THE IMPACT OF CLIENT'S BEHAVIOURS ON PROJECT CONSTRAINTS

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Abstract - Despite the importance of clients in project management, there is a gap in project management literature when it comes to their impact on project constraints. Project constraints are the boundaries, the line note to cross, the success criteria of every project. A successful project must meet clients' expectations within the project limitations. It is the responsibility of the project manager and his team to make sure that the end product or service meet project specifications within set constraints. Challenges arise when clients' behaviours are not perceived as impacting project delivery regarding due date performance and project expenditure. The aim of this research was to investigate how client's behaviours impact project "success" and influencing the project "progress" in the web development industry. A mixed method was used to conduct the research by means of qualitative and quantitative methods. Questionnaires and interview questions were given to employees working in the above-mentioned industry in the Cape Town area. The research findings reveal that the way client behaves or act impact (negatively and positively) on web development projects execution and on overall project success. Lack of client consistency regarding project specifications was the main issue leading to scope creep resulting in delays and cost overruns. Clients' behaviours and attitude thus have can positively or negatively influence project delivery; therefore, clients should be aware of that fact. It is recommended that organisations should consider client requirements changes and how they impact affect project success before putting blame on project team when a project is delayed and/or over budget.

Keywords - Project Constraints; Client's behaviour; Wed development project; Project success.

I. INTRODUCTION

Nowadays, advances in Internet technologies and related applications enable consumers to interact with firms in new ways. More and more, organisations spend a huge amount of money by investing in customer-directed online source technologies with the purpose of increasing their share of the online market place (Al-Qeisi et al., 2014:2282). Therefore, first impressions about a businessare largely made on the Internet. Whether you are looking up reviews of abakery, checking up the price of a potential car seller, or booking a flight ticket, a bad digital experience can derail what could have been a beautiful relationship, if only the first impression had been better. Consequently, to improve their website's design, to offer better internet shopping experience as well as to enhance the quality of customers' interaction experiences companies apply a lot of efforts (Vila and Kuster, 2011). In fact, One of the objectives of many e-projects, particularly internet and extranet projects, is to achieve global reach, to access customers or suppliers in much broader, more diverse market segments (Goel, 2007). However, to ensure success and achieve the above-mentioned goals or objectives firms rely on project management tools, skills and knowledge throughout the all project process. Caupin, (2006) refers to project management like planning, organization, monitoring and controlling all aspects of project, with the necessary motivation to achieve project goals on the safe manner, within agreed cost, time and performance criteria.Time, scope, cost and quality performance measurements are the traditional project management successful criteria, helping us to evaluate if a project was successful or not (De Wit, 1988; Cooke-Davies, 202; Ika, 2009). These criteria are used as standard successful project evaluation criteria for all the project, web design project included.

According to Pinto and Slevin (1987), the process of managing a project is a constant challenge to its manager: the project manager from the very beginning.The issue comes when the client's behaviour or attitudes are not seen as a cause for delay or failure in project management. The client is usually given total humility as well as no responsibility in project life cycle matters or recorded project delays. The client is not usually aware of how they may contribute to the failure of their own project.

To investigate how client's behaviours impact project "success" as well as influencing the project "progress" in the web development industry.Researchers have commonly examined the relationship between website design and consumer behaviour (e.g., Kwon, Kim, & Lee, 2002; Moss, Gunn, & Heller, 2006); but there is not enough resources or authors looking at the effects that client's behaviours or attitudes have on project limitations.

II. LITERATURE REVIEW SECTION

2.1. Relationship between Web development projects and project management criteria of success.

The competitive pressures in the markets drive clients to demand high-quality services in web development projects as a way of gaining a competitive advantage (Chaffey, 2008). Moreover, Goel (2007) observes

that competition for an audience is one of the major drivers of high website design project results. In the business world, the growing popularity of internet shopping drives companies to focus on designing websites that perform better than competitors (Shinn, 2004). Several projects need to be initiated to allow organisations to design websites that perform better. The good thing about project management is that when it is performed, it can influence both the outcome and the success of a project (Papke-Shields et al., 2010).Young (2006) defines a project as an activity or set of activities with specific goals and objectives and a defined start and end period. It has been noticed by Sheffield (2009: 26-27) that there are a lot of different kinds of possible projects within the web development domain. Most of them, however, fall into one these broad groups: new websites development, new mini-site development, existing website redesign and new web application development. Therefore, those web projects can be seen as an activity or set of activities with specific goals and objectives based on Young (2006) definition of a project above.

