channels of newspapers, television, and radio retain their historical favorite attributes: trust and reliability.[12]

N. Eyrich et al (2008) surveyed public relations practitioners on their adaptation of 18 different digital communication tools and their views on positive trends in digital communication practice. Using the online survey method, a total of 924 e-mail invitations were sent, the response rate was 33.22% out of which 26.41% were males and left were females. The resulted in the most popular tool was E-Mail followed by Intranet, Blogs, Video conferencing, podcasts, and on. Overall, PR practitioners have adopted six different digital communication tools professionally but find them slower in integrating more complicated tools that cater to niche audiences (such as social network, text messaging, etc.).[13]

Heinonen & Michelsson (2010) hinted that the relationship initiation is hard to identify. Findings reveal that initiative taken by the customer is equally important like the organization in the digital context. It could be noticed in a B2C relationship where customer come to know about offerings and its information digitally and makes a contact after finding a suitable service provider. It was also concluded that digital marketing activities, like direct e-mails and search engine advertisements, are becoming important due to cost efficiency and flexibility.[14]

Today's users and customers, particularly younger people, are becoming less and less likely to use traditional information and communication methods any more – even email, according to Carlson (2006, A33)[15] is following the downwards trend of telephone and written interactions with big business. If interactivity and communication aren't immediate and built into the information source, customers won't usually take the extra steps to give feedback - Web 2.0 technologies generate the desired dialogue with customer bases, and set up what Singer (2006, 67)[16] calls a "Feedback Loop".

The natural language style of Web 2.0 resources (blogs in particular) appeals to today's consumer: "People don't want to read press releases" (Delio, 2005, 46)[17] and appreciate the

---

[11] Rohan Samson et al. / Procedia Economics and Finance 11 (2014) 872 – 880.

[12] Danaher, P.J., &Rossiter, J.R. (2011). "Comparing perceptions of marketing communication channels". European Journal of Marketing, 45(1/2), 6-42.

[13] N. Eyrich et al. / Public Relations Review 34 (2008) 412–414.

[14] Heinonen, J & Michelsson, T. "The use of digital channels to create customer relationships", International Journal of Internet Marketing and Advertising, Vol. X, No. Y, xxxx.

[15] Carlson, S. (2006). The library at CUNY's Brooklyn College makes friends on MySpace. Chronicle of Higher Education, 52(37), A33.

[16] Singer, E. (2006) Build a biz blog. Canadian Business 79(23), 66-68.

[17] Delio, M. (2005) The Enterprise Blogosphere. Infoworld 27(13), 42-47.

personal voice, without a third party or a corporate PR line telling the story. The functionality in typical Web 2.0 technologies – tags, categories, linking, and active bookmarking – means increased search-ability and usability of the resource, and decreases the need for customers to spend time phoning or emailing for help.

The connectivity, flexibility and instant outreach and communication features of Web 2.0 technologies appeal to today's web users and the way they interact on a social level.

Advanced Technology and globalization are the two major influential elements that force change in the market function and firms relate to customers. Globalization has a powerful influence on the homogenization of different markets. This has changed customer choice and permanently altered the competitive landscape of business across the globe. Jaffe Thomas and Rajen K. Gupta (2OO5) attempted to identify that organizations adapt to those changing environmental realities that change in value distribution to value creation, customer acquisition to customer retention, and immediate customer to value chain of marketing. The shifts are from a goods-cantered view to service cantered view and co-creating valued customer experience.[18]

Prahlad and Ramaswamy (2000) have rightly stated that consumers/customers are changing the dynamics of the marketplace. The market has become a forum in which customers play an active role in creating and competing for value. Customers are becoming a new source of competence for the corporation. The competence that customers bring is a function of the knowledge, skills, and willingness to learn and experiment and the ability to engage in an active dialogue.[19]

Customers often look for a value in the total service which requires internal collaboration among the department that is responsible for different elements of the offering, such as the core product (goods or services) delivering the product, product documentation, etc. Moreover, from profitability and productivity perspectives only activities that produce value for customers should be carried out. Hence, firms have to get to know their customers much better than has normally been. However, the company should be able to build trust with the customer so it is easy to get feedback from the customer. This is how customer-oriented product or service could be developed (Hill, Brierley & MacDougall 2003).[20]

[18] Thomas, Joffi; Gupta Rajen K, Marketing Theory and Practice: Evolving through Turbulent times, Global Business Review, 2005, vol. 6, Issue 1, pp 95-112.

[19] Prahlad, C.K; Ramaswamy, Venkaitram, Co-opting Customer competence, Harvard Business Review, January/ February 2000, Vol. 78, Issue 1, pp 79-87

[20] Hill, N., Brierley, J. & MacDougall, R. 2003. How to measure customer satisfaction? USA: Gower Publishing Ltd.

Conceptual frame:

I. Section one : communication in the age of digital

1. The Internet as a Medium of Mass Communication

"The medium is the message" A statement by Marshall McLuhan, meaning that the form of a message (print, visual, musical, etc.) determines the ways in which that message will be perceived. McLuhan argued that modern electronic communications (including radio, television, films, and computers) would have far-reaching sociological, aesthetic, and philosophical consequences, to the point of actually altering the ways in which we experience the world. Meaning the actual technological platform itself impacts us more than the content on that platform, so to understand the message we need to understand the medium itself.[21]

the critical scrutiny of the features of the classical mass communication media such as radio television newspapers and magazines shows the internet exhibiting the same qualities, which confirms the idea of the internet as an emerging mass communication medium, and puts the internet on an equal platform with old mass media if not in a higher position .the following attributes strengthen the arguments

- Reach: it is said that a medium has a good reach or coverage if it has the ability to expose a large number of people to a given mass media message within a given period. According to Rossiter (1997 p. 447) reach is the "number of target audience individuals exposed to the advertising or promotion in an advertising circle"[22] frequencies restrict the reach of radio and television media to a limited region or territory. The circulation of print newspapers and magazines depend on manual distribution. This is a strong limitation but when enhanced on the internet the online version has no boundaries. The internet on the other hand has the potential to reach everyone hooked up to an internet-enabled system. its services or network can be received anywhere without any restriction through any of the internet service providers (ISP), in fact the internet is not only a mass medium but is also a global medium with the potential to reach everyone on the globe. Arens (2006 p. 558) pointed that "with an audience of some 800 million people worldwide the internet is also the only true global

[21] Marshal Mcluhan, 1967, the medium is the massage, an inventory of effects, Quentine Fiore produced by Jerome Agel, Gingko press inc

[22] Rossiter J.R (1997). Advertising communications & promotions management. Boston: McGraw Hill Irwin.

medium providing information and commerce opportunities that are immediately accessible around the world"[23].

- Simultaneity of reception: another feature of the traditional mass media is simultaneity which is the ability of the medium to transmit the message to audience members at the same time or nearly the same time. Hanson (2005 p.11) stated that "mass communication messages are transmitted rapidly to the receivers. Audience members can receive the message simultaneously as they would in the case of a radio broadcast; at similar though not identical times as in the case of a newspaper or magazine; and occasionally over an extended period as in the case of cd movie or video"[24].

In itself the internet has the potential to reach everyone who is connected at the same second just as radio and TV signals can be received at once by all who tune in to the same channel. However in reality the possibility of many being hooked up online all at the same time and surfing through the same website is very slim. Yet by routing a message in some popular websites such as Yahoo, Google, Facebook, and Twitter nowadays which are visited by many people worldwide the possibility of simultaneous mass communication is more accurate.

- Anonymity: a mass communication channel allows the sender to reach a large heterogeneous and anonymous audience. Because of the number involved an audience is a mixed group and the sender cannot personally know most of them if not all of them. The producers of a webcast a webzine an on-line newspaper or a popular corporate website cannot know the individual audience members who would visit their sites. The audience members on their part may also not know the sender of such online messages or information. besides what can be more anonymous than the cyber experience where people exchange views and mails online with other people they have never seen or met outside the virtual world of the internet so while the internet has the potentials for interpersonal communication it equally enables people to communicate with an anonymous audience or group.

[23] Arens, W. F. (2006). Contemporary advertising. Boston: McGraw Hill Irwin.
[24] Hanson, R. E. (2005). Mass communication: living in a media world. Boston: McGraw Hill Irwin.

- Heterogeneity of audience: if a medium of mass communication must reach a heterogeneous audience then no other medium does it better than the internet. The internet audience is a thoroughly mixed group from sex gender age location status class race religion and culture. They can be spatially dispersed both in reality and in the virtual world[25].

- Dual outreach: from one of the advantages the internet can be adapted for both a narrow and mass reach depending on the users' needs. It has the potential for both global marketing and narrowcasting to a specialized or segmented audience. Another thing is in the same way that radio and TV can switch from one language to the other the internet can be accessed in most popular languages spoken in different parts of the world. So not even language is a barrier here unlike for books newspapers magazines and billboards that are limited by language. Its barrier though is the technological illiteracy barrier because one must have some level of computer proficiency before he can access the internet. Accessibility too can limit the internet and this too will soon be in the past as the internet promises to become global cheaper and more easily accessible. Biagi (2005 p. 191) confirmed that" the web is a new medium but its growth to become a true mass medium for a majority of people seeking information and entertainment is limited only by digital technology and economics"[26].

Based on the previously stated benchmarks measurements for assessing a mass communication tool it has been proved enough evidence that the internet is a mass medium of communication and indeed an effective mass medium capable of reaching a very large mixed and anonymous audience anywhere anytime.

[25] Ohiagu, O. P. (2011). The Internet: The Medium of the Mass Media. Kiabara Journal of Humanities 16 (2), 225-232 page 2-6

[26]Biagi, S. (2005). Media impact: an introduction to mass media. Belmont: Thompsom Wadsworth. Dominick, J. (2007). The dynamics of mass communications: media in the digital age (9th ed.) Boston: McGraw Hill.

2. Digital transformation :

Digital transformation affects all fields in life, in particular economics. Companies now are given an opportunity to radically change their business models by new digital technologies like social networks mobile big data internet of things other innovations like block-chain. This mostly involves changes in the core business operations and modifies products and processes as well as organizational structures as companies ought to set up management practices to conduct these complex transformations. Consequently society overall is facing a radical change due to the development of digital technologies and their extensive implementations of all markets. To add to the expanded interest from clients organizations are facing even harder competition because of globalization and putting strain to go digital before others do looking to survive and accomplish competitive benefits. So what is digital transformation exactly?[27]

In literature multiple definitions of digital transformation can be found. For instance E. Stolterman, A. Fors (2004) pointed that "digital transformation is the changes that digital technology causes or influences in all aspects of human life"[28].

few years later A. Martin (2008) confirmed his theory explaining "(…) now commonly interpreted as such usage of Information and Communication Technology, when not trivial automation is performed, but fundamentally new capabilities are created in business, public government, and in people's and society life (…)"[29].

Moving forward to 2011 where G. Westerman, A. McAfee et al. (2011) defined it as "the use of technology to radically improve the performance or reach of enterprises is becoming a hot topic for companies across the globe. Executives in all industries are using digital advances such as analytics, mobility, social media, and smart embedded devices and improving their use of traditional technologies such as ERP to change customer relationships, internal processes and value propositions"[30].

---

[27] S. Ziyadin, S. Suieubayeva , and A. Utegenova, 2019, Digital Transformation in Business , Al-Farabi Kazakh National University, Almaty, Kazakhstan

[28] E. Stolterman, A. Fors, 2004, Information technology and the good life, in: Information Systems Research, p. 687–692,.

[29] A. Martin, 2008, Digital literacy and the "digital society", In: Digital Literacies Concepts Policies Practices 30, p. 151–176,.

[30] G. Westerman, A. McAfee, D. Bonnet, C. Calmejane, P. Ferraris, 2011, Digital transformation: A roadmap for billion-dollar organizations, MIT Center for Digital Business and Capgemini Consulting, p. 1-68.

As for M. Fitzgerald et al. (2013) digital transformation is the "use of new digital technologies, such as social media, mobile, analytics or embedded devices, in order to enable major business improvements like enhancing customer experience, streamlining operations or creating new business models"[31].

In general we could say that digital transformation is the combination of digital technologies and business processes resulting from the dynamic pace of technological progress and innovation that trigger changes in consumer and social behaviors.

2.1. The need for digital transformation :

In this part we will identify three major external factors driving the need for digital transformation.

First, already since the coming of the World Wide Web and its worldwide adoption, an increasing number of accompanying technologies have risen that have strengthened the development of e-business. Such broadband internet, smartphones, Web 2.0, SEO, cloud computing, speech recognition, online payment systems, and crypto-currencies. The omnipresence of big data, and advent of emerging digital technologies, such as artificial intelligence (AI), blockchain, internet-ofthings (IoT), and robotics, are projected to have far-reaching effects on business (Chen, Chiang, & Storey, 2012; Iansiti & Lakhani, 2014; Ng & Wakenshaw, 2017)[32]. The wide entrance of new digital technologies clearly signals the need for firms to transform their business digitally.

Second, due to these new digital technologies, competition is changing dramatically. In retail, technologies have disrupted the competition landscape, shifting sales to relatively young digital firms. Not only has the competition become more global, the intensity has also increased as big, information-rich firms from all over the world is now dominating numerous industries. The dramatic rise of digital firms is even more noticeable in the FAANG stocks (Facebook, Apple, Amazon, Netflix and Google) (Insider, 2017a).

---

[31] M. Fitzgerald, N. Kruschwitz, D. Bonnet, M. Welch, 2013, Embracing Digital Technology: A New Strategic Imperative, MIT Sloan Management Review, Research Report,.

[32] Chen, H., Chiang, R. H., & Storey, V. C. (2012). Business intelligence and analytics: From big data to big impact. MIS Quarterly, 36(4), 1165–1188.

Third, consumer behavior is changing as a response to the digital revolution. Market figures show that consumers are shifting their purchases to online stores, and digital touchpoints have an important role in the customer journey affecting both online and offline sales (Kannan & Li, 2017)[33]. With the help of new search and social media tools, consumers have become more connected, informed, empowered, and active. Digital technologies allow consumers to co-create value by designing and customizing products, Mobile devices have facilitate showrooming behavior, the practice of examining merchandise offline, and then buying it online (e.g., Gensler, Neslin, & Verhoef, 2017)[34]. Also strongly rely on apps, and new AI-based technologies, like Amazon's Echo and Google Home.

Consequently, the use of new digital technologies can easily become the new norm and defy traditional business rules. If firms cannot adapt to these changes, they become less attractive to customers, and are likely to be replaced by firms that do leverage such technologies.

3. Digital Communication :

Although Digital communication is a popular concept among managers and practitioners, this term tends to be forgotten and unused in the academic literature and so the theoretical background and conducted literature review was raised in this chapter , we've collected the following definitions from different resources , articles , books ,and papers in that objective .

Taken from BBC daily lessons "Communication is the process of sending information to others and receiving information back from them. Digital communication involves sending and receiving such information electronically"[35].

As explained by L. Flores (2012) "Digital communication is both media and non-media communication, and it corresponds to any communication on digital media (internet, social networks or mobile applications), and has been growing steadily over the last ten years or so"[36].

---

[33] Kannan, P. K., & Li, H. A. (2017). Digital marketing: A framework, review and research agenda. International Journal of Research in Marketing, 34(1), 22–45.

[34] Gensler, S., Neslin, S. A., & Verhoef, P. C. (2017). The showrooming phenomenon: It's more than just about price. Journal of Interactive Marketing, 38(2), 29–43.

[35] BBC, 27/05/2020,how to use technology in your business: digital communication ,online , https://www.bbc.co.uk/bitesize/guides/zdmfpg8/revision/3

[36] FLORÈS (Laurent) 2012, Mesurer l'efficacité du marketing digitale, Paris, Edition DUNOD, p 4.

Digital communication is not only a new discipline of communication but also of marketing, the term "digital communication" encompasses all actions (marketing and communication) to promote a product or a service through media communication supports or a digital communication channel, which defines the new objective of companies which is to target their consumers in a more precise and interactive way, through all digital media[37].

Simply said, digital communication involves an organization's online communication efforts. Most organizations today use a wide range of online channels—from their website to mobile chat to blogs—to connect with current and prospective customers, employees, and other stakeholders. Digital communications professionals are responsible for everything from creating online brand assets to building an engaged social media audience.

"Today, the options for getting a message out are much broader and quicker than they were just a few decades ago," explains Dr. Edward Powers, professor in Northeastern's Master of Science in Corporate and Organizational Communication and Bachelor of Science in Digital Communication and Media programs. "Digital communication professionals have to be mindful about how to put forward these new tools in the right way."

Dr. Powers says "If you can marry together the classic training that people in the marketing communications field have relied on for decades with emerging digital technology, you will have highly marketable skills," he also stated that "The demand for digital marketing professionals is exploding across corporations, nonprofits, government agencies, and academia, and there is no letup in sight. Some of the mechanisms for communication will come and go but digital communication is pretty much ingrained in our world now." hence we can conclude that digital communication holds a great importance to organizations both internally and on the extern[38].

[37] BERTELOOT (S), DEMEURE (C) 2015, Aide-mémoire – Marketing Ed7 Paris, Edition Dunod, P.325

[38] Northeastern university, 27/05/2020 , What is Digital Communication & Why Are Skilled Professionals in Such High Demand?, online, https://www.northeastern.edu/bachelors-completion/news/what-is-digital-communication/

4. Digital communication tools :

4.1.Website :

Your website is the most powerful communications and marketing tool available to your business "The website is an interactive brochure, providing information about their companies, the product or services they offer, the contact information" (Cornier, 1999, p17)[39]. The majority of your web visitors likely arrive after typing into a search engine, perhaps bypassing your homepage altogether. They've come to you, so make their inbound visit count by ensuring they get the information they need quickly. By providing strong content and opportunities to connect further across your site, you'll give web visitors good reason to dwell for longer and depart as "happy customers"[40]. Your Website is a Reflection of Your Image as a Business it Allows customers and clients to Contact You ,It Can Help You Stay on Top of Competition ,Your Website is a Marketing Platform[41].

Your website must make it easy for citizens to find what they need. Nothing annoys website visitors more than difficulty finding the things they need. Make sure your homepage displays the most recent news, upcoming events or deadline-specific callouts to help guide your visitor in as few clicks as possible. Work with your web design team to ensure that all information is findable within three clicks. And don't forget to always use plain basic language so that it is understandable by the public, create content with SEO in mind to drive more traffic to your website. Lastly add other ways to connect with you such us chat box, email, or social media accounts[42] .

[39] Samson owoyele, may 2016, website as a marketing communication tool ,thesis centria university of applied sciences Business Management , page 6
[40] Granicus, 2017, A Guide to content marketing for the public sector –uk.granicus.com page 5
[41] Action digital ,08/06/2020, Why your website is the most powerful communications and marketing tool. https://actiondigitalagency.com.
[42] Granicus, 2017, A Guide to content marketing for the public sector –uk.granicus.com page 6

4.2. Blog :

Blogs are a website based mainly on the publication of posts, personal diaries published on the Internet that can be read and commented on by all Internet users[43].

The blog is the platform that requires the most efforts and personal investment. If the company's objective is to be a master thinker, it will not be able to do without a blog. To a lesser extent, blogs can help it achieve these objectives: brand awareness, loyalty, human resources[44].

Blogs are currently the best way to talk about big ideas that are accompanied by detailed explanations. In many cases, the discussion in the "Comments" section proves to be particularly enlightening, sometimes more so than the article itself.

Blogging is a great way to increase organic traffic to your website, and retain audiences. Providing regular, timely and useful content via a blog can help you connect with people on a personal level. Blogging helps organizations tell their “story” directly, in a way that is untainted by the media[45].

Through editorial and exclusive content, blogs also help to build customer loyalty indirectly. They will regularly connect to your site to read your latest articles, to immerse themselves in your universe and keep up to date with your latest news

4.3. Email :

With the highest return on investment of any digital channel email is standing the test of time as a powerful engagement tactic. not only is email the most effective way of reaching audiences at scale but it also provides valuable audience insight via digital engagement metrics[46].

There are different forms of e-mailing depending on the company’s objectives. It can be used as prospecting sales loyalty or influencing tool. E-mail marketing is thus the most profitable

---

[43] DUPIN (Antoine), 2010, Communiquer sur les réseaux sociaux, Edition Florence devesa severir david, p.105
[44] Mlle. Benabdelbaki Manel, 2015, ,La communication digitale levier de compétitivité des entreprises. Etude de cas : Mobilis , Master thesis, HEC, page 100
[45] Granicus, 2017, a guide to content marketing for the public sector, uk.granicus.com
[46] Granicus, 2017, a guide to content marketing for the public sector, uk.granicus.com

customer loyalty and sales channel and is the only direct marketing lever on the internet because it allows creating a personalized message towards a given target the results of which can be measured individually and immediately[47].

