Web analytics enhancing Project Planning: the case of Digital Marketing campaigns

Qualitative study of structured Web analytics data in Project Management

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Autumn Semester 2017
Master thesis, one-year, 15 hp
Due to the increasing relevance conferred to a digital based approach to sales, more organizations are looking for a profitable way to exploit the value of the information they are able to collect during Digital Marketing campaign projects. These data are called Web analytics and are generated at the passage of the user on the Web page. Despite the value entailed by this information, previous academic literature points out the lack of a structured approach to Web analytics and rarely the subject was observed in connection with Project Management.

The purpose of our study is therefore to bridge the existing gap, by aiming to assess how a structured approach to Web analytics could enhance the planning phase of a project. The focus on the planning phase is due to the critical relevance attributed to it. About this, researchers want to answer the following research question:

*Project planning in digital marketing campaigns: which is the role of a structured use of Web analytics?*

Given the exploratory nature of the study, guided by a positivist stand point and considered time and space constraints, a qualitative approach to the research was selected as the most suitable. The literature review performed in the second chapter allowed the authors to draw a conceptual framework, showing the connections between the research areas involved. At the end of the chapter a model of use of Web analytics, built from previous researchers, is presented. This last one lacks of an explicit connection with the subject of Project Management, which we will develop along the thesis work. Empirical data was gathered through semi-structured interviews that involved with managers from a digital marketing company and consultants dealing with Web analytics, working in two different companies.

Research findings indicate the role of Web analytics to be extremely important while planning a Digital Marketing campaign project, but also revealed their use and relevance along other project phases. Also, the role of Web analytics historical data emerged during the interview process and is widely commented in the conclusive chapters. Interviewees provided coherent answers that we grouped in four main clusters and analyzed: structured use of Web analytics, project phases in marketing campaigns, use of Web analytics in the planning phase of a project and contextualization.

Results reveal interesting implications both at a managerial level and for future academic research. Indeed, a new model that connects a structured use of Web analytics with the planning phase of a project is presented, including the role of historical data. Suggestions are provided to managers in terms of possible investments, while in case of academics we recommended other ways to test the validity of the study.

*Keywords:* Project Management, Project Planning, Digital Marketing Campaigns, Web Analytics.
We would like to thank our supervisor Ulrica Nylén for her valuable guidance throughout the research process. Her support and continuous encouragement along the way has been highly appreciated.

Besides, we want to express our sincere gratitude to the participants of the study. Without their cooperation, completion would not have been possible.

Finally, to all professors and administrators of MSPME edition 10, thank you for the support and the opportunity you offered us.

December 28th, 2017

Umeå School of Business and Economics

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1. INTRODUCTION

This introductory chapter clarifies the reasons to undertake the research, explaining the topic selection, the problem background and clarifying the gap located. After this, the research question is posed along with the research purpose. Finally, the delimitations of the study are clearly stated and a structure of the chapters is presented.

1.1 Topic Selection

The decision of developing a research work related to the area of Project Management was natural, given the knowledge developed thanks to the Master program in Strategic Project Management. In addition to that, both the writers, aim at attaining managerial positions within this sector: for this reason they decided to deepen their knowledge of the field, relating it to the trending topic of digitalization.

While studying their Master course in the broad field of Project Management, they noted how it was often pointed out the criticality of the planning phase of a project, which is considered one of the main contributors to project success (Zwikael et al., 2014, p. 435).

On the other hand, both the authors have experience in the field of Digital Marketing, reason why the type of projects on which the data collection is going to be performed are precisely Digital Marketing campaigns. As it is going to be clarified in this chapter, the subject of Project Management - regarding the specific area of project planning - will be observed in relation with the use of Web analytics data. The main justifications to proceed in this direction is based on academic works from the last decade. That value entailed by those data could be exploited with data mining practices, becoming a key point in Project Management (Ji, 2009, p. 192). Among the main opportunities offered by data mining, the possibility to promptly react to environments that are changing on a daily basis (Ji, 2009, p. 192).

Also, the fact of focusing on projects in Digital Marketing, was fostered by trends recently measured. The weekly share of time spent on digital screens has grown by 85% from 2010 to 2016 (Edelman Digital, 2017, p. 5). Year 2017 was even predicted to mark a major milestone for digital advertising, as the historical moment in which the budget allocated for digital advertising would have surpassed the one allocated for TV (Edelman Digital, 2017, p. 16).

Finally, McKinsey & Company (2017) explains how looking at the right data in decision making processes would generate a virtuous circle that connects user needs with organizational culture.

1.2 Problem Background

While traditional literature in the field of Project Management places a good emphasis on the crucial implications of an accurate project planning, in parallel scholars have been
investigating around a fundamental dilemma. In fact, during the planning phase it is often observed a reverse correlation between the importance of the decision and the availability of information (Dawson & Dawson, 1998, p. 300). The usual approach undertaken to face such a dilemma, is to increase available knowledge about the project, postponing irreversible decisions with the aim of gathering more information (Yang et al., 2011, p. 2129). The approach just mentioned fosters flexibility, as a key to safeguard projects from the effects of uncertainty. Terms like adaptability and robustness are often used by scholars as synonyms, to describe the process of delaying irreversible decisions, until more information will be available (Olsson & Magnussen, 2007, p. 25).

As of 2012, the Standish Group (p. 3) observed that only 37% of [IT] projects are implemented within the budget, resources, duration and scope, planned in the beginning. A large number of projects are struggling (42%), degenerating in a tremendous amount of failures (21%). The most prominent cause is located in the uncertainty faced at the initiation and planning stages of the project lifecycle, when project managers are required to calculate budget, schedule and scope with the support of a limited set of tools mostly based on estimation by analogy or bottom-up/ top-down techniques (De Meyer et al., 2002, p. 62).

The major difficulty derives from the fact that no arrival of information is included in traditional project planning. The inclusion of new data would not be a matter of re-planning, but more precisely of proactive planning (Gao et al., 2014, p. 1). Among the benefits associated with proactive scheduling, one of the most prominent is the possibility to include both arrival of information and future decisions that might unfold. The main impact is that, by enhancing flexibility, future scenarios could become easier to handle, because of the reduced level of uncertainty. So far, academic literature discussed just few proactive approaches, that could promote the impact on arrival of information on future decisions (Vaagen, Kaut and Wallace, 2017, p.1098). The meaning of proactivity is related to the ability of understanding which items or services will become popular in rapidly changing environments and quickly respond to it (Vaagen, Wallace and Kaut, 2011, p. 389).

An effective and responsive answer to the matter of capturing the value of arrival information could be given by exploiting data mining practices. The subject is commonly defined as the process of recognizing meaningful patterns of knowledge deriving from various data sources, e.g., databases, texts, images, the Web, etc. Characteristics of the patterns are validity, usefulness, and legibility (Liu, 2011, p. 6). The term data mining refers to a broad range of data sources and techniques to analyze them (Berry and Linoff, 2004, p. 7). In recent years data mining has found multiple applications in the business field, ranging from marketing, quality management and risk management (Nakhaeizadeh, 1998, p. 479), but also banking, telecommunications, insurance, retailing and medicine and the purposes span from fraud detection, to credit scoring, customer retention, product placement and drug testing (Berry and Linoff, 2004, p. 7).
The focus of this research work will be established on projects in the Digital Marketing field and on a certain type of data, deriving from the behaviour of users on the Web, enabling data mining practices, that are better defined as Web Mining (Liu, 2011, p. 7).

These data are called Web analytics (WA) and are described as “the measurement, collection and reporting of Internet data for the purposes of understanding and optimizing Web usage” (Web Analytics Association, 2008, p. 3). More in depth, Web analytics enable the process of trace and read virtual traffic, by learning how the user interacts with a site (Farney and McHale, 2013, p. 3). The definition of Web analytics is often confused with the tools available to convert row data in reports and analysis and to perform Web mining practices. Some of these are Google Analytics, Google Search Console and SemRush, to name a few and they all have different purposes (Farney and McHale, 2013, p. 4).

As previously mentioned, there are various ways in which Web users can be digitally met, such as a well-finished Website, designed with a focus on search engine optimization (SEO) and content, social media, e-mail and e-commerce (Nikunen, Saarela, Oikarinen, Muhos & Isohella, 2017, p. 171). Never before it was possible to test and learn so much about the customer, while building the relationship (Nikunen, Saarela, Oikarinen, Muhos & Isohella, 2017, p. 171). The means described, are able to daily link user characteristics, with their funnel, capturing the type of file accessed, the time and date at which it occurred, and the characteristics of the machine from which the file was accessed (Farney and McHale, 2013, p. 4).
If on the one hand it is pivotal to specify which area of the wide topic of data mining we will look at, on the other hand it is important to specify on which kind of projects we will focus, in order to fulfill the purpose of this research work. Digital Marketing campaigns are indeed the type of projects we will look at in the development of this research work. Moreover, even though a wide range of projects in the digital sector could be studied, we decided to focus on Digital Marketing campaigns because of how digitization is re-shaping the traditional ways in which consumers and businesses are interacting with each other (Taiminen & Karjaluoto, 2015, p. 633). Taiminen & Karjaluoto (2015, p. 633) further explain how “digitization, and especially social media, have been claimed to transform consumer behaviour, with important consequences for firms, products and brands. Consumers are increasingly spending their time online”.

Digital Marketing is nowadays considered as an adaptive process of ongoing user interaction and understanding, that ranges from customer engagement, to promotion, retention, test and last but not least, value creation (Kannan & Li, 2016, p.p. 22-23). In recent years, the discipline of marketing has seen an epochal change, due to the availability of more tools, applications and data than ever before. As explained before, thanks to the support of these, digital marketers are able to gather feedbacks from users on a daily basis (O’Connor, 2015, p. 214). Despite this, studies noticed once more an under use of potential advantages related to the exploitation of such data, is currently carried out in an effective manner only by the 34% of organizations (O’Connor, 2015, p. 214).

1.3 Gap Spotting

Uncertainty is a pivotal factor to deal with, while planning a project, however the recent availability of heterogeneous raw data, available while conducting a Digital Marketing campaign, creates the perfect environment to perform Web mining techniques. As just mentioned, Web mining is the process of extracting information from raw data, in order to observe meaningful patterns (Markov & Larose, 2007, p. 142). By considering arrival information, these pattern are expected to impact on uncertainty, typical of the initial phase of a project and reduce it (Balsera et al., 2012, p. 50).

The Web allows an unprecedented access to user information and offers to companies the value associated to the exploitation of this large amount of data (O’Connor, 2015, p. 214). As assessed from previous academic literature, Web mining could be a solution to positively impact on the uncertainty typical of the planning phase of a project, but also to provide inputs to influence potential improvement of the organization (Gao et al., 2014, p. 1). In fact, data could be used for immediate analysis and correction, but also to improve global performances of the rest of projects in which the organization is involved (Liu, 2011, p.6).

Existing work of Markov & Larose (2007, p. 191) investigates the issue of understanding Web mining data, and so converting available data into valuable information thanks to predictive and descriptive analytics techniques. In real-life application scenarios,
scientists and analysts first need to understand data repertories, in order of being capable of understanding the type of information available and then to capture and model their intrinsic features such as: heterogeneity, high-dimensionality, uncertainty, vagueness and so forth (Markov & Larose, 2007, p. 192).

As specified above, because of the type of project we will study, that are Digital Marketing campaigns, the focus is going to be established on a peculiar type of data. Web analytics (WA), are defined as “the measurement, collection and reporting of Internet data for the purposes of understanding and optimizing Web usage” (Web Analytics Association, 2008, p. 3).

As stated in the previous section, Web analytics are a peculiar type of data, largely available nowadays because of the increasing digital-based approach to sales. For digital-based sales, the figure touched the 40% of the total in 2017 and is projected to reach 50% by 2021 (Media Company Magna & IPG Mediabrands, 2016, p. 2). In the Internet era, it is pivotal to understand how to take advantage of this information, in order to enable data mining practices and uncover the value hidden in analytics, by discovering patterns and distinguish useful arrival information from useless (Vaagen, Kaut and Wallace, 2017, p. 1098, Chaffey & Patron, 2012, p. 30).

A good Web analytics solution is observed to have practical implications in terms of cost effectiveness, but also regarding stakeholders involvement, showing how users value information available compared to others players in the market (Loftus, 2012, p. 46). An effective use of WA will ultimately serve two main purposes: provide the management with responsive intelligence on how to improve the content of the campaign and later on, test and determine the level of effectiveness of the improvements, generating a virtuous circle (Loftus, 2012, p. 46). Despite the wide availability of services meant to exploit the information entailed in Web analytics, it seems that the advantages deriving from a proactive use of these are not fully exploited, with a consequent impact on the result of marketing campaigns (Chaffey & Patron, 2012, p. 31). More specifically, tools to analyze WA are adopted by companies, while information filtered by these are often underused also, it does not exist an exact design of how an effective system should look alike, matter that still widely depends on the organization in question (Järvinen & Karjaluoto, 2015, p. 117). However, evidence deriving from previous academic research suggests that, in order to make a successful use of WA, organizations should move in the direction of a structured system, that is expected to enhance project planning and to reduce uncertainty (Järvinen & Karjaluoto, 2015, p. 119, Gao et al., 2014, p. 1)

In conclusion, it was assessed by previous academic researchers how Web analytics are often not fully exploited and employed. The purpose of the current work will indeed focused on understanding how Web analytics could enhance Project Management performances, reducing the uncertainty typical of the planning phase. Moreover, the authors of this paper intend to respond to the need of a more structured use of Web analytics, in order to standardize their use and to respond to the gap previously located.
1.4 Research Question and Purpose
Summarizing the argument found in the previous paragraph and coherently with what assessed in the research gap, the following research question aims to be answered:

Project planning in Digital Marketing campaigns: which is the role of a structured use of Web analytics?

This single research question covers different aspects within our research purpose. Firstly, it suddenly clarifies the type of project we will look at and the phase of the project we are interested in. Then it sets the focus on a peculiar aspect of Web mining practices, that are data deriving from Web usage, namely Web analytics.

The purpose of this study is to further investigate the gap located by previous academic researchers that point out the need to move from ad-hoc practices, in favor of a more structured approach, aiming to distinguish meaningful data from others. In doing so the link between two major research areas will be exploited, connecting research on project planning with Web mining, especially looking at Web analytics data: this combination was rarely investigated before.

To wrap up, a structured use of Web analytics will be observed in a project context, with the aim of understanding its impact on the planning phase. About this, the research question entails the purposes of:

- Assess the benefits of a structured approach to Web analytics in the planning phase of a project;
- Propose a model to approach Web analytics in the planning phase of a project, responding to the need of a structured approach.

As the research approach is of exploratory nature, the authors will combine existing theory with research findings, aiming to contribute at enhancing the planning phase of a Digital Marketing campaign project, thanks to a structured approach to Web analytics. Having as an objective of the research the design of a model, the authors are aware that such an approach will entail the generalization of their findings. For this reason, they will observe Web analytics in the planning phase of a project at a cross-national level, looking for recurring patterns.

1.5 Delimitations
In order to conduct a solid study, it is fundamental to set its delimitations. As explained by Nenty (2009, p. 24) the concept of delimitations consists of the boundaries of the work established by the researchers. A practical implication of it is to be able to achieve the planned purpose with the given amount of time and resources (Price & Murnan, 2004, p. 66).

Mainly due to practical reasons, related to time constraints and data availability, several delimitation deserve to be set since the very beginning of the thesis work.
Focusing on projects implemented within the field of Digital Marketing has a huge implication in terms of data collected. In fact, because marketers see digital campaigns as a way to engage customers for different purposes ranging from understanding their needs, to empower engagement and build long lasting relationships (Constantinides, Schepers & Vries, 2015, p. 180), this thesis focuses on a specific application of Web analytics. More specifically, this last one is a business to consumer application of information deriving from Web analytics.

1.6 Chapter Guide
With the intent to facilitate the reader through this research work and with the aim of providing a structured and logical approach to the topic of investigation, the thesis is divided into six chapters, as presented below:

*Chapter 1*: Introduction. This chapter depicts the research background, the needs for studies, such as the research purpose and question and the delimitations that characterize the research work. Finally, a brief overview of the thesis structure is given in this section.

*Chapter 2*: Theory. The theories on the subjects of project planning and data mining are exposed, the two subjects are bridged, leading to the research gap. Sources of this chapter are both reviewed academic and practical journals as well as books and online sources.

*Chapter 3*: Research Methodology. The philosophical standpoint that drives the research work is presented along with the research process, approach and strategy. Source criticism and evaluation are part of this chapter.

*Chapter 4*: Practical Method. This chapter provides an explanation on why a certain data collection method is chosen and describes. More specifically it describes how the sampling phase is carried out and why semi-structured interview are chosen to gather information. Quality criteria are listed before presenting the final version of the interview guide.

*Chapter 5*: Analysis. In this chapter the data collected with the interviews are presented. The questions are grouped in four clusters and analyzed.

*Chapter 6*: Discussion and conclusion. Key findings are related to the main purpose, answering to the research question. Also, suggestions for future research are presented.
2. THEORY

This chapter consists of an overview of the various topics that are necessary to build the understanding around the research purpose. Firstly, the subject of Project Management is nailed down, particularly looking at the planning phase of a project. Then data mining is introduced, along with the elements that typify Digital Marketing campaigns projects, allowing the reader to understand the model inserted at the end of the chapter.

2.1 Theoretical Framework

The purpose of the framework is to review the existing literature and to build the main research anchors around which this research work is developed. For this reason, an introduction to the subject of Project Management is given, before focusing on the planning phase. After assessing that the availability of data is the most interesting for the authors, literature review is performed regarding data mining. Consequently, Web analytics are introduced, to explain the kind of data this research will look at. Finally, looking at existing research in Digital Marketing field will allow the authors to give a theoretical justification to the peculiar type of projects they will observe and to clarify the role of the components depicted in the model proposed in the last section of this chapter.

