Facilitators and barriers to successful project Implementation in the Irish Healthcare setting

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Glossary of Terms

EHR	Electronic Health Record
GDPR	General Data Protection Regulations
HIT	Healthcare Information Technology
HSE	Health Services Executive
IHI	Individual Health Identifier
IPM	Integrated Project Management
IT	Information Technology
MedLIS	National Medical Laboratory Information System
PMP	Project Management Professional
PRINCE2	PRojects IN Controlled Environments 2

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Certificate of Originality

I declare that this dissertation that I have submitted to Dublin Business School for the award of master's in business administration (MBA) Project Management is the result of my own investigations, except where otherwise stated, where it is clearly acknowledged by references. Furthermore, this work has not been submitted for any other degree.

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Abstract

Healthcare organisations have embraced the role of project manager and adopted project management practices for many years in Ireland. The delivery of healthcare is changing and transformative projects are on the increase as organisations benefit from successful implementation with improved work processes, enhanced quality and safety of patient care. The aim is to explore and identify facilitators and barriers to successful project implementation in the Irish Healthcare setting. The methodology included development and circulation of an online survey to project managers with experience working in this setting. Data analysed using Microsoft® Excel and qualitative data with thematic analysis. The results identify stakeholder engagement, leadership, project management practices and communication as facilitators. Barriers to overcome are poor definition of project requirements, lack of feedback and rejection by users. To conclude, recommendations for project managers to incorporate stakeholder engagement, project management practices and effective communication to positively influence project implementation success.

Chapter 1: Introduction

1.1 Background

Large scale healthcare projects are on the increase in healthcare organisations across Ireland with many large transformative projects on the horizon (Health Service Executive, 2021) (Department of Ireland , 2013). Healthcare organisations have adopted project management methods for many years. The delivery of healthcare has changed, with patients increasingly treated for chronic conditions by multiple healthcare providers over their lifetimes, requiring records to be available across organizational boundaries. This is particularly true within Ireland where the healthcare environment consists of public and private hospitals (Nolan, 2006). Irish citizens are entitled to free healthcare, through the Health Service Executive (HSE) but a significant proportion still look to access healthcare through the private hospitals.

Healthcare information technology (HIT) in Irish hospitals and community healthcare providers have little or no integration of healthcare systems leading to many disconnected silos and difficulties in facilitating project implementation. The challenges experienced by clinicians when a patient presents to different healthcare organization wastes professionals' time, generates unnecessary repeated tests, is inconvenient and in some cases dangerous for patients (eHealth Ireland, 2021). Patients using the Irish healthcare system have also expressed concern and frustration at the lack of integration across the Irish health system (Darker, 2013). The development of integrated electronic health record (EHR) systems within groups, regions and nations is an important task for healthcare providers.

Healthcare organizations represent one of the most complex forms of organizations due to the number of stakeholders, multiple missions, and decision makers with professional autonomy to manage these changes (Gordon & Pollack, 2018). Irish people are living longer with life expectancy increasing two and half years between 2007 and 2018, access to healthcare remains an issue (Department of Ireland , 2019). The healthcare organisations are being put under more pressure to make rapid changes to better the patient's experience, enhance health outcomes and reduce health costs. Simultaneously, the value of the project manager in healthcare organisations is strengthening due to the pressures that challenge the healthcare organisations (Laukka, et al., 2020). Successful project implementation is fundamental to allow healthcare organizations to cope with the increasing demand for healthcare.

Projects undertaken in healthcare organisations are often described as transformative and the benefits of successful implementation include improvement in work processes, enhanced quality and safety of patient care, patient centred approach and cost-effectiveness of care (Lluch, 2011) (Laukka, et al., 2020). In recent years, HIT projects have become more popular and a move to introduce electronic health records (EHR) with a focus on digitalisation and towards integrations across the Irish healthcare system (Health Service Executive, 2021). Chiocchio et al. (2010) findings have shown that healthcare professionals are involved in two to five projects concurrently, demonstrating the popularity but also the importance of successful project implementation.

