

Skills for Online IT Outsourcing Resources: A Qualitative Content Analysis on Customer Perceptions

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ABSTRACT

Gig working is transforming the labour markets across the world by disrupting traditional employment models. This change is further accelerated by altered workplace demographics brought on by the Covid-19 pandemic, including great resignation, moonlighting and quiet quitting. Online IT outsourcing resources (IT gig workers) are being used by businesses more frequently for their projects. Online outsourcing offers businesses access to skilled people from around the world as well as lower costs for projects, administration, and compliance. It stands out because it makes special use of resources that are often acquired for brief periods of time and are not constrained by organizational frameworks. There are studies on the fundamental skills needed for online IT outsourcing resources, however customer perceptions on the success of projects using such resources are not consistently investigated. This paper addresses this gap and summarizes the skills required for this transformation, with the help of qualitative content analysis using customer reviews from a leading online outsourcing platform. The most important skills identified include learning that promotes open communication, technical competence, shared ownership, and shared understanding. On them, the effect of Covid-19 is also investigated. This study helps the future workforce for focused learning and it will also improve project team management literature in areas where there is a knowledge gap about online IT outsourcing.

Keywords: Online outsourcing, shared understanding, technical competence, shared ownership, open communication

I. INTRODUCTION

Organizations all over the world, especially Information Technology (IT) corporations, have included outsourcing as part of their business strategies. Outsourcing is the practice of assigning work to another entity. Emergence of a global knowledge workforce, focus on core competencies, sophistication of IT, cost savings, and spread of knowledge throughout the world are the elements driving the demand for outsourcing (Power, Desouza & Bonifazi, 2007).

Ray and Thomas (2019) provided a summary of outsourcing's three major waves. In the 1960s and 1970s, free trade led to the offshoring of manufacturing jobs, which was the first wave of outsourcing. The second wave of outsourcing emerged as a result of the internet bubble in the late 1990s and early 2000s, when businesses

established operations abroad to contract out back-office functions. The third wave is online outsourcing, where technology platforms enable contracts between buyers and sellers via dynamic, ongoing auctions. Organizations will also use a global network of workers who are accessible on demand, in addition to full-time personnel. Benefits like increased productivity, expanded economic opportunity globally, and a shift in the nature of labour itself become possible as a result.

The success of a project is correlated with the project resources' competencies in project management literature. Despite the fact that online IT outsourcing projects are becoming more and more popular due to the above-mentioned benefits, there is a dearth of research concentrating on the project success aspects, with critical success factors and associated skills in particular from a customer perception. The literature that is currently available is focused on general project success criteria and on projects that use virtual teams. Closing this knowledge gap will be beneficial for project professionals involved in online IT outsourcing.

A qualitative content analysis of customer reviews is employed to highlight the team success factors in online IT outsourcing projects. The information used came from a major online outsourcing platform, and the data period chosen was for the purpose of determining how the Covid-19 pandemic affected the success factors. The associated skills are then examined in relation to the success factors.

The structure of this paper is as follows. The background literature review on online IT outsourcing and key team success factors, which covers the related skills, is provided in a concise manner in Section 2. The qualitative content analysis employed in this study is explained in Section 3. Results and explanations of the success factors and related abilities are presented in Section 4. Finally, Section 5 concludes the paper with a mention of limitations and future work.

II. BACKGROUND

Technology advancements aided the creation of online markets for goods and labour. The terms gig economy, digital economy, sharing economy, freelance economy, project economy, platform economy, peer economy, crowd economy, contingent economy, on demand workforce, and online outsourcing are all used in literature (Gorog, 2018; Ray & Thomas, 2019). The term "online outsourcing" is used throughout this paper because it deals with the management of IT resources hired through technological platforms.

Through technological platforms, online outsourcing makes commercial processes more convenient. This entails recruiting contract workers, independent freelancers, and consultants who typically choose to work remotely. Matchmaking between the requester and the worker is made possible by the platforms. The sites typically have rating mechanisms and allow payments in addition to recording feedback. Ray and Thomas (2019) point out that labour transactions are virtually exclusively non-local, because of the gap in wages and skill sets throughout the world, with purchasers living in high-wage nations and hiring workers from low-wage countries. Buyers favour service providers from countries with a higher level of IT development, as well as those with slight country characteristics, such as language, time zone, and cultural differences, according to Hong and Pavlou (2017).