4.3.1. **types of e-mailing campaigns**:

- Information campaigns: information campaigns are mainly characterized by strongly editorial content. E-mail is then used as an information distribution channel.
- Incentive campaigns: unlike information campaigns the message of incentive campaigns tends to have a commercial connotation particularly in the case of e-commerce or transactional site. The objective is then to create an impulse that will lead to a purchase or a lead.
- Mixed campaigns: sometimes the line between information and incentive is blurred. Indeed it is not uncommon to come across mixed campaigns i.e. those that seek to both inform and incite. This mixed format could be called promo letter. Banks are particularly seasoned for this type of practice. It is a question of sending an e-mail combining news articles information to decipher a type of product and commercial offers.
- Other types of campaigns: the e-mailing lever can also be used in other types of campaigns. These include in particular survey or poll campaigns. The aim here is to collect the opinion of an internet user[48].

4.4. Text messages (SMS/MMS) :

Consumers are constantly bombarded with social alerts from friends, family, work and brands. Because of these disruptions, many disable notifications for email and other social networks. If you want to market in real time, you need to send a text message[49].

SMS is still, to this day, the only possibility of standardized messages to users; it is to the mobile what e-mail is to the PC (with the constraint of 160 characters maximum). These

[47] Mlle Benabdelbaki Manel, 2015, La communication digitale levier de compétitivité des entreprises. Etude de cas : Mobilis, HEC, page79
[48] Mr. Yacine Mamache, 2019, L'impact de la communication digitale sur l'acquisition de nouveaux clients. Cas : S.A.R.L KEYNA. Marketing thesis, HEC, page 22
[49] Business news daily, 09/06/2020, How to Run a Successful Text Message Marketing Campaign https://www.businessnewsdaily.com

messages can be SMS, MMS (clickable or not), Wap push (clickable mobile messages) or mobile e-mails. Multimedia and animated, the MMS delivers a more complete message than an SMS and nourishes the image of the brand thanks to elaborate graphics[50].

The messaging campaign must be legal and structured, need to have costumer's explicit consent, and provide traceable, useful leads.

Not only sending messages costs less "Texting allows businesses to do many of the things that traditional media does … without having to invest in extra hardware, labor, printing or media buys." (Luke Wilson, chief revenue officer of EZ Texting)[51], but it reaches costumers on border range and that's linked to mobile devices nowadays being more personal than ever "Because text messages appear on people's mobile phones, they feel more personal than other kinds of marketing," said Luke Wilson, chief revenue officer of EZ Texting. Texting became the most-used mobile device feature, studies shows that 85% of mobile device users prefer a text from businesses over phone calls or emails .Users don't even need a smartphone or internet access , they don't need to download a new app or learn to navigate a new interface[52].

4.5.Mobile Applications :

mobile applications the use of the mobile has become an unavoidable thing in the life of any digital consumer , it is estimated that by 2021 there will be around 7.1 billion mobile users worldwide based on the statistic study done by s. O'Dea Feb 2020[53].

The market for mobile applications is also booming nearly 280 applications are launched every day on the apple store generally free of charge to encourage consumers to download and use them. Their developers generate profits through advertisements on their programs that the user prefers to download for free[54].

---

[50] Benabdelbaki Manel, 2015, La communication digitale levier de compétitivité des entreprises. Etude de cas : Mobilis

[51] Business news daily, 09/06/2020, How to Run a Successful Text Message Marketing Campaign https://www.businessnewsdaily.com

[52] content marketing institute, 09/06/2020, Text-Based Marketing: 13 Reasons to Use It , https://contentmarketinginstitute.com

[53] Statista, 12/06/2020 Forecast number of mobile users worldwide 2019-2023 https://www.statista.com/

[54] Yacine MAMACHE, 2019, L'impact de la communication digitale sur l'acquisition de nouveaux clients. Cas: S.A.R.L KEYNA, HEC. Page 33

Creative and unique mobile apps are helping brands connect with fans to convey brand messages offer a useful service to keep them engaged and build customer loyalty in a crowded marketplace. Studies show that more than 50% of customers who regularly use a branded app are more interested in buying from that company with mobile apps brands can enhance their customer's offline experiences connect with their loyal audiences and boost sales. According to a recent report by code broker[55], 75 percent of consumers will engage more with loyalty programs that provide rewards in a mobile-friendly way.

Huge number of brands create a mobile app for business as it's a powerful marketing tool. There are various benefits of creating an app for a brand. Increase brand awareness collects data about users. Mobile apps enable one-on-one interactions between businesses and customers allowing businesses to turn communities into families. Mobile apps humanize companies and facilitate better interactions between brands and customers increasing both loyalty and sales[56].

What's more important for brands is to have a clear strategy on how they plan to drive app downloads to make the content compelling and increase long-term user engagement.

4.6. Social media :

4.6.1. Definition :

Communication opens doors for understanding and eradicating confusion (McEwen, 2005)[57]. According to Robinson (2007) "social media are the tools used for communication that have Web 2.0 attributes that is, they are participatory, collaborative, and have knowledge sharing and user-empowering tools available on the Web"[58].

(Breivik & Thorbjørnsen, 2008) also stated that "Social media serves as a podium for communication and engagement of the large variety of customers. Through this medium,

---

[55] Loyalty Program Consumer Survey 2018 _Loyalty Research Report_ How today's consumers want to engage with loyalty programs

[56] Yalantis, 11/06/2020, Mobile App As a Brand Marketing Channel: Benefits Apps Provide to Brands https://yalantis.com/

[57] / Nick Hajli ,2015, Handbook of Research on Integrating Social Media into Strategic Marketing, Newcastle University Business School, UK, ,chapter 1 page 2.

[58] 8th International Strategic Management Conference ,2012,The impact of social media marketing on brand loyalty ,Yalova University, Safran Campus, Yalova 77100, Turkey, page 1354

companies can raise awareness about their brands. They can also promote their brands by disseminating their specialty and point of parity"[59].

The social network was defined as "a structure defined by relationships between individuals»[60].

Conrad and al., (2010) believe that social media is a sort of synthesis of sociology and technology and creating an environment or platform on the internet where people share experiences with each other and develop networks for a variety of different official and unofficial reasons. Social media has become an important platform and has gone so important that nearly every business uses social media for the marketing and promotion of its business, products, and services. Social media is also used for sharing information and getting in touch with their customers and society at large.

In the words of Andreas Kaplan and Michael Heinlein (2010), social media is "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content." Social media is media for social interaction as a superset beyond social communication. Enabled by ubiquitously accessible and scalable communication techniques, social media has substantially changed the way organizations, communities, and individuals communicate[61].

A study by Info-graphics puts forward that at least half of Twitter and Facebook users say they have become more likely to talk about, recommend or purchase a company's products after they began engaging with the company on social media (Jackson, 2011)[62].

[59] Nick Hajli ,2015, Handbook of Research on Integrating Social Media into Strategic Marketing, Newcastle University Business School, UK, ,chapter 1 page 2.
[60] Le Petit Larousse Illustré, 2005, Edition Larousse
[61] Haenlein, M. Kaplan, A, M. (2010), Users of the world, unite! The challenges and opportunities of social media, Business Horizons, Vol. 53, Issue 1, page 61
[62] 8th International Strategic Management Conference 2012,The impact of social media marketing on brand loyalty ,Yalova University, Safran Campus, Yalova 77100, Turkey , , page 1355

4.6.2. Social Media Types, and Tools

a. Social Communities [63]

- **Facebook:**

The name "Facebook™" is derived from the name of a book given to American students at the start of the academic year to help students get to know each other. It was founded by Mark Zuckerberg and his college roommates at Harvard University & Launched in 2004 in the United States and opened to the public in 2006, Facebook is the true giant of social networks. With more than 2 billion active users per month worldwide, a personal space where everyone can express themselves, publish photos and videos and share them as they wish with one or more people, and even with all their contacts, Facebook is the platform par excellence for exchanges.

- **LinkedIn:**

Created in 2003 and considered as the leader of professional networks that allows the connection between professionals from different fields of activity, to stay in touch or to find jobs, and for organizations to list job vacancies and to search for potential candidates. It gathers millions of profiles containing the skills and experiences of each member at different levels.

- **Google+:**

It is a Social layer that enhances other online properties of Google. Circles are used to organize and share information (e.g., friends, family, or acquaintances). Similar to Facebook, the user gets a stream with updates and can send private messages (i.e., Hangouts).

Microblogging Tools

- **Twitter:**

[63] Amy Van Looy, 2016, Technologies and Strategies for Creating Business Value Social Media Management_ Springer Cham Heidelberg New York Dordrecht London # Springer International Publishing Switzerland page 50-53-54-55-56

It refers to “chirps from birds” or the sound that birds produce .Launched in 2006, Twitter now has over 300 million active monthly users worldwide. It is a real platform for sharing information, diverse and varied, visible to all, even for people who do not have an account. If the continuous flow of tweets is meant to reflect the news of the planet, Twitter also claims the crossing of the borders between different countries and different cultures.

b. Photo Publishing tools

The purpose of photo publishing tools is primarily to share photos, pictures, or images. As a picture is worth a thousand words, an increasing number of social media tools are using photos to share an experience or to tell stories.

- **Instagram:**

Instagram is an American photo and video-sharing social networking service owned by Facebook, Inc. It was created by Kevin Systrom and Mike Krieger and launched in October 2010 on iOS. With over 1 billion monthly active users Instagram enables its users to take pictures, apply digital filters, and share them on other social media tools (e.g., social communities).

c. Audio Publishing tools

The next social media type covers tools for publishing and sharing audio fragments. Audio is frequently used in social media as they are easier to understand than text. Some examples of social audio publishing tools are as follows:

- **Spotify:**

Music streaming service to listen to songs, podcasts, or the radio, including a purchase service. Spotify has a clear business model, namely, either you can use it for free, but then you have to listen to ads between the songs and you can only use it within a limited period, or you can go, premium and pay for its service without the previously mentioned restrictions.

- **Podcast:**

The term “podcast” is derived from the terms “iPod” and “broadcast.” It concerns a series of episodes (and thus not a single audio recording), e.g., a series of novels, radio or television series, interviews, music from a garage band, etc. A podcast may cover audio, radio, video, PDF, MP3, or other audio files that users can upload and download from a website. An advantage is that podcasts allow an asynchronous use, which means on-demand (i.e., chosen by an individual user, based on his/her interests) and on the go (e.g., while driving a car). New episodes in a series can be delivered automatically after subscribing to the series.

d. Video Publishing Tools

Social video publishing tools are platforms to share video fragments. Compared to text, photos, and audio fragments, videos can give information about body language that is used during communication. A common video publishing tool is YouTube™, but others exist[64].

- **YouTube:**

It is simply the most-watched video platform on the Web. With 2 billion users worldwide, YouTube is a popular medium for Internet users. Thus, after the "TV generation", another generation has grown up with the YouTube channels. It enabling users to upload, view, and share user-generated video content. It provides a forum for people to inform and inspire others and serves as a distribution platform for original content creators and advertisers.

[64] Gayet (C) Et Xavier (M), Février 2016, web marketing et communication digitale 60 outils pour communiquer efficacement auprès de ses cibles, Edition Vuibert, Paris, P 46.

II. Section two: service quality and customer satisfaction

1. Service quality:

During the last few decades service quality has become a major area of academic investigation. Many types of research, analysis, and authors defined the term service quality.

In the 1980's researchers first started investigating quality in service. While quality intangible goods had been described and measured by marketers at that time, quality in service was largely undefined and unsearched (Parasuraman, Zeithaml, and Berry, 1985). The interest in this field sparked due to the significant growth in the service sector. Delivering superior service quality became a prerequisite for success, if not survival, of such businesses. "Knowledge about goods quality, however, is insufficient to understand service quality. Three well-documented characteristics of services – intangibility, heterogeneity, relatively easy for competitors to imitate and inseparability – must be acknowledged for a full understanding of service quality" (Parasuraman et al., 1985).

Due to the intangibility of service, it is difficult for services to be displayed or communicated to consumers. This makes it difficult for consumers to assess the quality of services (Wilson et al., 2012).

Due to this heterogeneity, it can be difficult for organizations to ensure consistent service quality to its customers "Because services are performances, frequently produced by humans, no two services will precisely be alike. […] The heterogeneity connected with services is largely the result of human interaction (between and among employees and customers) and all of the vagaries that accompany it" (Wilson et al., 2012).

According to Wilson et al. (2012) services are inseparable because most services are sold first and then produced and consumed simultaneously. They state that the customer is present while the service is being produced and thus may even take part in the production process. Wilson et al. (2012)[65].

[65] M.L.J. Wesselman, 2014, Social media to enhance e-service quality. Master's thesis MSocSc. in Service Management –, Copenhagen Business School –page 11-12

Kotler Philip (2006) explains that as against to features of physical products, the services are not given for pre-testing, neither it is felt nor smelled before purchase making buyers look for some tangible evidence that will provide information and confidence about service[66].

It is also said that "Quality of service refers to the capacity of a service to respond through its characteristics to the different needs of its users or consumers"[67]

JAQUE HEROVITZ defines the quality of service as follows: "Quality of service is the level of excellence that the company has chosen to achieve in order to satisfy its target clientele, it is at the same time, the extent to which it complies with it."[68]

As for Harmel Quality of service is also "the overall satisfaction demonstrated by the basic set of services offered by the company to its customers, which determines the level of performance."[69]

Within a workplace service quality model, many researchers concur that service quality, customer satisfaction, and customer loyalty are distinct, but strongly interrelated constructs. For example, the ability of service providers to appropriately implement service quality in executing daily jobs may lead to greater customer satisfaction [Azman, Hafizah, et al. 2016, Hussain et al. 2015] and customer loyalty [Bardauskaite 2014, Lee & Lambert 2008][70].

The quality of service can bring customers the intention to use the service again. These will bring the loyalty of the customer to the business. Service quality came as a superior quality to the customer and brings customer loyalty [Zeithaml, Berry & Pasuraman 1996] and there are strong relationships between service quality and customer loyalty [Kuo, Wu & Deng 2009, Saura et al. 2008][71].

---

[66] S. Santhana Jeyalakshmi and Dr. S. Meenakumari, 2012, Service Quality Management: A Literature Review , Shanlax International Journal of Management volume 3 issue 4 page 35

[67] / Lynda Zemmour ,2017, La Contribution D'amelioration De La Qualite Des Services Dans L'acquisition De Nouvelle Clientele Etude De Cas : Algerie Telecom Master Thesis , Page 26

[68] HEROVITZ (J). op.cit, P.46.

[69] HARMEL (L). « La qualité de service », édition Saint-Denis, 2005, P. 82.

[70] Mohd Yunan, Azman Ismail, ,2016, Service Quality As A Predictor Of Customer Satisfaction And Customer Loyalty, Yusrizal Sufardi University Kebangsaan Malaysia, Selangor, Malaysia, Page 271

[71] Mohd Yunan, Azman Ismail, ,2016, Service Quality As A Predictor Of Customer Satisfaction And Customer Loyalty, Yusrizal Sufardi University Kebangsaan Malaysia, Selangor, Malaysia, Page 271

Thus, we can say that "Service quality is the difference between the customer's expectations of performance and the change in performance achieved by service providers. In other words, service quality would then be the difference between the quality achieved and the quality perceived by the customer"[72]

2. Customer satisfaction :

Digital communication puts the customer at the heart of the company's concerns, thanks to a communication strategy and actions carried out on the Web, social networks, and mobiles. Its tools provide a complete view of its customers, to know their needs, and ultimately create value for them and therefore for the company. The digital communication allows, certainly, to communicate with consumers who are connected, but also to make the offer and the product evolve by "listening".[73]

Customer satisfaction is a business term, which is used to capture the idea of measuring how satisfied enterprise customers are with the organization's efforts. During the past decades, customer satisfaction has emerged as a strategic imperative for most firms. In the 1980s, achieving higher satisfaction became a goal in itself. During the 1990s, there was a widespread realization that satisfaction is a strategic goal for all organizations involved in the delivery of customer service. Satisfied customers usually return and buy more, they tell people about their experiences, and they may well pay a premium for the privilege of using service products of the organization.[74]

Several definitions of the concept of customer satisfaction exist in the literature. For some, satisfaction is a cognitive construct (Howard and Sheth, 1969; Oliver, 1980), while others consider satisfaction to be an emotional response (Bagozzi et al., 1999) or an attitude since some authors consider satisfaction to be an evaluation or judgment (Czepiel and Rosenberg, 1977) It is a feeling, which a customer gets from a process of evaluating what was received against that expected, the purchase decision itself and the fulfillment of needs and want. The key to customer satisfaction lies in meeting these expectations. Expectations are created in the

[72] G.Divard. , P.Roman, I.Marien. : Marketing Des Services , 2eme Edition ; 2014, P74
[73] PINONCELY (L), 2016, Premiers pas vers le digital : Facebook, Twitter, Instagram, LinkedIn, toutes les astuces pour vous lancer facilement !, Edition Groupe Eyrolles , Paris , ,p.14,15
[74] S. Ziyadin(&), S. Suieubayeva , and A. Utegenova Digital Transformation in Business . Al-Farabi Kazakh National University, Almaty, Kazakhstan page 411

customer mind from a variety of causes and reasons like past- experience promotional claims, word of mouth and third party information

Customer satisfaction is defined as an overall evaluation based on the total purchase and consumption experience with the good or service over time (Fornell, Johnson, Anderson, Cha & Bryant 1996)[75]

Westbrook and Reilly (1983) also define satisfaction as an agreeable state of mind that results from the observation that a good, service, point of sale, or action leads to the realization of one's values (4). Under this viewpoint, customer satisfaction is defined based on several perspectives such as a decision made by customers about the service quality, product quality and price [Parasuraman et al. 1991, Zeithaml et al. 1996][76],

Furthermore, it is said to be an inner view resulted from customer's own experience from the service, an output of customers' comparison between expected performance and actual performance [Churchill & Surprenant 1982, Rosen, Surprenant & Rosen 1998] , a series of customer post-experience decisions with a product or service over time [Clemes, Gan & Ren 2011, Fournier & Mick 1999] and a difference between customers' expectations and experience performance after using the particular services [Kotler & Clarke 1985, Ramayah, Osman & Rahbar 2010] .

Kotler[2] also noted that satisfaction is a function of perceived performance and expectations that identify feelings of a person resulting from comparing a product's perceived performance concerning his/her expectations[77].

Customer satisfaction is broadly defined as a difference between customers' expectations and experience performance after using a service and/or product at a certain period [Azman, Ilyani Ranlan et al. 2016, Mosahab, Mahamad & Ramayah 2010][78].

---

[75] Kabu Khadka & Soniya Maharjan November 2017,Customer Satisfaction And Customer Loyalty ,Case Trivsel Städtjänster (Trivsel Siivouspalvelut) , Thesis Centria University Of Applied Sciences Business Management , Page

[76] David Rutambuka ,2017, La satisfaction des clients permet-elle de mieux expliquer l'Impact des fusions et acquisitions sur la valeur de l'entreprise?, Gestion et management. PSL Research University,. Page 19

[77] Kotler, Philip,2006, Marketing Management, 12e, 12th Edition, Pearson Education, New Delhi, , p 136

[78] Azman Ismail, Yusrizal Sufardi ,2016 , Service Quality As A Predictor Of Customer Satisfaction And Customer Loyalty , Mohd Yunan University Kebangsaan Malaysia, Selangor, Malaysiapage 272

Besides buying more they also work as a network to reach other potential customers by sharing experiences (Hague & Hague 2016.)[79]

Since satisfaction drives behavior, a more thorough understanding of what drives customer satisfaction will give service providers the insights they need to influence customer behavior in the short-term and long-term. The centrality of the concept is reflected by its inclusion in the marketing concept that high customer satisfaction ratings are widely believed to be the best indicator of a company's future profit[80].

Moreover, from profitability and productivity perspectives only activities that produce value for customers should be carried out. Hence, firms have to get to know their customers much better than has normally been. However, the company should be able to build trust with the customer so it is easy to get feedback from the customer. This is how customer-oriented product or service could be developed (Hill, Brierley & MacDougall 2003.)[81]

3. Customer engagement :

The term engagement has been used in the academic literature since 2005 and has become increasingly popular in conceptual and empirical studies alike, this term has various definitions from multiple authors and researchers over the course of time, for instance, Patterson et al. (2006) defines it as "The level of a customer's physical, cognitive and emotional presence in their relationship with a service organization."

Forrester Consulting's research, "How engaged are your customers?" conducted in 2008, defines customer engagement as "creating deep connections with customers that drive purchase decisions, interaction, and participation, over time". These studies define customer engagement as an effort from the brand to create a connection or an interaction with the customers, in order to retain them.

---

[79] Kabu Khadka & Soniya Maharjan November 2017,Customer Satisfaction And Customer Loyalty ,Case Trivsel Städtjänster (Trivsel Siivouspalvelut) , Thesis Centria University Of Applied Sciences Business Management

[80] Anderson et al. 1997,Customer Satisfaction, Productivity and Profitability: Difference between Goods and services, Marketing Sciences, , 16, 2, p 129-145.