Figure 2. Conceptual Model.

2.1.1 Project Management

For the past sixty years, Project Management (PM) has been existing as a discipline regulated by methodologies and standards such, as PMBOK® and PRINCE2® (Padalkar

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Lester (2014, p. 7) gives the following definition of the subject, as “the planning, monitoring, and control of all aspects of a project and the motivation of all those involved in it, in order to achieve the project objectives within agreed criteria of time, cost, and performance.”

The benefits of using a Project Management approach are related to the ability to address and meet the various needs of a project. The project manager is indeed accountable for developing a plan, through which the objectives of the project work can be tracked and measured: in order to do so, decisions have to be based on accurate and up to date information (Burke, 2003, p. 10). This information are crucial in the planning phase of the project, because they will help to determine the scope of the work and to measure its progression (Burke, 2003, p. 10). A lack of care in this phase could lead to inaccurate managerial decisions, increasing the probability of mistakes, rework and overrun (Burke, 2003, p. 10).

Projects can be very different in nature and scope, dealing with different kinds of uncertainty, complexity, requirements and moving at a different pace. Indeed, the project work, just like any action, is contextual to the nature of the different scenarios: guidelines and manuals help to organize the flow at to face complexity. About this, the traditional definition of the PMI (2013, p. 1), describes a project as a “temporary endeavor undertaken to create a unique product, service, or result”. This unique outcome, that might be either tangible or intangible, and the repetition of certain elements along the process of completion does not change the fundamental, unique nature of the project work (PMI, 2013, p. 1).

Based on the definition of project, we are able to legitimize the peculiar type of project we will look at, to fulfill the purpose of this research, which are Digital Marketing campaigns.

About this last point, a PMI sponsored study found that value achievement, in projects, derives from five major sources: satisfaction (view of the user), alignment (organizational perspective), process outcomes (process efficiency), business outcomes (profitability) and Return on Investment (cost-benefit of the project) (Thomas & Mullaly, 2008, p. 118). Focusing on projects in the marketing field will make us focus on the first dimension, which is the value brought by the view of the user, in relation with the cost-benefit parameter.

Success, which is the ultimate objective of the project manager, is a concept that has been traditionally associated with the ability to deliver the scope of the project according to three main parameters: time, cost, and quality (Caccamese & Bragantini, 2012, internet). The so-called “iron triangle” is a very popular tool, pointing out that a successful management of the should happen by reaching a reasonable trade-off among various concurrent, heterogeneous, and visible constraints (Caccamese & Bragantini, 2012, internet).
The Project Management Triangle is a model that has been used at least since the 1950s and that describes the major constraints within a project (PMI, 2013, p. 8). The main assumptions are that, by working underneath the constraints of budget, deadlines and with a certain scope, the project manager has to trade between the corners of the triangle. Unexpected changes in one of those constraints, will require to compensate, in order not to corrode the planned quality of the outcome (PMI, 2013, p. 8).

More recently it has been observed how project success has different meanings to different stakeholders. In fact, a project might seem successful to the eyes of the client, while it may have been very hard to complete for the Project Management team or difficult to use for the end user (Toor & Ogunlana, 2010, p. 228). More specifically, stakeholders have distinct interests that are reflected in different expectations around the project and therefore in varied perception of the concept of success. (Toor & Ogunlana, 2010, p. 228).

What makes a project successful can be seen as a multi-dimensional concept that combines the level of technology involved and the relative importance of the project. This last one term describes four layers on entities: 1) project efficiency (iron triangle), 2) impact on the customer, 3) business success and 4) preparation of the future (Shenhar, Dvir, Levy & Maltz, 2002, p.p. 715-718). The first dimension focuses on meeting time, cost and scope, the second on the value perceived by the customer, the third on the value of the project within the organization and finally, on how the project helped the company to move towards the future (Shenhar, Dvir, Levy & Maltz, 2002, p.p. 715-718). Mentioning these four dimensions is interesting in a dissertation that focuses on Web analytics, that are a peculiar type of data, deriving from user passage on the Web.

Over the years, it has been observed how to successfully manage a project a mix of both hard and soft factors is required at the same time (Gustavsson & Hallin, 2013, p. 568). Whether hard skills include a set of various activities and tools, such as business cases, cost and change management, project life cycles, work breakdown structures, network analysis, earned value analysis, risk management, quality management, procurement and so forth, the soft side considers different aspects (Lester, 2014, p. 7). These range from health and safety procedures to stakeholders analysis, team building activities, leadership, communication style, information and knowledge management, negotiation, conflict management, dispute resolutions, value management, marketing and sales (Lester, 2014, p. 7).

The ability to take advantage of of Web analytics is certainly related to the hard set of skills of the project manager, that has to be able to read their meaning and to choose meaningful information to fulfill the purpose of the project. Also, the selection of the appropriate Web analytics tools and possibly the statistical applications of these data will be discussed further.

2.1.2 Project Planning

As stated on from the PMI (2013, p. 1), a project includes the following four phases: initiation, planning, execution and closure.
Because the ultimate purpose in a project is to generate a unique product, service, or result (PMI, 2013, p. 1) the planning phase is of major importance. About this, the planning phase entails a series of processes, that are subjected to frequent interactions among themselves. These interactions may create interference that frequently impacts on the scope of the project itself, determining changes in cost and quality (Duncan, 1993, p.p. 8-9).

Some of the activities and processes, traditionally associated with the planning phase are the following: scope definition, task definition and sequencing, duration estimating, schedule development, cost estimation and budgeting, plan integration (Duncan, 1993, p.p. 8-9).

According to Laufer (1991, p.p. 39-40) planning is a form of decision making that can be divided into four major stages:

*Project objectives - pre-initiation planning.* In the very beginning the need/opportunity/idea/problem/ is examined and followed by a plan that entails economical, technical, and environmental feasibility studies. Objectives are set and formal authorization are generally requested.

*Conceptual planning - re-design planning.* The initial plan is confronted and refined according to additional sources of information. A more precise definition of the project, in particular regarding technical requirements and functional criteria, is drawn. At this point the project manager generally defines budget and schedule.

*Design engineering - pre-execution planning.* Includes detailed engineering of the plans, initial specification are updated and expanded, if required procurement activities are already carried out.

*Execution - detailed construction planning.* This phase is juxtaposed with the actual execution of the project and entails a continuous re-planning of changing objectives and requirements.

The planning phase is often challenged by changes, that require continuous adjustment, sometimes even on a daily basis (Vaagen & Aas, 2014, p. 515). Deviations from the original plan might affect the reliability of decision making processes and require the project manager to possess specific competences, skills and tools to manage the disturbances and optimize the output (Vaagen & Aas, 2014, p. 515).

The unfortunate case of projects delivered behind the planned time, cost and scope in fact can be attributed not only to the wrong usage of principles and methods, but also because of an inadequate Project Management style (Chatzoglou & Macaulay, 1997, p. 39). In order to increase productivity when cost and time are given, other resources, both human and technical, and Project Management techniques must be improved at the same pace (Chatzoglou & Macaulay, 1997, p. 48). Although behavioural factors can be difficult to measure, it is recognized how the final outcome is highly influenced also by these (Chatzoglou & Macaulay, 1997, p. 48).
Decision made in the planning phase will determine the quality of the final outcome, in a way that can either be good (desirable) or bad (undesirable) and uncertainty derives from the impossibility to control external events (Ortiz de Orue et al., 2009, p. 81). Therefore, a great part of the job of the planner is to increase the probability of good outcomes by reducing uncertainty. This can happen by exploiting the value of the information available at the time the decision is made. Whether there is uncertainty, the logic of the decision process should include aim to include any possible source of information (Ortiz de Orue et al., 2009, p. 81).

As we will further clarify in this chapter, the case of projects in the digital sector entails specific challenges compared to the ones traditionally reported in Project Management literature. Cervone (2012, p. 75) observes how in the case of projects in this field, success can be determined as early as 10 percent of the way through a project, therefore it is not surprising that a well-built plan is regarded as a critical element (Cervone, 2012, p.75). Project plan is expressed in documents that shape the scope and the purpose of the project, the static nature of those has, however, to be balanced with an holistic understanding of the specific features of the project. For this reason, Cervone (2012, p. 75) describes project planning like a regional map rather than the definition of a specific route from one point to another.

Because planning requires the project manager to act as a forward thinker all the time, a set of best practices and tools are available to assist him in this process (Burke, 2003, p. 94).

The most popular ones are listed below:

Table 1: Project planning tools

<table>
<thead>
<tr>
<th>Project Charter</th>
<th>The project charter acknowledges the start of the project and should outline the purpose of the project, the major changes and key objectives, along with the means of achieving them.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feasibility Study</td>
<td>The feasibility study develops the project charter and project brief into a project proposal. It suggests a methodical approach for identifying the stakeholders and assessing their needs. It reviews closeout reports, together with investigating other options and alternatives to support the project's business viability.</td>
</tr>
<tr>
<td>Scope Management</td>
<td>The scope of work defines what the project includes and just as importantly, what is not included in order to meet the stated objectives. On an engineering project, for example, the scope of work would be developed into a list of drawings, bill of materials and specifications. Scope management also contains a closeout report to document achievements and opportunity to learn from mistakes.</td>
</tr>
<tr>
<td>Build Method</td>
<td>The build method outlines how the product will be congregated or implemented, for example, it considers the position of the crane and storage on a high-rise building, or the methods of communication and data storage on an IT project.</td>
</tr>
<tr>
<td>Execution Strategy</td>
<td>The execution strategy considers the 'buy or make' decision. If the product is to be purchased this is a procurement issue, but if the product is to be made in-house this is a resource issue where the execution strategy should identify the equipment and labour pool.</td>
</tr>
<tr>
<td>Work Breakdown Structure (WBS)</td>
<td>The WBS is one of the key scope management tools used to subdivide the scope of work (as outlined by the build method and the execution strategy), into manageable work segment that can be estimated, planned, assigned and controlled.</td>
</tr>
<tr>
<td>Organisation Breakdown Structure (OBS)</td>
<td>The OBS or responsibility matrix is setup to manage the project as outlined in the execution strategy. The OBS connects the WBS work packages to the company, department or person who is responsible for performing the work. The OBS can be further developed to included assigned responsibility level of authority and lines of communication. project manager and project team usually coordinate the projects that is specially setup for the project and disbanded on completion. The integration of the project team and company departments is often through a matrix structure where the project team overlays the company's hierarchical structure. Burke, 2003, p. 95</td>
</tr>
</tbody>
</table>

A number of software tools exist to support project planners in this critical phase, *inter alia* assisting them in the implementation of standard scheduling techniques, such as PERT (Program Evaluation and Review Technique), the critical path method (CPM) and Gantt charts (Dawson & Dawson, 1998, p. 299). These techniques require the planner to define the order of the activities and to estimate their likely duration (Dawson & Dawson, 1998, p. 299).

The tools listed so far have to be described, given the prominence they have within the Project Management field, however more recently scholars noted how the vast majority of the project planning tools in the past were based on the assumption that information were complete information and a static, that is rarely the case because during the various disruptions that may occur (Van de Vonder et al., 2007, p.195). This is the case of the type of projects we will observe in this research work: Digital Marketing campaigns are indeed based on a huge amount on data, namely Web analytics that are generated on a daily basis. In order to incorporate this information, project managers can adopt two main approaches, defined as proactive and reactive. The aim of a proactive scheduling is to generate predictive baseline schedules that can absorb anticipated disruptions, while a reactive procedure will be used when a shift from the original plan occurs in the project (Van de Vonder et al., 2007, p. 195-196).

As new information arrive in a project, original plans are typically revised, the process of updating entails time and resources and it demonstrates that uncertainty is characterizing of the planning phase (Jørgensen & Wallace, 2000, p. 243).

The main reason to adopt the approaches just suggested on project planning is to enhance flexibility, with the aim of simplifying the way in which future can be handled when deviations occur (Vaagen et al., 2017, p. 1099). To date, practitioners recognize the shortcomings of classical project scheduling, that are often replaced by team-based
judgemental decision processes (Vaagen et al., 2017, p. 1099). The difficulty entailed in this last one is to generate behavioral challenges, because of the lack of guidelines and model to support decision making processes (Vaagen et al., 2017, p. 1099).

When looking at projects in the digital field, like in our case, activities are generally operational in nature, producing tangible results for users, improving their online experience and the process of adapting the initial plan can happen on a daily basis (Currier et al., 2017, p. 275).

Latest studies have been exploring the links between traditional planning algorithms - so quantitative methods - for project planning and qualitative features: a combination of the two could minimize the limitations entailed in qualitative approaches by integrating quantitative methodologies (Rotimi & Ramanayaka, 2015, p. 301).

The new trend shows indeed that the focus is shifting away from merely technical and operational tasks, to entail a greater interest towards the interactions among the various elements, actors and activities within the project (Sanderson, 2012, p. 432). About this, projects are nowadays described as social complex systems formed out of various specifications, the behaviour of which is emergent (Klein, Biesenthal & Erlend Dehlin, 2015, p. 268).

Adding to what just stated, project planning can be approached from several perspectives. According to Bryson & Bromiley (1993, p. 320) in fact a contingent approach to planning should consider four important elements: the context within the project is implemented, the process of planning itself, the impact of the change, and the interconnections among these previous three. Furthermore, planning can be seen an entire problem-solving sequence (Bryson & Bromiley, 1993, p.320).

The aspect of the context seems to be particularly challenging, whereby initial plans change according to emergent interests, purposes, constraints and ambitions (Giezen, 2012, p. 781), in the case of the projects contemplated in our research it might be interesting to consider the role that incoming social trends have on the outcome of the Digital Marketing campaign.

Although an accurate planning is not a guarantee of project success, on the other hand a poor planning will lead the project to fail. In fact, even though many projects are executed according to the dimensions of time, cost and scope, depicted on the iron triangle, failure can be related to other factors, such as the perception of users and prospective customers (Dvira, Raz & Shenhar, 2002, p. 90). The main conclusion of Dvira et al. (2002, p. 95) is that very little effort should be spared in the planning phase of the project, if the feedback of the end-user is not adequately taken into account. This last point is fundamental in our research, because of the data that we will introduce later on, that actually derive from user behaviour.

The crucial role of the user on project planning and therefore, success, has been researched for long time, especially since the rise of Information System technologies (Burbridge & Friedman, 1988, p. 71): we will study this matter by understanding how Web analytics can enhance project planning.

Furthermore, various researchers have demonstrated how not looking at the behaviour of
user has negative implications on the final outcome (Jiang, Chen & Klein, 2002, p. 20). The following pivotal task is to understand needs and requirements and convert them in project deliverables while planning (Jiang, Chen & Klein, 2002, p. 20).

The matter of gaining a better understanding of user preferences can be related to ascendant usage of the Web, that enables an interest-based understanding of users (Mahmud, 2012, p. 11). This last empowers the creation of better models that are able to connect their behaviour with demographic characteristics, studying changes in user interests with respect to time and location or mining interest data to build broadly useful resources (Mahmud, 2012, p. 11), which is particularly interesting in the context of Digital Marketing campaigns projects.

2.1.3 Data Mining
Data mining is generally defined as the process of discovering meaningful patterns of knowledge from large amounts of unstructured and semi-structured data: sources of these information are databases, data warehouses, the Web, other information repositories, such as data actively streamed into the system (Liu, 2011, p. 6). The explosive growth in the amount of available data is the result of the computerization of our society and the fast development of powerful data collection and storage tools. The purposes of this analysis can be classified in two major categories, namely predictive and descriptive techniques, meaning that the applications of data mining can helpful to predict trends or to assess an unbiased state of art (Kaur, 2017, p. 93-94).

Recently, data mining practices have been observing an increasing popularity (Kaur, 2017, p. 93). The subject has useful applications in different fields and answers to diverse purposes, becoming part of day-to-day operations of knowledge management, particularly whereas uncertainty plays a crucial role.

Various fields are benefiting of data mining techniques, mostly in term of cost reduction and sales increase. This source of competitive advantage can be applied to banking, telecommunications, insurance, retailing and medicine and the purposes span from fraud detection, to credit scoring, customer retention, product placement and drug testing (Berry and Linoff, 2004, p. 7). Focusing on businesses, datasets are generate on a daily basis worldwide, from operations including sales transactions, stock trading records, product descriptions, sales promotions, company profiles and performance, and customer feedback (Han, Kamber & Pei, 2012, p. 4).

According to Radhakrishnan et al. (2013, p. 41) data mining can provide solutions to many problems of intellectual, economic, and business interest, including: classification, estimation, prediction, affinity grouping, clustering and finally profiling. All the previous six are of major interest in marketing, where data mining is applied by first defining what it means to be considered a good prospect and then finding rules that allow people with those characteristics to be targeted (Radhakrishnan et al, 2013, p. 41).

The job of the project manager that, as explained in an earlier section, entails difficulties related to an accurate planning, deduce enormous advantages from data mining practices.
The classical set of tools is indeed enlarged thanks to those techniques. During the development of projects, very different sources of data can provide information about what is happening, including delays and overloads. These information could be used in the context of an immediate analysis and correction, and therefore on planning, but also stored and employed in future projects (Balsera et al., 2012, p. 50).

Nevertheless, the fields cited were enhanced in term of reducing uncertainty and biases in decision-making processes, basing on the automatization efficient and reliable information. (Tremblay, Dutta & VanderMeer, 2010, p. 2).

The evolution of the World Wide Web has brought an enormous and growing amounts of data and information. It is indeed accessible 24/7, at a low cost and with unlimited access possibility (Liu, 2011, p. 7). Also for this reason, when looking at data deriving from this peculiar source, we can refer to data mining practices as Web mining. In this case the aim of the miner is to reveal patterns and classify Web pages, uncovering dynamics that derive from the association of different variables, including Web pages, users, communities, and Web-based activities (Liu, 2011, p. 7). Because of the aim of the analysis Web mining could be split into three main sub-categories: Web structure mining, Web content mining and Web usage mining (Liu, 2011, p. 7). This last point means that the information that can be gathered from Web mining practices span in different direction, depicting the reaction of the user to the structure of the displayed information, to its content, providing the miner a clarification on its usage.