Access to competent people and a reduction in project, administration, and compliance expenses are the platform economy's main advantages for businesses. Integration, security, and knowledge management are the drawbacks. Workers are free to choose their favourite employers as well as their chosen working hours, days of the week, and types of jobs. The lack of social benefits and job, income, and schedule consistency are the workers' main drawbacks. The rise of global internet connectivity, the transition from input-based pay to output-based pay, and the marked decrease in transaction costs as a result of the massive amount of disintermediation facilitated by the

internet were the three main underlying economics of online outsourcing identified by Ray and Thomas (2019). Through its website, the Online Labour Observatory, a partnership between the International Labour Organization and the Oxford Internet Institute at the University of Oxford, keeps track of the nations and professions involved in online outsourcing. Figure 1 depict market share information as of January 2023. The largest occupation is in the field of software development and information technology (IT), with India leading the world in the supply of workers for online IT outsourcing, followed by Pakistan and Bangladesh.

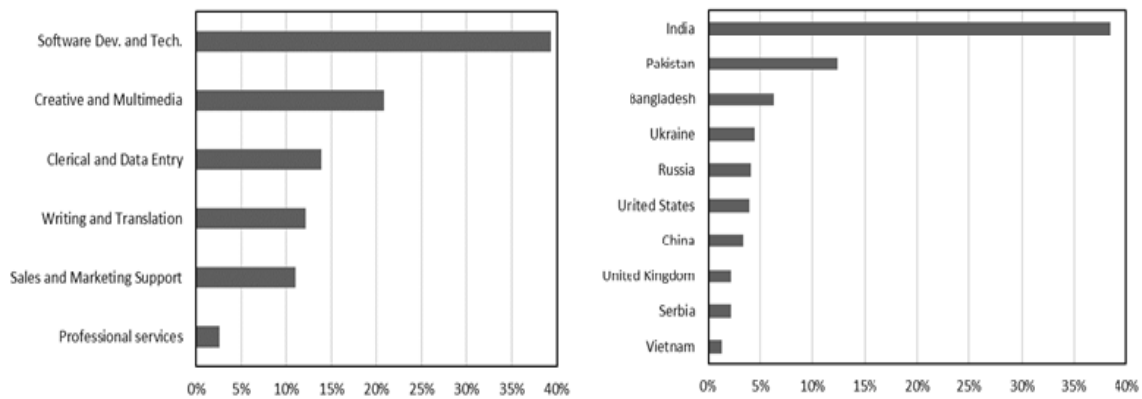


Figure 1. Online Outsourcing: Occupations and Supply

The characteristics that distinguish between a project's success and failure are known as critical success factors. Although project success and success factors have been extensively addressed in project management literature, there has been very little research on the factors of project success related to online outsourcing and the skills involved. Online IT outsourcing has increased as a result of altered workplace demographics brought on by the Covid-19 pandemic, including great resignation, moonlighting and quiet quitting. It would be advantageous if the research examined how the Covid-19 pandemic affected success factors and skills.

According to Ahimbisibwe, Cavana, and Daellenbach (2015), key team success factors for software development projects include internal project communication, project team commitment, team expertise, team experience using development methodologies, and team makeup. As per Sudhakar (2012), task orientation, project team coordination, the suitable project team, team capability/competence, and teamwork are the critical success factors for software projects.

Due to global competitiveness and the emergence of the digital economy, virtual projects based anywhere in the globe are predicted by Walker and Lloyd-Walker (2019). They stressed the importance of focussing on digital skills, social skills, entrepreneurial and creative abilities, superior technical foundational skills, and cross-cultural communication and interconnectivity skills. High-performing project teams are influenced by a number of elements, according to the PMBOK guide (2021). Open communication, shared understanding, shared ownership, trust, collaboration, adaptability, resilience, empowerment, and recognition were the factors identified.