[81] Kabu Khadka & Soniya Maharjan November 2017,Customer Satisfaction And Customer Loyalty ,Case Trivsel Städtjänster (Trivsel Siivouspalvelut) , Thesis Centria University Of Applied Sciences Business Management

Bowden (2009) sees it as “A psychological process that models the underlying mechanisms by which customer loyalty forms for new customers of a service brand, as well as the mechanisms by which loyalty may be maintained for repeat purchase customers of a service brand.”[82]

In (2010) Mollen and Wilson define “brand engagement” within specific online contexts. The authors describe consumers' engagement as “the cognitive and affective commitment to an active relationship with the brand as personified by the website or other computer-mediated entities designed to communicate brand value.” The concept characterizes the dimensions of “sustained cognitive processing”, the individual's level of perceived “instrumental value” (i.e. utility and relevance), and “experiential value” (i.e. the level of emotional congruence with the narrative schema encountered in computer-mediated entities). When conceptualizing online “brand engagement,” Mollen and Wilson (2010) scrutinize how the concept differs from “involvement.” They suggest that a consumer's brand engagement extends beyond mere involvement, as it encompasses an interactive relationship with the engagement object, and requires the emergence of the individual's perceived experiential value, in addition to the instrumental value obtained from specific brand interactions[83].

Moving to (2011) where Hollebeek sees it as “consumers’ proactive contributions in co-creating their personalized experiences and perceived value with organizations through active, explicit, and ongoing dialogue and interactions”. Also for Brodie et al. (2011), it’s “A motivational state that occurs by virtue of interactive, co-creative customer experiences with a focal agent/object (e.g. a brand) in focal service relationships.” [84]

While there are many ways to conceptualize and measure engagement, there are two primary dimensions that are most important for utilities given the opportunities and challenges ahead:

---

[82] Audrey Cuillierier ,June17th, 2016, Customer Engagement through Social Media , Helsinki Metropolia University of Applied Sciences European Business and Administration

[83] Roderick J. Brodie ∗, Ana Ilic, Biljana Juric, Linda Hollebeek,2011, Journal of Business Research,Consumer engagement in a virtual brand community: An exploratory analysis , ,The University of Auckland Business School, Department of Marketing, , New Zealand,page 106

[84] Audrey Cuillierier ,June17th, 2016, Customer Engagement through Social Media , Helsinki Metropolia University of Applied Sciences European Business and Administration

Home Energy Activity (what customers do) and Trust in the Utility (how customers feel)." (OPower, 2011)[85]

Vivek et al. (2012) also agree on that saying "The intensity of an individual's participation and connection with the organization's offering and activities initiated by either the customer or the organization."

Moving forward to the year 2016, Guesalaga (2016, p. 75) defines customer engagement on social media as "the extent to which the organization's important customers are active in using social media tools". In line with this, Schivinski, Christodoulides, and Dabrowski (2016, p. 68) note that "consumers use an array of tools and resources to engage with brands". Thus, activities related to a brand on social media can entail different behavioral manifestations of engagement. The qualitatively varied forms of customer engagement on social media can be classified according to the COBRA typology (Consumer Online Brand Related Activities) according to whether the activity exhibits one of three dimensions: content consumption, contribution, or creation (Schivinski et al., 2016).[86]

Furthermore, Kumar and Pansari (2016) illustrate the importance of customer purchase engagement, incentivized referrals, social media influence, customer feedback, and customer knowledge on CE[87].

A number of researchers have considered the consequences of customer/consumer engagement, which may include the concepts of trust (e.g. Casalo et al., 2007; Hollebeek, 2011), satisfaction (Bowden, 2009a), commitment, emotional connection/attachment (e.g. Chan and Li, 2010), empowerment, consumer value (e.g. Gruen et al., 2006; Schau et al., 2009), and loyalty (e.g. Bowden, 2009a, b). Among these, the concepts of loyalty (e.g. Andersen, 2005; Casalo et al., 2007; Schouten et al., 2007), commitment (e.g. Chan and Li,

[85] Perceptive insight ,Phase 4, 2016, Literature review & final consumer engagement ,Customer engagement methods and examples of best practice ,Report prepared for: NIE Networks ,April ,Page 14
[86] John Harvey, 2019, JOURNAL OF CUSTOMER BEHAVIOUR ,Customer engagement behaviour on social media platforms: A systematic literature review ,Tolu Ajiboye, Nottingham Trent University, UK* University of Nottingham Business School, UK Sheilagh Resnick, Nottingham Trent University, UK, Vol. 18, No. 3 pp. 241
[87] Gizem Unal, Bruno Schivinski ,2017, Literature Review on Conceptualisation of Online Consumer Engagement, Nottingham Trent University – Nottingham Magdalena Brzozowska-Woś Politechnika Gdańska,Page 356

2010) and empowerment (e.g. Cova and Pace, 2006; Füller et al., 2009; Zimmerman and Warschausky, 1998) are prominent in online brand community contexts[88].

Stronger consumer engagement can help to test service providers' expenditure proposals and can raise alternative views on matters such as service priorities, capital expenditure proposals, and price structures (Australian Energy Regulator, 2013)[89].

Thus we can say that from all these definitions, customer engagement is a relationship between a customer and a brand, translated into active participation from the customer and creation of experience from the brand, in order to make the customer purchase the brand's products.

Many companies think that a successful customer engagement strategy transforms them from being a simple provider for the customers to being a real partner. It means that customer engagement is more than simply offer a good product to customers; it evolves into creating a real relationship with the customers[90].

[88] Ana Ilic, Biljana Juric, Linda Hollebeek, Roderick J. Brodie, 2011, Journal of Business Research,Consumer engagement in a virtual brand community: An exploratory analysis , ,The University of Auckland Business School, Department of Marketing, , New Zealand,page 106

[89] Perceptive insight ,Phase 4: Literature review & final consumer engagement ,Customer engagement methods and examples of best practice ,Report prepared for: NIE Networks ,April 2016 ,Page 14

[90] Audrey Cuillierier, June17th, 2016, Customer Engagement through Social Media , Helsinki Metropolia University of Applied Sciences European Business and Administration.

Conclusion:

Today's Digital communication is founded on years of development experience and broader understanding of past flaws. It is being conducted by digital teams that are better adjusted to manage the change brought about by innovation. Also, it is important to highlight that digitalization permeated public domains on various levels, with digital strategies being address by countries.

It is, therefore, important to build the understanding of digital transformation as a motivation for introducing beneficial changes to organizational strategies and behaviors.

The interactions of digital clients with digital organizations opens up a new perspective for everyone: the necessity to learn and understand new solutions, including their legal framework.

The scale and speed of digital transformation in today's business world can feel overwhelming and exhausting to those trying to keep pace. At times, rolling waves of new technology washing over organizations can seem to detach and isolate them from their colleagues, customers and partners.

As long as the services help people work with people, connecting them whenever needed, from wherever they may be, we're optimistic about the next phase of digital transformation, and the many more to come.

With every technological advancement, we enter new routes, both organizations and humans must strive to understand the changes in the surrounding world. The goal of this chapter was to provide more clarity about the phenomenon of Digital Communication. The structured view of the Digital transformation, and it provides the insights on the way "the digital" is altering our daily life paradigms. Enhancing the quality of services and engaging with people to assure a high level of customer satisfaction

This theoretical background and literature study is a first step to build the basics of digital transformation and communication characteristics and build the basics for further research in the field of digital excellence models and its practical aspects.

In spite of these rapid developments, and the very pressing need for organizations and communication professionals to understand digitally mediated communication practices, research addressing digital business communication is still fragmented. Although recent publications on business communication and discourse acknowledge the importance of, and provide a brief overview of, electronic media in professional communication (see, for example, Breeze, 2013; Goodman & Hirsch, 2014; Schnurr, 2013), much more work is needed to map out precisely how digitally mediated channels are changing the landscape of professional and corporate communication.

Chapter three: Methodology

In this chapter we will discuss the epistemological approach and then we will present our conceptual and methodical model of our research that discuss service quality, customer satisfaction and engagement through digital communication. Stating the choice of our reasoning, hypotheses, the data collection, and data analysis.

1. Epistemology:

According to Bryman & Bell (2013) an epistemological issue concerns the question of what is (or should be) regarded as acceptable knowledge in a discipline. They also state that a particularly central issue in this context is the question of whether or not the social world can and should be studied according to the same principles, procedures and ethos as the natural sciences.

Epistemology instead is something different. It means attempts made by human to gain knowledge about the world. As humans we have several senses to realize the world we live in and we have brain that is used to interpret stimuli in a specific way (the way is set by experiences we make as individuals during our lifetime). So the way we see the world as humans is not the state of being of this world. For example as humans we cannot see UV-wavelengths but they are in the world. That is why scientists - who are humans - try to find a way of gaining objective knowledge about the world that is independent of the human perception. Epistemology therefore is the theory of gaining objective knowledge.

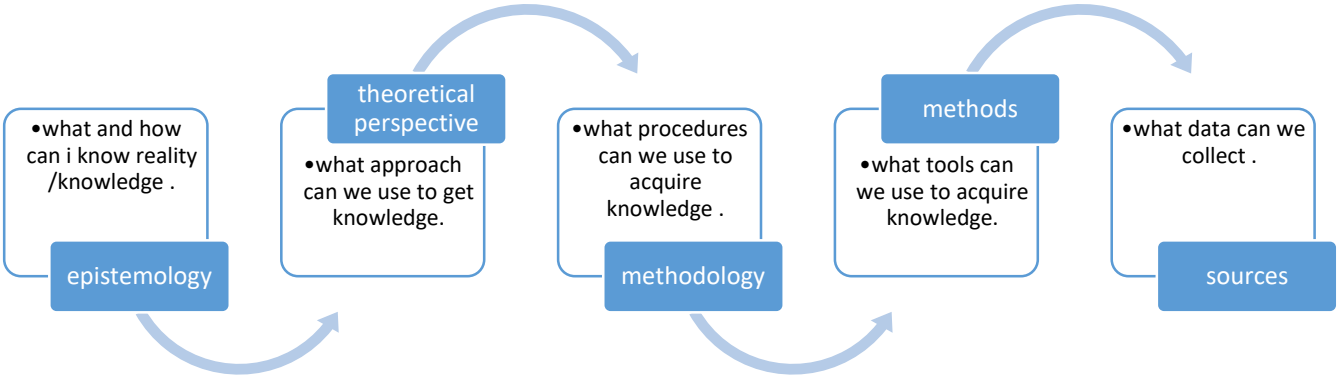


Figure n° 5 : epistemological research steps. source: selmapatel.co.uk.

2. Theoretical perspective :

This research work is part of an epistemological posture of a positivist type, it leads to a hypothetical deductive reflection of verification, which takes shape with a problematic, describing itself by a hypothesis that is provisionally related to a theory, whether to confirm or deny it,

The literature review and the conceptual framework guided us to assume the existence of a link between digital communication and consumer satisfaction and commitment, we also introduced a mediating variable that is the quality of service in order to measure the relationship between them, and the confirmation of these relationships requires us to adopt the positivist paradigm.

Paradigm	Ontology *What is reality?*	Epistemology *How can I know reality?*	Theoretical Perspective *Which approach do you use to know something?*	Methodology *How do you go about finding out?*	Method *What techniques do you use to find out?*
Positivism	There is a single reality or truth (more realist).	Reality can be measured and hence the focus is on reliable and valid tools to obtain that.	Positivism Post-positivism	Experimental research Survey research	Usually quantitative, could include: Sampling Measurement and scaling Statistical analysis Questionnaire Focus group Interview

Figure n° 6: positivism approach. Source: salmapatel.co.uk.

3. Research reasoning:

Both deduction and induction are ways to learn more about the world and to convince others about the truth of those learnings.

The biggest difference between deductive and inductive reasoning is that deductive reasoning starts with a statement or hypothesis and then tests to see if it's true through observation, where inductive reasoning starts with observations and moves backward towards generalizations and theories. (daniel miessler in philosophy, the difference between deductive and inductive reasoning, danielmiessler.com)

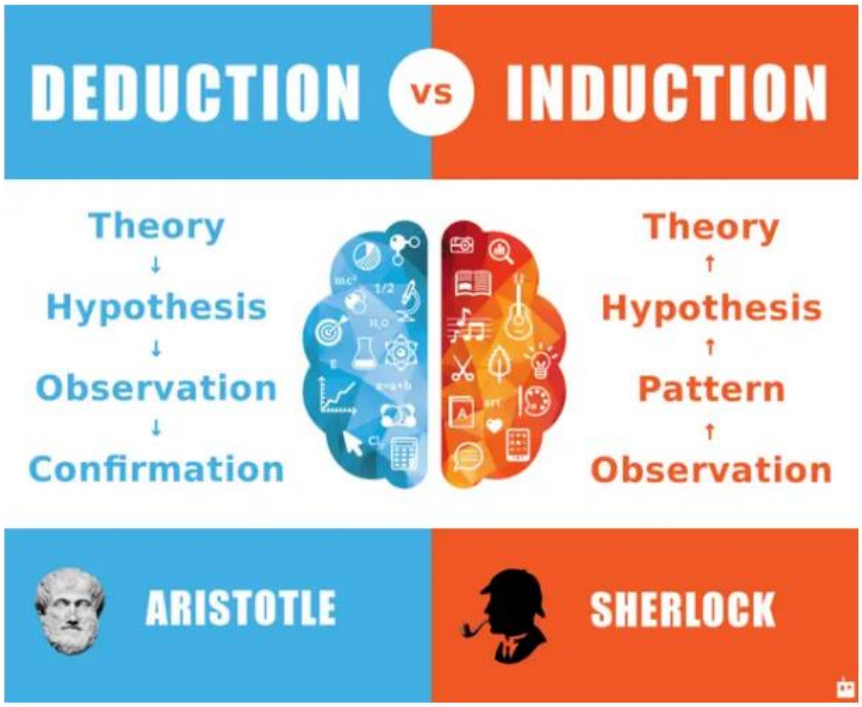


Figure n°7: deductive vs inductive reasoning. Source: danielmeissler.com.

Deductive reasoning is a basic form of valid reasoning. Deductive reasoning, or deduction, starts out with a general statement, or hypothesis, and examines the possibilities to reach a specific, logical conclusion, according to California State University. The scientific method uses deduction to test hypotheses and theories. "In deductive inference, we hold a theory and based on it we make a prediction of its consequences. That is, we predict what the observations should be if the theory were correct. We go from the general — the theory — to the specific — the observations," said Dr. Sylvia Wassertheil-Smoller, a researcher and professor emerita at Albert Einstein College of Medicine. (Alina Bradford, Deductive Reasoning vs. Inductive Reasoning, live science, visited 07/08/2020, www.livescience.com)

- Deduction moves from idea to observation, while induction moves from observation to idea.
- Deduction moves from more general to more specific, while induction moves from more specific to more general.
- Deductive arguments have unassailable conclusions assuming all the premises are true, but inductive arguments simply have some measure of probability that the argument is true—based on the strength of the argument and the evidence to support it.

4. Methodology:

4.1.Quantitative Research

Quantitative research gathers data in a numerical form which can be put into categories, or in rank order, or measured in units of measurement. This type of data can be used to construct graphs and tables of raw data.

Quantitative researchers aim to establish general laws of behavior and phenomenon across different settings/contexts. Research is used to test a theory and ultimately support or reject it.

Experiments typically yield quantitative data, as they are concerned with measuring things. However, other research methods, such as controlled observations and questionnaires can produce both quantitative information.

For example, a rating scale or closed questions on a questionnaire would generate quantitative data as these produce either numerical data or data that can be put into categories (e.g., "yes," "no" answers).

(Saul McLeod, What's the difference between qualitative and quantitative research? Simply

Psychology. Simplypsychology.org visited 06/08/2020)

4.2.Why quantitative research:

- Scientific objectivity: Quantitative data can be interpreted with statistical analysis, and since statistics are based on the principles of mathematics, the quantitative approach is viewed as scientifically objective, and rational (Carr, 1994; Denscombe, 2010).
- Useful for testing and validating already constructed theories.
- Rapid analysis: Sophisticated software removes much of the need for prolonged data analysis, especially with large volumes of data involved (Antonius, 2003).
- Replication: Quantitative data is based on measured values and can be checked by others because numerical data is less open to ambiguities of interpretation.
- Hypotheses can also be tested because of the used of statistical analysis (Antonius, 2003).

4.3.Key Features

- Quantitative researchers try to control extraneous variables by conducting their studies in the lab.
- The research aims for objectivity (i.e., without bias), and is separated from the data.
- The design of the study is determined before it begins.
- For the quantitative researcher reality is objective and exist separately to the researcher, and is capable of being seen by anyone.
- Research is used to test a theory and ultimately support or reject it.

5. Methods:

5.1.Data collection :

The data obtained via quantitative data collection methods can be used to test existing ideas or predictions, learn about your customers, measure general trends, and make important. For instance, you can use it to measure the success of your product and which aspects may need improvement, the level of satisfaction of your customers, to find out whether and why your competitors are outselling you, and so on.

As quantitative data collection methods are often based on mathematical calculations, the data obtained that way is usually seen as more objective and reliable than qualitative. Some of the most common quantitative data collection techniques include surveys and questionnaires (with closed-ended questions).

Compared to qualitative techniques, quantitative methods are usually cheaper and it takes less time to gather data this way. Plus, due to a pretty high level of standardization, it's much easier to compare and analyze the findings obtained using quantitative data collection methods.

5.1.1. Surveys/questionnaires

Surveys or questionnaires created using online survey software are playing a pivotal role in online data collection be is quantitative or qualitative research. The surveys are designed in a manner to legitimize the behavior and trust of the respondents. Closed-ended surveys and online quizzes are based on questions that give respondents predefined answer options to opt for. There are two main types of closed-ended surveys – those based on categorical and those based on interval/ratio questions.

Categorical survey questions can be further classified into dichotomous ('yes/no'), multiple-choice questions, or checkbox questions and can be answered with a simple "yes" or "no" or a specific piece of predefined information.

Interval/ratio questions, on the other hand, can consist of rating-scale, Likert-scale, or matrix questions and involve a set of predefined values to choose from on a fixed scale. To learn more, we have prepared a guide on different types of closed-ended survey questions.

5.1.2. Interviews

Interviewing people is a standard method used for data collection. However, the interviews conducted to collect quantitative data are more structured, wherein the researchers ask only a standard set of questionnaires and nothing more than that.

There are three major types of interviews conducted for data collection
- Telephone interviews
- Face-to-face interviews

• Computer-Assisted Personal Interviewing (CAPI): similar setup of the face-to-face interview where the interviewer carries a desktop or laptop along with him to upload the data obtained directly into the database.

5.1.3. Structured observation:

In this type of observation method, the researcher has to make careful observations of one or more specific behaviors in a more comprehensive or structured setting compared to naturalistic or participant observation. In a structured observation, the researchers, rather than observing everything, focus only on very specific behaviors of interest. It allows them to quantify the behaviors they are observing. When the observations require a judgment on the part of the observers – it is often described as coding, which requires a clearly defining a set of target behaviors.

5.1.4. Document Review

Document review is a process used to collect data after reviewing the existing documents. It is an efficient and effective way of gathering data as documents are manageable and are the practical resource to get qualified data from the past. Apart from strengthening and supporting the research by providing supplementary research data document review has emerged as one of the beneficial methods to gather quantitative research data.

5.2.Measuring instrument :

We used a questionnaire as a measurement instrument in our study to collect data on the impact of digital communication on Mobilis customers' satisfaction. This measuring instrument, based on the circumstances, appears to be the most relevant to achieve the objective of our study.

5.3.The structure of the questionnaire:

Our questionnaire contains 5 sections divided as the following:

The First section: concerns general and multiple-choice questions, in order to define the profile of our participants from Mobilis costumers.

- Binary type question (Q1, Q5).
- Categorical type questions (Q2, Q3, Q4).
- Multiple option type question (Q6, Q7).

The second section: this section contain 4 questions concerning the content created by Mobilis on their different digital platforms and social media and the level on engagement they offer to their community.

- Questions concerning engagement (Q8, Q9).
- Questions concerning content (Q10, Q11)

The third section: this section present questions about the availability of information about the company and it services and product to the public on Mobilis's digital communication platforms (Q12, Q13, Q14, Q15).

The forth section: this part question the quality of services provided by Mobilis employees from coverage, internet quality and problem solving, as well as the level of professionalism seen from their agents (Q16, Q17, Q18, Q19, Q20).

The fifth section: this section concerns the brand awareness and costumers loyalty to Mobilis

- Questions about brand awareness (Q21, Q23).
- Questions about loyalty (Q22, Q24).

And lastly we concluded the questionnaire with a binary type question about the intention of recommendation (Q25).

5.4.Measurement scales :

The Variables (independent and dependent) were measured by the Likert scale ranging from 1 to 5, from "Strongly Disagree" to "Strongly Agree". Five degrees were chosen to give the participants more freedom to measure their responses to be more accurate.

On the other hand, the other variables were measured by multiple-choice responses.

5.5. Sampling:

5.5.1. Study Population :

We targeted the consumers of Mobilis.

5.5.2. Size of the sample :

In order to build a representative sample, we set ourselves the objective to interview a minimum of 150 consumers of Mobilis.