“Success” has been explored as a central theme in project management literature (Santosa, et al., 2020). Project success criteria not only include time, cost, and quality, what is known as the ‘iron triangle’ but also the significance of customer and stakeholder satisfaction

(Santosa, et al., 2020). However, one of the main obstacles reported with transformative projects in healthcare organisations are challenges and difficulties in the implementation phase of the project (Palm & Persson-Fischier, 2021). Laukka (2020) recognizes facilitators to successful project implementation in healthcare organisations to be communication of goals, strong leadership with well-defined governance structures, training and support to all stakeholders, addressing work process change and follow up. Barriers too are documented in the literature including lack of user feedback throughout the project, lack or absence of stakeholder engagement and rejection by user to project implementation (Cresswell, et al., 2013).

Laukka et al. (2020) reports that despite major investment, information technology project implementation in healthcare organisations often fails due to leadership barriers, where leadership is poor or lacking support. The identification of determinants such as facilitators and barriers that may positively impact project implementation success in healthcare organisations is important to meet the increasing challenges it is encountering. In particular at a time where project managers are working to enable and support the successful implementation of many large transformative projects in progress or on the horizon to better the patients experience and enhance health outcomes.

1.2 Rationale

The rationale for this research looks to support project managers to achieve successful project implementation in the Irish healthcare setting. This research is particularly important at a time when the Irish healthcare setting is required to adapt to changes in a time manner and looks to make a major contribution to the improvement of services to patients of healthcare

organisations. It will seek to provide project managers with a better understanding of facilitators and barriers to successful project implementation in the Irish healthcare setting and recommendations for future projects they are work on. Healthcare organisations can benefit from the strengthening value of project managers working to better the patients experience and enhance health outcomes.

1.3 Research Aims and Objectives

The research aims to fill the gap in knowledge by exploring and identifying the facilitators and barriers to successful project implementation. The overall aim of this research question is to explore and identify facilitators and barriers to successful project implementation with project managers working in the Irish Healthcare setting. The research objectives are to:

- To undertake a targeted literature review on successful project implementation and the facilitators and barriers that contribute to successful project implementation in healthcare organisations.
- To develop and undertake an online survey that is distributed to project managers with experience working on project in the Irish healthcare setting to explore and identify facilitators and barriers to successful project implementation.
- To provide recommendations on how project managers can optimise the use of facilitators and assist in recognising and overcoming the barriers to successful future project implementation in the Irish healthcare system.

The research will be based on the personal experience of project managers in the Irish healthcare setting. It offers the value of the learning from participants who have experience in the field of study, the Irish healthcare setting. The research will act as form of lessons learnt and recommendations for project managers who are currently working or new to working on projects the Irish healthcare setting.

1.4 Research Questions

The research questions are:

1. What are the facilitators to successful project implementation in the Irish Healthcare setting?
2. What are the barriers to successful project implementation in the Irish Healthcare setting?
3. What recommendations or lessons learnt should be shared with project managers to assist in overcoming the barriers to successful project implementation in the Irish Healthcare setting?

Chapter 2: Literature Review

This chapter examines the literature on successful project implementation, which aims to provide an understanding of the facilitators and barriers surrounding project implementation in healthcare organizations. The focus of the literature review will be on project implementation success facilitators and barriers and to explore and identify the factors that influence successful project implementation. The literature review includes all projects undertaken in a healthcare setting.

Project-based work has become an increasingly exploited medium to make necessary organizational changes and implementation of healthcare projects within organisations (Lunkka, et al., 2019). Project-based work refers to work that is organized into distinct, complex tasks limited in both time and scope (Lindgren, et al., 2014). Across many healthcare organisations, the importance of health projects in particular HIT projects have been highlighted and their value is still growing due the pressures that challenge healthcare today (European Commission, 2018). The Department of Health eHealth Strategy for Ireland (2013) details the incremental approach to digitisation of health services and processes in Ireland to a more patient centred model so that the data about the right patient is available in the right place and at the right time to ensure safe and efficient provision of care services (Department of Ireland , 2013). eHealth is the move of healthcare records and services to electric platforms and offers a significant opportunity to healthcare organisations that is fundamental to providing new and integrated models of care. The new delivery model will realize benefits in patient health and well-being, as well as delivering efficiencies in resource utilisation (eHealth Ireland, 2021).