According to the literature review, there is a knowledge gap about team success factors and required skills in online IT outsourcing projects, especially from the perspective of the customers. As a result, the following research questions were intended to be answered by this study:

RQ1: What are the critical team success factors in online IT outsourcing projects?

RQ2: From a customer perception, what are the important skills required for online IT outsourcing resources?

RQ3: How does Covid-19 impact the critical success factors?

III. METHODOLOGY

A prominent online IT outsourcing platform's client reviews are analysed qualitatively as part of this study. By following content analytical norms and step-by-step models without hasty quantification, Qualitative content analysis is "an approach of empirical, methodological controlled analysis of texts within their context of communication, following content analytical rules and step by step models, without rash quantification", as per Mayring (2000).

Dataset. The customer reviews posted on a major online IT outsourcing platform made up the dataset used for the content analysis. Three successive quarters were chosen to study the impact of Covid-19 on reviews: pre-Covid (Q42019), initial outbreak (Q12020), and during outbreak (Q22020), as shown in Figure 2 (data from the World Health Organization).

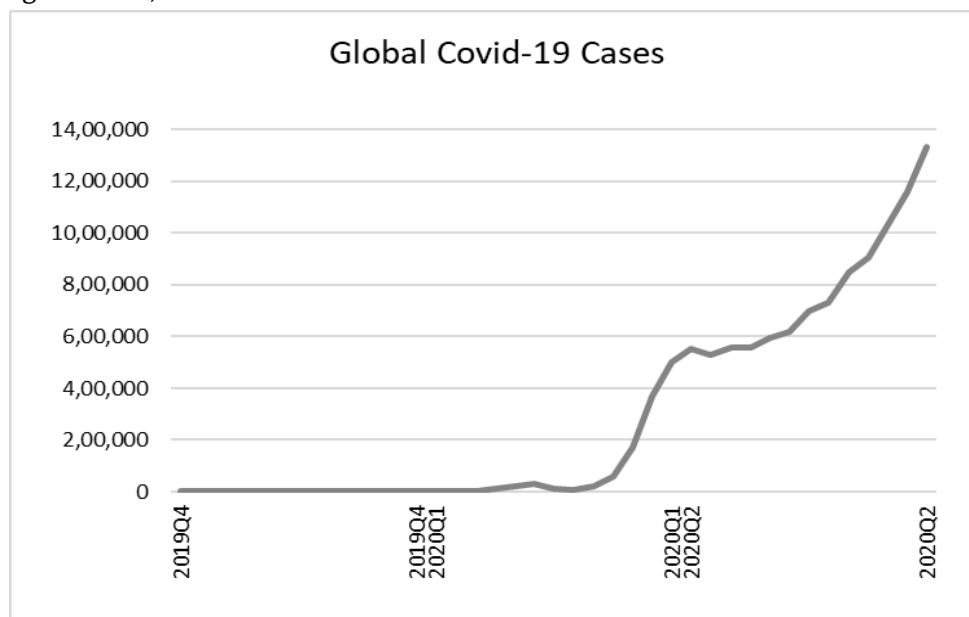


Figure 2. Global Covid-19 Cases (Quarterly)

The steps of the analysis were built on the methodology outlined by Zhang and Wildemuth (2009). After reviewing earlier studies and methods, they developed an eight-step procedure. Additionally, consideration is given to the coding choices a researcher must make when performing a content analysis (Carley, 1993).

1. **Prepare the Data:** The extracted dataset contained reviews that were unusable for analysis as well as blank data. These were taken out, leaving a total of 624, 670, and 776 reviews for each quarter, respectively.
2. **Define the Unit of Analysis:** The fundamental text unit that will be examined is the Unit of Analysis. A term or phrase that designates a concept is used in this analysis.
3. **Develop Categories and a Coding Scheme:** A data-driven inductive method is employed because there are no relevant research or theories connected to team factors in online outsourcing. To gain novel ideas and distinguish between concepts and categories, constant comparative method is used.
4. **Test the Coding Scheme on a Sample of Text:** The coding system is developed by inductive coding of the pre-Covid (2019Q4) data. Where necessary, the categories and the coding system were incrementally revised.