The Web is able to reflect user interests from multiple perspectives in a distributed environment. In order to be used in Web mining practices they need to be integrated according to the different scenario and sources from which they are retrieved, indeed different scenarios have different levels of importance (Mahmud, 2012, p. 15). Hence, ranking strategies among different data sources is a priority that is related to the possibility of producing various subsets (Mahmud, 2012, p. 15), with the aim of identifying relationships and interdependencies that affect marketing-related problems or opportunities (Thelen, 2004, p. 26). In order to benefit of the potential of data/Web mining techniques, it is necessary be aware of the quality of the data and of the ultimate purpose of the analysis. It is well known, in fact, that a major obstacle to a successful application of data mining techniques is precisely the approach to the dataset and to its quality (Davidson & Tayi, 2009, p. 764). Most mining processes derive from the assumption that data are complete, error free and up-to-date, while this is rarely the case (Davidson & Tayi, 2009, p. 764). This is a key point that the authors need to underline, prior to introduce the type of data they will focus on during the development of this research work. Also, whereby the aim of the research is to assess the benefit of a structured approach to Web analytics, it is fundamental to select and examine meaningful data.

Finally, it is important to observe that organizational data is a critical resource that empowers business processes and managerial decision making, aspect that we will research in the context of Digital Marketing campaigns. By taking advantage of information technology, organizations are able to learn about themselves more than ever
Before. Because of the nature of data and due to the purpose by which data is employed, there is a variety of different and complex ways to generate information that serves as an input (Watts, Shankaranarayanan & Even, 2009, p. 202). As the volume of data increases, so does the complexity of managing it and the risk of poor data quality or inaccurate use (Watts, Shankaranarayanan & Even, 2009, p. 202).

2.1.4 Web Analytics
Web analytics are what already defined in the first chapter as the collection, the measurement and the report of Internet data having the purpose of understanding and optimizing Web usage (Web Analytics Association, 2008, p. 3). Since the advent of Internet, numerous multimedia features changed the way in which organizations interact with their customers, suppliers, competitors, but also employees.

The use of Web analytics to positively impact on performances traces back to the 1990s when the first Web analytics systems were created (Chaffey & Patron, 2012, p. 30). To understand the contribution of Web analytics, it is important to clarify the meaning and scope of Web analytics within a company and to show how it contributes to its commercial success (Chaffey & Patron, 2012, p. 35). Web analytics make possible the process of tracing and reading online traffic, by depicting how the user interacts with a site (Farney and McHale, 2013, p. 3).

Previous studies argue indeed that a proper employment of Web analytics needs an accurate definition of the so-called Key performance Indicators (KPIs) or Web metrics (Bekavac & Garbin Praničević, 2015, p. 374). The value carried by Web analytics is, in fact, generally measured through KPIs, among which are relevant for Digital Marketing: funnel analysis, mining internal search data, and integrating user testing and analytics (Chaffey & Patron, 2012, p. 31).

When looking at a project in the Digital Marketing field, having available a certain range of Web analytics will require the project manager to select the appropriate KPIs in order to track the progression of the objectives selected in the planning phase (Järvinen & Karjaluoto, 2015, p. 118). The process by which Web analytics are refined, managed and employed (Järvinen & Karjaluoto, 2015, p. 118) is indeed fundamental to set up and monitor the Digital Marketing campaign.

During the planning phase, when defining the goal of the project and therefore its KPIs, it is pivotal to bear in mind the raison d’être and the context in which it is happening: by having this structured approach expenses can be measured against returns (Waisberg & Kaushik, 2009, p. 2). Objectives are critical input to KPI definition: it is commonly agreed within the Web analytics community that is not worth to collect information which is not able to generate valuable insights for the planner (Waisberg & Kaushik, 2009, p. 2).

The ultimate purpose in analyzing these data is in fact to turn them into valuable information for decision-making processes, Web analytics also provide other advantages, such as improving efficiency and cost reduction (Bekavac & Garbin Praničević, 2015, p. 375). Moreover, what is particularly interesting for the purpose of this research is their
Web analytics consist of an important step towards measurable marketing. This goes in hand with the increasing importance of the digital world, becoming more and more influential due to the growth in consumption and due to the integration of online and offline entities: because of this the proportion of marketing actions covered by WA is growing (Järvinen & Karjaluoto, 2015, p. 117). In fact, even offline marketing actions include digital elements that can be tracked by Web analytics (Järvinen & Karjaluoto, 2015, p. 117).

Fagan & Condit (2014, p. 25) explain how “Web analytics have long been used by the commercial sector for studying online user behavior and determining quickly how effective their virtual spaces are at achieving business goals”, that is the reason why project managers have to learn which KPIs are relevant in the context of their project. About this, the actual challenge is the interpretation of these indicators: as for most of quantitative information, the side effect made from human behavior is a risky factor (Fagan & Condit, 2014, p. 25). Moreover, because Web analytics are raw data, that can be used to perform more sophisticated data mining techniques it is important to state that they show what users are doing, but without revealing why, also Web analytics tools treat people in a transactional way, aggregating individuality and providing no personal information (Fagan & Condit, 2014, p. 25).

Finally, Web analytics are information that is continuously available, deriving from user passage on a Web page. For this reason, academics noted how project reports reveal inaccuracies of the planning phase that was possible to correct with Web analytics information: in some cases the correction of these even inspired new project goals (Loftus, 2012, p. 53). Not only Web analytics helped the management to understand the needs that they addressed in the redesign, showing an higher degree of success, but they also improved communication of requirements and expenses to other stakeholders (Loftus, 2012, p. 53).

2.1.5 Digital Marketing Campaigns
Although it is not fully based on knowledge deriving from Academic Journals, this section is necessary to clarify the understanding around the type of projects being investigated.

Digital Marketing campaigns are a trending type of project, due to the increase in online sales, that in 2015 accounted for 7.4% of overall retail spending in the U.S., the highest figure reached since its measurement, began in 1999: a good percentage of this sales is made through mobile devices, reaching the 27% of the total (Kannan & Li, 2017, p. 22) and promoted via Digital Marketing campaigns. Corporations have therefore noted the relevance of creating a “digital relationship” with their customers being aware that digital technologies and devices such as smartphones, the Internet of Things (IoT), Artificial
Intelligence, and deep learning are expected to bring significant changes transformations in consumers’ lives in the near future (Kannan & Li, 2017, p. 22). Not just that, the interest towards the field is further justified by new trends detection: it was observed an increasing preference of people towards digital media. While traditional media (e.g. radio, TV) lost ground by measuring a reduction in use of 2.5 hours per week, digital consumption, including mobile devices and computers, sharply increased by 6.5 hours (Schuuring et al., 2017, p. 3). Moreover, it was recently observed how in 2016 the global expenses in the Digital Marketing sector reached the peak of 40% of the budget allocated for media advertising (Schuuring et al., 2017, p. 4). For the third consecutive year, marketing budgets are measured to rise, moving from the 11% reached in 2015 to the peak of 12% of company revenue in 2016 and the trend is expected to continue for the current year (Gartner, 2016, p. 3). Survey findings explain that the willingness to invest in this function is related to the better reliability of data-driven marketing campaigns. Also, larger companies show a tendency in spending averagely more of their revenue on Digital Marketing: up to 13% for those organizations with more than $5 billion in annual revenue versus 10% at smaller companies that have $250 million to $500 million in annual revenue (Gartner, 2016, p.4).

As clarified by Schrage (2013), digital marketing campaigns can be implemented across various channels, including landing pages, emails and social media. By doing so, especially when preparing the content of a landing page, digital marketers can apply Search Engine Optimization (SEO) techniques that became popular since Google started to dominate the scene in its analogue market, aiming at making products and services as findable as possible on the web (Fishkin and Høgenhaven, 2013, p. 5). When the objective of the digital project manager is to rank in search engines, it is necessary to bear in mind that search engines are not public services: they are businesses, meant to generate money (Fishkin and Høgenhaven, 2013, p. 7). As an implication of such, the search engine is built to ensure that users will find what they are looking for. In fact, search engines put a great effort in terms of time, human capital, and budget into learning what users want when they perform a research, and on which pages do not fulfill their needs (Fishkin and Høgenhaven, 2013, p. 7). What just stated, means that the digital marketer that wants to perform SEO techniques, will have to understand how the search engine ranks the content displayed by the various sites and landing pages, passage that can be made by looking at Web analytics, as it is going to be explained in the following section.

Regarding social media campaigns and email newsletters, Savage (2013, p. 179) clarify how these two are considered as inexpensive ways to create a positive impact on the business. The reasons beyond a social media campaign can span from building the awareness around a brand or product or service, to reach out a prospective customer base and to improve the relationship with them (Savage, 2013, p. 179). Finally, behind the scenes of SEO and social marketing campaigns, skills are required in terms of “Technology” and “Analytics”, aiming at making processes and purchases more efficient (Schrage, 2013).

At this point of the study the authors do not know yet which kind of digital marketing campaign will be nailed down by the interviewees involved in the research, nevertheless
it was necessary to point out that Digital Marketing campaigns can be implemented across different channels. Also, macro data regarding the Digital Marketing sector are provided to justify the interest towards the field and to depict its magnitude. In the following section the concept of Key Performance Indicator is going to be introduced in connection to Digital Marketing campaigns, contributing to further describing the notion.

2.1.6 Key Performance Indicators in Digital Marketing Campaigns Projects
This research work focuses on the application of Web analytics in Digital Marketing campaigns projects with the purpose of understanding the benefit a structured approach to this kind of data has on its planning phase. The reason behind this section is to describe some of the concepts that the project managers, consultants and digital marketers involved being interviewed might refer to, during the data collection process. Therefore, we will explain why the definition of KPIs is important in Digital Marketing campaigns and which are the crucial ones to this kind of projects. Also, it is important to state that the KPIs presented in this chapter are based on Web analytics data.

Nearly a quarter of a century passed since commercial use of the Internet and the World Wide Web began popular, a time range in which the business landscape evolved at a fast pace (Kannan & Li, 2017, p. 22). Over the past five years, marketing as a discipline, experienced a radical change (O’Connor, 2015, p. 214). The increasing popularity of Web-based platforms, that encourage an online shifting of social behavior, has remarkably changed the nature of human activities, habits, and interactions (Tiago & Veríssimo, 2014, p. 703). Because of the availability of new tools, project managers in Digital Marketing can take advantage of the millions interactions happening on a daily basis, improving the perception that customers and prospects would establish around their products and services (O’Connor, 2015, p. 214). Digital Marketing, indeed, integrates various Web strategies, defining its objectives by taking advantage of different tools, platforms and social media (Saura, Palos-Sánchez, Cerdá Suárez, 2017, p. 2). The relevance of Digital Marketing campaigns resides in the way they are able to gather consumer insights regarding purchasing decisions by looking at Web analytics and by setting Key Performance Indicators (Saura, Palos-Sánchez, Cerdá Suárez, 2017, p. 2). Marketing accountability is essential for the organization to experience sustained organic growth (Pauwels, 2015, p. 9). In order to reach this result, some steps have to be followed in term of defining the right results, using the right metrics and finally acting on the collected insights. About point should not be how many figures can be collected, but rather how many figures are needed and in which form (Pauwels, 2015, p. 9). As stated from Parmenter (2015, p. 3) “KPIs represent a set of measures focusing on those aspects of organizational performance that are the most critical for the current and future success of the organization”. Common characteristic of these indicators, is to be the result of different actions and to provide a clear understanding to the marketer, comparing actual performances with the goals set in the planning phase of the campaign (Parmenter, 2015, p. 2).
Marketing professionals can, in fact, empower their tactics and strategies by assessing how the execution of the campaign is performing compared to the initial plan, through the right performance indicators (Saura, Palos-Sánchez, Cerdá Suárez, 2017, p. 2). In the digital environment it is important to identify which indicators will help the marketer to improve conversion rates and consequently, to increase the visibility of the campaign on the Internet (Saura, Palos-Sánchez, Cerdá Suárez, 2017, p. 2).

Below are listed and described the main KPIs, when the purpose is to evaluate the performance of a Digital Marketing campaign.

Table 2: Main KPIs in Digital Marketing campaigns

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Page Views</td>
<td>The number of times a page was viewed.</td>
</tr>
<tr>
<td>Visits/Sessions</td>
<td>Reciprocal action by an individual, with a website consisting of one or more requests for an analyst-definable unit of content (i.e. “page view”)</td>
</tr>
<tr>
<td>Unique Visitors</td>
<td>The number of individual people (filtered for spiders and robots), within a specific timeframe, with activity consisting of one or more visits to a site.</td>
</tr>
<tr>
<td>New Visitor</td>
<td>The number of unique visitors with activity including a first-visit to a site during an informing period</td>
</tr>
<tr>
<td>Return Visitor</td>
<td>The number of unique visitors with activity consisting of a visit to a site during a given period and where the unique visitor also visited the site prior to the reporting period.</td>
</tr>
<tr>
<td><strong>Entry Page</strong></td>
<td>The first page in the visit disregarding how the sessions are calculated.</td>
</tr>
<tr>
<td><strong>Landing Page</strong></td>
<td>A page aims to identify the beginning of the user experience resulting from a defined marketing effort.</td>
</tr>
<tr>
<td><strong>Exit Page</strong></td>
<td>The last page on a site accessed during a visit, conveying the end of a visit/session.</td>
</tr>
<tr>
<td><strong>Visit Duration</strong></td>
<td>The length of time in a session by calculating the last activity in the session minus the time of the first activity of the session</td>
</tr>
<tr>
<td><strong>Referrer</strong></td>
<td>The page URL that originally generated the request for the current page view or object</td>
</tr>
<tr>
<td><strong>Original Referrer</strong></td>
<td>The first referrer in a visitor's first session, whether internal, external or null.</td>
</tr>
<tr>
<td><strong>Click-through Rate/Ratio</strong></td>
<td>The number of page views in a given period divided by number of visits in the same reporting period</td>
</tr>
<tr>
<td><strong>Page Views per Visit</strong></td>
<td>Number of exits from a page divided by total number of page views of that page</td>
</tr>
<tr>
<td><strong>Page Exit Ratio</strong></td>
<td>Number of exits from a page divided by total number of page views of that page</td>
</tr>
<tr>
<td>Single-Page Visits</td>
<td>Visits that consist of one page regardless of the number of times the page was viewed.</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Single Page View Visits (Bounces)</td>
<td>Visits that consist of one page-view</td>
</tr>
<tr>
<td>Bounce Rate</td>
<td>Single page view visits divided by entry pages</td>
</tr>
<tr>
<td>Event</td>
<td>Any recorded action that has a particular date and time assigned to it by either the browser or server</td>
</tr>
<tr>
<td>Conversion</td>
<td>A visitor completing a target action.</td>
</tr>
</tbody>
</table>

(Own elaboration of: Web Analytics Association, 2007, p.p. 6-34)

At this point of the research work we have decided to introduce some KPIs, commonly adopted in Digital Marketing, because we believe that our respondents might refer to some of them. Pauwels (2015, p. 12) explains how the benefit of Web analytics “is that they do not require customers to actively answer questions as attitude surveys do”, providing the same kind of information. To sum up, by connecting valuable Web analytics with the right KPIs, the organization will be able to create a set of interconnected metrics that relate the decisions made in the planning phase with the company’s goals, including: profits, cost savings, organic growth (Pauwels, 2015, p. 14). This form of accountable marketing is necessary whether the aim is to improve data use for recurring and quantifiable decisions, and it frees up time for scanning the environment for opportunities (Pauwels, 2015, p. 14).

2.2 A general model of application of Web analytics

Regarding the matter of defining a structured approach to Web analytics, so far it exists a suggested funnel which is interesting compared to the purpose of this research. However, it does not explicitly refer to project phases, step that will be taken from the authors of this research.

According to Bekavac & Garbin Praničević (2015, p. 376) in fact, determining this funnel activities is crucial, whereby the objective is to develop a structured approach to analytics that can lead to track the success of digital improvements and to achieve a certain return on investment (ROI). In order to understand if the objectives were met, it is important to
define key performance indicators (KPIs) that will help to detect a lag in achieving goals (Fagan, 2014, p. 25). Each KPI should be able to depict the value of a specific action, according to the parameters of timelessness, simplicity, relevance and usefulness (Bekavac & Garbin Praničević, 2015, p. 376). The four criteria just listed will help the decision maker in a way in which the information should be promptly available (timelessness), simple to understand (simplicity), as well as relevant for the purpose of the analysis (relevance) and useful (usefulness) to the purpose of the project (Bekavac & Garbin Praničević, 2015, p. 376).

Waisberg & Kaushik (2009, p.1) state that the aim of Web Analytics is to improve the performances of online businesses (online marketing campaigns is the focus of this research), by understanding and enhancing the experience of users. The ultimate purpose of Web analytics is to induce a virtuous circle of improvement, that according to Waisberg & Kaushik (2009, p.1) should resemble the following structure:

![Figure 3: Approach to Web analytics](Bekavac & Garbin Praničević, 2015, p. 376, Waisberg & Kaushik, 2009, p.1)

A structured approach to Web analytics processes, according to Bekavac & Garbin Praničević (2015, p. 376) and Waisberg & Kaushik (2009, p. 1) should be developed across: objective (goal) determination, KPIs definition, data collection, data analysis and finally change implementation.

The five steps model present above is interesting for the authors of this research work, because it entails the theory presented so far. In fact, with KPIs definition and data collection we mean the use of Web analytics data, while data analysis is what we described as data mining in our literature review. So far, the model lacks of a clear connection with the subject of Project Management and especially with the planning phase. By presenting the five steps is in fact not clear which phases of the project could be empowered by this structured approach to Web analytics and how. We will therefore try to observe if a similar structure can be applied to the planning phase of a project, determining valuable improvements: the type of project we will look at are Digital Marketing campaigns.
3. RESEARCH METHODOLOGY

This chapter illustrates the philosophical standpoint of the researchers, disclosing their preconceptions, ontological and epistemological considerations. Also, the research process is described along with the research approach.