The eHealth strategy recognizes that the introduction of new software used across a healthcare organization or system is a business change project first and a technology project second. Furthermore, the strategy documents the lessons learnt from the mistakes of England's National Programme for Information Technology whereby it is necessary to establish a high level of clinical and patient involvement from the start of the project. There are over 300 HIT projects are currently being progressed or in development throughout the HSE (eHealth Ireland, 2021). Projects include a national EHR, National Integrated Medical Imaging System, National Medical Laboratory Information System (MedLIS), enhanced IT for Primary Care, Individual Health Identifier (IHI), ePharmacy, EHR for the new National Children's Hospital and the Cancer Care eHealth Programme (eHealth Ireland, 2021).

There is a growing expectation for health organisations to implement innovative projects to meet the challenges of today's healthcare. The literature reports a hurdle for innovative projects to have an impact on the healthcare system in practice is as a result of difficulties in the implementation phase (Palm & Persson-Fischier, 2021). The literature from (Helfrich, et al., 2007) states that "*often, complex innovations are adopted with great anticipation only to fail during implementation."* Palm & Persson-Fischier (2021) attributes this to a lack of definition of theoretical perspectives related to how innovation projects and new ideas can be implemented in healthcare organisations. Nilsen (2015) attributes existing theory as "*usually are too generic to provide sufficient detail for guiding an implementation process."*

2.1 Successful project implementation

Project implementation phase involves putting the project plan into action (Project Management Institute, 2021). The process of project implementation is reported in the literature for many years. Blumenthal & Stoddard, (1999) describes project implementation as a fundamental part of the entire project life cycle. Whereas, Pinto and Slevin (1988) describes the process of project implementation, as involving the successful development and introduction of projects in the organization, presenting an ongoing challenge for managers. The project implementation process is complex, usually requiring simultaneous attention to a wide variety of human, budgetary, and technical variables.

Numerous research efforts to identify what facilitates project implementation success and their success factors, i.e., the inputs of the management system that directly or in- directly influence the success of the project (Cooke-Davies, 2002). In the project management literature, the definition of 'project success' has by many authors followed the tradition of pinning up three main measurement assessments commonly known as 'The Iron Triangle'. This triangle includes 'Cost' as seen in the project budget. 'Time' defined as delivering on or before a promised delivery date. The last part of the triangle is 'Quality and Scope' defined as meeting the requirements to functional and technical specifications as well as the absence of defects and the reliability of the product (Fleron & Pries-Heje, 2021). The literature from Ruggles (2012) defines project success as "*any project that has fulfilled all of the success criteria typically agreed upon by the stakeholders before the start of the project, upon completion of the project. However, these criteria may change, by stakeholder consensus agreement, over the project life cycle.*"

The literature by Nelson (2008) on project retrospectives and how to learn from past projects there is also the addition of 'stakeholder satisfaction' to the Iron Triangle as shown in Figure 1. From Nelson's perspective the real success is to have happy stakeholders (Nelson, 2008). Similarly, Santosa, et al., (2020) states that project success criteria are not only include time, cost, and quality but also customer and stakeholder satisfaction has significant importance.