Usually, meeting specific requirements of the project or compliance with cost, schedule, and quality/performance has been used as a criterion to measure project success (Barclay and Osei-Bryson, 2010; Meredith and Manuel, 2000; Pinto and Slevin, 1987). These three constraints, known as the "iron triangle", are still considered the gold standard for measuring project success even if theyare often criticized, (Mullaly, 2006; Papke-Shields et al., 2010). Atkinson (1999) project management success which is measured at the end of the project against success criteria, such as those relating to internal efficiency, typically cost, time, and quality.The "iron triangle" means that a project is considereda success when the three following happen:

- the final cost is close enough to the initial budgetplanned;
- the project is completed within the estimated schedule;
- and all deliveries meetthe requirements agreed by all parties involved in theproject.

The very first model to measure success in project management was the "iron triangle" model [2], which was later proven to be only a part of overall project success. The three criteria have been criticized. Thereis no agreement among researchers managers concerning the successcriteria of project (Jha and Iyer, 2006) because achieving a project success depends on several factors meaning that the success of a project can be evaluated using different forms; therefore no single best method of measurement exists (Thomas and Fernández, 2008). It is important to consider that there are many variables that can affect success when it comes to a project, such as thetype of project, the project specifications, the context of the internal organization, the external environment and so on.

Because multiple factors can influence project management success, we would like to look at what impact client's attitude or to what extent they can influence time, cost, scope and quality. Despite the importance of website design, previous research does not provide consistent information on how client's attitudes are affecting the web design project constraints.

2.2. Relationship between project manager/project team and clients

We all clients or customer in a certain manner; therefore, the main objective of our service provider is to keep us happy by giving or providing what we want sometimes beyond our expectations. In fact, a happy client ensures a good reputation as well as profit.Furthermore, project management successis a measure of the project manager's performance in achieving the project plan as judged by the project owner(Musawir et al., 2017:4). Clients are thereforethe one with the authority to judge the final product/service as well as the overall process experience (e.g. how was it to work with an x or y company from client point of view).

In general, project's environment is complexand requires its project managers to have the suitable skills and abilities to address different kind of issues with human, financial, and technical dimensions, to name a few, as well as their interactions. As a result, project managers must respond to difficult tasks, and their jobs are often characterized by overwork and a frantic pace.(Osorio et al., 2014:39). Becausethewell-known project performance criteria such as time, scope and cost are not enough to ensure success; it has been argued that it is crucial for organisations to have an approach as well as an engagement with their clients to ensure project success. The relationship between the project manager and clients came to have an impact on the overall project and trust must be built between the two parties.(Francisco de Oliveira and Rabechini Jr, 2019:131-132). According to Schepper and his co-authors, clients' actions affect not only theirtargets but also the entire project environment (De Schepper, Dooms and Haezendonck, 2014).In 2008 a study done by Kattara, Weheba and El-Said revealed that all employees' behaviours, either negative or positive, are highly correlated to the customers' overall satisfaction. Employees' behaviours have an impact on customers' perceptions of quality and overall satisfaction.

It was suggested by a group of researchers that to be able to boost the project process, the project team and customer need to have relevant knowledge of best project practices.(Handzic et al., 2016:479).Despite the fundamental importance of achievingprojectsuccess, concerning how project managementsuccess isconsidered and measured, the literature doesnot address theinterrelatedness of key related factors.For example, althoughmany studies

have shown thatproject success depends uponproject managercharacteristics, team motivation, projectfeatures andeven portfolio prioritization (PMI, 2017), theliteratureas a whole has not explored the impact of clients' behaviours on time, cost, quality and scope that why we would like to look at that.