We questioned 156 consumers as an involved population to expect 150 consumers as a target population for more representativeness and clarity.

5.5.3. Sampling method :

The study being descriptive, we opted for a sampling method by convenience. It is therefore non-probability sampling.

Convenience sampling is defined as a method adopted by researchers where they collect market research data from a conveniently available pool of respondents. It is the most commonly used sampling technique as it’s incredibly prompt, uncomplicated, and economical. In many cases, members are readily approachable to be a part of the sample.

Researchers use convenience sampling in situations where additional inputs are not necessary for the principal research. There are no criteria required to be a part of this sample. Thus, it becomes incredibly simplified to include elements in this sample. All components of the population are eligible and dependent on the researcher’s proximity to get involved in the sample.

The researcher chooses members merely based on proximity and doesn't consider whether they represent the entire population or not. Using this technique, they can observe habits, opinions, and viewpoints in the easiest possible manner.

5.5.4. Practicalities of the investigation

- Information Gathering Tool: Questionnaire
- Method of administration: The questionnaire was set online to whom ever wanted to participate from Mobilis users
- Survey period: the data collection period was from august 17th to august 25th
- The questionnaire test: The questionnaire test was shared online with Mobilis users and customers.

5.6. Data analysis:

Data analysis has allowed us to bring out the most relevant information for our theme from the data collected during our research, the data analysis was useful in gathering information in order to

- Finding answers to workable hypotheses;
- Improve your understanding of the impact of digital communication on consumer satisfaction.
- Improving the relevance of the empirical part of our thesis.

To process & analyze the questionnaire, GOOGLE FORMS was used, and to illustrate the results with graphs the EXCEL software was used.

Two types of analyses will be carried out in our study:

- Unit-varied analysis: mainly descriptive analyses of the sample
- Multi-varied analysis: we will test the reliability of our measurement scales and perform simple analyses to confirm or invalidate our hypotheses.

5.7.Search limits :

The main limitation of our study is the lack of appropriate time for our internship at Mobilis due to the global pandemic caused by Covid-19, which did not allow us to refine our research work.

On second hand, the lack of literature review and documentations about our subject from business point of view of digital communication.

Chapter IV: results and discussion

In order to respond to our previously formulated problematic and to determine the impact digital communication on customer satisfaction.

In this chapter, we will first present the results of the survey we conducted on the client satisfaction with the company digital communication, engagement and services.

Next, we will proceed with a detailed analysis of the results from the answers in order to be able to respond to our assumptions, validate our hypothesis and conclude on the results.

A. Results analysis:

1. Analysis by flat sorting :

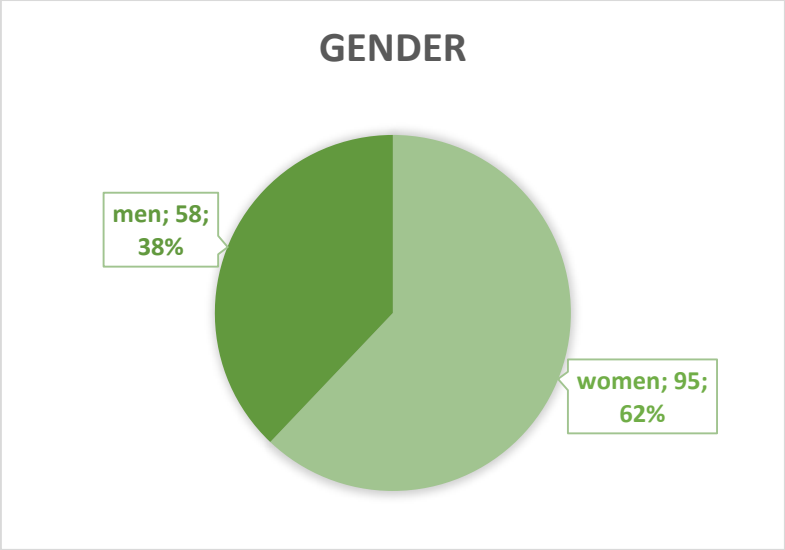
1.1. **First section**: general Questions for deep understanding of our sample of participants characteristics

1.1.1. Gender:

Our questionnaire was answered by 156 participants, (but only 153 from them answered this question).

95 of the answers are from women presenting 62% the majority of the sample, the rest 58 are men presenting the remaining 38%.

Figure n°8: Sample Distribution by Gender.



Source: Developed by us based on research results.

Table1: Sample Distribution by Gender.

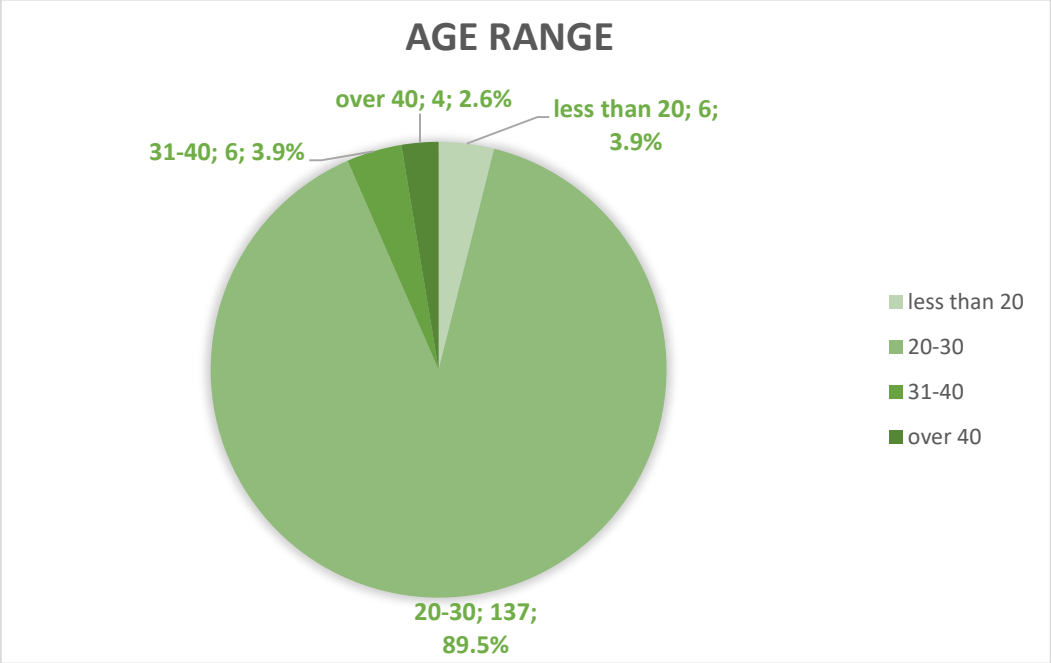
Gender	Frequency	percentage
Women	95	62%
Men	58	38%
Total	153	100%

Source: Developed by us based on research results.

1.1.2. Age range:

The majority of the participant's ages ranges between 20-30 years old presenting 89,5% (137) of the whole sample leaving the rest 10.5% is divided as the following : 3.9% (6) less than 20 years old , 3.9% (6) between 31 and 40 and, 2.6% (4) over 40 .

Figure n°9: Distribution of the sample by age group.



Source: Developed by us based on research results.

Table n°2: Distribution of the sample by age group.

	frequency	percentage
Less than 20	6	3.9%
20-30	137	89.5%
31-40	6	3.9%
Over 40	4	2.6%
total	153	100%

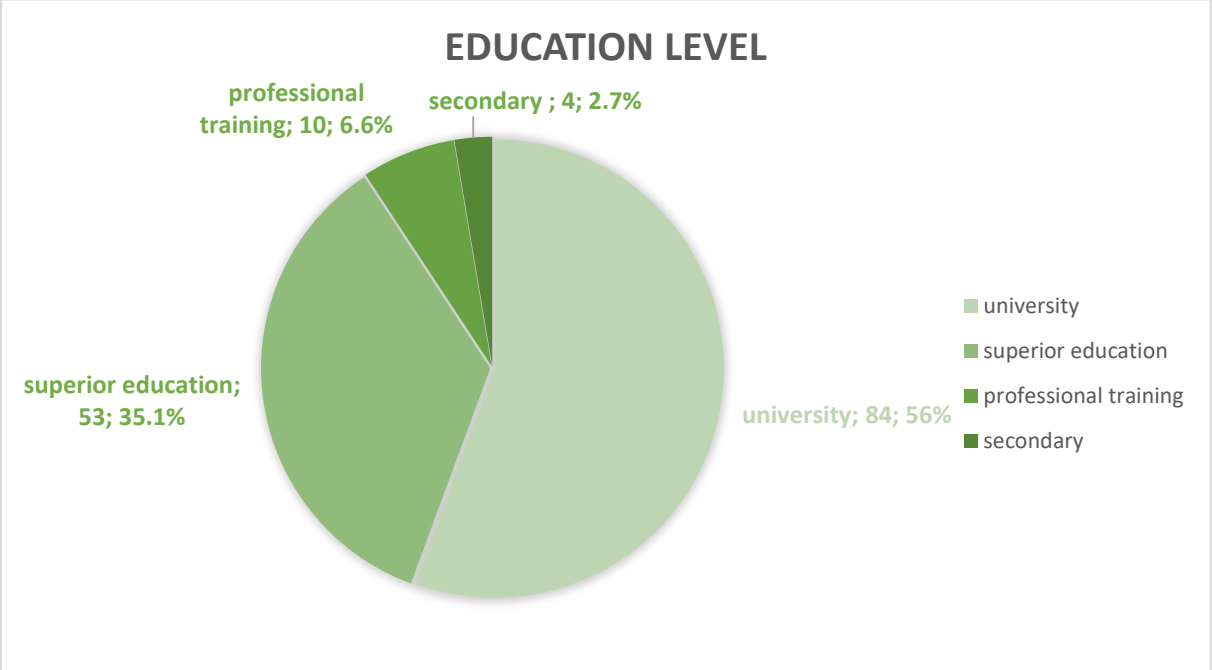
Source: Developed by us based on research results.

1.1.3. Education level

Since the majority of the participants ages range between 20 to 30 years old, most of them are students

University students with the highest percentage of 55.6% (84), followed up with superior education students 35.1% (53), the remaining 9.3% is for professional training 6.6% (10) and, secondary education high school 2.7% (4).

Figure n°10: Distribution of the sample by education level



Source: Developed by us based on research results.

Table n°3: Distribution of the sample by education level

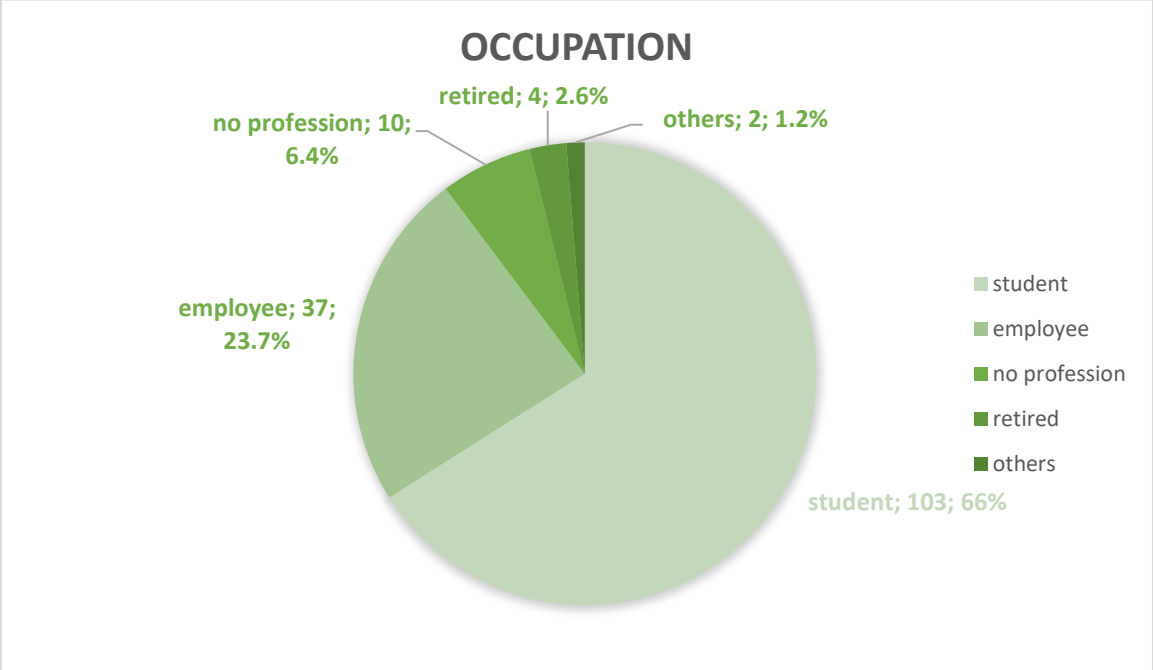
	frequency	percentage
Secondary	4	2.7%
University	84	56%
Superior education	53	35.1%
Professional training	10	6.6%
total	150	100%

Source: Developed by us based on research results.

1.1.4. Socio-professional status (occupation)

As mentioned before the majority are students hence the highest percentage of 66% (103), followed up with employees presenting 23.7% (37) of the participants, 6.4% (10) with no profession or job seekers, 2.6% (4) retired and, 1.2% (2) international profession .

Figure n°11: Distribution of the sample by socio-professional category



Source: Developed by us based on research results.

Table n°4: Distribution of the sample by socio-professional category

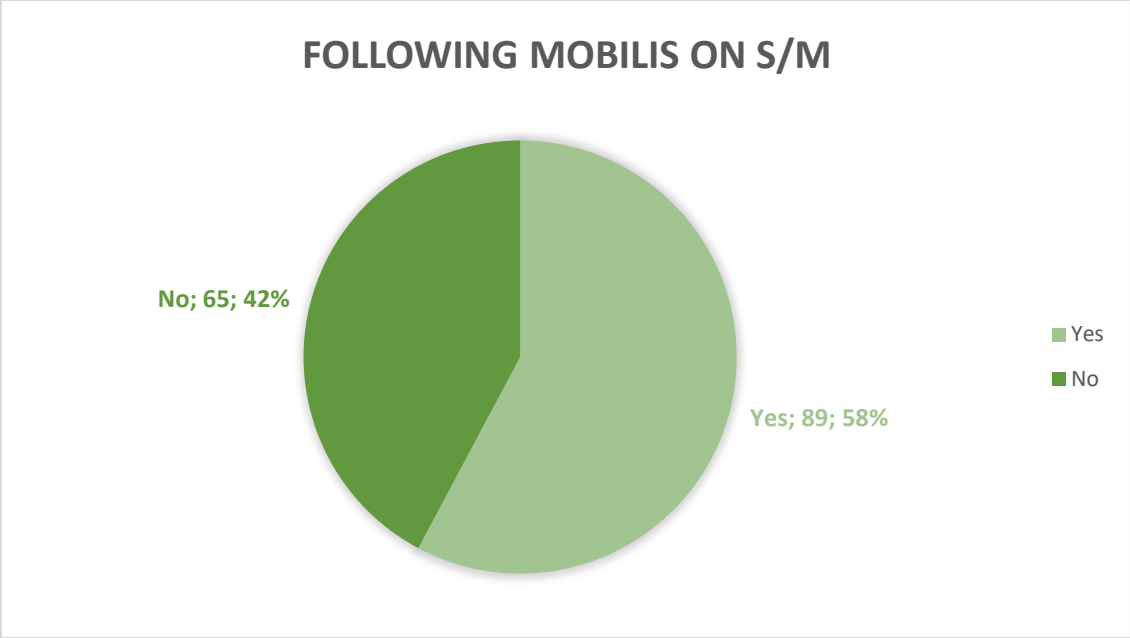
	frequency	percentage
Student	103	66%
Employee	37	23.7%
No profession	10	6.4%
Retired	4	2.6%
Others	2	1.2%
total	152	100%

Source: Developed by us based on research results.

1.1.5. Following Mobilis on social media (a yes no question)

The majority of the participants 58% (89) answered yes for following Mobilis on social media platforms, the remaining 42% (65) don't.

Figure n°12: distribution by followers on social media



Source: Developed by us based on research results.

Table n°5: distribution by followers on social media

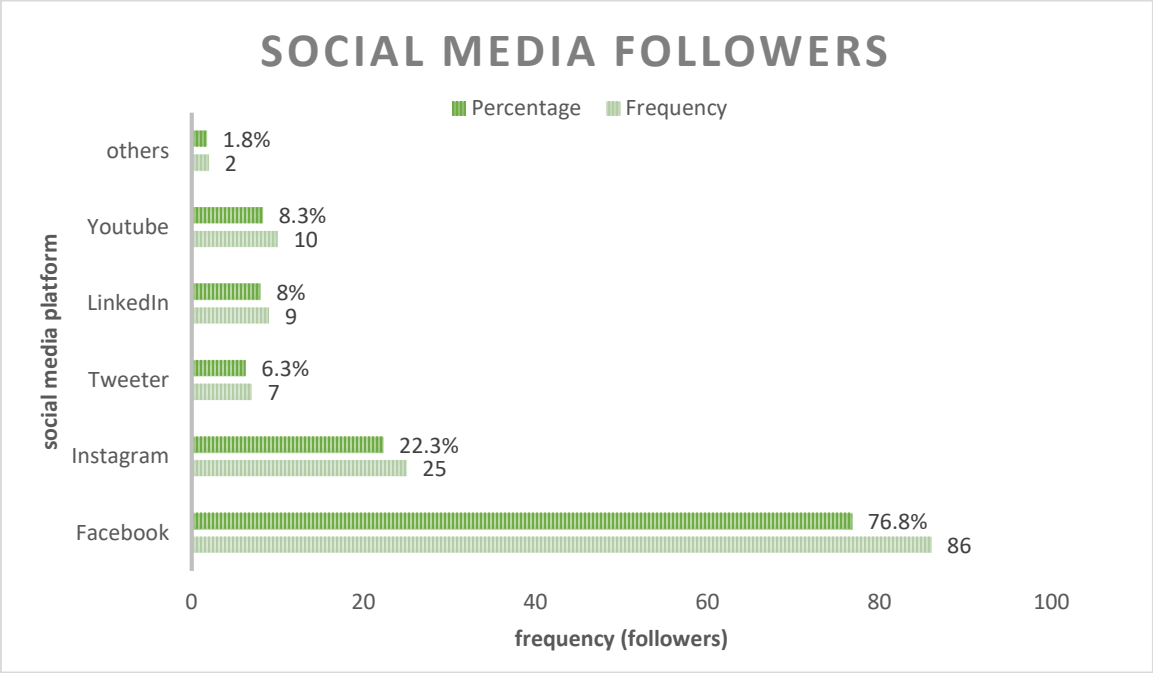
	frequency	percentage
Yes	89	58%
No	65	42%
Total	153	100%

Source: Developed by us based on research results.

1.1.6. Social media platforms following Mobilis on.

Facebook ranked first on the chart with a percentage of 76.8% (86) , next in line is Instagram with 22.3% (25) , then YouTube 8.9% (10) , next is LinkedIn 8% (9) and lastly tweeter 6.3% (7) .

Figure n°13: Distribution most followed social media account.



Source: Developed by us based on research results.

Table n°5: Distribution most followed social media account.

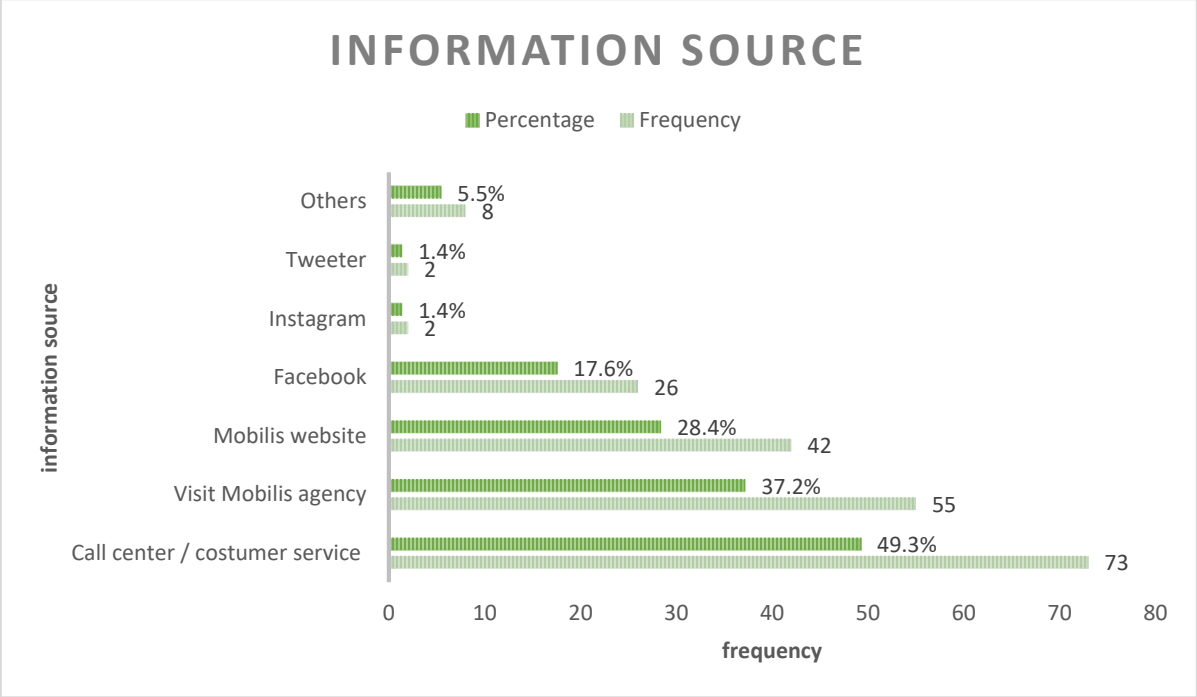
	frequency	Percentage
Facebook	86	76.8%
Instagram	25	22.3%
Tweeter	7	6.3%
LinkedIn	9	8%
YouTube	10	8.3%
Others	2	1.8%

Source: Developed by us based on research results.