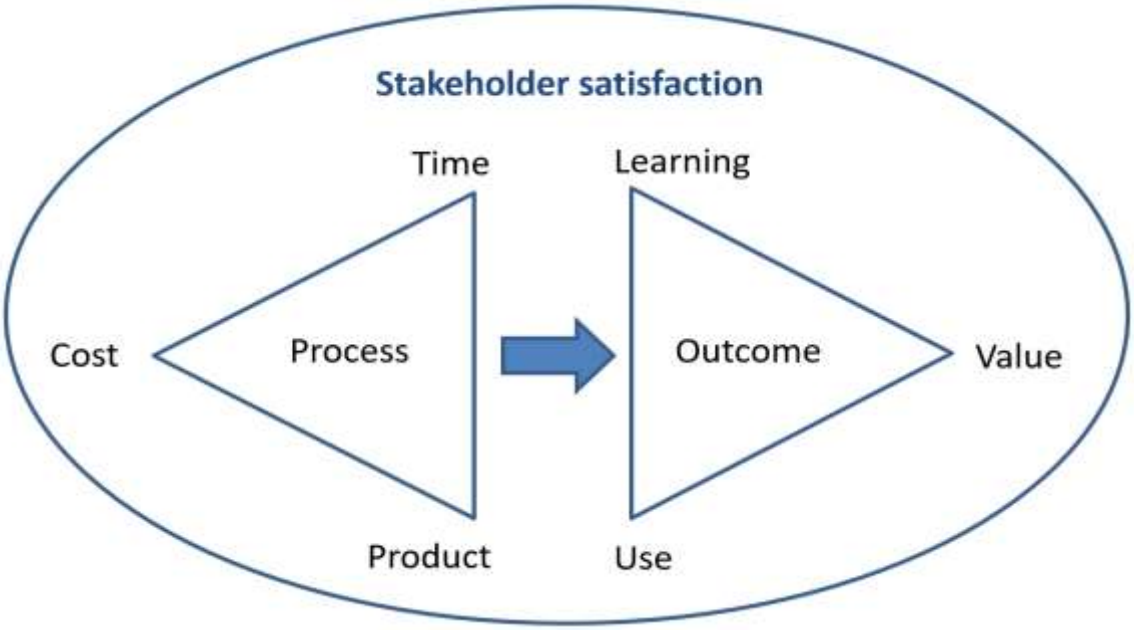

Figure 1. Iron Triangle process can lead to an outcome of use, value and eventually learning (adapted from leron & Pries-Heje, 2021)

In addition, successful project implementation is described by Pinto and Slevin (1988) as coming in on-schedule, on-budget, achieved the project goals and user acceptance by the clients or stakeholders for whom the project is intended. This literature review focuses on successful project implementation in the healthcare setting and explores the facilitators and barriers reported with project implementation in healthcare organisations throughout the world.

2.2 Successful project implementation in healthcare organisations

Project managers have been shown to support the transition to increasing the use of patient outcomes in healthcare organisation and is due to healthcare managers being forced to adjust their focus, resource allocation and overall approach to patient care (Stelson, et al., 2016). The challenges that face healthcare organisations nowadays is to implement and deliver more enhanced information, and to provide more efficient quality services at a cost that is affordable to the entire population. To achieve this objective, health organisations require more comprehensive and integrated technological solutions, by optimisation of their available resources and eliminate inefficiencies. More and more, the role of project managers and project management practices are recognised as being a vital enablers to use in developing initiatives that are aimed at promoting the implementation of organisations' strategies (Gomes, 2014).

Additionally, Gomes (2014) states success as being perceived differently by the various participants involved in managing projects in healthcare settings. In some cases, the project success phenomenon in healthcare organisations can be viewed as a 'Fata Morgana'; "a synonym of "mirage" that is a deceptive image of a distant object, an illusion or fantasy; something that appears real or possible but is not in fact so (Fleron, et al., 2019) Similar to Gomes, Jahangirian, et al., (2017) refer to project success as multi-faceted and multi-perspective as the perception of project success may be different between individual stakeholders in the project.

Project success is documented by Fleron, et al. (2019) as the project having the resources needed and launched on time and within budget. Therefore, the project management iron triangle of resources, time and budget can be successfully applied and the project implementation was deemed a success. Palm et al. (2021) reported that healthcare innovation

improvement project success increases patient life expectancy and quality of life, and makes access to care, treatments, and diagnostic-path options easier. Innovation improvements in healthcare therefore generates efficiency and reduces costs in the organisation. Healthcare service and process innovations have been reported as having a positive impact on operational performance (Moreira & Sousa, 2017). The findings from a study of more than 130 hospital-setting innovation projects, by Zippel-Schultz and Schultz (2011) reported that the positive relationship between project planning and project success. The author stated that this project success was mediated by the coordination within project teams and further supports the role of the project manager in successful project implementation.