III. METHODS SECTION

3.1. Research Design

Mixed Methods Research		
Means	**Qualitative Method**	**Quantitative Methods**
Tools	Questionnaires/Survey Open-ended Question	Interview Questions
Number of Participants	100	20
Number of companies involved	15	15
Sampling Techniques	• Convenience Sampling • Homogeneous Sampling • Opportunistic Sampling	
Location	• Cape Town	
Industry	• Internet Marketing Services; Website design and development	
Target Participants	• managers, subordinates	
Data Analysis	• SPSS	

Figure 1: Summary of Research Design processestimation plan

The study used both qualitative research design and a quantitative research design making it a mixed method study. As a mixed research design, the study applied both an inductive and deductive approach. Within a chosen research design, a deductive approach or an inductive approach can be taken (Cohen, Manion & Morrison, 2011:4). The study aimed at both testing the theories and beliefs within the web design project management environment and at bringing out new theories and perceptions from the same environment.

3.2. Delimitation of study

The study was conducted at internet development and services companies in Cape Town, South Africa. It was restricted to companies that developed and designed websites (intranet, extranet, internet) in part or in full.

3.3. Population of study and sample

A clearly defined population ensures that the results and findings apply to the correct category of elements in society.

The population for the study were members of sampled organisations who worked in website-related projects. These included:

- Website administrators
- Website designers
- Website developers
- Content managers and writers
- Project managers and administrators
- Functional and divisional managers
- Web-services client liaisons
- Web security specialists

The total sample size was 100 persons. These persons were located in Cape Town's website designing and development organisations. The organisations were identified via the internet. Visits to their websites were done to ensure that they fell in the targeted category of website designers and developers.

Kumar (2011:151) states that non-probability sampling encompasses methods of selecting study units without any consideration of the theory of probability. The study used a non-probability sampling method called quota sampling because of challenges in accessing the total population of website sub-industry professionals. A predetermined number of research candidates was set. The researcher then went on to contact firms where candidates who could meet the required quotas could be identified.

Kumar suggests that arbitrarily large samples can be used in the absence of information needed to come up with a scientifically determined sample size. The study relied on this view and arbitrarily set a sample size of 100 on the belief that it is big enough to be representative of the population of website experts in the Western Cape.

3.4. Data Collection

Data was collected through email-administered questionnaires. Attempts to make telephonic contact with targeted potential respondents were made before the questionnaires were administered. Email-administered questionnaires were considered a viable option because they are quick to administer, are cost-effective and work well with a sample that has extensive access and use of email like website experts (Hill & Alexander, 2017:73).

Data was also collected through the personal administration of the data collection tool to the research participants within the work setting.

A closed-ended questionnaire with a brief open-ended section was used in data collection. This is a questionnaire that limits study participants to a set of pre-determined responses (Kumar, 2011:151-153).

A list of potential companies where participants were based was made. Contacts were then made with human resources person and company administrators to identify respondents as well as to seek permission and assistance in doing the study.

The questionnaire designed for the study was subjected to a validation process for face and content validity. Creswell (2003:78) states that the validity of the data collection tool used in the study refers to the extent to which the particular tool measures what it is intended to measure. The questionnaire comprised five sections with a mixture of structured closed as well as open-ended questions. Questions were developed to ensure rigour and objectivity of data. The questionnaires were administer using google

forms links to make it easy to get data on an excel sheet as google forms automatically generate excel sheet from answer received.

IV. DATA ANALYSIS

Data analysis refer to the process of bringing order, structure and meaning to the mass of collected data Marshall and Rossman (1999:150).
For analysis of closed-ended questions, a computer programme called Statistical Package for Social Sciences (SPSS) was used. Data were analysed by using descriptive statistics.
The open-ended questions were analysed through quantitative content analysis by the researcher with the aim of quantifying emerging characteristics and concepts.

V. RESULTS AND DISCUSSION

The aim of the study was to evaluate the impact of client's behaviours or attitudes on project limitations such as time, cost, scope and quality in web designs project. The research reveals that the impact on each constraint can be positive or negative depending on the type of project (duration, specifications, cost, etc) as well as the client's attitude (actions and reactions).The research findings reveal that the way clients behave or act impact (negatively and positively) on the way web developmentprojects are executed and on overall project success.