3.1 Pre-understanding and Axiology

Because of previous experiences, researchers’ might be affected by certain kind of preconceptions and assumptions. Awareness of such it is crucial to preserve the research work from any sort of risky misrepresentation (Tufford & Newman, 2010, p. 80). In order to avoid it, as suggested by Malterud (2010, p. 483), assumptions will be considered before deepening the study. Moreover, Malterud (2010, p. 483) gives a clear picture of where preconceptions might come from, deriving from “previous personal and professional experiences, pre-study beliefs about how things are and what is to be investigated, motivation and qualifications for exploration of the field, and perspectives and theoretical foundations related to education and interests”.

Similarly, axiology refers to role of the values of the authors in conducting the research work. When a positivist standpoint is taken, in fact, the research is likely to be conducted immune from values, while in the case of interpretivist viewpoint, values will shape practical methodology and findings (Saunders et al., 2016, p. 116).

About this point, this research work is developed as part of the Master program in Strategic Project Management (European) (MSPME) in which both the authors are currently enrolled. The M.Sc. is offered by a consortium of three international universities, that are: MIP Politecnico di Milano Graduate School of Business (Italy), Heriot-Watt University (UK) and Umeå University (Sweden). The course exploits the various shades of the subject of Project Management, with the aim of enhancing its best practices, ranging from small to mega-project environment and either for a profit and non-profit sector (MSPME.org, 2017).

Additionally, the authors are aware that the decision of the topic is related to their background and interests (Saunders et al., 2016, p. 107-108). In fact, both the authors have been working in marketing field, dealing with campaigns and Web analytics tools and applications. Nevertheless, they were never involved in strategic decision making at a corporate level. Previous experience of both, however, justifies the interest towards the subject and contributes to design the question posed to the interviewees. To wrap up, the transparency of the authors regarding their education, background and values is translatable in an effort to showcase axiological skills (Heron, 1996, p.11-12).

3.2 Research Philosophy

The philosophical standpoint of the authors will shape the way in which the work will be conducted, so it is pivotal to be aware of this kind of considerations in advance and state them (Saunders et al., 2016, p.p. 124). Proceeding in such a manner, is expected to impact
on the final outcome in terms of reliability and understanding of the findings (Saunders et al., 2016, p.p. 125). Considerations will be presented more in details below.

### 3.2.1 Ontology

Ontology refers to how the aims of the research are influenced by the way researchers choose to view social entities (Bryman & Bell, 2015, p. 32). It aims to understand whether these entities are objective, and so not influenced by external actors, or if they can be seen as constructions, build up from the perception of other actors and actions (Ritchie & Lewis, 2003, p. 11). The ontological standpoint will ultimately impact on the focus of the research (Saunders et al., 2016, p. 124). As mentioned above, Bryman & Bell (2015, p. 32) mainly distinguish in two ontological perspectives: objectivism and constructionism.

In the specific case of this work, because of the aim of contributing to the design of a structured use of Web analytics, the ontology beyond the work is objectivism. Web Analytics are the result of the interaction of the single user with the content of the site, the main assumption beyond the research gap is that their current use is still depending on the organization in question, while a structured use of those is expected to have a better impact on reducing the uncertainty typical of project planning (Järvinen & Karjaluoto, 2015, p.119).

More specifically, objectivism looks at social entities as something realistic, having rules and regulations that go beyond the influence of actors and moving in the direction of standardized procedures (Bryman & Bell, 2015, p.32). As an implication of such, authors believe that individual experiences of social actors is not going to impact on the pattern intrinsic to social entities (Saunders et al., 2016, p. 124). Also, a wider assumption, falls back on individuals that are born within this social order, that forces them to conform to the requirements of organizations (Bryman & Bell, 2015, p. 32).

On the other hand, constructionism would place all the emphasis on the role of social actors on the nature of social entities: this continuous interaction requires a continuous revision of previous findings and observations (Bryman & Bell, 2015, p.p. 32-33). Factors such as history, geography and culture would be the lenses through which researchers would study interactions (Saunders et al., 2016, p. 130). According to Gelo et al. (2008, p. 269), in fact, individuals are enormously affected by the happenings in the social world. To fulfill the purpose of this research, we are not interested in the role of social actors on entities.

### 3.2.2 Epistemology

Epistemology refers to the relationship between the phenomenon being studied and the researcher himself (Veal, 2011, p.30). The main distinction is usually traced between positivist and interpretivist stance, these two respectively differentiate between an objective and distant approach from a relationship in which the researchers looks at the subject in a more subjective and engaged way (Veal, 2011, p.30).
Moreover, another purpose is to understand whether or not social science can be approached in the same way as natural science (Ritchie & Lewis, 2003, p.p. 13-14).

Regarding the positivist stance, the emphasis is placed on the objectivity of data collected, that are not influenced by personal beliefs of the researcher (Krauss, 2005, p. 760), a positivist would indeed look for the applications of natural science methods on social sciences (Mohd Noor, 2008, p.1602). Adding to that, positivism entails both deduction and induction, because the data collected are expected to validate a certain assumption (deduction) and finally to contribute to draw conclusion and generalization (induction) (Bryman & Bell, 2015, p. 27).

On the other hand, while having an interpretivist stance the focus is on observing how social sciences and natural sciences should be studied in different ways (Bryman & Bell, 2015, p. 28). An interpretivist researcher would argue on how personal values and beliefs would deeply shape observations and outcomes (Howe, 1988, p. 13). As a consequence, his work would be focused on understanding how human behave, rather than explaining it (Bryman & Bell, 2015, p. 28). For this reason, generalized conclusion and statements are considered to be an excessive simplification of reality (Bryman & Bell, 2015, p. 28). Also, because of the influence of personal beliefs, the whole research process is considered to be influenced by subjective factors: from the way data are collected, to their final interpretation (Saunders et al., 2016, p. 142).

Believing that a structured approach to Web analytics can be studied and designed reveals from the beginning of the research the positivist stance of the authors, meaning that the research process could lead to a new version of the model presented at the end of chapter two.

3.3 Research Process
The so-called abductive strategy presented by Saunders et al. (2016, p. 145), together with the approaches named respectively deductive strategy and inductive strategy (Bryman & Bell, 2015, p.23) describe the implications of the way in which the research is conducted. According to Saunders et al. (2016, p.p. 148-149) there are three main reason to nail down the implications of these. Firstly, it has implications on the design of the research, secondly it contributes to build awareness around the right research approach and finally it helps to depict boundaries and limitations within the research work.

Deduction aims to spot causal links between concepts and variables, preferably in a quantitative way and with the purpose of generalizing conclusions (Saunders et al., 2016, p.p. 146-147). Generally a deductive approach derives from theories already known and tested (Bryman & Bell, 2015, p. 24) and builds on the knowledge previously assessed (Dubois & Gadde, 2002, p. 559).

To the opposite pole, there is the inductive approach. While the deductive one, it is generally used in quantitative research, this one finds most of its application in qualitative
research (Bryman & Bell, 2015, p. 26). The aim is to develop theories starting from empirical findings (Hyde, 2000, p. 83) and the research question often derives from previous theory (Saunders et al., 2016, p. 152).

Embracing an abductive approach results in a combination of elements of the previous two (Dubois & Gadde, 2002, p. 559). Saunders et al. (2016, p. 152) describe it, indeed, as the collection of “data to explore a phenomenon, identify themes and explains patterns, to generate a new or modify an existing theory”. Because it leads to incremental changes and continuous variation of previous models or theories (Dubois & Gadde, 2002, p. 559) it is concluded that abduction conveys in an hybrid, including features induction and deduction (Saunders et al., 2016, p. 148).

The aim of the researchers is to contribute to the research area of project planning, by studying the niche of use of Web analytics. The combination of the two main subject was rarely observed, making appropriate the adoption of an abductive approach. More specifically, the belief that a structured approach to Web analytics would improve the planning phase of a project, seeks its validation in the experience of the managers that are involved in the research. Finally, thanks to the implementation of such an approach, it will be possible to exploit the systemic features of the empirical world, combining them with the characteristics of theoretical models (Dubois & Gadde, 2002, p. 559). Finally, the reason why we consider our approach abductive is because it entails both elements of theory building and theory testing. At the end of the second chapter we indeed presented a model, designed from previous academic researchers, that we expect to confront and possibly update with the information collected during the interview process.

3.4 Research Approach, Design and Strategy

One of the first tasks of a researcher after identifying the research problem and formulating the hypothesis is to establish the appropriate research method and design (Weathington et al., 2012, p. 158). The researchers have to make a choice of research method from one of three established methods: quantitative, qualitative and mixed methods. Vogt (2007, p. 57) denotes that research design is focused on methods of collecting evidence and it addresses the question of how the study will be conducted. Vogt (2007, p. 58) also established that analysis includes methods for interpreting evidence, and it answers and addresses the question of how the results will be generated, evaluated, and inferred.

The decision of the researchers to incline for a qualitative approach, which might seem not completely in line with the positivist standpoint driving the research, it is going to be further explained in this section and it is also due to some pragmatic considerations, related to time and space (Tacq, 2010, p. 268), given the short time frame available to perform the study and the difficulty to access databases of Web analytics. Referring to the overall research strategy, instead, explains the general orientation that leads the research (Bryman & Bell, 2015, p. 37). Our work is of exploratory nature, meaning that the purpose of the research is to clarify the knowledge about a certain issue.
and thus to contribute to the understanding of its precise nature (Saunders et al., 2016, p. 174-175).

In academic literature, few was researched in order to bridge the subject of Project Management with the possible applications of Web analytics in the planning phase of a project. There is, indeed, a lack of empirical analysis to examine the association between the two research areas. Moreover, literature does not present systematic evidence of the adoption of Web analytics in the planning phase of a project. The exploratory nature of the study adds valuable justifications to the qualitative approach briefly described previously in this section. Given the nature of the study, a qualitative research could provide valuable insights to the researchers that intend to contribute to the standardization in the use of Web analytics in the planning phase of Digital Marketing campaigns projects, as rarely studied before. Following this intention, in this early phase the experience of the managers involved in the research is expected to help the authors to spot patterns that could eventually be tested later on, thanks to other academic works. What just stated is in line with what theorized by Zikmund et al. (2013, p. 136), that observe qualitative research to be commonly adopted whether the nature of the study is exploratory. Another point in favor of proceeding with a qualitative research is the fact that it entails a significant use of abductive approach, in order develop theory (Saunders et al., 2016, p. 168). Because of the practical reasons mentioned before, information are gathered from a limited pool of companies. More specifically several managers, working in the field of Web analytics, are asked the same set of semi-structured question, following a priori considerations made on the topic and determining the content of the interview guide (Tacq, 2010, p. 268). Also, gathering data with semi-structured interviews is common while performing studies of exploratory nature (Otheitis & Kunc, 2015, p. 144).

The authors consider this work to be exploratory because of the jump they have to make between existing theory on the topics of interest and their aim, that is to assess how a structured approach to Web analytics could enhance project planning, coming out with a model of application of such. This study is considered to be theory-building, even though existing theories are fundamental to construct the understanding of the subject, because the combination of the topics presented in the second chapter little was explored before. Pre-existing theory provide a crucial challenge to theory-building to researchers. A valid motive to look at previous literature reside in the fact that a lack of theoretical knowledge, may mislead the authors in the wrong direction, with the risk of replicating pre-existing findings, or to produce findings without any clear contribution to existing research (Andersen and Kragh, 2010, p. 49). Also, reflecting on pre-existing theory can be seen as an effort that the researcher makes to engage in a discourse with the scientific community (Andersen and Kragh, 2010, p. 49).

The positivist standpoint that drives the research is readable in the certainty by which they assume that the impact of Web analytics on project planning exist and it is positive, reason why the use words like assess and benefit since in the research purpose statement and they expect to come out with a model of application. The fact of performing a qualitative
research, does not affect the standpoint of the researchers that expect social entities (Web analytics) to exist independently from social actors (project managers and digital marketers) determining their behaviour. While building the bridge between existing theories, that rarely were observed in combination before, a quantitative research could be misleading, because researchers might not have a solid theoretical base to test hypothesis on. For this reasons, the authors confidently affirm their positivist standpoint in the context of a qualitative research, clarifying in various parts of the research work (e.g. interview guide, presentation of cluster analysis) how this shaped the content displayed in the section.

3.5 Source criticism
In order to fulfil the purpose of this research work, both primary and secondary data were employed. By primary data we mean the information collected in the form of semi-structured interviews, that have been conducted via telephone or Skype. Secondary data, on the other hand, consist of scientific papers and reports depicting figures and trends to assess the need for studied and the problem background. About this, while using secondary data the researcher needs to be aware of the following facts.

Because researchers do not have control over the secondary data quality, it is important to assess the quality of such (Saunders et al., 2016, p.334). Secondary data could potentially be less reliable, due to human manipulation: for this reason we have selected peer reviewed journals, preferably ranked in the so-called ABS list, which is based on statistical information related to citation and so determining the quality of journals in which business and management academics publish their research (Harvey et al., 2010, p. 5).

After the data collection process, at the end of the interviews, that data was prepared and analyzed to increase the integrity of study and to avoid possibility of jeopardizing research findings.
4. PRACTICAL METHOD

This chapter has the aim to describe how the study was practically conducted. It includes the description of the sample involved in the research, the approach to data collection and analysis, quality criteria and considerations regarding ethics.

4.1 Sampling

This section specifies the characteristics of the sample and the approach and preparation to the interview process.

Sampling allows a researcher to make predictions or draw conclusions about other things or conditions (Weathington et al., 2012, p.158).

The research target sample for the study consisted of content managers and consultants working in two different companies, based in Italy and Germany and working everyday with practical applications of Web analytics in a project setting. The decision to involve these practitioners supports the idea by which purposive sampling is to involve participants in a strategic way, so that those sampled are relevant to the questions that are being posed (Bryman & Bell, 2015, p.429).

Both the companies asked their name not to be disclosed, while a general description is provided.

As presented on their official website, the core business of the German company is related to the aggregation and promotion of online deals and vouchers, a service that they offer to well known international premium media groups, thereby connecting smart shoppers with their favourite brands in a trustworthy environment. The main functions in the company are represented by the departments of sales and content, that take care respectively of the type of deals displayed on the site and the way they are presented, following a structured SEO (Search Engine Optimization) strategy. The objective of this last is to rank as the first solution proposed by Google and in order to do so, the Web analytics left by user are read and interpreted on a daily basing and incorporated in the content strategy, ranging from the type of product/deal required to the keywords used to perform the search. The whole business is based on a deep understanding of customer’s preferences and needs, considering seasonal factors and trends (e.g. summer sales, Black Friday). The projects performed in the company have the shape of marketing campaigns that are averagely lasting around two months and that are continuously updated after the initial design.

The company counts around 50 employees working in 10 different national markets, such as Russia, Europe and Latin America, managing 36 different websites. The decision to involve in the sampling just six out of the 50 available has two main reasons. Firstly, we are interested to hear from content managers or professionals that work everyday with applications of Web analytics. Secondly, focusing on a company that works in so many different national markets will allow us to sample in a cross national way, in a time efficient manner. Because one of the authors of this work had an internship in the Digital Marketing company, it was possible to establish a direct contact with the managers that accepted to participate. Just few managers were asked to join the research because the authors were interested in professionals working at direct contact with Web
analytics at a managerial level, that means involved in decision making processes. For this reason, people working in other positions or with lower level of responsibility were excluded from the sample: six manager were asked to participate and all of them accepted.

The second company involved in the research is an international consulting company, that we contacted in one of its Italian offices. The company provides to clients a range of services that span from strategy to consulting, digital, technology and operations services. As of 2017, the company counts more than 425,000 employees, advising clients in more than 200 cities across 120 countries. Thanks to personal connections, it was possible to gain access to two consultants; the criteria of selection was for them to work in the Analytics department and our aim was to benefit from their cross-industrial expertise to enrich our research findings.

4.1.1 Procedure
As the study is of exploratory nature, the sampling process can be described as purposive, also known as judgmental, because the decision on whom to include in the sample derives from the perspective and experience of the authors (Zikmund et al., 2013, p. 396). The decision of involving a certain pool of managers and practitioners in the search derives from the expectation of the researchers to gather information that are relevant to the research question and purpose. A judgmental sampling is indeed common in similar research work, whether the use of case studies is involved (Saunders et al., 2016, p. 301). Moreover, the time constraints resting on the research work played a role in the decision of such a method (Saunders et al., 2016, p. 301).

Finally, the study was conducted in Sweden, from where the participants involved in the research were contacted via telephone.

4.1.2 Participants
The detailed criteria on which interviewees were selected is presented below, according to the issue of clarity described by Brink (2010, p. 139) that underlines the distance between the questions being asked by the researchers and the quality of the answers provided by professionals.

As this study aims at exploring the relationship between project planning and a structured approach to Web analytics in the context of Digital Marketing campaigns, people with experience in the digital field were involved, including both managers and consultants working close contact with Web analytics applications. It is common for researchers to employ personal contacts to reach interviewees with relevant experience (Zikmund et al., 2013, p. 396) and so the authors of this research work did, trying to cope with time constraints.

Common characteristic to the participants are: 1) to be knowledgeable about the topic, 2) being able to provide the interviewer with detailed information about the area of investigation and 3) being open to share his knowledge (Whiting, 2008, p. 35).
The data collection process was initiated with an email from the researchers requesting the participants of the approaching research study and scheduling most convenient time. Eight people were contacted, all accepting to answer to our questions. The email included the research purpose of the study and informed consent. The interview was estimated to last between 25 and 50 minutes and was recorded after the permission of the participants. The content of the interview was planned in advance, following a formal but friendly approach. Data, after collection, were processed and analyzed in accordance with the purpose of the research. Technically speaking we will edit, code, interpret and tabulate collected data so that they are amenable to analysis (Kothari, 2004, p. 123). Information about participants, including role and type of firm or duration of the interview, are specified to make possible considerations on potential interference with the quality of information gathered.