Ruggles (2012) reports that healthcare delivery organisation project teams often request that eleven key goals be met and that these goals are viewed as critical to a project teams' successful implementation as shown in figure 2. These key goals the author believes are necessary facilitators that are essential to achieving successful project implementation in healthcare organisations.

Figure 2. Eleven Key Goal met by project teams in healthcare organizations adapted from Ruggles (2012)

Challenges to successful implementation of projects in healthcare organisations are also present. One of those being reported by Fleron & Pries-Heje (2021) is resistance to change in healthcare organisations. The findings from Stelson et al (2016) suggest that success for continuous improvement projects in healthcare organisations is dependent on the extent to which employees understand and are committed to a change. This is driven by managerial support where it's been demonstrated that involving employees who are directly affected by proposed changes results in improved project success and stakeholder representation from other departments indirectly affected by the project (Stelson, et al., 2016).

The literature has highlighted that the growing number of HIT projects have great potential for improving the quality, safety, patient-centeredness and cost-effectiveness of care (Lluch, 2011) (Laukka, et al., 2020). Gomes (2014) reports HIT project implementation as one of the main assets to improve patient care. However, despite major investments, HIT project implementation tends to fail more often in healthcare settings (Glaser, 2005) (Heeks, 2006) (Chiocchio, et al., 2015). Project in general, the rate of successful implementation is improving and this is attributed in the literature as due to the advance in knowledge, understanding and standards by project managers (Shore, 2008).

Laukka et al. (2020) states that identifying implementation determinants such as barriers or facilitators is imperative, since recognising these determinants may positively improve implementation outcome. Implementation facilitators and barriers are a consistent focus in the research literature, and findings suggest that healthcare leadership is one of the important implementation determinants (Mair, et al., 2012) (Lunkka, et al., 2019). Lack of support from leaders has been recognised as one of the major barriers in successful project implementation (Lluch, 2011). The successful implementation of projects in healthcare organisation is critical assist healthcare organisation overcome the challenges it encounters with improvements in work processes, enhanced quality and safety of patient care through a patient centred approach. This review of the literature is broken down thematically into two main themes: facilitators and barriers to successful project implementation in healthcare organisations.

2.3 Facilitators to successful project implementation

Numerous research efforts to identify what facilitates successful project implementation and their success factors, i.e., the inputs of the management system that directly or in-directly influence the success of the project (Cooke-Davies, 2002). The literature identifies facilitators to successful implementation in healthcare organisations as the inclusion of clear communication of project vision and goals, strong leadership with well-defined governance structures, provision of support and training, addressing work process change and follow up (Laukka, et al., 2020) (Jahangirian, et al., 2017). The findings from Creswell et al. (2013) identified the ten key considerations for successful implementation of large-scale HIT as; clarify what problem (s) the technology is designed to help tackle, build consensus, consider your options, choose systems that meet clinical needs and are affordable, plan appropriately, consider the infrastructure, staff training and education, continuous evaluate of project progress, maintain the system and keep project on course.

A systematic review of the literature on the impact of clinical leadership on HIT adoption by Ingebrigsten et al. (2014) identified seven leadership behaviours that were associated with successful outcomes in HIT adoption as shown in figure 3.

Figure 3. Seven Leadership behaviors associated with successful HIT adoption (adapted from Ingebrigtsen, et al., 2014)

Mazur et al. (2012) suggest a focus on behavioural change as a solution to long-term improvement and culture change. The literature refers to managerial support is a prerequisite for real and perceived healthcare project success (Stelson, et al., 2016). Therefore, the author's recommendations for project managers on how to improve project success is the requirement to obtain clear support from senior managers and financial decision makers from the onset and before project challenges arise. Clear managerial support can increase project credibility, especially where there are ties to reward systems (Stelson, et al., 2016). Healthcare managers can also communicate long-term project goals and projected practical impact on each

participant. Culture and leadership in healthcare organisations are documented in the literature as strong facilitators for successful implementation in healthcare (Rogers, et al., 2020).