5. **Code All the Text:** The same categories and coding methodology were followed for the other two quarters after the sample data from the 2019Q4 was coded and tested for consistency. There were no more categories or themes to be added.
6. **Assess the Coding Consistency:** After coding all of the reviews, the consistency of the coding is examined. For every text that is evaluated, a 100% check is performed. Additionally, since only one coder is engaged in the coding and categorization, there are no inter-coder reliability or consistency issues.
7. **Draw Conclusions from the Coded Data:** Based on the similarities to success factors found in literature, the resulting categories were then organised under 9 success factors. The factors for high-performing teams (PMBOK guide, 2021) offered the generated categories a close to perfect match. Additionally, categories pertaining to technical expertise and skills were combined under “competence” (Ahimbisibwe et al., 2015; Walker and Lloyd-Walker, 2019; Sudhakar, 2012). In order to identify the critical team success factors, the frequency of occurrences of various categories and factors were also collated. Additionally, the data were aggregated each quarter to examine the impact of the Covid-19 pandemic on these factors.
8. **Report the Methods and Findings:** The analysis’s methodology is described above. The findings and conclusions are presented in the sections that follow.

IV. RESULTS AND DISCUSSIONS

The customer view of the critical success factors has been narrowed using the content analysis methods described in the previous section. 36 categories were used to group the words and phrases from the customer reviews and 9 success factors were then created from these derived categories. Adaptability, collaboration, competence, empowerment, open communication, recognition, shared ownership, shared understanding, and trust were the factors.

The four success factors with the highest occurrence were chosen to answer the RQ1. Figure 3 illustrates these as shared understanding, competence, shared ownership, and open communication. In Table 1, the skills related to these four that address the RQ2 are listed.

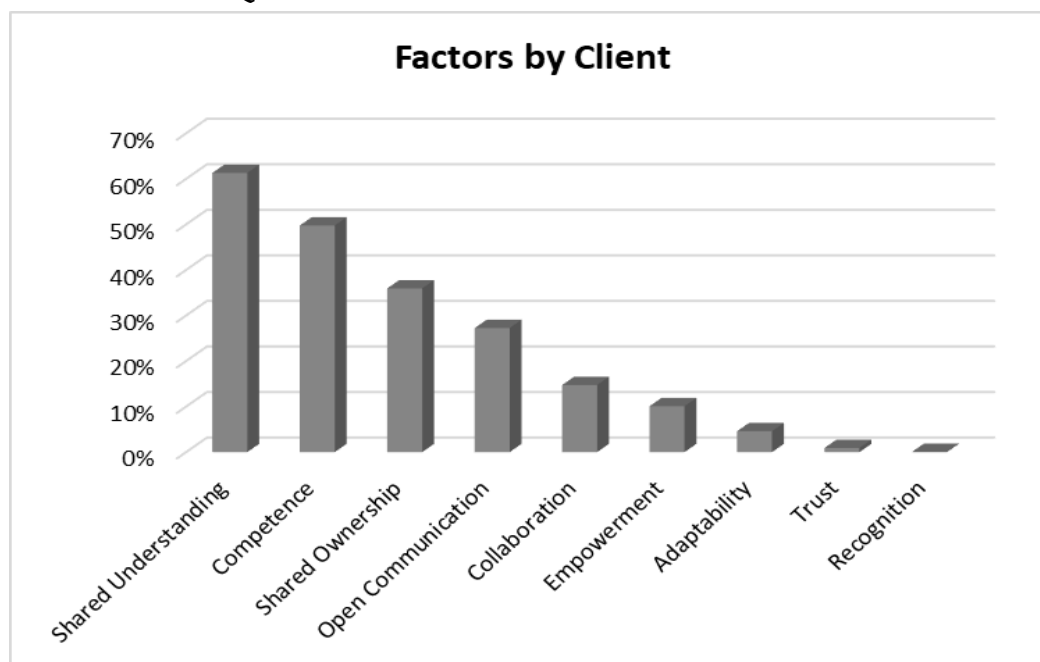


Figure 3. Success Factors

Critical Success Factors	Skills
Shared understanding	Ability to understand requirements and meet expectations; Attention to detail; Quality consciousness
Competence	Technical skills; Knowledge; Professionalism
Shared ownership	Responsiveness; Cost awareness; Promptness
Open communication	Communication; Feedback