1.1.7. Information seeking in case of a problem.

The majority of 48.6% (72) answered that they would call Mobilis call center/ client service, 37.2% (55) would visit Mobilis agency in their region, 28.4% (42) would visit Mobilis website to look for answers and the rest would use social media: 17.6% (26) would check on Facebook, 2.7% would use Google and, 1.4% for each of Instagram and tweeter (2 each).

Figure n°14: Distribution by information source



Source: Developed by us based on research results.

Table n°6: Distribution by information source

	frequency	Percentage
Call-center/ customer service	73	49.3%
Mobilis agency	55	37.2%
Mobilis website	42	28.4%
Facebook	26	17.6%
Instagram	2	1.4%
Tweeter	2	1.4%
others	8	5.5%

Source: Developed by us based on research results.

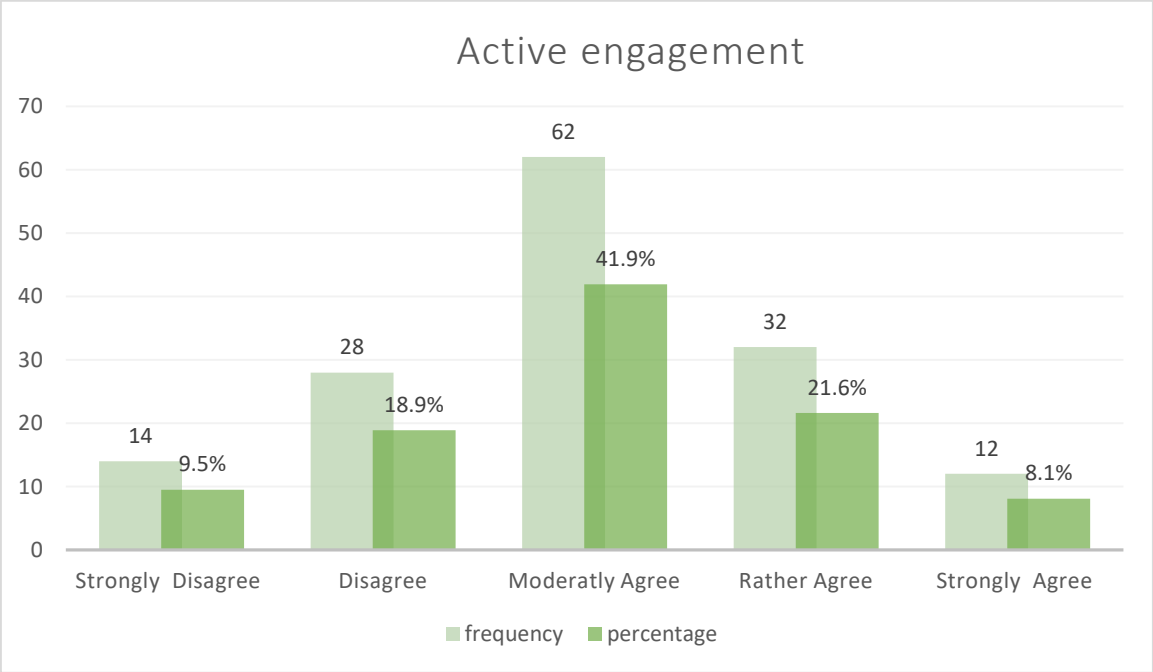
1.2. **Second section**: content and engagement

1.2.1. Active engagement:

Q1: There is an active engagement from Mobilis community managers

The graph below represents the percentage of participants' agreement with the statement on the active engagement provided by Mobilis community managers, we can see that 29.7% responded positively to the statement, against 28.4% who don't agree with that, and the majority of 41.9% moderately agree with the fact that there is indeed an active engagement from Mobilis .

Figure n°15: Distribution of the sample satisfaction with Mobilis active engagement.



Source: Developed by us based on research results.

Table n°7: Distribution of the sample satisfaction with Mobilis active engagement.

	Frequency	Percentage
Strongly disagree	14	9.5%
Disagree	28	18.9%
Moderately agree	62	41.9%
Rather agree	32	21.6%
Strongly agree	12	8.1%
Total	148	100%

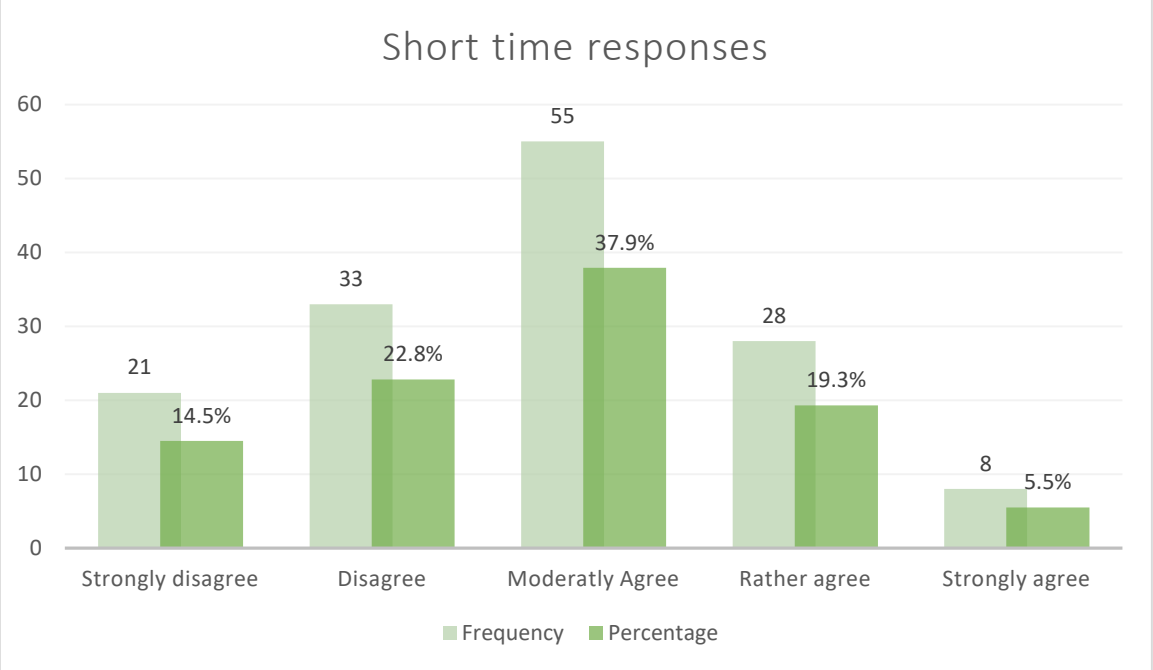
Source: Developed by us based on research results.

1.2.2. Short time responds:

Q2: All my questions are actively and immediately answered by Mobilis on their different pages

The graph below present the percentage of users' agreement that their questions are actively and immediately answered by Mobilis on their social media pages, unfortunately we notice that most of the participants do not agree with this with 37.3% of disagreement and only 24.8% positively agree, while the rest 37.9% moderately agree.

Figure n°16: Distribution of the sample satisfaction with the quick response time



Source: Developed by us based on research results.

Table n°8: Distribution of the sample satisfaction with the quick response time

	Frequency	Percentage
Strongly disagree	21	14.5%
Disagree	33	22.8%
Moderately agree	55	37.9%
Rather agree	28	19.3%
Strongly agree	8	5.5%
Total	145	100%

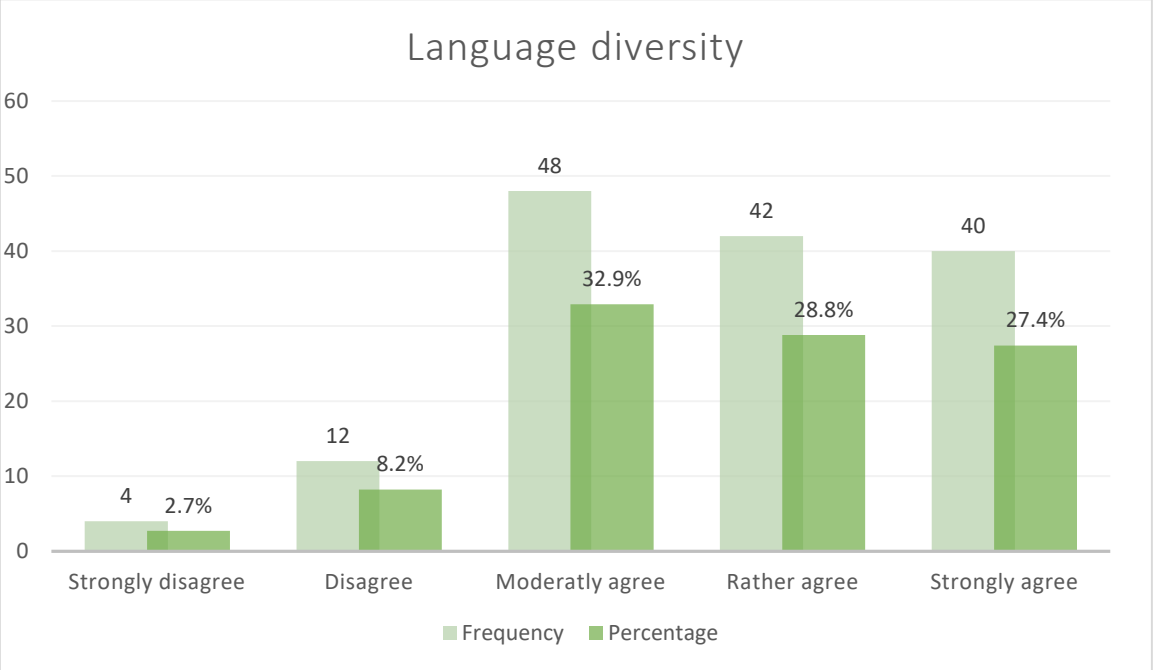
Source: Developed by us based on research results.

1.2.3. Language diversity:

Q3: Mobilis use multiple languages in their content to engage with their costumers

This graph present of agreement with either Mobilis is using different languages to communicate with her community and the answers were highly positive with 56.2% of agreement and 32.9% of moderate agreement, against only 10.9% of disagreement from our participants.

Figure n°17: Distribution of the sample satisfaction with the content language diversity.



Source: Developed by us based on research results.

Table n°8: Distribution of the sample satisfaction with the content language diversity.

	Frequency	Percentage
Strongly disagree	4	2.7%
Disagree	12	8.2%
Moderately agree	48	32.9%
Rather agree	42	28.8%
Strongly agree	40	27.4%
Total	146	100%

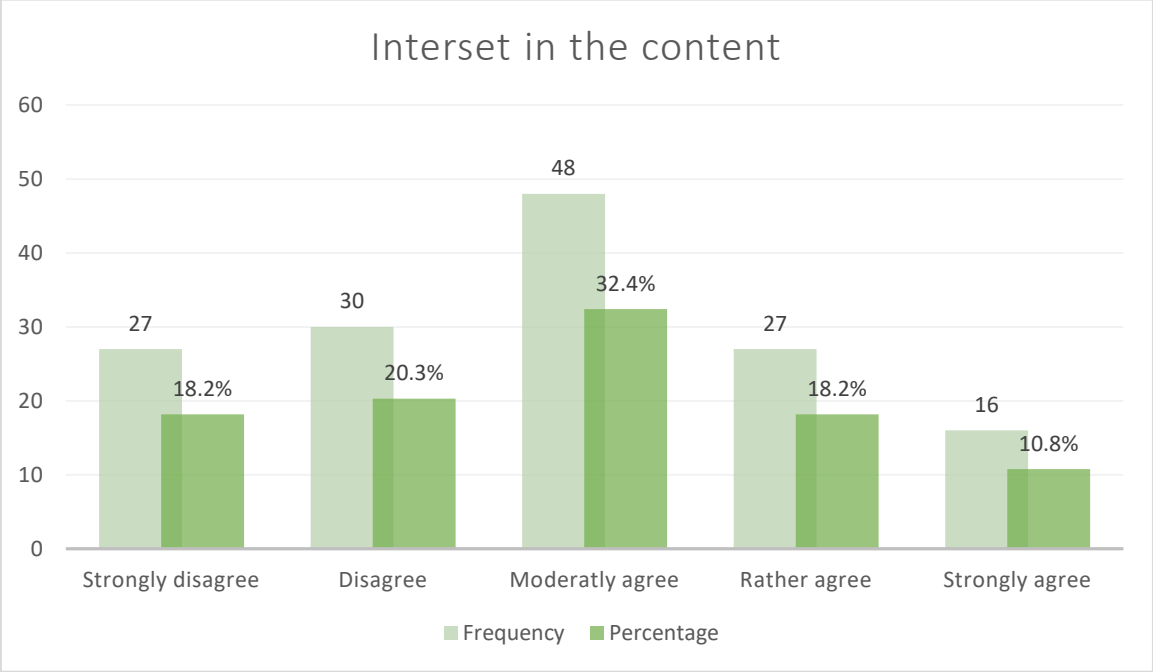
Source: Developed by us based on research results.

1.2.4. Interest in the content:

Q4: The content created by Mobilis interest me

The graph is a presentation of participant level of interest in the content created by Mobilis, we can see that 38.5% aren't interested in the posts shared by Mobilis, up against 29% of complete interest and 32.4% of medium interest.

Figure n°18: Distribution of the sample level of interest in Mobilis content



Source: Developed by us based on research results

Table n°9: Distribution of the sample level of interest in Mobilis content.

	Frequency	Percentage
Strongly disagree	27	18.2%
Disagree	30	20.3%
Moderately agree	48	32.4%
Rather agree	27	18.2%
Strongly agree	16	10.8%
Total	148	100%

Source: Developed by us based on research results.

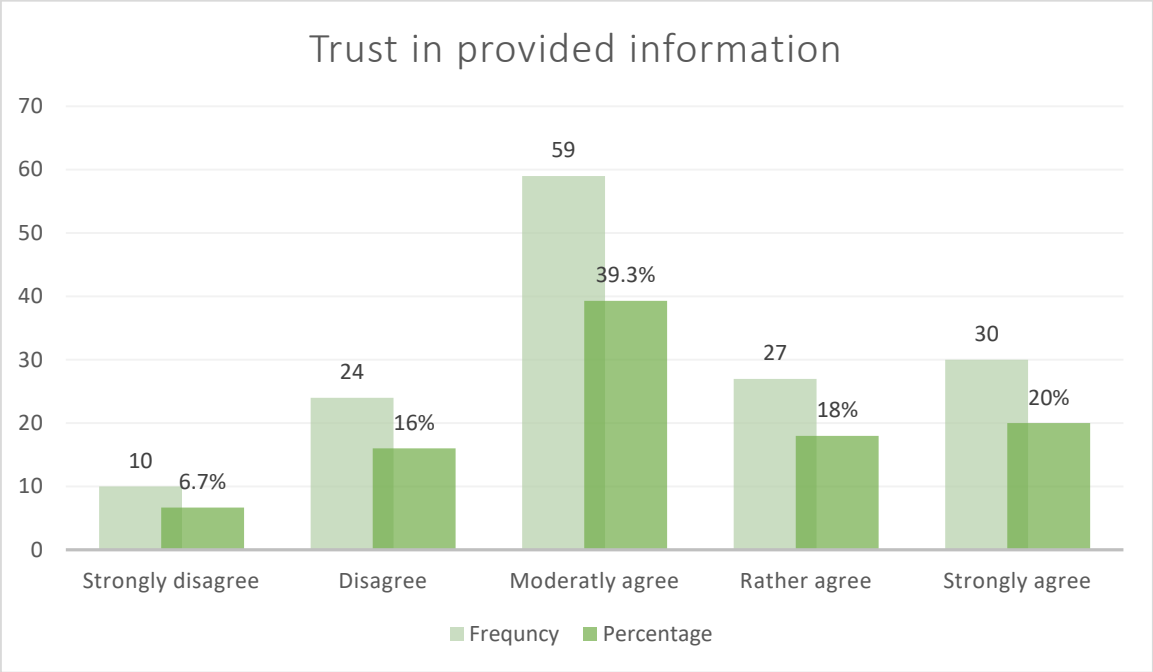
1.3. Third section: information availability

1.3.1. Information reliability:

Q1: I trust all the information provided about Mobilis and their services/ products through their website & social media accounts

This graph shows the level of trust costumers have in the information provided by Mobilis on their social media and website about their services and products, we notice that 38% fully trust the information presented to them plus 39.3% who moderately trust it, versus 22.7% who lack trust in the shared information.

Figure n°19: Distribution of the sample trust in the provided information.



Source: Developed by us based on research results.

Table n°10: Distribution of the sample trust in the provided information.

	Frequency	Percentage
Strongly disagree	10	6.7%
Disagree	24	16%
Moderately agree	59	39.3%
Rather agree	27	18%
Strongly agree	30	20%
Total	150	100%

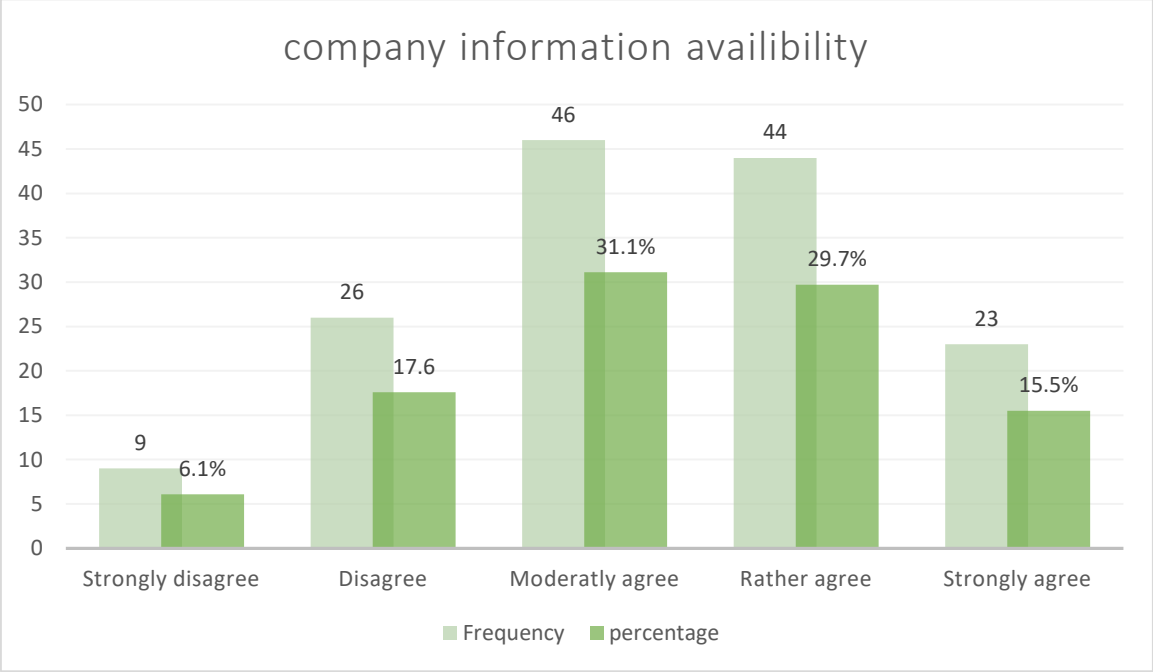
Source: Developed by us based on research results.

1.3.2. Company information availability

Q2: All information you need about Mobilis are available on their social media pages

The graph below represent the agreement with the statement that says that all information Mobilis costumers need about the company are available on its social media pages, 45.2% of the answers came positive agreeing to the stated question with 31.1% of moderate agreement, con 23.7% of disagreement from the users.

Figure n°20: Distribution of the sample trust in the provided information.



Source: Developed by us based on research results.

Table n°11: Distribution of the sample trust in the provided information.