Similarly, the literature from Weintraub and McKee (2019) stress that leadership always is important at all levels of the healthcare organisation. The existence of managerial support is a crucial factor in the success of implementing innovations in healthcare (Palm & Persson-Fischier, 2021). Research undertaken by on managers at 27 hospitals identified that organizational support for innovation was the strongest predictive factor of successful implementation of organizational change project (Palm & Persson-Fischier, 2021).

Despite the literature recognising that HIT project implementation requires strong leadership, it is also documented reported that leaders are not always aware of their roles in successful project implementation (Desveaux, et al., 2019). The reason attributed to this is thought to be due to the changing environment and advances in healthcare technology and the roles of healthcare leaders have expanded. Traditionally, it has been part of the healthcare leader's role to have competency in clinical health services and management, but now, leaders must also possess knowledge of technologies related to HIT projects (Laukka, et al., 2020).

Healthcare leaders are now demonstrating that they to take on many roles in HIT project implementation including supporter, change manager, advocate, project manager, decision-maker, facilitator and champion (Laukka, et al., 2020). Another role of the healthcare leader is as a "sellers" in the implementation of HIT projects to their subordinates and colleagues and tries to make them recognise the benefits of the change more positively (Laukka, et al., 2020).

Creswell et al. (2013) identifies communication as a facilitator associated with successful implementation and adoption of healthcare projects. Communication is also necessary when there is change planned and for project managers to ease employees into continuous improvement culture within the healthcare organisation. The literature reports that project managers should focus on small wins from tangible projects that have clear deliverables before proceeding to more complex projects (Stelson, et al., 2016). Tight communication ensured cross regional and programme alignment contributed to project success (Fleron & Pries-Heje, 2021). This is achieved by the project managers establishing networked of stakeholders who form a test panel and collaborate with the core stakeholders to achieve healthcare benefits and bridge potential knowledge gaps between the project teams and operation management.

The early engagement with the project stakeholders from the start of the process and a phased approach to implementation waves enabled early learning (Fleron, et al., 2019). In the earlier literature change management is important for creating innovation and successful implementation of projects in healthcare organisation an approach referred to by Grol (1997) presents what he calls the approach to be 'changing clinical practice,'

Communication to stakeholders and the end user of project progress should also incorporate an opportunity for feedback (Cresswell, et al., 2013). It can be used to inform on-going implementation activities as it has been shown to provide an opportunity to identify and respond to unforeseen problems in a timely manner. The study on what is seen as facilitating successful project implementation were where communication and interaction between the provider and the consumer is perceived as regular communication on updates on the progress of the project (Jahangirian, et al., 2017).

Facilitators of successful project implementation include technical factors with the correct technology requirements for the organisation at the end of the pre-test phase to ensure suitability to proceed along with the use of project management practices (Gomes, 2014). Palm and Fischier (2021) reported six theoretical perspectives to support the implementation of innovation projects in healthcare organisations (table 1).

Table 1. Theoretical perspective to support the implementation of innovation projects in healthcare organisations (adapted from Palm and Fischier, 2021)