Table 1. Success Factors and Skills

To respond to RQ3, each of the nine factors that were identified was examined based on its individual frequency over the course of three quarters. Figure 4 plots these factors and the percentage of occurrences. The graphic shows that practically all success factors are unrelated to the Covid-19 quarters. Shared understanding, a key success factor, has only slowly increased over the quarters. These results demonstrate that the Covid-19 pandemic has no appreciable impact on the critical team success factors in online IT outsourcing projects.

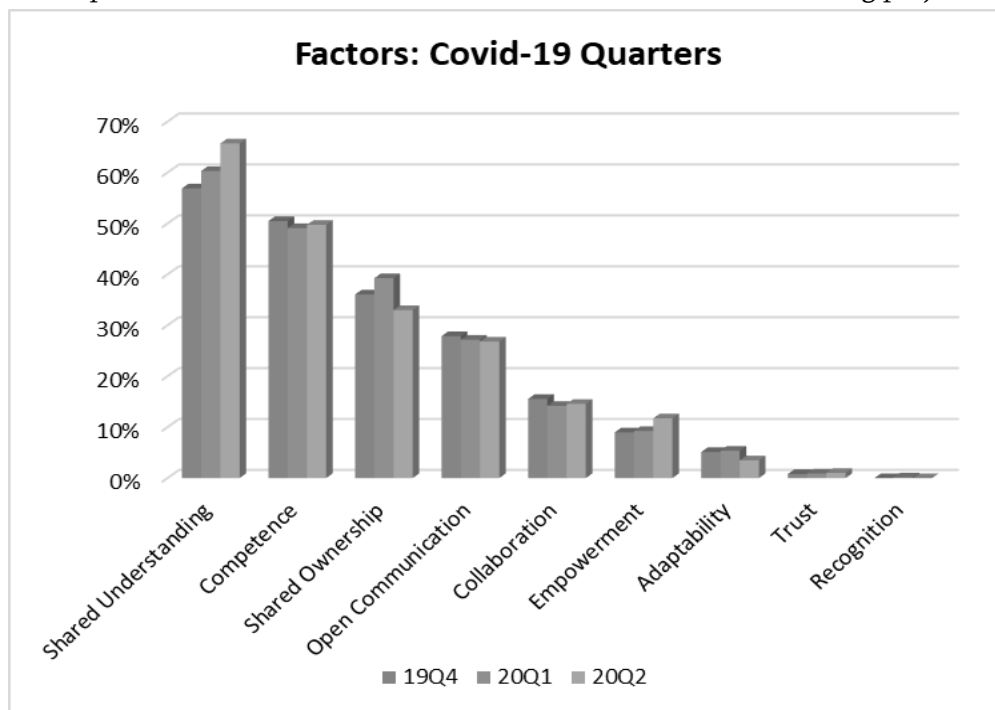


Figure 4. Success Factors: Covid-19 Pandemic Influence

V. CONCLUSION AND FUTURE WORK

The qualitative content analysis has highlighted the critical team success factors and associated skills in online IT outsourcing. The skills are ability to understand requirements and meet expectations, attention to detail, and quality consciousness (shared understanding); technical skills, knowledge and professionalism (competence); responsiveness, cost management and promptness (shared ownership); and communication and feedback (open communication). Further investigation has revealed that only the success factor "shared understanding" has any

relationship to the Covid-19 quarters and that the Covid-19 pandemic has no appreciable impact on the critical team success factors.

This study's limitation is that it solely took into account customer reviews when analysing the success factors. A concurrent investigation from the worker perspective is proposed, and it would provide a balanced study of the critical success factors.

Potential online IT outsourcing project resources could benefit from this study, to concentrate their learning on the important skills required for success in the platform economy. Project personnel and companies using online IT outsourcing resources would benefit from being able to focus on critical team success factors and skills to maximise project success. Additionally, it would improve project management literature in areas where online IT outsourcing knowledge is lacking.

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