Table 3: Information about participants and interviews

<table>
<thead>
<tr>
<th>Name</th>
<th>Type of Firm</th>
<th>Role</th>
<th>Date</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Alessandro</td>
<td>Analytics Consulting</td>
<td>Senior Manager</td>
<td>12/12/2017</td>
<td>33:04</td>
</tr>
<tr>
<td>Company 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B Carlo</td>
<td>Analytics Consulting</td>
<td>Consultant</td>
<td>07/12/2017</td>
<td>28:35</td>
</tr>
<tr>
<td>Company 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C Agnieska</td>
<td>Digital Marketing</td>
<td>Content Manager Polish Market</td>
<td>09/12/2017</td>
<td>27:43</td>
</tr>
<tr>
<td>Company 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D Gulnaz</td>
<td>Digital Marketing</td>
<td>Team Leader Russian Market</td>
<td>08/12/2017</td>
<td>27:28</td>
</tr>
<tr>
<td>Company 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E Stefano</td>
<td>Digital Marketing</td>
<td>Content Manager Italian Market</td>
<td>11/12/2017</td>
<td>51:34</td>
</tr>
<tr>
<td>Company 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F Juan Miguel</td>
<td>Digital Marketing</td>
<td>Content Manager Spanish Market</td>
<td>10/12/2017</td>
<td>25:03</td>
</tr>
<tr>
<td>Company 2</td>
<td></td>
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<td></td>
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<tr>
<td>G Marco</td>
<td>Digital Marketing</td>
<td>International Partnership</td>
<td>09/12/2017</td>
<td>36:03</td>
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<tr>
<td>Company 2</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>H Maria Elena</td>
<td>Digital Marketing</td>
<td>Content Manager Latin America</td>
<td>11/12/2017</td>
<td>43:34</td>
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<tr>
<td>Company 2</td>
<td></td>
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</tbody>
</table>
4.2 Interviews
While conducting a qualitative research are commonly employed two type of interviews, namely unstructured and semi-structured (Bryman & Bell, 2015, p. 481). In the case of an unstructured interview, the process would be carried out through a formal conversation, in which the respondents would share their perspectives with no specific guidelines (Bryman & Bell, 2013, p. 481). The researchers, on their part, would be interested in a certain area of investigation but they would not have foreordained predetermined questions upon it (Saunders et al., 2016, p. 391).

In the case of semi-structured interviews, on the other hand, researchers would encourage the respondents to share their own opinion and experience, by answering to a set of predetermined questions (Bryman & Bell, 2013, p. 481). To fulfill the purpose of this research, that derives from the idea that a structured use of Web analytics would be beneficial on project planning, this last type of interview was planned and executed.

A conceptual framework based on previous literature review is therefore built, before carrying out the data collection. Indeed, the focus of the questions was kept on variables highlighted from existing academic literature, aiming at building the link between the two main subjects involved in the research, that are project planning and Web analytics. Nevertheless, questions are left semi-structured to intentionally capture the experience and the insight of the managers involved. While conducting their qualitative research, authors made sure that the respondents clearly understood what was being mentioned, such as the confidentiality of the information given.

4.2.1 Semi-Structured Interviews
In qualitative research, interviews are the commonly used method used to perform data collection and the semi-structured format is the preferred one (Kallio et al., 2016, p. 2954). Reasons beyond this popularity mostly reside in its flexibility and versatility, also it can be employed both in the case of individual and group interviews (Kallio et al., 2016, p. 2954).

Among the main advantages, the rigidity of its structure can be varied depending on the purpose of the study and according research questions, it is stated to enable reciprocity between the interviewer and the participant, allowing the first one to improvise follow-up questions based on the performance of the respondent (Kallio et al., 2016, p. 2954).

Conducting a qualitative research values the possibility of going "off topic", gaining the insights deriving from the qualitative reasoning of the respondents (Bryman & Bell, 2015, p.p. 480-481). Due to personal experience in the field and given the research gap located, the study is based on the idea that there is the need of a structured approach to data collected in the form of Web analytics, reason why researchers will try to understand how such an approach could enhance project planning. For this reason, the basic idea that inspired the research, will seek the confront with the practices adopted by the managers.
and the consultants, believing that in this way it will be possible to understand how Web analytics (social entities) shape their behaviour.

The fact of structuring the data collection in the form of semi-structured interviews, will allow possible new concepts to emerge, enriching or disproving the starting point (Dearnley, 2005, p. 22) such an approach is moreover coherent with an abductive strategy, described in the third chapter. By asking certain questions, in form of guidelines, the interviewee is facilitated in the process of answering about complex issues and topics (Barriball & While, 1994, p. 330). Also for this reason, given the extent of the subject, not going for an semi-structured interview approach might have implied to relapse to far from the basic idea and purpose of the research.

To sustain the efficacy of a semi-structured interview approach Saunders et al., (2016, p. 394) describe its advantages along three circumstances: a large pool of questions to be answered, complex issues or open dilemmas, the conclusion may vary according to the answer. All these three elements characterize the nature of our exploratory study.

4.3 Quality Criteria

In order to conduct a valuable study, the authors need to make sure that the conclusions they reached analyzing their findings will be valuable at different layers (Saunders et al., 2016, p.191). In order to assess the quality of the research work, criteria of reliability and validity are adopted, because they considered to be particularly relevant in the context of qualitative research (Bryman&Bell, 2015, p. 399).

Reliability criterion refers to whether the research process would be constant and if the same subject of investigation will be observed by a different researcher, therefore producing similar results (Miles & Huberman, 1994, p. 278). Moreover, external reliability refers to the measure in which a study can be replicated in the future (Bryman & Bell, 2015, p. 400), point on which the authors made an effort to ensure that all the steps of the research process were documented in a clear and transparent manner, being available for future access and use. Internal reliability, on the other hand, refers to the presence of more than one observer, in order to reduce possible bias (Bryman & Bell, 2015, p. 400). Not just this thesis work was a four handed process, but its progression was perpetually checked by our supervisor: Prof. Ulrica Nylen.

Validity criterion states the prominence of building accurate operational measures, to confront the research findings with (Ghauri & Grønhaug, 2010, p.63). Internal validity refers to the match existing between the observations collected and the theoretical framework developed, while external validity concerns the degree by which research findings can be generalized. Regarding our work, an effort was made in order to ensure that each passage of the research was supported and justified by a congruent use of methodology. In terms of generalization of the findings, a model will be presented in our sixth chapter: it is considered to be cross nationally valid because of the features of the sample, but we are
aware that a small sample was employed to fulfill the purpose of this research and that we looked at a very narrow type of projects.

Patton (2001, p. 34) states that validity and reliability are two factors which any qualitative researcher should be concerned about while designing a study, analyzing results and judging the quality of the study. Creswell & Miller (2000, p. 134) suggest that the validity is affected by the researchers´ perception of validity in the study and their choice of paradigm assumption.

The fact that one of the researchers worked in the Digital marketing company, could possibly affect the quality of the questions posed and of the answers received. In order to reduce the first risk, a pilot interviewed was performed, looking deep into the wording used and to the concepts expressed with a Digital Marketing professional. Regarding the second matter, researchers are aware that some response bias might occur, namely inconsistent responding and acquiescence (McGrath et al., 2010, p. 451). Inconsistent responding is used to describe the case in which the respondent supplies his answer in an unsystematic manner, while acquiescence refers to the tendency to endorse the opinion of the interviewer without fully considering the accuracy of the information being discussed (McGrath et al., 2010, p. 451). Both the scenarios might occur, given the personal relationship possibly developed among ex-colleagues. Having the possibility to conduct the interview in couple, has led the researchers to take the decision that the person asking questions will be the one not having a personal relationship with the interviewee, while the other one will take notes.

Finally, because we are discussing quality criteria, a consideration has to be made about the language in which we conducted the research work and, especially, the interviews. Answering in a second language indeed could impact on the quality and on the self confidence of the interviewee (Woodrow, 2006, p. 308). All the interviews were conducted in English so, in order to avoid “communication problems”, which might damage the outcome of the research we are carefully tried to find an appropriate strategy as suggested from Filep (2009, p. 59) making sure to test the clarity of our terminology with a pilot interview and to use a vocabulary that can be familiar to the respondents.

4.4 Construction of Questions

In order to make the respondents feel comfortable (Whiting, 2008, p. 37) and in order to gather valuable information, the questions asked should be properly designed. For this reason, the attempt of the authors of this research work, was directed towards the creation of valuable question, more specifically "good use of interview questions will maintain interaction and lead to the generation of knowledge" (Whiting, 2008, p. 37). Moreover, researchers must combine the inquisitive purpose of the interview guide with a legitimization of their questions, so that respondents can evaluate the type of research they are taking part to (Price, 2002, p. 273).

It has been agreed that in a qualitative study, as in designing research methodology more in general, defining rigorous data collection procedures is the factor that mostly impacts
on the criteria of quality and trustworthiness and that therefore critically influence the findings of the research (Kallio et al., 2016, p. 2955). Because of the previous methodological reasons, the interview guide was built asking questions that do not entail a simple yes or not answer, but rather leaving the respondents the freedom to tap from their stock of knowledge, by stating the area if interest. Questions about type of projects managed within the organization, such as other team within the company, competitors and possible relevant exceptions will be useful to depict the context of the analysis.

As stated from Pedersen et al. (2015, p. 631) in “developing an interview guide, pre-existing knowledge about the research topic is essential”. About this, assembling the interview guide around a terminology that the managers could understand, was possible because of the prior experience of the authors in the Digital Marketing field.

4.5 Pilot Interview
In order to gain understanding and gather valuable information for the topic appropriate questions have been drafted. Besides, the test interview was organized in order to acquire supplementary information on the concept, such as insights and practical terms. Moreover, in order to gain a depth understanding and create an high-quality research, we put an effort on to creating interview questions that could be well understood, by being well formulated and appropriate.

In the context of social science studies, the term pilot is used in two different manners. Firstly, it can refer to the so-called feasibility studies which are “small scale version[s], or trial run[s], done in preparation for the major study” (Polit et al., 2001, p. 467). Also, according to Baker (1994, p.p. 182 -183) a pilot study can consist of a pre-testing of a certain research instrument, that is our case. One of the advantages of conducting a pilot study is to spot possible weaknesses of the instrument created as an interview guide and correct it (Teijlingen & Hundley, 2002, p. 33).

According to Kim (2010, p. 190) the purpose of test studies is providing clear understanding of the question and explore the ease of answering. The original draft was therefore tested with a professional, working in the digital sector with Web analytics. His main suggestions were related to the overlap of some questions and to the possibility to ask about the perception that the managers have about their direct competitors.

According the information received during our pilot interview, the interview guide has received few minor changes, that are displayed in the final version presented below. The changes are expected to impact on the fluency and the understanding that prospective respondents will have of the research instrument.

4.6 Interview Guide
After testing the original draft with a pilot interview and aware that the structure may vary according to the process of interview itself, the following interview guide is presented.
The questions displayed in the interview guide are formulated following a positivist approach, that can be spotted since the usage of a certain wording, when the respondents are asked for general and typical ways and structured approaches. Stressing on the research method, the increasing importance of digital social data in recent years has required a joint response from both social science and computational science communities: for qualitative researchers it is pivotal to understand how digital data is accomplished, lived and analyzed (Housley et al., 2017, p. 607). The questions can be further split in four clusters, namely: structured use of Web analytics, project phases in Digital Marketing campaigns, use of Web analytics in the planning phase of a project and contextualization. These clusters will be explained more in details later on.

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**Participant name:**

**Organization:**

**Role:**

**Years of Experience:**

**Date:**

**Duration:**

1. **Could you describe me a typical project (marketing campaign)?**

   The purpose of this question is to create a common understanding around the type of project being subject of research.

2. **In which phases is this kind of project generally structured?**

   *Backup: based the phases 1) initiation, 2) planning, 3) execution, 4) closure, could you explain how your project is typically implemented?*

   By dividing a marketing campaign in phases the link with the subject of Project Management can be made. Hopefully the managers will give coherent answers that will allow us to build the bridge between the two subjects.

3. **How is the planning phase of a marketing campaign generally carried out?**

   A greater focus on the planning phase is expected to reveal us the role of Web analytics in this phase and whether a structured approach is actually employed.

4. **At which stage of the project can you generally incorporate feedbacks deriving from Web analytics?**

   We aim to understand if there are other phases of the project in which Web analytics are adopted and how.
5. **Do you typically follow a structure in reading the feedbacks deriving from Web analytics?** (e.g. firstly I look at the click-out value, then to the bounce rate…)  
   a. **Could you describe it?**  

   We aim to understand if the structure exists and if the same one is adopted by managers working on different national markets.

6. **On the other hand, is there any parameter you could avoid to consider while incorporating the feedbacks?**

   In the literature review we depicted the necessity to look for quality instead of quantity of information. We want to understand what happens in practice.

7. **Do you think that other players within your market act similarly?**

   All the managers involved in the research play in a different national market, by asking about their competitors we aim to gather a greater understanding of the couponing industry at a cross-national level.

8. **Do you think that the re-planning of the campaign benefits from incorporating the feedbacks deriving from WA? In which way?**  
   a. **In case of no, tell me why you think so**

   We explicitly make a link between the planning phase and a structured approach to Web analytics, asking to the managers to reveal their experience and perceptions.

9. **Whether the re-planning of the marketing campaign (/project) was successful, do you keep records/ case studies for future use?**  
   a. **If so, how do you use this information later on?**

   Because we expect a structured approach to be used, we want to understand if records are kept and how they are used from time to time.

10. **Do you have the impression that the approach to analytics on project planning, given a similar project objective, can change from time to time?**

   Again we aim at understanding if there is a recurrence in the approach undertaken.

11. **Your company has the peculiarity to have many different teams working on different**
projects based in different markets. Do you have the impression that the approach to Web analytics on project planning is the same for every “Country”? Do you notice any benefit of employing a similar structure?

We aim to understand if different teams working on different national markets adopt the same approach, opening the way for a generalization of findings.

12. We spoke about general and typical ways of managing a marketing campaigns. Is there any relevant exception that works differently? Would you like to talk about it?

By asking about exceptions we give the freedom to the managers to share personal experiences that could enrich our findings.

4.7 Access Gain
In this research work, access was gained to two firms: a company playing in the digital field, more specifically in the couponing market and the Italian branch of an international consulting company, dealing with analytics solutions. As highlighted by Saunders et al. (2016, p. 220) there might be issues related to respondents willingness to engage in voluntary interviews, due to scarcity of time, resources and/or interest. In order to remedy this personal contacts were utilized. Such an approach allowed the authors to save a considerable amount of time and to gain access to highly skilled professionals, that could have been hard to reach in other ways. The decision to proceed with personal contacts, was reinforced by Buchanan et al. (2013, cited in Saunders et al., 2016, p. 231) stating that such an approach is commonly used to gain access to interviewees. All the respondents were informed of the purpose of the research work, asked about the possibility to share information about the company they work for, asked the consensus to register the interviews and finally provided with the transcripts to check the reliability of the understanding of the researchers.

4.8 Ethical Considerations
It is not uncommon for people to use the words morals and ethics interchangeably, even though there is a relevant difference between the two. While morals refer to principles and rules that describe what is right or wrong, ethics can be described as the process of studying moral standards and examining how we should interpret and apply them in various situations (Weathington, Cunningham & Pittenger, 2012, p. 24). Ethical considerations in combination with educational requirements can be viewed as an effective manner to secure the competences of the authors (Rodgers, 2009, p. 83).

When referring to ethics, two main concepts are considered, the right and the good, the structure of an ethical theory is then related on how these two basic notions are connected (Ronzoni, 2009, p. 455). Always according to Ronzoni (2009, p. 455) “the point of the
good is to define what is valuable and worth pursuing the goals of action, whereas the aim of the right is to delineate how and to what extent conduct ought to be justified to other agents the constraints on action”.

Ethical considerations made by researchers are among the success factors of any research in business and social science studies (Ghauri & Grønhaug, 2010, p. 20). For research works in this context, ethics concerns the way in which moral choices might affect decisions, standards and behaviours, towards those who are participating in the study (Saunders et al., 2012, p. 226). The authors of this work followed the suggestions of Ghauri & Grønhaug (2010, p.20) that recommend to researchers to seek voluntary participation, inform participants about the aim of the research, preserve anonymity, protect participants by not exposing them to stress, not using coercion to get the information and not using special equipment without their consent and awareness.

To meet with ethical considerations, we decided to provide our interviewees with information about our research purpose and process. We therefore asked which information we could disclose about their role and about the companies they are working for, being asked not to reveal the brand of the organization. Prior to conduct the interviews, we asked them about the possibility to record the conversation, with the aim to have a precise transcription of the information shared. To further stress on the reliability of these, participants were provided with the transcription of the material recorded and asked to confirm our bona fides.

4.9 Conducting Interviews

All the interviews were conducted via telephone or Skype during a time period of one week.

Also, all the interviews were conducted in English and the nationalities involved in the research are: Italian, Polish, Mexican, Spanish, Ecuadorian and Russian.

A wider effort was placed in the opening phase of the interview, a stage in which it is crucial to earn the trust of the respondent (Saunders et al., 2016, p. 405). Because questions on how the information disclosed will be presented often arise (Saunders et al., 2016, p. 405-406), the interviewers begin by explaining that the research is happening in the context of their Master thesis in Business Administration and Strategic Project Management and that their involvement will be handled with complete anonymity. Moreover, the conversation started by asking background data, as a way to break the ice, but also to possibly link the findings to this kind of information, especially nationality (Jacob & Furgerson, 2012, p. 3).