Theoretic perspective	Examples from Palm & Persson-Fischier (2021) of how ideal scenario could be achieved
Collaboration with the core stakeholders for the healthcare benefit	Establish and use a "stakeholder library" (i.e., core stakeholders who an interest in the development of healthcare) Include core stakeholders including patient representatives in the 'test panel' as part of the implementation phase.
Collaborations with wider stakeholders in the implementation process	From the start collaborate with stakeholders during the implementation phase. Expectations, objectives and goals of the various stakeholders should be clarified and discussed early in the process. Continuous feedback to all stakeholders
Culture within the organization	Focus on what would be achieved, more than the ability to be innovative Trust Establish a culture where all employees feels responsible for the development of the organization. Create a culture where all employee feel a willingness to learn from mistakes that occur.
Human Resource Management	Recruitment of new employees who have knowledge of change management and implementation. Early in the process share positive results or early wins in the implementation phase. All employees are aware of the organization's vision and goals.
Organizational structure	Develop a process for how implementation of innovative projects are managed. Establish small working groups to identify and develop small-scale prototypes tested and trialed in the same environment. Develop and implement using circular process with constant review and improvement.
Resource availability	Resources should be set aside for monitoring and benchmarking with similar implementation processes. Plan for evaluations that take into account health economic aspects as a result of the innovation. The costs of *not* implementing innovations need to be depicted.

The work of Palm and Fischier (2021) demonstrates the importance of being able to show early innovations success during the project as it creates enthusiasm and motivation for all stakeholders to continue with the implementation process. Organisational factors were identified as the strongest predictive facilitator for implementation of organisational change projects within 27 hospitals (West & Anderson, 1996). While Palm and Fischier (2021) reports that the whole organization follows the same ambition when developing an innovation-enabling culture and the cost of not implementing the project needs to be depicted to inform all stakeholders of the importance and significance of the project to the healthcare organisation.

Training is reported as a facilitator to successful project implementation. Creswell et al. (2013) reported staff training a key consideration for successful implementation and adoption of HIT project as '*Trained users tend to be more satisfied with new technologies than those who have not been adequately trained.'* Training is most effective if it is tailored to individual roles of the user and should provide the users to practice 'hands-on' new process to simulate the new working environment. Creswell et al. (2013) suggests that investment in training is often lacking, and that training should be approximately 40% of the project implementation budget. Laukka et al. (2020) identifies the roles of leaders and managers in healthcare organisations as an enabler to ensuring that training is in place for healthcare professionals as training has been shown to be an important facilitators in successful project implementation.

2.4 Barriers to successful project implementation

The healthcare setting represents is one of the most complex organizations due to the number of stakeholders and decision makers with a shared aim to improve the quality, safety, patient-centeredness and cost-effectiveness of care in the organisation. Additionally, many uncertainties and barriers exist, as well as constraints, which range from funding concerns, through to the diversity of subsystems, interoperability and other restrictions that may well prevent the successful implementation (Gomes, 2014). The healthcare sector has had many disconnected silos, and the perspective of having to work collaboratively across disciplines in the healthcare organisation (i.e. project team) rather than the usual ongoing work arrangement compounds the problem (Chiocchio, et al., 2015).

Gordan and Pollack (2018) recognises that the process of healthcare services integration requires further attention. Merging healthcare services is a complex process of organizational and behavioural changes. Shortell et al. (1993) identified that the barriers to integration project implementation include a failure to understand a new core business, resistance to change a hospital paradigm, lack of governance with an understanding of an integrated environment, failure to define roles and responsibilities, inability of managers to lead and implement change, and an integrated approach that is misaligned with the strategic vision of the organisation.

Healthcare projects are extremely popular with healthcare professionals citing that at one time they are involved into two to five projects (Chiocchio, et al., 2010). In more recent literature, Chiocchio et al. (2015) identifies projects as essential in the healthcare organisation for improvements and adapt to today's demands yet project management and its ability to encourage collaboration on projects is not part of the training for healthcare professionals. This

highlights the increasing importance and value of the role of the project manager in healthcare organisations. Project managers work with healthcare professionals to look to overcome factors that challenge healthcare systems (Laukka, et al., 2020). As discussed previously, most healthcare projects are transformative and promote a multidimensional organisational transformation. Gomes (2014) reports that this as a major change in terms of culture, processes and procedures, human resources and infrastructures of the healthcare organisation.