	Frequency	Percentage
Strongly disagree	9	6.1%
Disagree	26	17.6%
Moderately agree	46	31.1%
Rather agree	44	29.7%
Strongly agree	23	15.5%
Total	148	100%

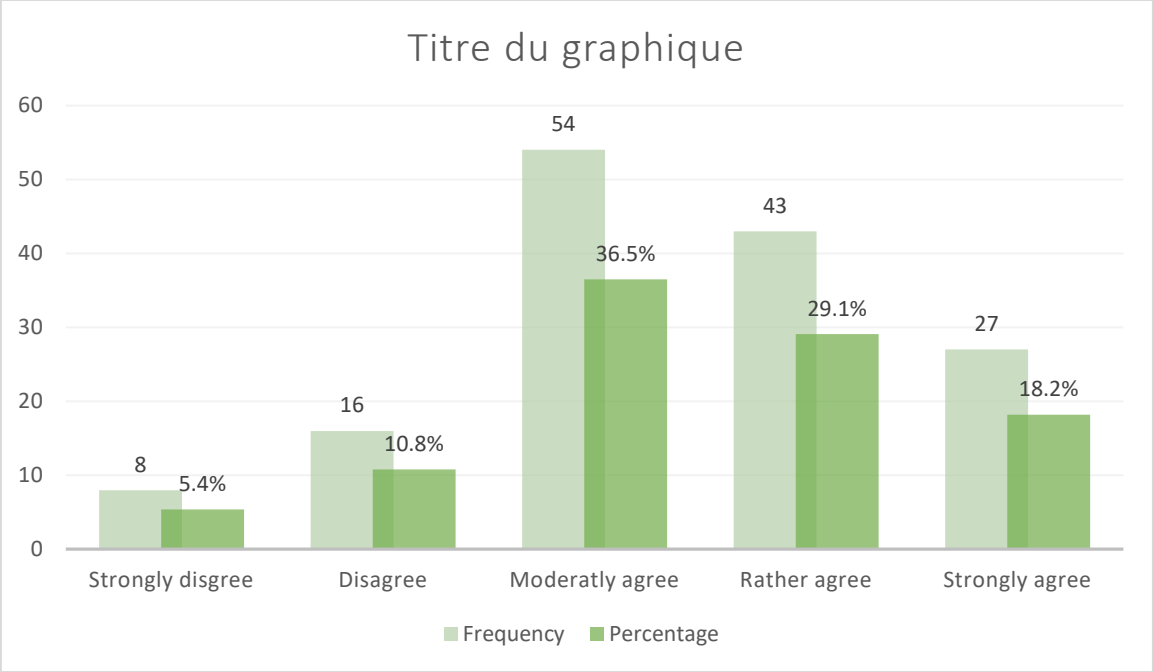
Source: Developed by us based on research results.

1.3.3. Service information availability

Q3: All information about Mobilis services are provided through their website and social media pages

The graph below represent the agreement with the statement saying that all information needed about Mobilis services are provided through both their website and social media accounts, we notice 47.3% of positive agreement and 36.5% of moderate agreement, while only 16.2% disagree to that.

Figure n°21: Distribution of service information availability



Source: Developed by us based on research results.

Table n°12: Distribution of service information availability.

	Frequency	Percentage
Strongly disagree	8	5.4%
Disagree	16	10.8%
Moderately agree	54	36.5%
Rather agree	43	29.1%
Strongly agree	27	18.2%
Total	148	100%

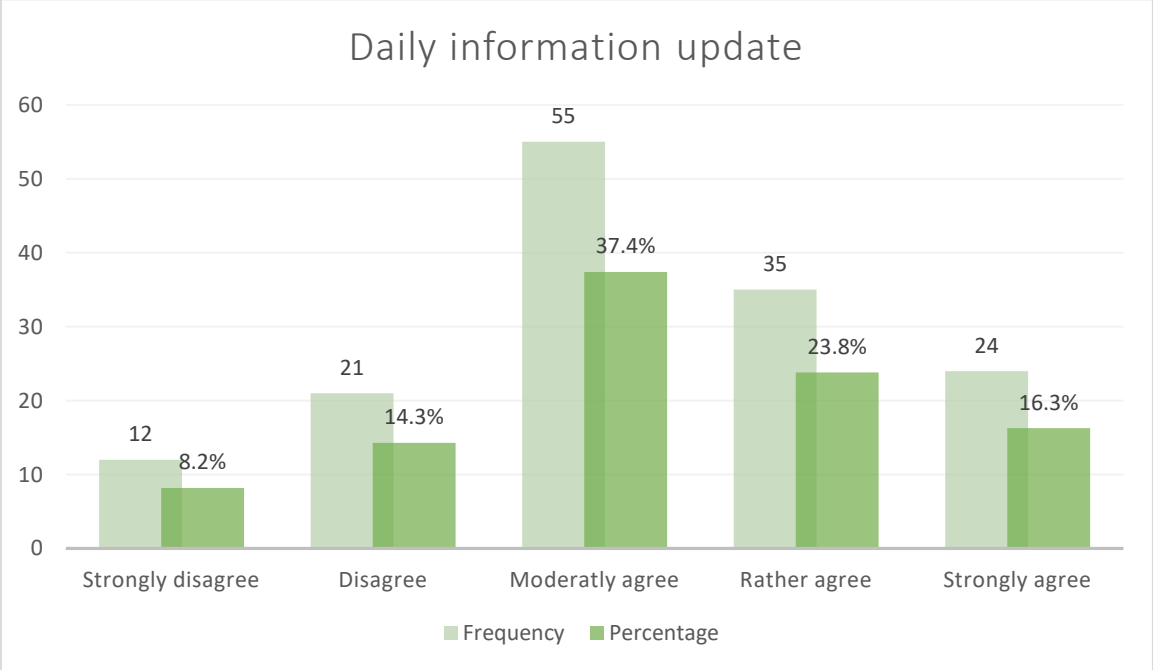
Source: Developed by us based on research results.

1.3.4. Information update

Q4: All the information are daily updated

The following graph represent the agreement level that all the previously mentioned information about Mobilis and its services and products are updated on the regular, we can see that the positive agreement is up to 40.1% plus the moderate agreement of 37.4%, con 22.5% of disagreement with the mentioned statement.

Figure n°22: Distribution of information update.



Source: Developed by us based on research results.

Table n°13: Figure n°22: Distribution of information update.

	Frequency	Percentage
Strongly disagree	12	8.2%
Disagree	21	14.3%
Moderately agree	55	37.4%
Rather agree	35	23.8%
Strongly agree	24	16.3%
Total	147	100%

Source: Developed by us based on research results.

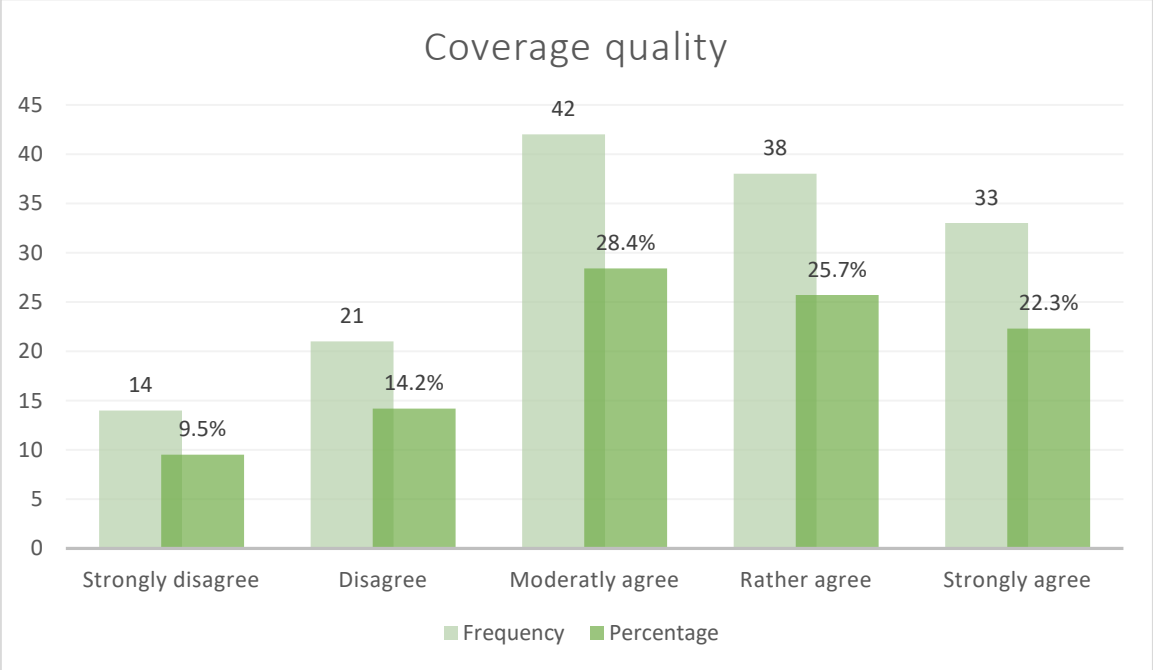
1.4. Fourth section: service quality.

1.4.1. Coverage quality

Q1: Mobilis has a great level of coverage

The graph below represent the level of agreement of Mobilis costumer to the statement about it providing a great level of coverage, in this case we notice 48% positive agreement and 28.4% moderated agreement, contra 23.7% of disagreement to the statement.

Figure n°23: Distribution sample of coverage quality



Source: Developed by us based on research results.

Table n°14: Distribution sample of coverage quality

	Frequency	Percentage
Strongly disagree	14	9.5%
Disagree	21	14.2%
Moderately agree	42	28.4%
Rather agree	38	25.7%
Strongly agree	33	22.3%
Total	148	100%

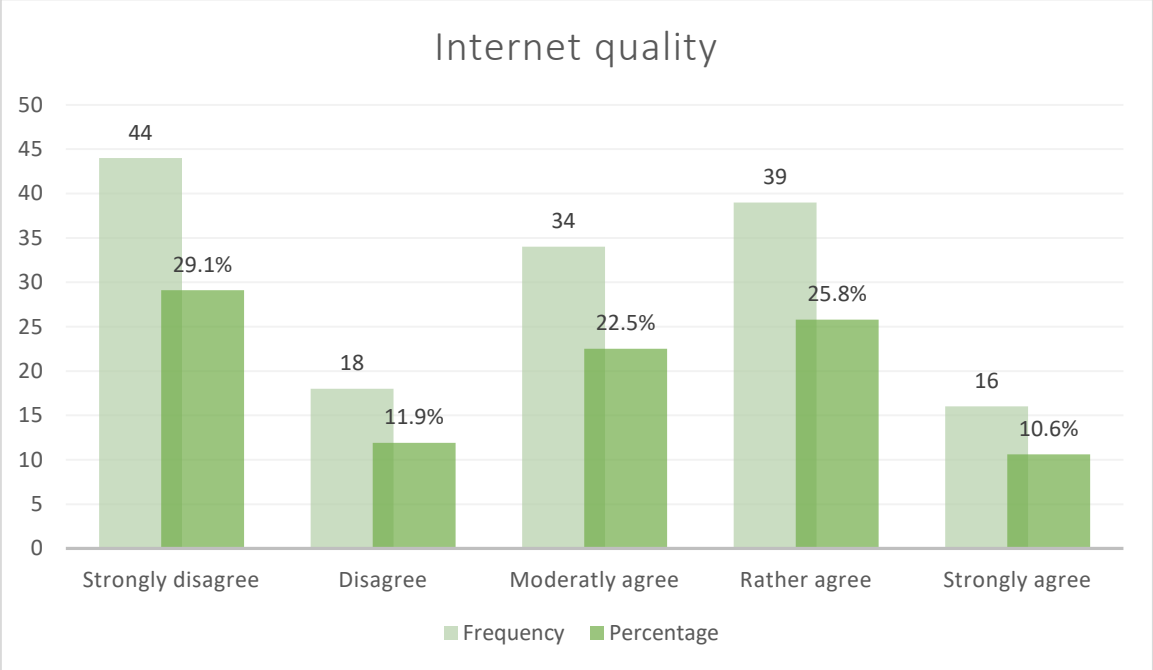
Source: Developed by us based on research results.

1.4.2. Internet quality

Q2: Mobilis is an example of the leading brand in Internet quality.

This graph present the level of agreement to Mobilis being a leading brand in internet quality provided to the people, we notice in this case a high level of disagreement to the statement to a percentage of 41%, against only 36.4%, with a moderate satisfaction of 22.5% to the quality of internet provided to their customers.

Figure n°24: Distribution sample on internet quality



Source: Developed by us based on research results.

Table n°15: Distribution sample on internet quality

	Frequency	Percentage
Strongly disagree	44	29.1%
Disagree	18	11.9%
Moderately agree	34	22.5%
Rather agree	39	25.8%
Strongly agree	16	10.6%
Total	151	100%

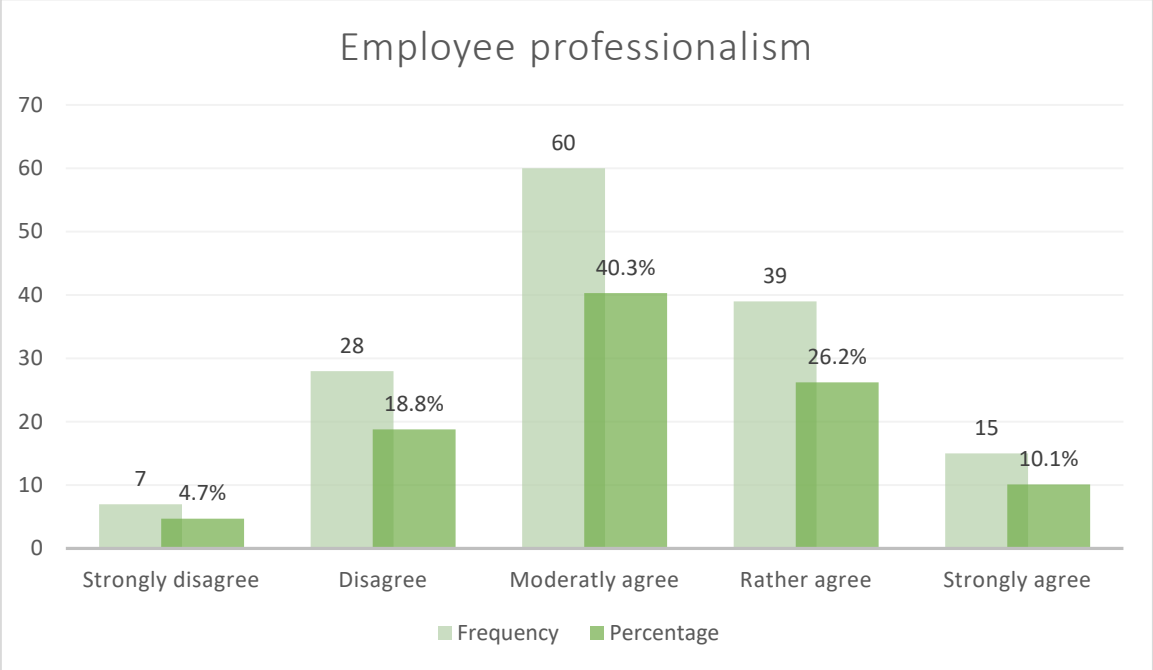
Source: Developed by us based on research results.

1.4.3. Employee professionalism

Q3: Mobilis employees share a high level of professionalism.

This graph represent the percentage of participants agreeing that Mobilis employees share a great level of professionalism, it shows that 36.3% agree with this statement with 40.3% of moderate agreement , against 23.5% who don't share the same opinion about the professionalism of its employees.

Figure n°25: Distribution sample on employee professionalism



Source: Developed by us based on research results

Table n°16: Distribution sample on employee professionalism

	Frequency	Percentage
Strongly disagree	7	4.7%
Disagree	28	18.8%
Moderately agree	60	40.3%
Rather agree	39	26.2%
Strongly agree	15	10.1%
Total	149	100%

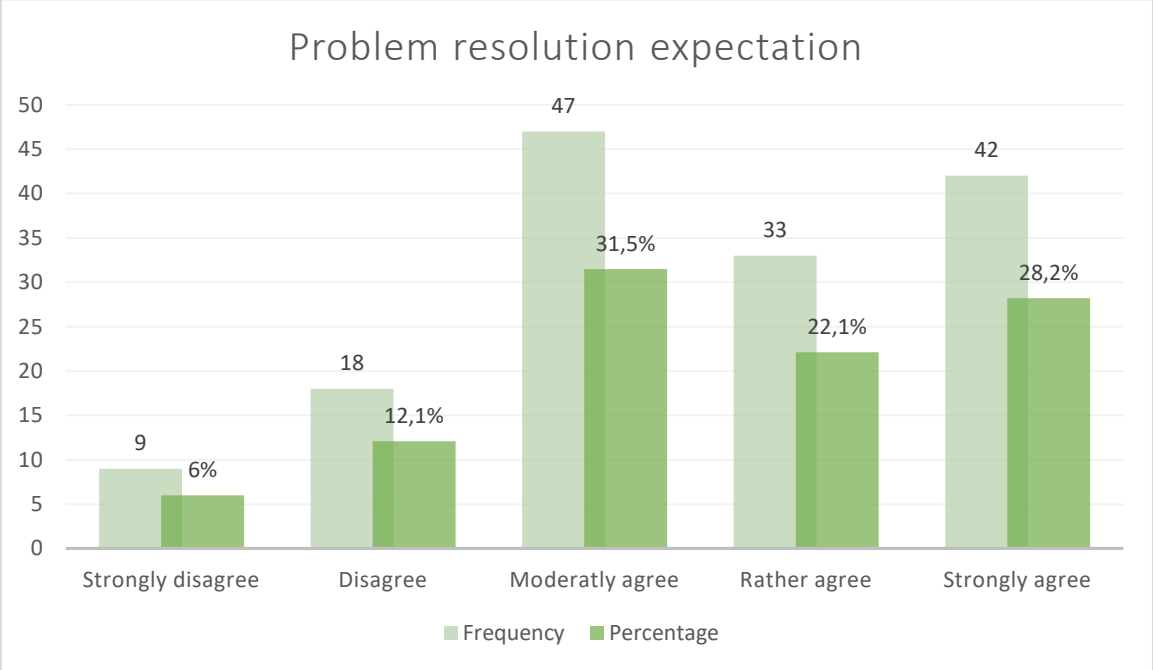
Source: Developed by us based on research results.

1.4.4. Quick Problem resolution expectation

Q4: you expect from Mobilis a faster solution to every problem you encounter.

This graph represent the level of expectation participants have toward Mobilis providing them with a fast solution to the problems they encounter consuming their services, and it shows a very high level of expectation to actually 50.3% next to 31.5% moderate, in opposite of 18.1% of low expectation from their clients.

Figure n°26: Distribution sample on problem resolution expectation



Source: Developed by us based on research results.

Table n°17: Distribution sample on problem resolution expectation

	Frequency	Percentage
Strongly disagree	9	6%
Disagree	18	12.1%
Moderately agree	47	31.5%
Rather agree	33	22.1%
Strongly Agree	42	28.2%
Total	149	100%

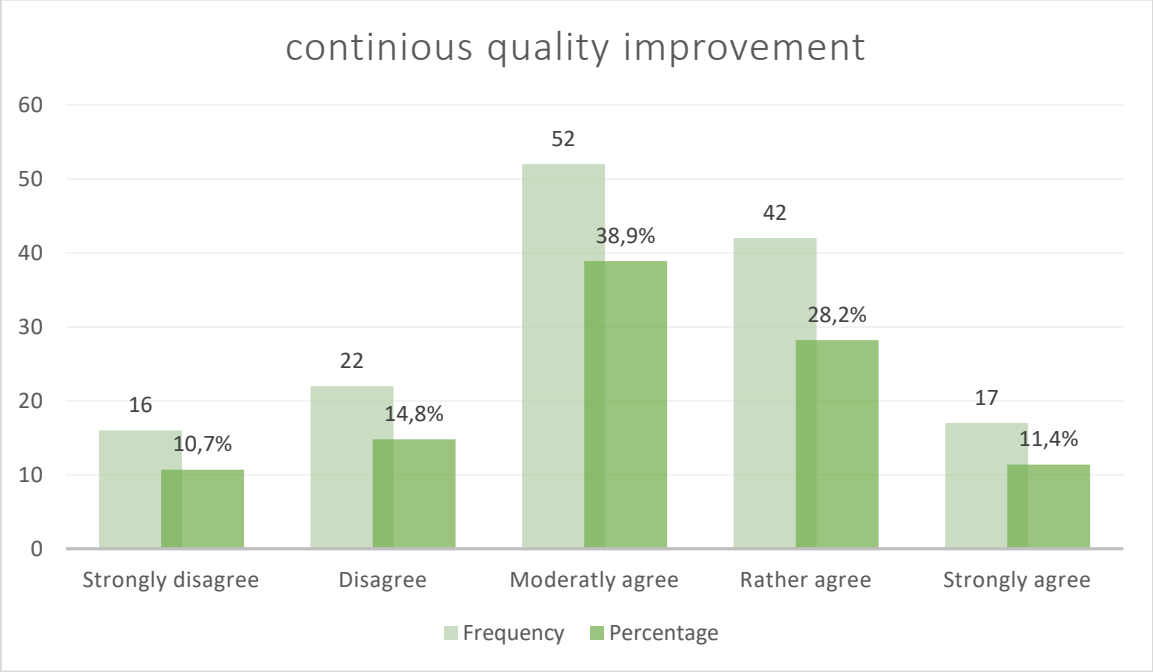
Source: Developed by us based on research results.