Because both the authors were present at the interviews, the first interviewer could focus on conducting the interview while the other could note down the responses (Bryman & Bell, 2015, p. 214).

4.10 Data Processing
Saunders et al. (2016, p. 550) discuss that after conducting interviews, data have to be processed and analyzed by converting audio recorded interview into a written document with the complete transcription of the received answers. Heritage (1984, p. 238) argument that recording and transcribing the interviews provides an opportunity to carefully analyze answers and that is accessible at any time. Moreover, transcripts are proof that information mirror actual responses. Finally, transcripts also decrease the risk of misrepresenting the results due to subjective interpretations or researchers bias (Heritage, 1984, p. 238).

Researchers Bryman and Bell (2015, p. 214) debate that recording grant researchers to be solely concentrated on the discussion instead of being concerned with taking notes during the interview. However, analysts discuss that participants might not feel comfortable being recorded and researchers might need a different system to document the interview answers, doing so in a manner that does not divert the attention of participants. Prior to conducting interview, we received the permission to record it, the collected results were in English and the duplicate was sent to participants for reviewal.

Transcribing might take significant time, however it also allows to access results at any time and increase the trustworthiness of results (Skukauskaite, 2012, p. 1). In order to get best results, we have recorder interview on two different devices, in case one of them would face technical difficulties. Both of us will be analyzing transcript: the results will be presented in the next chapter. The process allowed us to draw conclusions from the gathered data, facilitating the connection with the theory presented in the second chapter. Analysis of answers will help us better understand topic and shed some light on how project planning benefits of the use of Web analytics: we will try to detect patterns, develop explanation and describe fact from data.

4.10.1 Analysis
The data collected through interviews will be analyzed based on the three-stage procedure suggested by Creswell (2007, p. 156), that entails the preparation of data for analysis by transcribing, the reduction of the data into themes through a process of coding and the representation the data. Braun and Clarke (2006, p. 86) point out that patterns can be identified through a rigorous process of data familiarization, data coding, and theme development and revision. This study confirmed the notion by Braun and Clarke (2006, p. 86) that it is appropriate to choose a method of analysis that is driven by both research question and broader theoretical assumptions.

Although the stages used in the analysis of the data look sequential, they are iterative and built up on the previous stage as Braun and Clarke (2006, p. 86) have already highlighted how “analysis is typically a recursive process, with movement back and forth between different phases”.

For this reason, the identification of salient themes, such as recurring ideas or language, and patterns of belief that link people and settings together is considered to be the most intellectually challenging phase of the analysis and the one that can unify the entire endeavor (Guest & McLellan, 2003, p. 186). According to what just stated it is relevant to reiterate that all the interviews were conducted in English and that we our aim is to find
similarities among the responses. A positivist approach to qualitative data will focus on reducing text to codes by aiming to spot patterns and relations, the first way to approach the matter would be a content analysis, which centers on determining the frequency of particular words or phrases in the text (Guest & McLellan, 2003, p. 187). Regarding our aim to capture similarities, it is relevant to recognize the fact that each interview is different in terms content, meaning that ‘bringing together’ the ideas and perceptions can be a complex task (Burnard, 1994, p. 111). As suggested from Burnard (1994, p. 112) we will approach the content in a systematic manner, analyzing textual data by breaking the text down into meaning units.

There are two main approaches to analyze data, namely deductive and inductive. Because of the nature of our study, that aims at building theory with an explorative approach we will be using a mixture of the two approaches. We could refer to this hybrid approach as abductive reasoning, that according to Mirza et al. (2014, p. 1980) is “a form of synthetic inference through which meaningful underlying patterns of selected phenomena are recognized to comprehend a complex reality and expand scientific knowledge”. Because we described abductive approach as a mixture of the two, it is relevant to specify that by inductive reasoning we mean drawing conclusions from evolving data collected into information to build new theories, the text is approached with an open mind in order to spot meaningful subjects or patterns and answer the research question (Bengtsson, 2016, p. 10). Deductive reasoning stays at the opposite pole: the researcher looks for predetermination, testing hypotheses or principles of existing theories (Bengtsson, 2016, p. 10). About this, our interview guide is built on the concept depicted in the literature review that culminate in the model presented at the end of the second chapter, a jump has to be made in order to test the reliability of this model in the context of the subject of Project Management, particularly looking at a structured approach to Web analytics in the planning phase.

4.10.2 Data Grouping and Measurement

While performing data analysis, regardless of the philosophical standpoint around which the research is developed, the ultimate purpose is to organize and elicit meaning from the data collected and draw realistic conclusions (Bengtsson, 2016, p. 10). A method commonly adopted to fulfill this purpose is the so-called content analysis, that entails features employed both in quantitative and qualitative methodology and that can be used in an inductive or a deductive way (Bengtsson, 2016, p. 10), aspect that is particularly interesting in the case of our research. Furthermore, content analysis can be applied to different types of written texts, no matter where the material comes from and there are no strict rules on how the researcher should proceed (Bengtsson, 2016, p. 10). As clarified by Erlingsson & Brysiewicz (2017, p. 10) the objective of the researcher that performs qualitative content analysis is “to systematically transform a large amount of text into a highly organized and concise summary of key results”. The process starts with the approach to raw data interviews, that turned into transcriptions looking at categories
or themes that will allow a further abstraction of data at each step of the analysis (Erlingsson & Brysiewicz, 2017, p. 10).

Given our research question, that is: *project planning in Digital Marketing campaigns: which is the role of a structured use of Web analytics?* The primary theme we will look at arise from participant identification and description of the importance of planning in a project. The second theme is related to a structured approach to Web analytics, seeking for a valuable link with the planning phase of a project.

In order to isolate the major themes, a first approach to the analysis was about clustering the questions, looking at the research area they are related to. Cluster analysis is typically used as a data reduction technique, to evolve raw data in aggregates that can be managed in an easier manner (Punj & Stewart, 1983, p. 136).

Table 4. Issues related to cluster analysis.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Reflections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Transformations</td>
<td>a. What measure of similarity/dissimilarity should be used?</td>
</tr>
<tr>
<td></td>
<td>b. Should the data be standardized?</td>
</tr>
<tr>
<td></td>
<td>c. How should interdependencies in data be addressed?</td>
</tr>
<tr>
<td>Approach to clusters</td>
<td>a. How many clusters should be drawn?</td>
</tr>
<tr>
<td></td>
<td>b. Is an algorithm necessary?</td>
</tr>
<tr>
<td></td>
<td>c. Is any cluster necessary to fulfill the purpose of the analysis?</td>
</tr>
<tr>
<td>Validity</td>
<td>a. Is the cluster solution different from could be expected from the prior approach?</td>
</tr>
<tr>
<td></td>
<td>b. Is the cluster solution reliable or stable across samples?</td>
</tr>
<tr>
<td></td>
<td>c. Are the clusters related useful or related to other variables other than those used to derive them?</td>
</tr>
<tr>
<td>Variables selection</td>
<td>a. What is the best set of variables for generating a cluster analytic solution?</td>
</tr>
</tbody>
</table>

Source: Punj & Stewart, 1983, p. 144

Being aware of the issues related to the creation of clusters, we came out with the following clusterization of the question posed during the interview, where we grouped the questions based on the research area they are related to.

Figure 4. Clusterization of the research topics.
The clusters namely “structured use of Web analytics” and “project phases in Digital Marketing campaign” are expected to bring into the analysis elements of deductive reasoning, because based on existing theory. On the other hand the remaining two, namely “use of Web analytics in the planning phase of a project” and contextualization are expected to carry elements of novelty that would allow the authors to bridge the two subjects, through an inductive reasoning process.

A second approach to content analysis is the so-called summative, that is carried out by identifying and quantifying certain words within the text with the purpose of studying the contextual use of the words or content. This quantification is coherent with the exploratory nature of the study: indeed is not meant to infer but, rather, to exploit their
usage (Hsieh and Shannon, 2005, p. 1283). If the analysis would stop at this point, it could be considered quantitative, observing the frequency of certain sentences (Hsieh and Shannon, 2005, p. 1283). A summative approach takes a further step, by fostering the interpretation of those frequencies, going beyond a mere count (Hsieh and Shannon, 2005, p. 1283).
5.DATA ANALYSIS
In this chapter we perform the data analysis of our research work, while the main findings and conclusions are left to the next one. The questions presented were hand out to nine managers and consultants, working in two different companies, in the form of semi-structured interviews.

5.1 Content Analysis
Based on the clusterization presented in the previous chapter, questions are grouped and analyzed. It is important to underline that are presented as a response just selected parts of the interview, that are considered relevant. The focus of the researchers is to spot similarities, with the aim of answering to the research purpose and to move in the direction of a structured use of Web analytics in the planning phase of a project. Nevertheless, differences are took into consideration and eventually discussed.

5.1.1 Contextualization
This cluster is important to describe the context in which the analysis is carried out, in different ways. Firstly, its aim is to precisely describe the type of Digital Marketing campaigns analyzed in the research, secondly if focuses on understanding the perception that managers have about the approach of other players in the same field. Furthermore, they are explicitly asked about how their colleagues, staffed within the same company on different national markets, are working, trying to figure out whether a structured approach is followed at a cross national level. Conclusively they are asked about exceptions, with the aim to spot valuable information that reside outside the standardized approach described before.

1) Could you describe me a typical project (marketing campaign)?
Stefano begins stating the three main purposes that can inspire a Digital Marketing campaign, that are: increase in brand awareness, increase in sales in a certain channel and possible growth of a database of contacts. The ultimate purpose on which the manager will decide to base the campaign, will determine its setup.
Gulnaz, on her part, discloses more about what is typically promoted with a Digital Marketing campaign, explaining that are brands, services and products related to the affiliate network that partners with the Russian team (in which she works). The concept of the campaign is therefore developed and the project is implemented across different channels, that can be: social media, newsletter, influencers and landing pages. She adds that, in parallel, they company works to promote its own brand, as leading experts in the couponing market.
Maria Elena and Marco describe the business model of their organization more in details, as the aggregation and promotion of online discount codes, a service that they implement on websites with their own brand, but also as a service to well-known international premium media groups. This service is carried out in 10 different countries and across 36 websites.
In such a context, Juan Miguel sees the campaign as a service meant mainly for sale reason. Marco and Maria Elena detail what a SEO marketing campaign is: this last one it is going to be the focus of the answers displayed in this section of the research work. According to the managers, the ultimate objective of a SEO marketing campaign is to rank as the first landing page displayed by the search engine and therefore to monetize traffic generated by organic users. The typical user landing on the campaign page, is performing a purchase on another site and is looking for a discount code to apply to it in the check out phase. Finally, Agnieszka affirm that more in general, every campaign derives from the idea or the deal that is the subject of promotion. The process of designing the campaign involves a negotiation phase with the affiliate network, a competitor research and finally a study of the social trends related to the deal being promoted.

7) Do you think that other players within your market act similarly?
The content managers agree on the similarity of the approaches undertaken from different players within the Digital Marketing field, while setting up a campaign. According to Gulnaz this affinity is even more marked when looking expressly at digital coupon platforms. Always Gulnaz adds that the sameness is observable both regarding the shape of the landing pages and the kind of offers (or content) displayed on them. In the opinion of the Russian manager, also the channels used to promote brands, products and services are similar. She specifically says how social media are just out there. Juan Miguel, the content manager of the Spanish team, explains how this similarity is due to the relevance that the algorithm of the search engine has on the performances of players within this field, a statement that is confirmed by Stefano, content manager of the Italian team and Marco, responsible of the content for International partnerships. Stefano furthermore clarifies how their competitors are behaving in the same way, following a standard, almost sure of how they are monitoring the same KPIs, user funnel and user experience. What it is likely to change from one case to another, is the strategy used to engage stakeholders, position the brand and the channels to sale. Agnieszka, content manager of the Polish team, forthwith makes a link with the planning phase of a Digital Marketing campaign, by saying that is in this phase that the marketplace sets up the content by looking concurrently at traffic and keyword volume search. Maria Elena, responsible of content strategy for Latin American platforms, agrees on a similar approach to Web analytics, even if she points out expressly that it does not exist a standard so far.

This last one is the same point of Carlo, the consultant, that expresses in different moments of the interview how there is the potential and the need to establish an industry standard.

11) Your company has the peculiarity to have many different teams working on different projects based in different markets. Do you have the impression that the approach to Analytics on project planning is the same for every “Country”?
Because the Digital Marketing company works on various national markets, managing a range of different sites and platforms, managers are expressly asked about the approach of their colleagues. The aim of the question is to understand whether a structured approach is followed within the company or if teams react differently due to possible different features of each national market. Stefano immediately clarifies that, as he answered regarding competitors, a standard approach is followed within the company. He adds that even if every Country has different users, looking for different brands, or seasonalties, user behavior and funnel can be traced and studied following the same KPIs. Juan Miguel says that similarity is due to the ultimate goal of the SEO campaign, that is often to generate clickout. Similarly to Gulnaz, he states that each Country has its preferred manner to reach users, mostly in terms of channels. Always Gulnaz, along with Maria Elena, specifies that, within the company, user funnel is monitored according to the same metrics and KPIs, following the same structured approach. Maria Elena clarifies that this is typical of a SEO strategy, revealing how some national teams working in her organization are more structured than others in doing so. Finally, Agnieszka explains how teams often gather together to discuss how the various Digital Marketing campaigns are performing. Once the campaign is concluded, success stories are shared among teams and workshops are organized to enable collective learning processes.

12) We spoke about general and typical ways of managing a marketing campaigns. Is there any relevant exception that works differently? Would you like to talk about it? Other than SEO Digital Marketing campaigns, on which respondents have focused their answers, exceptions are discussed. Marco explicitly clarifies this point by stating that what he answered before concerned SEO campaigns and that the steps described aim to monetize organic traffic, by converting it into valuable clicks. He explains that different channels, such as newsletter, influencers and social media can be used to promote their brands and work in a different way that is not fully based on implementing the feedbacks deriving from Web analytics. Gulnaz, on her part, explains how the approach can differ whether the objective of the campaign does. An example provided is the shift of interest from conversion to visibility: because of this different KPIs would be monitored. Juan Miguel confirms the point of Gulnaz by sharing his experience with a client, a famous Spanish publishing company, that had the aim to increase the interaction of users and prospective customers with their site.
Stefano adds that a different approach might be required if the product or service being promoted does not have a strong brand identity: in this last case the search volume would not the key start-point anymore, and the content department would have to build awareness via different channels.

Interesting is the experience shared by Maria Elena, that explains how in her previous company, when she was working for a magazine, they made a mistake by focusing on a wrong, single KPI, extrapolating it from the context.
“We observed that people were staying longer on the page if we had less text and more images. The whole strategy of the magazine changed and focused to images, but the domain authority fell because Google didn’t perceive as a magazine anymore. Now I would say it was a bad idea. If you have information that you don’t know how to use them it might be dangerous.”

Consultants Alessandro and Carlo share a range of different application of Web analytics, including banking, publishing companies, automotive and so forth. Alessandro says that the approach of their company is to design solutions that the client can apply at different layers, namely B2B and B2C. Looking at the specific case of a publishing company, with an accurate use of Web analytics the client in the end was able to offer to other companies targeted advertising spaces, at a premium price. On the other hand, in the case of B2C, customer profiles and journeys were exploited in a way that allowed the client to cluster its readers and to set up future content and prices for subscriptions accordingly. Carlo reiterate the range of possible applications of Web analytics by sharing the following case.

“A client goes on his target insurance site, for example, where he performs a certain number of times a price quotation. After this he goes to a complete different site, where we can display a pop-up showing a competitive price compared to the one he was checking before. This is how we are able to create targeted advertising.”

In other cases, consultants explain how they manage certain sections of the digital properties of their clients. In the case of an automotive company, they describe how they will earn a fee each time they are able to make the user book a test drive, using a combination of techniques including SEO activities.

The type of Digital Marketing campaign described in details from the managers is called SEO campaign, as Marco explains the ultimate purpose of this type of project is to monetize organic traffic. The authors expected that respondents could have referred to this concept, reason why they decided to include it in the second chapter in section 2.1.5.

In doing so, they cited researchers Fishkin and Høgenhaven (2013, p. 5-7), describing that SEO techniques will be focused on understanding how the algorithm of the search engine values the content displayed and therefore ranks pages and websites, with the ultimate purpose of providing the user with useful information that will fulfill his needs. Having received many answers focused on campaigns based on SEO strategies, has persuaded the authors of this study to include in the analysis more literature, in order to provide the reader with an accurate understanding of a key concept for the research. Researchers Lee et al. (2016, p. 197) observe how displaying the right information has become a sophisticated and specialized art. Visibility on the search engine is the purpose of a SEO strategy, because a good visibility will lead to higher traffic on a landing page or a website: in order to increase visibility, marketers will apply search engine optimization (SEO) techniques, a set of processes and tasks that help organizations to secure relatively top positions in search engine result listings (Lee et al., 2016, p. 198).
Stefano explains the three main purposes that the company has while implementing a SEO campaign, that are: increasing brand awareness, increasing sales through a certain channel or increasing a database of contacts.

Marco and Gulnaz, on their part, clarify that the company has other ways to promote brand and deals, including different channels, such as newsletters and social media. While describing the typology of campaigns they can implement, the actors contributing to the setup of the project are introduced, these are: affiliate marketing platforms and influencers. When asked about other players in the market, they all agree on the similarity of the approach undertaken to plan Digital Marketing campaigns. Stefano specifically says that competitors in the couponing market are behaving in the same way, following a standard. Probably looking at the same KPIs, funnel and user experience. What is changing is the strategy, the stakeholders, the brand awareness, the channels to sale.

The couponing market is a new concept, that deserves to be depicted according to academic literature. Sigala (2013, p. 165) explains how following the global popularity of groupon.com, a variety of websites is now offering discount coupons for a variety of goods and services, ranging from leisure, to insurance, to fashion, tourism and beauty. The availability of online coupons is related to the increasing popularity of internet shopping, whereby shoppers are often suggested to enter a promotion code in the checkout phase of their purchase (Oliver & Shor, 2003, p. 121).