In this research, client's behaviours refer to the way clients or customer act during the different phases of project management. The way clients conduct themselves based on the project team point of view and experiences. However, attitudes refer mostly to their way of thinking or feeling.
Initially, 100 was the target number of participants but we got 87 responses in total which were used to conduct the analysis. Respondents were people involved in web design and web development project in the past 24 months. Additionally, five Open-ended questions were asked at the end of each questionnaire or in separate forms; 96 valid responses from open-ended questions were analysed. SPSS and Codit.co were used to analyse and code the data collected. Interviews were also conducted.

To be able to see to what extend actions and feelings of clients may influence project cost, schedule, scope and quality we needed to know from web project management team how clients they worked with act and how does it affect their work. They meet usually different types of clients and deal with people from various industries (designing several websites for organisations operating in different business areas; selling different types of products; or providing different types of services). According to the Project Management Institute a project has five standards characteristics such as unique, temporary, planned, definite deliverables, limited time scale and finally limited budget (Project Management Institute, Inc., 2019). Those project characteristics make each project differ one from another; meaning each project got their own DNA or specifications, which is an important aspect to consider when analysing answers from participants.

Our results can be divided in two part:

- Clients actions, attitudes and behaviours
- Their impact on cost, time,scope and quality.

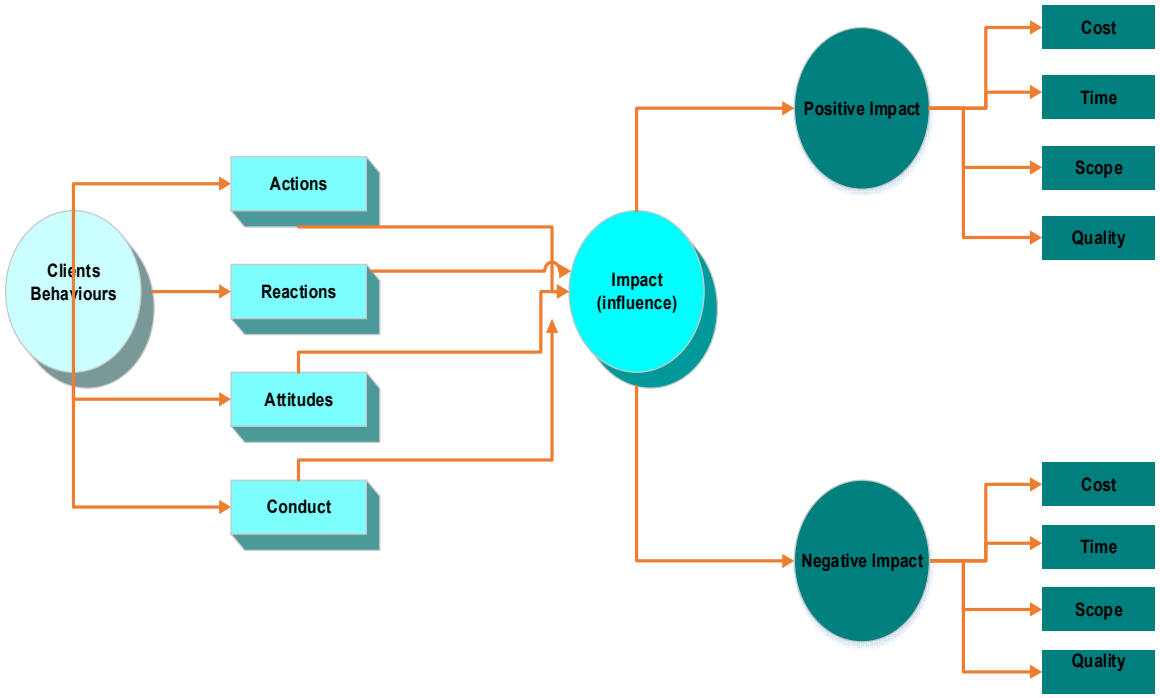


Figure 2: Summary of Results

In our research we divided client's behaviour in four types named: Actions,

Reactions, Attitudes and Conduct. Each may have different connotation in our context therefore we will define meaning of each in our context:

- Client's actions refer to what clients are doing during the project life cycle or do not do according to the web development team. Actions here denote how active clients; it can be client's efforts and deed.
- Client's reactions refer to how clients act in response to certain event, news or information from the web development team regarding the project or staff related to the project process.
- According to the Dictionary.com, "attitude" can be defined as "the manner, disposition,feeling and position with regard to a personor things" or "the way a person views something or tends to behave towards it" (www.dictionary.com, 2019: a). We can add that here client's attitudes refer to the way clients see things, their point view as well as feelings about project processes or decisions taken. The way client perceive things.
- Clients' conduct refers to "the manner in which a person behaves, especially in a particular place or situation" (www.dictionary.com,2019:b).

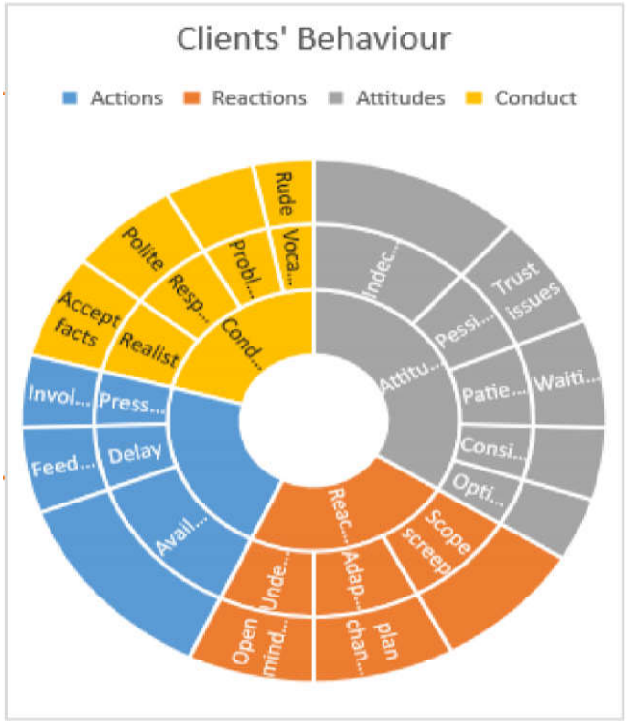


Figure 3: Clients' Behaviour Results

The chart above represents the different behaviours (most common ones) which were mentioned by web development team as having an influence on web development projects execution and on overall project success.

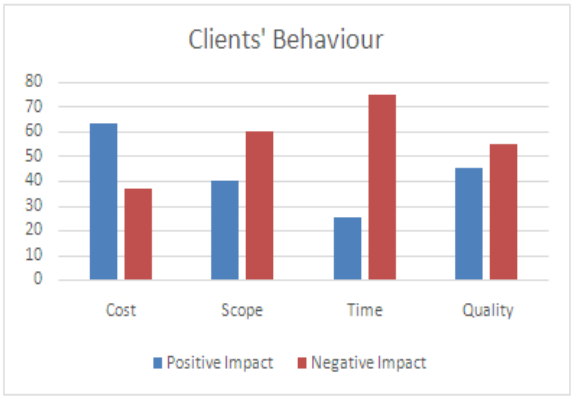


Figure 4: Clients' Behaviour Impact on project constraints.

From the above chart we can see that Client's behaviours have a more positive impact on cost than a negative one. Secondly, when it comes to scope, the impact of client's behaviour is mostly negative than positive. Thirdly, the negative impact on time is quiet high in terms of time constraint compare to the positive impact which seems little. Finally, in terms of quality, there is a small difference between client's behaviour positive and negative impact. According to web designers and developers, the positive or negative impact of client's behaviour may vary depending on the type of project, the type of client as well as the team perceptions of things. Actions, reactions, attitudes as well as conduct of clients may have a positive impact on a project and have a negative impact on another project. In other words, same client actions may have a positive impact on X project and have a negative impact on Y project vice-versa. For example, it was recorded during interviews that client who are always present may help the team

to fix issues quickly as they are around and ready to give quick feedback if something needs to be adjusted. On the other hand, the fact that fact they are always around is stopping certain team developers and designers from moving forward as clients' presence tend to delays them and distract them from completing their job as faster as possible.Consequently, if clients are present and that they keep delaying the team to complete their tasks there is chances that the all project may be delay which may cause cost increase.A team member might see an X behaviour from clientas an advantage while another does see it as a threat stopping him/her from completing the tasks assigned to him/her.