1.4.5. Continuous quality improvement

Q5: Mobilis is keen to continuously improve its services

This graph represent the agreement of the participants that Mobilis does continuously update and improve its services, we notice a great level of agreement with this statement 39.6% positive and 34.9% moderate agreement, contra 25.5% of opposite opinion.

Figure n°27: Distribution sample for continuous quality improvement.



Source: Developed by us based on research results.

Table n°18: Distribution sample for continuous quality improvement.

	Frequency	Percentage
Strongly disagree	16	10.7%
Disagree	22	14.8%
Moderately	52	38.9%
Rather agree	42	28.2%
Strongly agree	17	11.4%
Total	149	100%

Source: Developed by us based on research results.

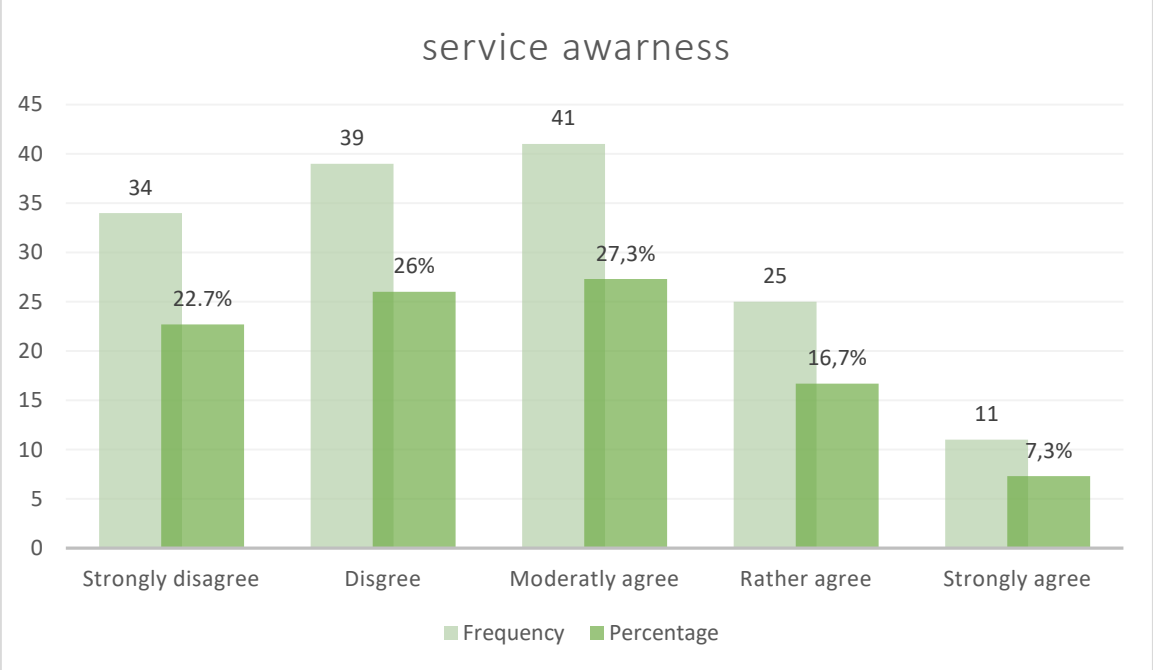
1.5. **Fifth section:** brand awareness and loyalty

1.5.1. Service awareness

Q1: I am aware of all the services provided by Mobilis

The next graph represent the level of the participants awareness of the services provided by Mobilis to them, and as we can see a noticeable lack of awareness to the services with a great percentage of 48.7%, in opposite of only 24% of positive awareness, and 27.3% of participate who are somehow aware of few of the services provided by the company.

Figure n°28: Distribution sample on service awareness



Source: Developed by us based on research results.

Table n°19: Distribution sample on service awareness

	Frequency	Percentage
Strongly disagree	34	22.7%
Disagree	39	26%
Moderately agree	41	27.3%
Rather agree	25	16.7%
Strongly agree	11	7.3%
Total	150	100%

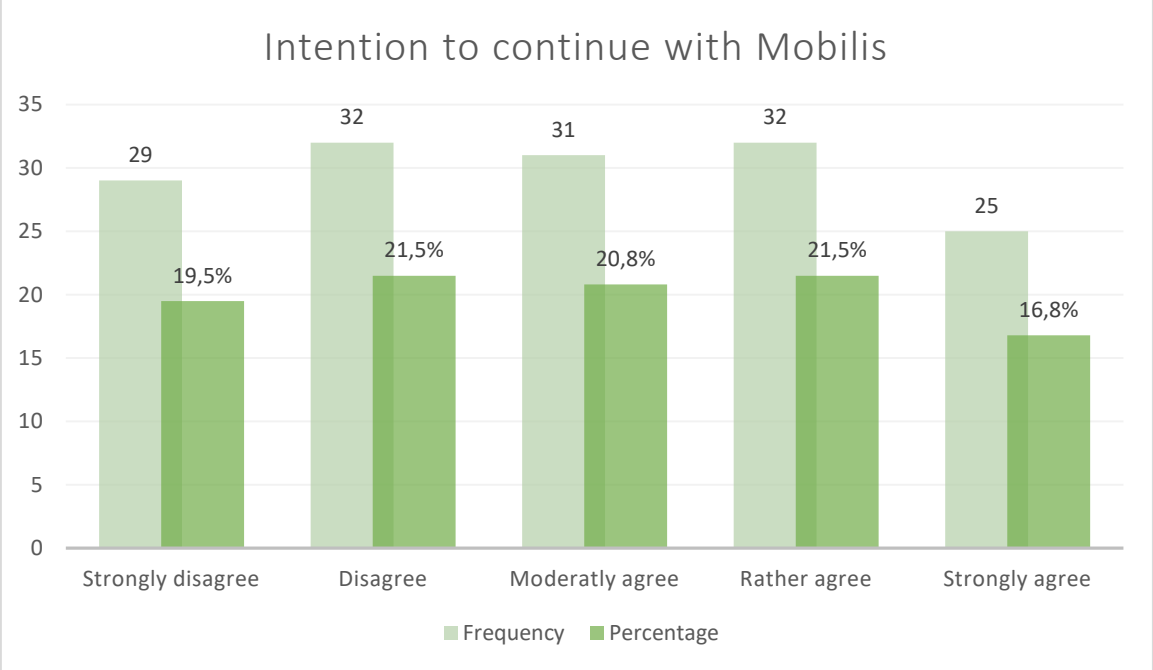
Source: Developed by us based on research results.

1.5.2. Intention to continue business with Mobilis

Q2: I will continue to do business with Mobilis despite competitors' offers.

The graph represents the percentage of participants' responses to the question on their intention on continuing their business with Mobilis despite the competitors offers, we notice that the results accumulated are pretty close, 38.3% of costumers willing to continue their journey with Mobilis against 41% who would end it here and take their business to one of the other two competitors, while 20.8% are in between choices.

Figure n°29: Distribution sample of the intention to continue business with Mobilis



Source: Developed by us based on research results.

Table n°20: Distribution sample of the intention to continue business with Mobilis

	Frequency	Percentage
Strongly disagree	29	19.5%
Disagree	32	21.5%
Moderately agree	31	20.8%
Rather agree	32	21.5%
Strongly disagree	25	16.8%
Total	149	100%

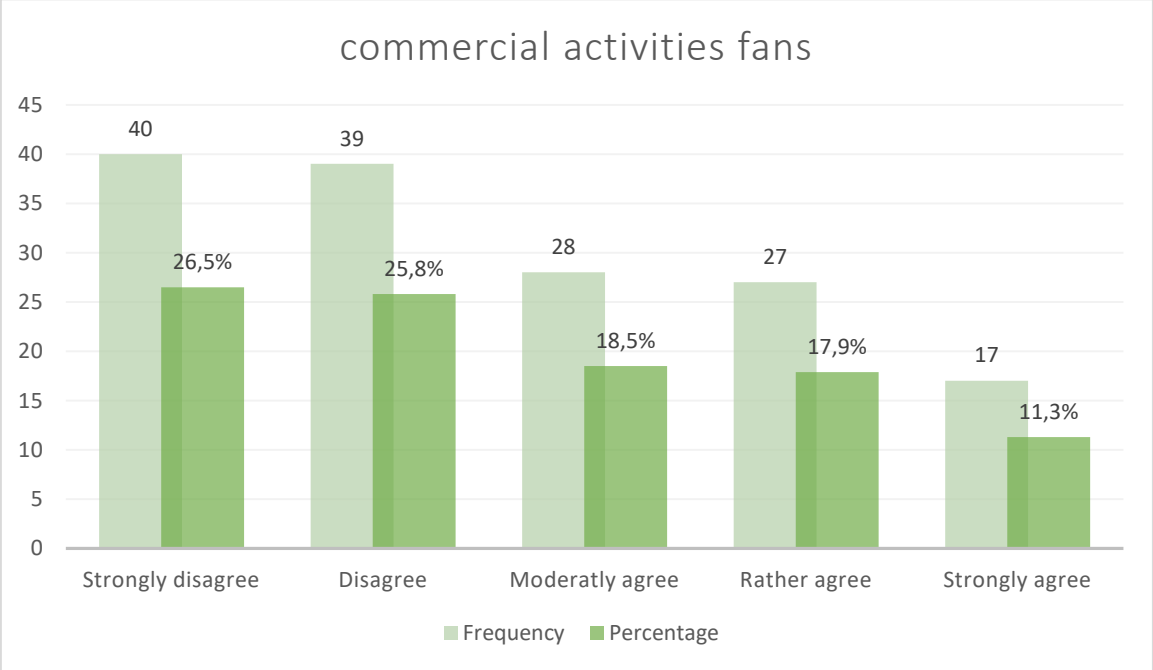
Source: Developed by us based on research results.

1.5.3. Mobilis commercial activities fans

Q3: I consider myself a fan of Mobilis's commercial activities.

This graph present the percentage of participate fandom toward the brand's commercial activities, we can see a negative result to this question, 52.3% of the answers were not in favor of the brand, con only 29.2% of costumers who do consider themselves to be fans to its commercial activities, while the remaining 18.5% are in between.

Figure n°30: Distribution sample of commercial activities fans



Source: Developed by us based on research results.

Table n°21: Distribution sample of commercial activities fans

	Frequency	Percentage
Strongly disagree	40	26.5%
Disagree	39	25.8%
Moderately agree	28	18.5%
Rather agree	27	17.9%
Strongly agree	17	11.3%
Total	151	100%

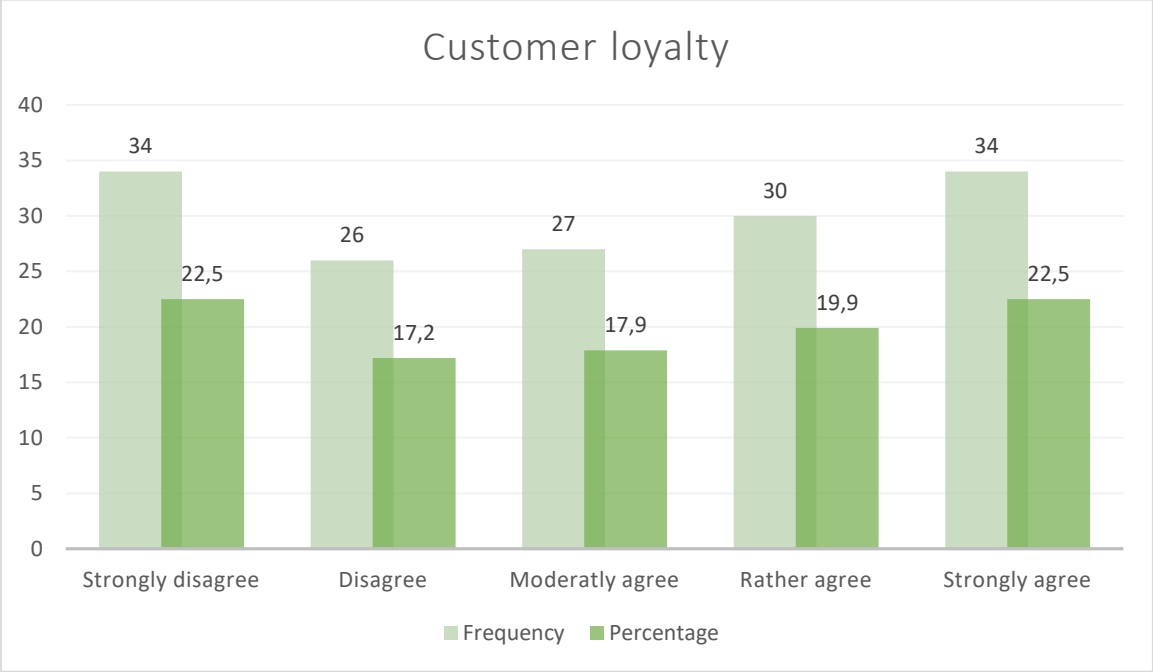
Source: Developed by us based on research results.

1.5.4. Customer loyalty

Q4: I consider myself a loyal customer to Mobilis

The graph below present the level of loyalty Mobilis costumers hold towards the brand, we notice a good level of loyalty with a positive agreement of 42.4% and 17.9% of moderated agreement, against 39.7% of disagreement to the statement.

Figure n°31: Distribution sample of customer loyalty to the brand



Source: Developed by us based on research results

Table n°22: Distribution sample of customer loyalty to the brand.

	Frequency	Percentage
Strongly disagree	34	22.5%
Disagree	26	17.2%
Moderately agree	27	17.9%
Rather agree	30	19.9%
Strongly agree	34	22.5%
Total	151	100%

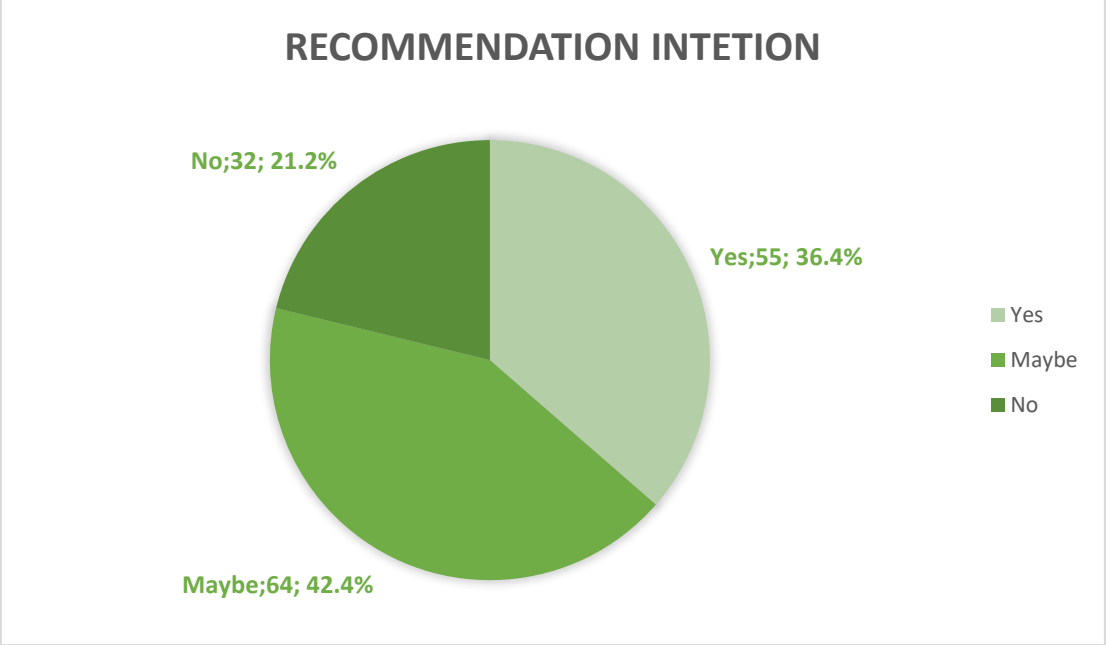
Source: Developed by us based on research results.

1.6. **Sixth section:** recommendation intention

Q: Do you intend to recommend Mobilis' services to your colleague?

The graph below represents the percentage of participants' responses to the question on their intention to recommend Mobilis to others, more than half of the respondents specifically 78.8% responded in favor to recommending the brand services to their friends and colleagues (36.4% yes and 42.4% maybe), compared to only 21.2% of respondents who prefer to obtain from recommending.

Figure n°32: Distribution sample of recommendation intention.



Source: Developed by us based on research results.

Table n°23: Distribution sample of recommendation intention.

	Frequency	Percentage
Yes	55	36.4%
Maybe	64	42.4%
No	32	21.2%
Total	151	100%

Source: Developed by us based on research results.

2. Cross-sorting analysis:

2.1. First crossing: Question 1 X Question 5: Age range vs following on social media

The table below present the crossing between the answers of age range and the participants following Mobilis on social media, we notice that the highest number of followers are ages between 20-30 years old presenting 87.64% of the customers following the brand on social media.

Table n°24: crossing between Q1 & Q5.

	Yes	No	Total
Less than 20	5	1	6
20-30	78	60	138
31-40	4	2	6
Over 40	2	2	4
Total	89	65	308

Source: Developed by us based on research results.

2.2. Second crossing: Question 15 X Question 8: service information availability on social media vs active engagement.

The table below present the crossing between service information availability on social media and the active engagement provided by Mobilis employees, we can see that the more Mobilis share information about their services on social media platforms the highest their engagement rate with their costumers grow.

Table n°25: crossing between question 15 & 8.

	Strongly disagree	Disagree	Moderately agree	Rather agree	Strongly agree	Total
Strongly disagree	3	2	7	2	0	14
Disagree	3	5	7	8	5	28
Moderately agree	1	6	31	19	5	62
Rather agree	1	2	8	10	10	31
Strongly agree	0	1	1	4	6	12
Total	8	24	51	43	26	299

Source: Developed by us based on research results.

2.3. **Third crossing**: Question 15 X Question 24: service information availability on social media vs customer loyalty to the brand.

The table below shows the crossing results of service information availability on social media and customer loyalty, we notice that the more Mobilis shares their service information on social media platform the highest customer loyalty increases.

Table n°26: crossing between question 15 & 24.

	Strongly disagree	Disagree	Moderately agree	Rather agree	Strongly agree	Total
Strongly disagree	6	5	16	7	3	37
Disagree	2	4	10	6	3	25
Moderately agree	0	3	14	3	5	52
Rather agree	0	3	8	13	4	28
Strongly agree	0	0	6	14	12	32
Total	8	15	54	43	27	321

Source: Developed by us based on research results.

2.4. **Fourth crossing**: Question 8 X Question 24: active engagement vs customer loyalty.

The following table represent the crossing results of active engagement and customer loyalty, we can see the participants are moderately more loyal to the brand when they receive and moderately active engagement from Mobilis.

Table n°27: crossing between question 8 & 24.

	Strongly disagree	Disagree	Moderately agree	Rather agree	Strongly agree	Total
Strongly disagree	5	8	14	6	0	32
Disagree	3	5	13	4	1	26
Moderately agree	3	3	11	7	2	26
Rather agree	2	5	15	6	2	30
Strongly agree	1	7	9	9	7	33
Total	14	28	77	32	12	310

Source: Developed by us based on research results.

2.5. **Fifth crossing**: Question 8 X Question 26: active engagement vs the intention of recommendation.

The following table present the crossing results between the active engagements provided by Mobilis and the intention of recommendation from their customers, we notice that the more active the engagement is, the highest chances that Mobilis customers recommend the brand to their contacts.

Table n°28: crossing between question 8 & 26.

	Yes	Maybe	No
Strongly disagree	3	4	7
Disagree	8	12	8
Moderately agree	20	30	12
Rather agree	18	10	4
Strongly agree	5	7	1
Total	54	63	32

Source: Developed by us based on research results.

A. Summary of the results :

- 62% of our study survey participants are women and the remaining 38% men.
- The majority of the participant age ranges between 20-30 years old representing 89.5% of the sample, hence the biggest part of the respondents are students.
- 57.8% of the participants do follow Mobilis on social media.
- Facebook ranked first on the chart of most following on social media with a percentage of 76.8% followers.
- When presented with a problem or seeking for information, the majority of 48.6%would contact Mobilis customer service/ call center or 37.2% visit their agency in the area.
- There's a 71.6% agreement from the participant to the active engagement from Mobilis community managers.
- The participants aren't satisfied with the responds time to their concerns from Mobilis through their different digital portal and pages.
- Respondents are satisfied with the language diversity in Mobilis content.
- There isn't a high interest in the content shared by Mobilis.
- Mobilis customers highly trust the content shared on the brand social media and website.
- The participants agree to finding all the information they need about Mobilis and their services on their social media accounts. And that it's always updated.
- The participants showed a noticeable dissatisfaction from the level of coverage and internet quality provided from Mobilis.
- The respondents are satisfied with & agree that Mobilis employees share a high level of professionalism and always expect a fast solution to their problems from them.
- There is a great agreement and satisfaction to the continuous quality improvement from the brand.
- The customers share a great awareness towards the brand and the services it provide , in fact the majority consider themselves a loyal customers and would continue doing business with Mobilis and would recommend it to their friends and colleagues.