The perception of the managers is confirmed by the statement of the consultant Carlo that previously asserted that there is the potential and the need to industrialize an approach to Web analytics.

The company in the Digital Marketing field involved in the search has the peculiarity of working in 10 different countries, based in Europe, Russia and Latin America managing a range of 36 web sites. Observing how the teams working in different national markets behave gave us the possibility to perform a cross national study. As observed by Parameswaran and Yaprak (1987, p. 36) a “reliable assessment of cross-national measures is of fundamental interest to multinational marketers; such assessments may affect the accuracy, and therefore the quality, of strategic decisions”. The combination of the question about international competitors with the one asking the managers how other colleagues working on different markets behave, such as the nature of the sample itself seems to be suitable to generalize the findings of our study at a cross national level.

Finally, the focus is moved away from SEO campaigns, by asking about relevant exceptions. By doing so, we aimed at spotting interesting insights that could enrich the research findings.

The contribution of the two consultants involved in the research, clarifies that nowadays their approach to Web analytics is happening at another layer, while digital marketers are making a huge effort on using Web analytics in a descriptive manner, trying to fulfill *hic et nunc* objectives, consulting is moving towards the application of a predictive use of
Web analytics empowering artificial intelligence and machine learning. The answer of the consultants can be linked with the theory of section 2.1.3 in which two major use of analytics were pinpointed, adopting predictive or descriptive techniques, meaning that the applications of Web mining could be employed in order to predict trends or to assess an unbiased state of art (Kaur, 2017, p. 93-94). Finally, they describe a scenario in which consulting is moving faster of the actual industry, that appear still confused on how to approach the huge amount of Web analytics, even asking to consulting firms to directly manage certain sections of their digital properties.

5.1.2 Structured Use of Web Analytics

5) Do you typically follow a structure in reading the feedbacks deriving from Web analytics? (e.g. firstly I look at the click-out value, then to the bounce rate...)

As specified by Gulnaz, Stefano and Marco, they approach Web analytics with a range of Web analytics tools, namely: Google Search Console, Google Adwords and most of all SemRush and Google Analytics. As they clarify, in this way the managers are able to segment the traffic and understand where users derive from. Juan Miguel adds that KPIs are established while setting up the project and monitored according to the objectives of the campaign, explaining how the actual metrics are compared with the position the landing page of the marketing campaign is ranking on the search engine. Furthermore, Marco, Juan Miguel and Agnieszka explain that among all the available KPIs some are systematically checked, including: bounce rate, views, CTR, ranking position on Google, sessions and click out value. Carlo, one of the consultants, clarifies that the KPIs checked depend on the industry being observed and that in his profession people focus on vertical aspect, such as optimizing a specific action on a section of a site. He adds that looking at parameters such as the bounce rate, with the aim of improving the overall site performance is old-fashioned, at least regarding the consulting sector.

6) On the other hand, is there any parameter you could avoid to consider while incorporating the feedbacks?

Gulnaz, Marco and Stefano agree that all the available information can be important if properly compared to the context in which they are gathered and confronted with the ultimate objective of the Digital Marketing campaign. Marco specifies that these KPIs do not have to be seen as something isolated from the context. Agnieszka adds that the aim of her analysis is to look at the whole user funnel. This last one includes, understanding where the users came from, how long they stayed on the website, which page they are clicked on, which part of content is more interesting for them and therefore which page has a lower bounce rate trying to understand why. Alessandro, the senior consultant, reveals that in their sector the analysis of possible useful parameters is done at another layer. He states that they use statistical algorithms to distinguish useful information from others. Looking at the specific sector they are operating in, consultants draw a list of approximately 1500 KPIs, from which they are
able to extract a from 30 to 150 meaningful ones. This is happening regularly in their projects and it is carried out towards statistical softwares and regression models. Such an approach gives them the possibility to implement Artificial Intelligence and Machine Learning practices to be applied to the industry of their clients.

Most of the respondents point out the need of a structured approach to Web analytics and describe their recurrent behaviour. Without explicitly being asked for it, they mention the need of defining objectives and KPIs, referring to a structure that is congruent with the one presented in the model at the end of the literature review chapter. More specifically, Bekavac & Garbin Praničević (2015, p. 376) and Waisberg & Kaushik (2009, p. 1) state that the approach to Web analytics should be developed across: objective determination, KPIs definition, data collection, data analysis and finally change implementation. This point is even more interesting if we note that not just the answer is provided by the content managers, all working in the Digital Marketing field, but also from Carlo, the consultant, that relates it to the specific industry the company is competing in.

Secondly, the managers coherently provide a description of the KPIs they are looking at: starting with traffic segmentation, they look at Bounce Rate, CTR, sessions and Click Out value. These parameters answer to the dilemma posed from Saura, Palos-Sánchez & Cerdá Suárez (2017, p. 2) that state how important is to identify which are the indicators that will lead the marketer to improve conversion rates and consequently, to increase the visibility of the campaign on the Internet.

The digital marketers describe a certain range of tools, used to accomplish this steps of analysis, namely Google Analytics, Google Search Console, Google Adwords and SemRush. This aspect is new compared to the literature depicted so far and has an interesting correlation with theory. As noted from Nakatani & Chuang (2011, p. 172). They state that the choice of the tool used to analyze Web analytics might determine long term strategic implications, because of the quality of the data displayed by the Web analytics tool: the information provided by the tool will indeed have a direct impact on decision making processes within the organization. Also, data needed for producing analytics reports are usually collected over a long period of time and, depending on the tool, it might not be fully under the organization’s control (Nakatani&Chuang,2011,p.172).

The consultant reinforce the concept described in the previous cluster, by which their industry is moving at another pace. They describe as the ultimate purpose of their approach to Web analytics is to improve Artificial Intelligence and Machine Learning practices, implying a long term vision which is not yet is the scope of marketers, very interested in the current performance of the digital campaign project.
When asked about parameters they could avoid to consider, digital project managers and consultants answer that Web analytics should be analyzed within the context of the campaign and so that none of the KPIs can be considered as something self-standing. A connection with theory outlined in section 2.1.6 is therefore made, confirming the point of Pauwels (2015, p. 9), that affirmed the importance of focusing on the quality of information collected, rather than on quantity.

5.1.3 Project Phases in Digital Marketing Campaigns

2) In which phases is this kind of project generally structured?
Backup: based the phases 1)initiation, 2)planning, 3)execution, 4)closure, could you explain me how your project is typically implemented?
Gulnaz and Marco clarify that the set up of the campaign is generally forerun by a phase of negotiation with the brand being promoted or with the affiliate network having the brand within its portfolio, goals are set in terms of sales target or expected traffic growth. The company working in the couponing market will earn a commission in case the coupon being offered is actually used. They furthermore explain that after having clear the type of product or service that is going to be promoted a keyword research is performed. Juan Miguel adds that in this phase it is important to coordinate with the sales department, that is the one taking care of the negotiation with brands and affiliates. More specifically, because of the visibility packs the sales department agreed to display on the site, the content department will have clear what to look for in the keyword research.
Maria Elena says that after this passage, the content of the landing page is prepared and that the campaign could have a number of ramifications, including advertising spaces and sub-pages. In addition to that, Juan Miguel stresses on the fact that this process requires a joint effort from various departments, including design, to make it appealing. Juan Miguel and Agnieszka furthermore disclose how once the content will be online, team members will be assigned to monitor the user interaction with the landing page and to therefore observe the performance of it on a daily basis: the aim is to update the content accordingly if required.
Stefano explains that in the closure of the project it is assessed the overall performance compared to the initial targets.

On the other hand Carlo, one of the consultants, clarifies that the type of projects they are working on would typically develop across three phases, namely: analysis and study, design and implementation. He states that he is describing projects that are defined as digital transformation.

3) How is the planning phase of a marketing campaign generally carried out?
Gulnaz restate that the planning phase of a Digital Marketing campaign will start with a negotiation with affiliate partners or brands, that along with the sales department will determine the targets and the trends on which the campaign will be focused.
Maria Elena explains that, in order to be responsive to the needs of the users, volume search of trending keywords is checked and that the content is set up accordingly. Marco clarifies that typically the keyword used will combines the brand, service or product which is about to be promoted, with a word belonging to the semantic group of discount codes and deals. Gulnaz and Maria Elena restate that the programs used to spot trending keywords are usually Google Search Console, Google Adwords, Semrush and Keywords Snatcher and Seomofo. Juan Miguel tells how the content department is in charge to decide how many landing pages or subpages are needed. Agnieszka, on her part, explains that the planning phase is also characterized for the selection of the channels through which the campaign is going to be implemented, including possible partnerships with influencers. Stefano and Agnieszka agree on the need of paying attention to what the competition is doing. Stefano states that in this way it is possible to understand both how the content of the competitor is valued and ranked from the algorithm of the search engine, and if it will be possible to display an additional value to the user and to differentiate the type of offer. Finally Stefano tells about the relevance of historical data on the planning phase of a project: these will provide managers with valuable insights on which approaches worked best in the past.

This third cluster was for us fundamental to build on the initial assumption that a Digital Marketing campaign can be considered as a project, according to the attributes provided by the PMI (2013, p. 1), describing it as a “temporary endeavor undertaken to create a unique product, service, or result”. Also, the four phases described from the PMI (2013, p. 1), that are: initiation, planning, execution and closure are mentioned in the responses provided by the interviewees. As anticipated for the first cluster, especially refer to a specific type of Digital Marketing campaign that is a SEO campaign. Compared to what stated so far, the information provided within this section required the researchers another step back to existing literature. As described from Berman & Katona (2013, p. 644) “consumers using a search engine face the option of clicking organic or sponsored links”. Organic links are ranked according to the relevance that the algorithm of the search engine attributes to the queries displayed in the content (Berman & Katona, 2013, p. 644). To meet the expectations of their users, marketers try to increase the visibility of their pages by gaming the search engine ranking algorithm using techniques collectively known as search engine optimization (SEO) (Berman & Katona, 2013, p. 644). The concept of keyword was indeed new to the reader and it derives from the process of query research performed by the users over time.

According to the managers, a campaign begins by reaching an agreement with an affiliate networks. This last one was for the researchers an unexpected actor, participating to the setup of the campaign. As clarified by Edelman & Brandi (2015, p. 2) an affiliate
merchant is “the website aiming to sell goods or services through online advertising”. Affiliate marketing merchants include in their network a wide range of well known online commerce portals and they compensate their partners and publisher on the performances they show by promoting this range of brands (Edelman & Brandi, 2015, p. 2). In the case of the company involved in our research, their ultimate purpose is to offer to organic users coupon and deals on a product/brand they are about to purchase. In case this coupon is utilized, they will earn a commission.

According to the information gathered, in the planning phase the content of the Digital Marketing campaign is prepared mainly looking at volume search of popular keywords. These keywords have to be semantically related with the core business of the company, that is the distribution of online coupons and deals. Objectives and KPIs are established. The KPIs, widely referred by the respondents, are all included in table 2 in section 2.1.6, confirming the use that is made in Digital Marketing of this metrics. Looking at the same section in the literature review chapter, a link with the work of Pauwels (2015, p. 12) deserves to be made, whether the managers confirm that being able to select the correct KPIs and relate them to the ultimate objective will generate value. Furthermore, they answered in accordance to the work of Chaffey & Patron (2012, p. 31) presented in section 2.1.4: they indeed described how important is value internal data in order to understand the funnel performed by the user.

Once the content is online, managers refer to a new phase of the project, which is the execution. Whether they decide to update the content displayed the use two specific terms, that are monitoring and re-planning. This last term was the same used in section 2.1.2, where project planning was nailed down according to Laufer (1991, p.p. 39-40), that described how the initial plan is often confronted and refined according to additional sources of information. According to the scholar, it is a phase that is juxtaposed with the actual execution of the project and that entails a continuous re-planning of changing objectives and requirements.

Not just SEO activities are performed in the planning phase, several managers point out the relevance of performing competitors analysis, looking at what other players are doing and if the search engine is compensating their effort. Also, the campaign can be implemented via different digital channel (e.g. social media, emails) and this requires a strategy that can vary from the SEO campaign described so far. The execution starts once the Digital Marketing campaign is displayed online, during this period the performance of the campaign is constantly monitored via the Web analytics tools: the content of the campaign is updated accordingly. Regarding the closure, the overall performance is assessed. In case of very successful or important campaigns, records are kept. The overall performance is assessed in terms of records and in terms of meeting the objectives and the KPIs set in the beginning.
As for a previous cluster, the working used by the respondents is consistent with the one displayed in the model of Bekavac & Garbin Praničević (2015, p. 376) and Waisberg & Kaushik (2009, p. 1), finally making a link between their five steps (objective determination, KPIs definition, data collection, data analysis, change implementation) and the project phases.

5.1.4 Use of Web Analytics in the Planning Phase of a Project

In this conclusive cluster, the authors look for the overlap between the two main research area, with the aim to answer to the research question posed in the introductory chapter.

4) At which stage of the project can you generally incorporate feedbacks deriving from Web analytics?

Juan Miguel clarifies that there are different ways to look at the feedbacks deriving from Web analytics that are applicable at different stages of the project. According to the content manager of the Spanish team the first stage at which they are applicable is the planning phase, that is widely built around the volume search of trending keywords or historical data deriving from previous campaigns, information that is confirmed from Stefano. Secondly, once the campaign is online marketers are able to assess its performances using Web analytics tools. Two of them are mentioned recurrently by the respondents: Google Analytics and Semrush. According to Gulnaz the kind of feedbacks collectable range from volume search, to ranking position, to the type of search the user is carrying out: specific parameters can indeed describe the reaction of the user to the content offered on the page. Juan Miguel and Stefano agree that the process of monitoring is carried out all along the project duration and the second one states that it is a matter of moving from general to particular. Marco discloses some details on how the content of the Digital Marketing campaign is ranked from the algorithm of the search engine, the page will take some days in order to be indexed after its launch, generally a couple. Marco adds that according to the interactions they are able to assess via Web analytics tools, the managers will be capable of valuing the user experience on their site (or landing page dedicated to the Digital Marketing campaign). Also, Maria Elena states that she checks Web analytics all along the campaign. She specifies that after assessing the volume search of the keywords, she will look at how many people are interacting with the content, where their journey is starting, what they seem to value more on the page. Also, she is able to gather information regarding their gender and provenance. Maria Elena affirms that she considers this as the main advantage of being an online business, having the chance to access to a market analysis that offline would not be so easy to get. Agnieszka also tells about the relevance of making a good use of Web analytics once a Digital Marketing campaign project is over: some figures could be relevant for future use and turned into guidelines. About this Maria Elena adds it would be a shame not to take advantage of this information.

The consultant Carlo says that Web analytics are extremely helpful in the planning phase of a project, in order to understand how their client were interacting with their users. Web analytics are therefore helpful in two different ways: to prove to the client that the digital
transformation process is worth the investment and to set up the actual planning phase of the project itself. Alessandro, the senior consultant coherently affirms that in the process of digital transformation there is the need of monitoring the way in which users are interacting with the digital property of the client, this process is generally systematized by the consulting company that makes a predictive use of Web analytics encountered in previous project, valuing historical data.

8) Do you think that the re-planning of the campaign benefits from incorporating the feedbacks deriving from WA? In which way? In case of no, tell me why you think so.

Gulnaz, along with Juan Miguel, says that monitoring the campaign on a daily basis is a necessity that makes sure that the content prepared in the beginning is still valuable for the user. Doing so, managers are able to realize which channel is performing and deciding if keep on using it or not. Also, Juan Miguel, affirms that every campaign is based on KPIs that should be checked and followed all along the process of monitoring: in order to meet goals and targets set at the beginning it is fundamental to re-plan accordingly. Marco clarifies that this necessity is related to the extreme dynamism that characterize the Digital Marketing environment. Agnieszka shares a recent experience related to the last main campaign carried out in the company, that is “Black Friday”, happened on November the 24th 2017. She noted on Google analytics how there was an high volume search on a certain category of products that was not well displayed on the landing page. She could benefit from the instant feedback and increase her revenues by better promoting that specific product. Stefano adds that the changed value displayed to the users, is recognized from the search engine, that rewards it by better ranking the landing page. He says that it is essential to re-plan a campaign when it comes to SEO strategy.

On the other hand, Maria Elena warns about the possible side effects of being too reactive to the figures shown on Web analytics tools. She says she would not judge a campaign from the very beginning for a couple of bad results and that she might stick up and observe the performance, in order not to jump to hasty conclusions: she calls it an advantage with a risk.

9) Whether the re-planning of the marketing campaign (project) was successful, do you keep records/ case studies for future use? If so, how do you use this information later on?

Gulnaz clarifies that there are two main reasons to keep records of previous successful campaigns: on the one hand they are useful to look back at performances and understand what worked out well. On the other hand it is an opportunity for the company to negotiate with partners and affiliate networks the remuneration of future projects. Marco agrees that records are fundamental for the same reason, while Agnieszka sees a possible greater application of those, as a way to share information and knowledge among all the teams working in the company, on different national markets. Marco, Juan Miguel and Gulnaz agree that so far the practice of keeping records does not have a systematic approach to it.
and that the process of review could be improved. Also Maria Elena admits that the company lacks of a structured approach to the process of review, even if she warns on the trust managers should put back in this kind of data. Because the algorithm on which the search engine is based changes after some years, it is important that information collected in the past are still up to date and relevant for current use. She adds that even if a campaign is formally concluded, whether the content is still displayed online, it is still possible to observe and study the interactions of few organic users with it.

Stefano describes this process with a metaphor. A website is a way of communication between two actors, that are user and website. In order to improve the conversation between the two, the digital marketer should keep trace of previous success and failures, with the aim of understanding and not replicating possible mistakes.