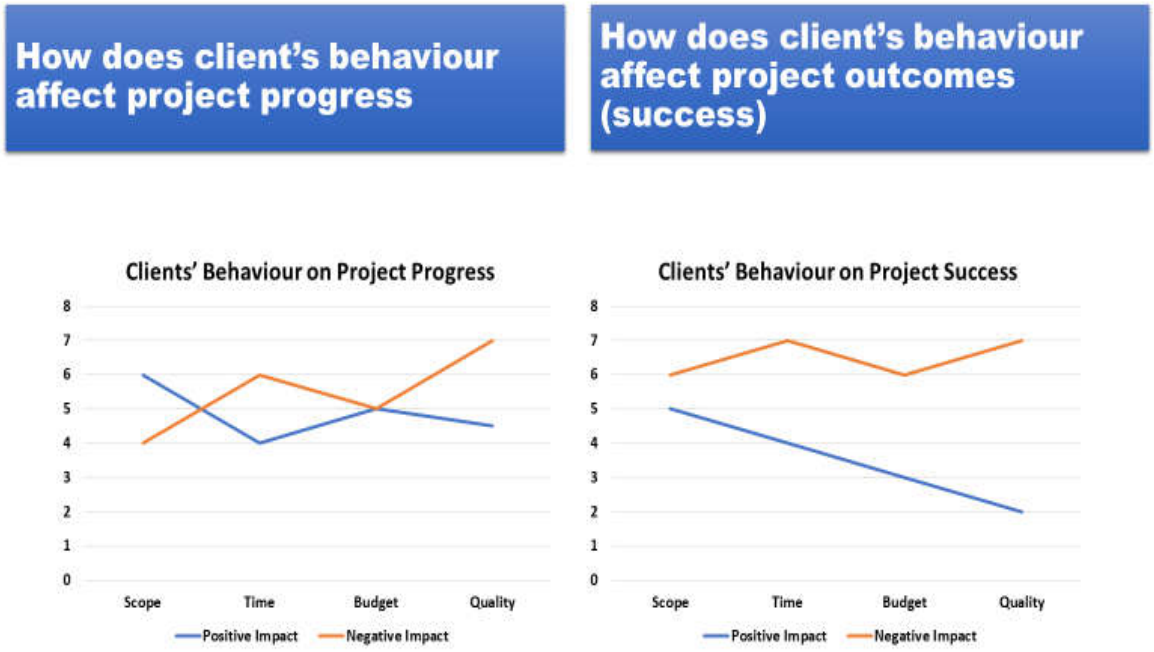


Figure 5: Clients' Behaviour Effect on project success and project progress.

CONCLUSIONS

When it's come to project management, a successful project is defined by the ability of the project team to finish a project on time, within budget by ensuring quality and scope completion. Obviously after all of the above and successful project must be accepted by the client which is one of the most important things before closing phases is completed client must be happy with the final product or service. Clients provide the team with enough information to ensure that the final product is aligned with their expectations. The issue arises when clients do or do not do certain things which ever help favourably the team to complete the project within time and within budget; or which justify delays and failures of website development projects. Therefore, we can see that project success does not only be based on project managers skills and knowledge, they should not be the one to blame when things gowrong as clients may have their role to play too.

It is beneficial for organisations to understand the influence that clients' actions, reactions, attitudes and conduct have on project constraints knowing that project constraints are project success criteria which help organisation to determine if a project was a failure or not. If project success criteria are affected by clients' behaviour therefore the project progress and project outcomes areaffected.

We know it is the job and responsibility of the project manager and his team to complete project within time, within budget and making sure client is happy with final product.It is the project team responsibility to make things happen, consequentlyif something goes wrong or fails the team is the one to blame. The outcomes of our research are revealing to us that clients have their role to play in the success completion of a project. Clients impact on project success should be considered.

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