The company is working on its digital communication very seriously to improve its notoriety and its brand image but also to be always closer to its customers and thus build an even stronger relationship with customers and on better bases and this through its active engagement with their consumers.

Thus, we are now able to clarify our different hypotheses of research:

Table n°29: responses to hypotheses.

Hypotheses	Results	Status
Digital communication bring Mobilis closer to her costumers thus an increase in their satisfaction.	Based on the results the participants are more satisfied when there is an active engagement and fast replies from the brand through the different digital panels Hence, digital communication does increase customer satisfaction.	Confirmed
Mobilis can use social media to be closer and engage with their costumers	The majority of the customers follow Mobilis on social media, to find the information they need about the brand and it services, solve their problems and concerns, and engage with the brand.	Confirmed
The more Mobilis is engaged with their community the easier it is to build a relationship with them and satisfy them.	Based on the crossing between engagement we notice that the highest the engagement the more satisfied the customers are And a satisfied customer is a loyal customer.	Confirmed

Source: Developed by us based on research results.

B. **Suggestion and recommendations**:

After having carried out an overall synthesis of the study results, we formulate some suggestion and recommendations in order to apply these results that can bring added value to the company's digital communication, particularly through social media that will help Mobilis to reinforce their customer relationship, engagement, and satisfaction.

In relation to the target:

- We have concluded that the broad category interested in this mode of digital communication is the one that age range between 20 and 30 years old. The majority are students who are captivated by this subject. It is therefore necessary for Mobilis to focus its communication on this target.

Content and engagement:

- Since the majority of the followers are between 20-30 so we are talking millennials and Gen Z, Mobilis should focus on creating more relatable content to this category of people to capture their attention and interest, and assure more engagement.
- Focus on creating more visual content such as videos instead of written posts.

- The world of communication has evolved, the integration of influencers through a creative and original concept and create brand content in collaboration with them.
- Mobilis must work on shortening their response time, customers expect fast replies to their questions and concerns.

Service quality:

- Mobilis must work on improving their coverage and internet quality.
- Hire and integrate more young talents on different level of management especially in both their digital communication and marketing teams.

General Conclusion

Currently, digital communication occupies an essential place within companies, it is one of the key elements of success and sustainability in the turbulent markets resulting from the new economic situation created by the democratization of the web and the extent of the digital evolution.

We have moved from unidirectional communication to multidirectional communication where the consumer has all the necessary tools to express their needs and desires as well as their experience and appreciation of the products and services offered by companies.

Today, the consumer has become more informed, more aware and more demanding. They see themselves as holders of the power and the decision to buy, and they intend to use it to their advantage.

Every company aim is to maintain the long-term relationship with the customers and the business organization. In order to acquire the potential customers, needs and demands should be acknowledged. Also customer satisfaction has a great impact on the entire business operations. Therefore, it is very important to the organization to understand what exactly the customers need and how to satisfy them to gain loyalty for the successful business.

As it is discussed in chapter two, that the customers plays a crucial role in the market chain process. To make it clearer, satisfied customers are the ones who creates the possibility of the new customers. If the existing customers are satisfied with the product and service, then there are the chances of recommendation to the new ones. This will lead to the increasing number of customers and could maintain the level of the relationship with the customers. This thesis has gone into depth to understand the co-relation between customer satisfaction and the brand digital communication.

We came to confirm that digital communication and engagement plays a crucial role in customer satisfaction and customer loyalty. During the research, we figured out if the customers are satisfied with the quality of the service and the company performance according to the customer’s demand and expectation as well as the active engagement perceived from the brand. It can be said, that customer satisfaction is the key component of business profitability because once the customer reaches their satisfaction level, and it may influence them to consume the service continuously. Moreover, they share their experiences with other people, which creates the possibility of new customers. Likewise, dissatisfied people also give their opinion about the products, about their unfortunate experiences and lead towards a declining position to the number of customers.

Bibliography

1. 8th International Strategic Management Conference ,2012,The impact of social media marketing on brand loyalty ,Yalova University, Safran Campus, Yalova 77100, Turkey.

    A. Martin, 2008, Digital literacy and the “digital society”, In: Digital Literacies Concepts Policies Practices 30, p. 151–176.

2. Amy Van Looy, 2016, Technologies and Strategies for Creating Business Value Social Media Management_ Springer Cham Heidelberg New York Dordrecht London # Springer International Publishing Switzerland.
3. Ana Ilic, Biljana Juric, Linda Hollebeek, Roderick J. Brodie, 2011, Journal of Business Research,Consumer engagement in a virtual brand community: An exploratory analysis , ,The University of Auckland Business School, Department of Marketing, , New Zealand.
4. Anderson et al. 1997, Customer Satisfaction, Productivity and Profitability: Difference between Goods and services, Marketing Sciences.
5. Arens, W. F. (2006). Contemporary advertising. Boston: McGraw Hill Irwin.
6. Audrey Cuillierier, June17th, 2016, Customer Engagement through Social Media, Helsinki Metropolia University of Applied Sciences European Business and Administration.
7. Azman Ismail, Yusrizal Sufardi, 2016, Service Quality as a Predictor of Customer Satisfaction and Customer Loyalty, Mohd Yunan University Kebangsaan Malaysia, Selangor, Malaysia.
8. Benabdelbaki Manel, 2015, La communication digitale levier de compétitivité des entreprises. Etude de cas : Mobilis.
9. Berman, S. & Marshall, A. (2014). The next digital transformation: from an individual–centered to an everyone-to-everyone economy. Strategy & Leadership.
10. Berman, S. J. (2012). Digital transformation: opportunities to create new business models. Strategy & Leadership.
11. BERTELOOT (S), DEMEURE (C) 2015, Aide-mémoire – Marketing Ed7 Paris, Edition Dunod, P.325
12. Biagi, S. (2005). Media impact: an introduction to mass media. Belmont: Thompsom Wadsworth. Dominick, J. (2007). The dynamics of mass communications: media in the digital age (9th ed.) Boston: McGraw Hill.

13. Carlson, S. (2006). The library at CUNY's Brooklyn College makes friends on My Space. Chronicle of Higher Education.

14. Chen, H., Chiang, R. H., & Storey, V. C. (2012). Business intelligence and analytics: From big data to big impact. MIS Quarterly.

15. Danaher, P.J., &Rossiter, J.R. (2011). "Comparing perceptions of marketing communication channels". European Journal of Marketing.

16. David Rutambuka, 2017, La satisfaction des clients permet-elle de mieux expliquer l'Impact des fusions et acquisitions sur la valeur de l'entreprise?, Gestion et management. PSL Research University.

17. Delio, M. (2005) the Enterprise Blogosphere. Infoworld 27(13), 42-47.

18. DUPIN (Antoine), 2010, Communiquer sur les réseaux sociaux, Edition Florence devesa severir david.

19. E. Stolterman, A. Fors, 2004, Information technology and the good life, in: Information Systems Research.

20. FLORÈS (Laurent) 2012, Mesurer l'efficacité du marketing digitale, Paris, Edition DUNOD.

21. G. Westerman, A. McAfee, D. Bonnet, C. Calmejane, P. Ferraris, 2011, Digital transformation: A roadmap for billion-dollar organizations, MIT Center for Digital Business and Capgemini Consulting.

22. G.Divard, P.Roman, I.Marien. : Marketing Des Services, 2eme Edition.

23. Gayet (C) Et Xavier (M), Février 2016, web marketing et communication digitale 60 outils pour communiquer efficacement auprès de ses cibles, Edition Vuibert.

24. Gensler, S., Neslin, S. A., & Verhoef, P. C. (2017). The showrooming phenomenon: It's more than just about price. Journal of Interactive Marketing.

25. Gizem Unal, Bruno Schivinski, 2017, Literature Review on Conceptualisation of Online Consumer Engagement, Nottingham Trent University – Nottingham Magdalena Brzozowska-Woś Politechnika Gdańska.

26. Granicus, 2017, a guide to content marketing for the public sector, uk.granicus.com

27. Haenlein, M. Kaplan, A, M. (2010), Users of the world, unite! The challenges and opportunities of social media, Business Horizons, Vol. 53.

28. Hanson, R. E. (2005). Mass communication: living in a media world. Boston: McGraw Hill Irwin.

29. HARMEL (L). « La qualité de service », édition Saint-Denis, 2005, P. 82.

30. Heinonen, J & Michelsson, T. “The use of digital channels to create customer relationships”, International Journal of Internet Marketing and Advertising, Vol. X, No. Y, xxxx.

31. HEROVITZ (J). op.cit, P.46.

32. Hill, N., Brierley, J. & MacDougall, R. 2003. How to measure customer satisfaction? USA: Gower Publishing Ltd.

33. John Harvey, 2019, JOURNAL OF CUSTOMER BEHAVIOUR ,Customer engagement behaviour on social media platforms: A systematic literature review ,Tolu Ajiboye, Nottingham Trent University, UK* University of Nottingham Business School, UK Sheilagh Resnick, Nottingham Trent University, UK, Vol. 18, No. 3 pp. 241

34. Kabu Khadka & Soniya Maharjan November 2017, Customer Satisfaction and Customer Loyalty, Case Trivsel Städtjänster (Trivsel Siivouspalvelut), Thesis Centria University of Applied Sciences Business.

35. Kamila Jurgielewicz, 2019, Digital transformation: theoretical backgrounds of digital change.

36. Kannan, P. K., & Li, H. A. (2017). Digital marketing: A framework, review and research agenda. International Journal of Research in Marketing, 34(1), 22–45.

37. Keller, K. “Building strong brands in a modern marketing communications environment”, Journal of Marketing Communications, Vol. 15, Nos. 2–3, April– July 2009, 139–1

38. Kotler, Philip,2006, Marketing Management, 12e, 12th Edition, Pearson Education, New Delhi, , p 136

39. Le Petit Larousse Illustré, 2005, Edition Larousse.

40. Loyalty Program Consumer Survey 2018 _Loyalty Research Report_ How today’s consumers want to engage with loyalty programs.

41. Lynda Zemmour, 2017, La Contribution D’amelioration De La Qualite Des Services Dans L’acquisition De Nouvelle Clientele Etude De Cas : Algerie Telecom Master Thesis, Page 26.

42. M. Fitzgerald, N. Kruschwitz, D. Bonnet, M. Welch, 2013, Embracing Digital Technology: A New Strategic Imperative, MIT Sloan Management Review, Research Report.

43. M.L.J. Wesselman, 2014, Social media to enhance e-service quality. Master’s thesis MSocSc. In Service Management –, Copenhagen Business School –page 11-12.

44. Marcin Kotarba ,2018, Digital Transformation Of Business Models Warsaw University Of Technology, Faculty Of Management, Warsaw, Poland

45. Marshal Mcluhan, 1967, the medium is the massage, an inventory of effects , ,Quentine Fiore produced by Jerome Agel, Gingko press inc

46. Matthews, L. “Social Media and the Evolution of Corporate Communications”, The Elon Journal of Undergraduate Research in Communications, Vol. 1, No. 1, Winter 2010

47. Mlle Benabdelbaki Manel, 2015, La communication digitale levier de compétitivité des entreprises. Etude de cas : Mobilis, HEC, page79

48. Mlle. Benabdelbaki Manel, 2015, La communication digitale levier de compétitivité des entreprises. Etude de cas : Mobilis , Master thesis, HEC, page 100

49. Mohd Yunan, Azman Ismail, ,2016, Service Quality As A Predictor Of Customer Satisfaction And Customer Loyalty, Yusrizal Sufardi University Kebangsaan Malaysia, Selangor, Malaysia, Page 271

50. Mosconi, E., Packmohr, S. & Antonio De Santa-Eulalia, L. (2019). Making Digital Transformation Real. Grand Wailea, Hawaï: 52nd Hawaii International Conference on System Sciences.

51. N. Eyrich et al. / Public Relations Review 34 (2008) 412–414.

52. Nick Hajli, 2015, Handbook of Research on Integrating Social Media into Strategic Marketing, Newcastle University Business School, UK, chapter 1 page 2.

53. Ohiagu, O. P. (2011). the Internet: The Medium of the Mass Media. Kiabara Journal of Humanities 16 (2), 225-232 page 2-6

54. Perceptive insight, Phase 4, 2016, Literature review & final consumer engagement ,Customer engagement methods and examples of best practice ,Report prepared for: NIE Networks ,April ,Page 14

55. Perceptive insight, Phase 4: Literature review & final consumer engagement ,Customer engagement methods and examples of best practice ,Report prepared for: NIE Networks ,April 2016 ,Page 14

56. Piccinini, E., Hanelt, A., Gregory, R. & Kolbe, L. (2015). Transforming Industrial Business: The Impact of Digital Transformation on Automotive Organizations. Fort Worth, Texas: International Conference on Information Systems

57. PINONCELY (L), 2016, Premiers pas vers le digital : Facebook, Twitter, Instagram, LinkedIn, toutes les astuces pour vous lancer facilement !, Edition Groupe Eyrolles , Paris , ,p.14,15

58. Prahlad, C.K; Ramaswamy, Venkaitram, Co-opting Customer competence, Harvard Business Review, January/ February 2000, Vol. 78, Issue 1, pp 79-87

59. Roderick J. Brodie ∗, Ana Ilic, Biljana Juric, Linda Hollebeek,2011, Journal of Business Research,Consumer engagement in a virtual brand community: An

exploratory analysis , ,The University of Auckland Business School, Department of Marketing, , New Zealand,page 106

60. Rohan Samson et al. / Procedia Economics and Finance 11 (2014) 872 – 880.
61. Rossiter J.R (1997). Advertising communications & promotions management. Boston: McGraw Hill Irwin.
62. S. Santhana Jeyalakshmi and Dr. S. Meenakumari, 2012, Service Quality Management: A Literature Review , Shanlax International Journal of Management volume 3 issue 4 page 35
63. S. Ziyadin, S. Suieubayeva , and A. Utegenova, 2019, Digital Transformation in Business , Al-Farabi Kazakh National University, Almaty, Kazakhstan
64. Samson owoyele, may 2016, website as a marketing communication tool ,thesis centria university of applied sciences Business Management , page 6
65. Singer, E. (2006) Build a biz blog. Canadian Business 79(23), 66-68.
66. Thomas, Joffi; Gupta Rajen K, Marketing Theory and Practice: Evolving through Turbulent times, Global Business Review, 2005, vol. 6, Issue 1, pp 95-112.
67. Westerman, G., Calméjane, C., Bonnet, D., Ferraris, P. & McAfee, A. (2011). Digital Transformation: A roadmap for billion–dollar organizations. MIT Center for Digital Business and Capgemini Consulting, 1–68.
68. Yacine Mamache, 2019, L'impact de la communication digitale sur l'acquisition de nouveaux clients. Cas: S.A.R.L KEYNA. Marketing thesis, HEC, page 22
69. Yacine MAMACHE, 2019, L'impact de la communication digitale sur l'acquisition de nouveaux clients. Cas: S.A.R.L KEYNA, HEC. Page 33

Webographie References :

1. Action digital, 08/06/2020, Why your website is the most powerful communications and marketing tool. https://actiondigitalagency.com.
2. BBC, 27/05/2020,how to use technology in your business: digital communication ,online , https://www.bbc.co.uk/bitesize/guides/zdmfpg8/revision/3
3. Business news daily, 09/06/2020, How to Run a Successful Text Message Marketing Campaign https://www.businessnewsdaily.com
4. content marketing institute, 09/06/2020, Text-Based Marketing: 13 Reasons to Use It , https://contentmarketinginstitute.com

5. Statista, 12/06/2020 Forecast number of mobile users worldwide 2019-2023 https://www.statista.com/
6. Northeastern university, 27/05/2020 , What is Digital Communication & Why Are Skilled Professionals in Such High Demand?, online, https://www.northeastern.edu/bachelors-completion/news/what-is-digital-communication/
7. Yalantis, 11/06/2020, Mobile App As a Brand Marketing Channel: Benefits Apps Provide to Brands https://yalantis.com/

Annexe

Questionnaire :

En vue de l'obtention d'un diplôme de master en management, à l'école nationale supérieure de management (ENSM), on réalise une étude qui porte sur le thème de : « l'impact de la communication digitale sur la satisfaction des clients de Mobilis ».

De ce fait, on vous prie de nous accorder quelques minutes de votre précieux temps afin de répondre à notre questionnaire tout en vous assurant de garder l'anonymat des réponses et que les résultats ne seront utilisés que pour des fins académiques dans le cadre de ce mémoire de master.

On vous remercie d'avance pour votre précieuse collaboration à la réalisation de cette étude.

Première Section :

1. Genre ?
    - Femme
    - Homme
2. Quelle est votre tranche d'âge ?
    - Moins de 20 ans
    - Entre 20-30
    - Entre 31-40
    - Plus de 40 ans
3. Quel est votre niveau d'instruction ?
    - Formation, professionnel
    - Bachelier
    - Universitaire
    - Etude supérieure
    - Autre
4. Quel est votre statut socio - professionnel ?
    - Etudiant (e)
    - Employé (e)
    - Sans profession
    - Retraité (e)
5. Suivez-vous Mobilis sur les médias sociaux ?
    - oui
    - non
6. Sur quelle plate-forme de réseaux sociaux suivez-vous Mobilis ?
    - Facebook
    - Instagram
    - Tweeter
    - LinkedIn

- Youtube

7. Si vous avez un problème, comment chercher de l'aide ou des informations ?

- Centre d'appel
- Site officiel
- Facebook
- Instagram
- Twitter
- Agence Mobilis dans votre région

Deuxième section: engagement et contenu

- Il y a un engagement actif de la part des gestionnaires de la communauté Mobilis

Pas de tout d'accord	en désaccord	modérément d'accord	plutôt d'accord	fortement d'accord

- Toutes mes questions sont activement et immédiatement répondues par Mobilis sur leurs différentes pages

Pas de tout d'accord	en désaccord	modérément d'accord	plutôt d'accord	fortement d'accord

- Mobilis utilise plusieurs langues dans son contenu pour communiquer avec ses clients

Pas de tout d'accord	en désaccord	modérément d'accord	plutôt d'accord	fortement d'accord

- Les contenus créés par Mobilis m'intéressent

Pas de tout d'accord	en désaccord	modérément d'accord	plutôt d'accord	fortement d'accord

Troisième section : disponibilité des informations

- Je fais confiance à toutes les informations fournies sur Mobilis et ses services/produits par le biais de son site web et de ses comptes de médias sociaux

Pas de tout d'accord	en désaccord	modérément d'accord	plutôt d'accord	fortement d'accord

- Toutes les informations dont vous avez besoin sur Mobilis sont disponibles sur leurs pages de médias sociaux

Pas de tout d'accord	en désaccord	modérément d'accord	plutôt d'accord	fortement d'accord

- Toutes les informations sur les services de Mobilis sont fournies par le biais de leur site web et des pages des médias sociaux

Pas de tout d'accord	en désaccord	modérément d'accord	plutôt d'accord	fortement d'accord

- Toutes les informations sont mises à jour quotidiennement

Pas de tout d'accord	en désaccord	modérément d'accord	plutôt d'accord	fortement d'accord

Quatrième section : qualité de service

- Mobilis a un grand niveau de couverture

Pas de tout d’accord	en désaccord	modérément d'accord	plutôt d'accord	fortement d'accord

- Mobilis est un exemple de la marque leader en matière de qualité de l'Internet.

Pas de tout d’accord	en désaccord	modérément d'accord	plutôt d'accord	fortement d'accord

- Les employés de Mobilis partagent un haut niveau de professionnalisme.

Pas de tout d’accord	en désaccord	modérément d'accord	plutôt d'accord	fortement d'accord

- vous attendez de Mobilis une solution plus rapide à chaque problème que vous rencontrez.

Pas de tout d’accord	en désaccord	modérément d'accord	plutôt d'accord	fortement d'accord

- Mobilis est soucieuse d'améliorer continuellement ses services

Pas de tout d’accord	en désaccord	modérément d'accord	plutôt d'accord	fortement d'accord

Cinquième section : Notoriété et fidélité à la marque

- Je connais tous les services fournis par Mobilis

Pas de tout d’accord	en désaccord	modérément d'accord	plutôt d'accord	fortement d'accord

- Je continuerai à faire des affaires avec Mobilis malgré les offres des concurrents.

Pas de tout d’accord	en désaccord	modérément d'accord	plutôt d'accord	fortement d'accord

- Je me considère comme un fan des activités commerciales de Mobilis.

Pas de tout d’accord	en désaccord	modérément d'accord	plutôt d'accord	fortement d'accord

- Je me considère comme un client fidèle à Mobilis

Pas de tout d’accord	en désaccord	modérément d'accord	plutôt d'accord	fortement d'accord

Avez-vous l’intention de recommander les services de Mobilis auprès de vous collègue ?

- Oui
- Peut-être
- Non