Finally, the consultant Carlo explains that historical data are crucial in his job, because they enable an accurate planning of the consulting project: solutions are designed on the basis of the interactions that users performed in the past. Not just sections of the site are improved, but processes within it. He gives an example of a recent project he worked in, in the banking sector: because of historical data deriving from Web analytics it was possible to design the process of purchasing a bank card in terms of number of passages. Alessandro, the senior consultant, adds that the collection of Web analytics allows the consulting company to create a database that empowers a predictive use of this kind of data. The application of statistical models to this databases allows the company to observe patterns and perform machine learning and artificial intelligence applications of Web analytics.

10) Do you have the impression that the approach to analytics on project planning, given a similar project objective, can change from time to time?

Gulnaz explains that, given a similar project objective, there is a basic approach that her team follows time. Juan Miguel adds that this approach is mainly related to the type of campaign being performed and to its ultimate goal. He furthermore adds that in most of the cases this goal is to generate click outs and because of this, the approach to Web analytics of Team Spain, where he works, is very similar from time to time. Stefano clarifies that this repeatability is related to the algorithm on which the search engine is based and Marco explains that this very standard approach to set up the content and monitor it, covers the 80% of his working time. He also adds that the approach is scalable for the range of brands, products and services they promote, such as for other competitors playing in the same market niche. Agnieszka says she will follow the same approach and check the same KPIs but maybe, depending on the goal of the project, she will focus more on traffic rather than on the bounce rate, for example. Also Maria Elena confirms the standard approach of the content department, adding that even though she could perform variations, she would not feel like exposing the team
Also Alessandro, the senior consultant, confirms that in his company Web analytics in
digital transformation processes are approached in a systematic way, looking for example
at databases of historical data. On the other hand the solution is targeted on the needs and
on the sector is which the client is operating. Finally, Carlo confirms the point of Alessandro, adding that in consulting Web analytics
data could be enriched by adding qualitative information deriving from interviews to
customers and employees, providing further suggestions and insights.

When explicitly asked, the digital marketers explain how the feedbacks deriving from
Web analytics can be incorporated at every step of the process. Regarding the planning phase, which was the main focus of this cluster of questions and of the overall research, it was possible to pinpoint the steps and the type of data that characterize it. More specifically, historical data and figures related to volume search of trending queries are described as fundamental to an accurate planning of the Digital Marketing campaign.

Referring to the historical data, to the content managers, means turning the KPIs registered in previous projects into valuable information and case studies, that contribute to organizational knowledge and boost their bargaining power with the affiliate network. In parallel, the content managers admit a lack of structure in the approach to historical data, that reiterate that the company is making a descriptive use of Web analytics data, at a cross-national level. A further, systematic, exploitation of these would possibly lead to the predictive use argued by Kaur (2017, p. 93-94) in section 2.1.3 of chapter second. Because of the information gathered with the interviews, it is not possible to understand if this is a specific feature of the company involved in our research, or if it is a common characteristic to competitors in the couponing field. The answers of the consultants suggest that generally, industry players appear still confused on how to make an effective use of Web analytics data.

This last point is coherent with the gap located by academic researchers Järvinen & Karjaluoto (2015, p. 117-119), that depict a scenario in which there is still confusion regarding the design and implementation of an effective system, to make a successful use of Web analytics. Furthermore, according to Chaffey & Patron (2012, p. 31) a poor understanding and use of Web analytics data would determine a bad impact on the outcome of the digital marketing campaign, suggesting that not knowing how to look at historical data would possibly generate a vicious cycle in the mid-run.

To wrap up, historical data could be used also to negotiate better deals with affiliate networks and to boost the planning phase of future campaigns. At the same time, the managers state that possible changes in the algorithm of the search engine have to be carefully considered: results that were valued in the past indeed might not be valid anymore. A link is made with the work of scholars Fagni, Perego & Silvestri (2006, p. 55), presented in section 2.1.4, that observe how diverse “works have studied the behaviour of users by analyzing usage data”. The meaning of such is that historical data make possible to locate trending keywords, because they consist of a set of persistent
optimal queries submitted in the past.

Along the overall project life-cycle, feedbacks deriving from Web analytics tools are stated to help the managers to understand the performance of the campaign and to provide them with the choice of re-planning, update or stick to the initial plan. Maria Elena explained how sometimes, even if the campaign is formally concluded, whether the content is still available on the landing page, it is possible to observe and study the interactions of few organic users with it: that provides further information on how user friendly the campaign was and on the value the users attribute to the product or service promoted. Her statement suggests that the intelligence available to understand or test the reaction of the user to the content being promoted might derive from alternative sources, that are not directly related to the landing page planned for the main campaign.

Generally, in connecting the theory on Web analytics with the planning phase of a project, is prominent the work of Loftus (2012, p. 48), cited in section 2.1.4 of the second chapter. The researcher observed how Web analytics can be used to justify site or content changes and redesigns, by providing managers with evidence both on highly trafficked sections of the site and sections that have the potential to be valuable but underused. Also, looking at Web analytics can help marketers to identify and correct troublesome navigation (Loftus, 2012, p. 48). Furthermore, Loftus (2012, p.p. 54-55) affirm that Web analytics can provide a greater value when combined with other sources of information about the users, such as surveys, targeted interviews, stakeholder analysis, usability studies, and a variety other methods.

This last statement is confirmed by the experience of the consultant, Carlo, that explains how they often decide to use actual Web analytics enriching them by adding qualitative information deriving from interviews to customers and employees, providing suggestions and insights.

Web analytics have the peculiar feature of being unique and continuously available, moreover they can be tracked in real-time with minimal effort (Loftus, 2012, p. 55).

When asked about the benefits Web analytics would provide in the re-planning of the campaign all the managers agree on their relevance in progressively observe and improve user experience. The managers widely responded describing the relevance of this last point, element that suggests us to look back to literature and add theory about it. Academics Agichtein, Brill & Dumais (2006, p. 19) explain that “incorporating user behavior data can significantly improve ordering of top results in real web search setting”, warning on the risk of focusing on noisy feedbacks. Millions of users interact with search engines on a daily basis, by issuing queries, clicking on results or ads, spending a certain amount of time on pages and eventually reformulating their initial query: these interactions can provide a valuable source of information for tuning and improving web search result ranking (Agichtein, Brill & Dumais, 2006, p. 19). The opinion of the managers is therefore mirrored by academic literature, creating a link that will be interesting to connect specifically to project phases.
On the other hand, Maria Elena is the respondent pointing out the possible side effects of reacting too early to Web analytics feedback, explaining how she would not judge a campaign from the very beginning for few not satisfactory results, stating that she would patiently observe the progression of the campaign. About this last point, she defines the use of Web analytics as an advantage entailing a risk. Her opinion finds a match with literature cited in section 2.1.6. Authors Saura, Palos-Sánchez, Cerdá Suárez (2017, p. 2) observed how important is to take time, in order to understand the set of valuable indicators that will actually improve conversion rates and consequently, increase the rank of the campaign on the search engine.

Finally, content managers agree on behaving in a standardized way, whether the purpose is to fulfill a similar project objective, providing evidence on supporting our research purpose and question. As clearly stated by Stefano, managers can standardize their approach because the business is very much related to the algorithm of the search engine. This last point traces back to the definition of SEO provided in section 2.1.5 by Fishkin and Høgenhaven (2013, p. 7) that described how the effort of the search engine will be canalized on progressively improve user experience.
6. CONCLUSION
This chapter depicts discussion and conclusion based upon the research findings analyzed in the previous chapter. Also, it discusses implications and recommendations at three layers, namely: managerial, societal and academic.

6.1 Discussion and General Conclusion
As expressed in the introductory chapter, the purpose of this research study is to further investigate the gap located by previous academic researchers and understand how to take advantage of Web analytics, responding to the need of a structured approach, in a scenario that is still widely related to ad-hoc specification (Järvinen & Karjaluoto, 2015, p. 117). Also, the aim of the authors, was to exploit the matter in connection with the subject of Project Management, with the purpose of assessing the benefit of a structured use of Web analytics in the critical planning phase of a project.

In this section we will present the findings that contribute to fulfill our research purpose, along with emergent findings that we consider relevant to enrich it. About this, Reybold et al. (2012, p. 700) describe qualitative research as the “fusion of planning and discovery”. While some research choices are intentionally planned, some others will spontaneously emerge triggered by circumstance (Reybold et al., 2012, p. 700).

Based on our analysis, we are able to draw a number of conclusions. First, Web analytics are used all along the project phases of Digital Marketing campaigns, nevertheless we observed the potential to describe a structured approach to the planning phase.

The planning phase, which is our main focus was described by the managers as characterized by a certain number of activities, including negotiation with affiliate networks, that define the targets of the campaign along with the sales department. After this, the volume search of trending keywords characterizing the object of promotion is checked and the content of the landing page is prepared. Tools used in this process are Google Search Console, Google Adwords, Semrush and Keywords Snatcher and Seomomofo. Consequently, the channels through which the campaign it is going to be implemented are selected, including possible partnership with influencers. In this process it is necessary to check on competitors, in order to understand how their content is valued and ranked from the algorithm of the search engine. Finally, historical data from previous campaigns are used to repeat winning move or to recall what users experienced positively. Among the activities entailed by the planning phase, three are rigorously related to Web analytics confirming their crucial importance, these are: volume search, monitoring of rankings and use of historical data.

Once the content is online, managers identify a new phase of the project, which is the execution. Whether they decide to update the content displayed the use two specific terms, that are monitoring and re-planning. These terms have a connection with theory traditionally related to Project Management and depicted in the second chapter of this research work.
In both the cases, digital marketers either point out the need of a structured approach or describe how they regularly operate following a standardized approach, aspect that is confirmed from the consultants even claiming an industry standard. According to the answers we collected, we will therefore present an updated version of the model depicted in the second chapter.

Secondly, interviewing professionals coming from different industries, that are consulting and Digital Marketing, opened two different scenarios. While in the first case Web analytics are used to create statistical models that can have predictive application in machine learning and artificial intelligence processes, digital marketers are making a descriptive use of Web analytics data. This last one, are used to understand the state of art of the campaign. While describing the fast pace at which the advertising industry is moving thanks to these use of Web analytics data, consultants point out the gap existing between the two approaches. One of the two consultants expressly affirms that looking at improving the overall performances is an outdated approach and that the focus of his sector is to improve specific activities or processes within the site. This last strong statement, along with the consideration made by the digital marketers, raises a wider deliberation. The content managers indeed described a specific approach undertaken within their company and replicated in the different national markets where they compete and they affirm to note a marked similarity with their respective rivals. For this reason, we suggest that nowadays managing the descriptive side of Web analytics can be considered as a threshold capability. This last one is described from Johnson et al. (2017, p. 100) as the need for the “organization to meet the necessary requirements to compete in a given market and achieve parity with competitors in that market. Without these, the organization could not survive over time. Indeed many start-up businesses find this to be the case”.

The third and last key finding is related to the use of historical data. In the case of the Digital Marketing company managers pointed out in parallel their usefulness, particularly during the planning phase and the lack of a structured approach to it. Also the consultants confirm their crucial role, explaining how they are fundamental in building statistical models. For this reason, we suggest that a systematic review of previous projects and data and their storage could consist of a distinctive capability, required to achieve competitive advantage. Johnson et al. (2017, p. 100) explain how distinctive resources or capabilities “are dependent on an organization having a distinctiveness or uniqueness that are of value to customers and which competitors find difficult to imitate”.

6.2 Towards the Model
Posing question two to the content managers, allowed us to clearly identify the phases in which a Digital Marketing campaign is structured and to assimilate them to the four traditionally described by Project Management literature, namely: initiation, planning, execution and closure (PMI (2013, p. 40-41). While describing the project phases of a
Digital Marketing campaign, managers state that it begin with an agreement or project request, it continues with the campaign setup, that characterize the planning phase. Always according to the managers, after this the project is ready to go live, opening the so-called execution phase and finally terminates with lessons learned, deriving from the Web analytics data that depict the evolution of the project just concluded.

Without being explicitly asked and therefore suggested, the managers describe an approach to Web analytics that is congruent with the five steps presented in the second chapter, including objective (goal) determination, KPIs definition, data collection, data analysis and finally change implementation (Garbin Praničević, 2015, p. 376 and Waisberg & Kaushik, 2009, p. 1). Question four asked about the stage of the project in which feedbacks deriving from Web analytics can be incorporated, question five asked about the approach undertaken specifically in the planning (or re-planning phase) and question nine asked about keeping records of previous projects. Answering to these questions, the managers were able to relate the five steps just reported to the project phases. In accordance to them, objective determination and KPIs definition characterize the planning phase of the campaign, while data collection, data analysis and change implementation are possible once the project is being executed. Unexpected was the mention of historical data, that respondents relate to the conclusive phase of the project: according to them a systematic use of such could empower the planning phase of the campaign, benefiting of the understanding of the user previously built.

6.3 Theoretical Contribution
A new version of the model presented in the second chapter is discussed in this section. The interviews, conducted with consultant and digital marketers, allowed us to understand in which phases a Digital Marketing campaign is typically structured. After this it was possible to connect the phases of the project with the steps of the model proposed by Bekavac & Garbin Praničević (2015, p. 376) and Waisberg & Kaushik (2009, p. 1). As specified in the previous section, the project phases depicted on the left side of the figure are drawn according to the description provided by the PMI (2013, p. 40-41).

According to the research findings, the use of Web analytics historical data was missing in the model described in the second chapter. These data could be valuable both on the determination of reliable project goals and KPIs, but also to develop what we defined as a distinctive capability of the firm, that could gather value in moving from a descriptive use of Web analytics data to a predictive use of them. The suggestion derives from the procedures already adopted in consulting companies in the context of projects defined as “digital transformation”. Employ such practices results in the capability to deliver digital campaigns that are tailored on specific clusters of users. To date, organizations seem to lack of such capabilities, reason why they refer to consultants to redesign and manage their digital properties. Compared to the initial assumption that led the purpose of the research it was assessed
that the use of Web analytics has implications on the overall marketing campaign performance, nevertheless the planning phase is crucial because it will determine how the search engine values and ranks the content displayed. According to this, we are confident in affirming that we were able to fulfill the purpose of our research, that was assessing the benefit of a structured use of Web analytics in the planning phase of a project. The authors of this research work believe that this would be enhanced by a systematic review of historical data that would empower objective determination and therefore KPIs definition.

Figure 5. Web analytics on project life cycle.

**6.4 Managerial Implications and Recommendations**

Affirming that nowadays managing the descriptive side of Web analytics can be considered as a threshold capability is a strong statement. Nevertheless, the situation depicted by the managers involved in our research and confirmed by the experiences shared from the consultants, provides us a certain degree of reliability to affirm so.

If this is the case, investments can be made in two directions.
According to the experience shared by Maria Elena, that warned about the risks of a poor understanding of the meaning of KPIs, investments are suggested in order to train employees to have the capability to read and interpret correctly the meaning of Web analytics data, being able to link them with the ultimate goal of the project, but also with the context in which the company is competing. The awareness that KPIs and parameters have little meaning when approached outside the context is described as fundamental to play in the Digital environment. On the other hand investment can be made in order to build internally the capabilities to store historical data, in a safe environment and to make a statistical use of those. This second point derives from the interviews with the consultants, that describe an environment in which companies and managers seem to be still confused on how to approach the mare magnum of Web analytics data.

A third suggestion is related to other channels of promotion, such as social media. As recently explained by researchers Kannan & Li (2017, p. 27) “an important characteristic that sets the digital environment apart from the traditional marketing environment is the ease with which customers can share word-of-mouth information, not only with a few close friends but also with strangers on an extended social network”. In this context customers can post reviews on products, services, brands, but also firms at firms' websites as well as third-party websites: this information could be used in parallel to enhance the planning phase of the campaign (Kannan & Li, 2017, p. 27). Because this channels were mentioned from our interviewees we suggest to carefully monitor the performance of the project not just from a quantitative perspective (Web analytics), but also from a qualitative point of view. This last sentence means to closely observe the type of reactions displayed by the users and to absorb both their positive and negative comments.

6.5 Societal Implications
The societal implication of our research work was postulated rather than demonstrated. While approaching international digital marketers and consultants, responses were initially quite doubtful. It was not unexpected, considering the fact that corporate strategies could possible contain sensitive information which are intended to be kept private. Hence, in order to gain valuable research data it was crucial for us to inform respondents about our ethical guidance and convince about confidentiality. The ethical considerations are outlined in more detail in section 4.7. We are content with our procedures and believe that in the future the respondents will be more frank and approachable in supporting academics in their research.

So far, no major actor is affected by the model proposed. About this it important to specify that Web analytics tools mentioned by the managers in our research findings already filter data by hiding sensitive information about the users, safeguarding their privacy.

6.6 Future Research
This research work is based on findings deriving from a Digital Marketing and a consulting firm. For this reason, it would be valuable to assess its findings on a wider
sample that involves participants from different industries, managing digital properties. Also, the participants involved in our research mentioned several time that their ultimate purpose was the conversion of traffic deriving from organic users into clicks: it would be interesting to test the validity of the model on projects having different goals, like traffic increase or promotion of an unknown brand. Because we highlighted in our theoretical contribution that Web analytics historical data could have a crucial role in the planning phase, we suggest that further research could focus on the closure of the project and propose best practices to store and take advantage of historical data.

We consider this study to be cross-national valid because we carefully included in the sample managers competing on different national markets, nevertheless the validity of the cross-national generalization could be further investigated. Moreover, a quantitative study could reveal which KPIs are more meaningful for different national markets. Also it would be important to carry out a similar study, involving different competitors, in order to understand if the approach to Web analytics is actually carried out in the manner described by the company involved in our search. By understanding if the same Web analytics tools are used and which use is made of historical data, it would be possible to confirm or retract or distinction in threshold and distinctive capability.

Finally, because the main focus of our research was to assess the benefit of a structured use of Web analytics in the planning phase of a project, we suggest that the matter could be linked to other project phases or to the overall project performance.
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