The literature reports that healthcare professionals are busy prioritizing care to patients and that engagement and participation in projects are over and above their primary responsibilities and job role which adds considerable pressure and shown to be detrimental to their mental health and well-being (Rice, et al., 2010). Another contributing factor is reported in the difference between ongoing healthcare service delivery and project work is not clearly understood by healthcare professionals (Chiocchio, et al., 2015). In summary, the absence of training for healthcare professionals involved in projects and knowledge of project management skills is due to being too busy to invest the time in planning for successful project implementation even where the project can offer significant value by saving time on the future through better coordination and reduced rework (Chiocchio, et al., 2012).

A further barrier to successful implementation of healthcare projects is the governance of healthcare organizations and a review of this barrier suggests that successful project implementation involves not just the delivery of objectives measured to specified project criteria, but also the management of the cultural and behavioural aspects of how these healthcare organizations operate (Gordon & Pollack, 2018). The themes broadly speaks of a misalignment between traditional project management and the needs of a healthcare integration environment.

Changes to organizational governance can be a barrier to successful project implementation. In particular where significant organizational changes are implemented, with the intention of improving patient outcomes and not reducing service delivery during implementation. The lack of or inappropriate governance was found to be the most common barrier to successful project implementation (Ruggles, 2012). This highlighted the role of the healthcare organisations strategic governance not just project financial governance.

The Coplan and Masuda (2011) paper discussed that if healthcare organisations don't change information technology and incorporate project management practices, successful project implementation and healthcare improvements will not be achieved. A fundamental shift is required in how organizations manage these projects with the adoption of project management practices, information technology management, and change management disciplines to increase the likelihood of project success as illustrated in figure 4. Project managers working on HIT projects need to be able to apply integrated project management (IPM) skills to help improve patient care and healthcare outcomes. The inclusions of change management, considers end user training, understanding user 'as is' process, and how process are likely to change with the implementation of the project. Coplan and Masuda (2011), believe those adoptions and application of project management practices, information technology management and change management are equally if not more important than the project and technical aspects of the implementation. Integration project management is identified in the literature as the skills required by project managers to overcome the barriers to successful project implementation.

Figure 4. Integrated project management (IPM)

Resistance to change too is reported on numerous occasions in the literature as a barrier to successful project implementation in healthcare organisations (Shortell, et al., 1993) (Fleron & Pries-Heje, 2021). Resistance to change can occur as the implementation wave in the project progresses the more and more obvious that user resistance is present and the barrier to successful implementation is observed (Fleron, et al., 2019). This requires the need for the project team to manage and address after each implementation wave. Additionally, the requirements to ensure reinforced user configuration and assistance after project go-live (Fleron, et al., 2019). Gordan (2018) also identified the barrier and user resistance experienced with project implementation was a result of lack of information in managing a change process.

The barriers in healthcare improvement project implementation success documented by Stelson et al. (2016) arises from multiple, conflicting goals, poor managerial or leadership support, organizational silos, and inadequate resources. In addition, successful HIT project

implementation barriers include resistance to change, lack of stakeholder knowledge regarding the topic, or resistance at group or individual end user level (Fleron & Pries-Heje, 2021).

The complexity of HIT project implementation reported in the literature by Laukka et al. (2020) states how projects involving improvement in technology and a move to digitalise healthcare have been shown to fail more often in the healthcare organisations. Healthcare leaders as discussed under the heading of facilitators to successful project implementation and their role in contributing to this as supporter, change manager, advocate, project manager, decision-maker, facilitator and champion. However, healthcare leaders are moving away from their traditional role in clinical health services and management and may be seen as barrier as they adopt an awareness of their new roles in successful implementation. Glaser (2005) findings reported one of the main reasons to cause HIT failure is due to is poor leadership in healthcare organisations. Occasionally, some leaders even display a lack of interest in HIT successful project implementation, and they do not actively adopt any role in the implementation process (Nilsson, et al., 2016).). This reluctant leadership might be explained by the lack of confidence among leaders in relation to HIT implementation, and therefore they might prefer to have more support and training for themselves (Kujala, et al., 2019) (Laukka, et al., 2020). Poor leadership in healthcare organisations and lack of support from leaders as barriers to HIT implementation. Additionally, organisational culture, management and decision-making practices, lack of user feedback and stakeholder engagement throughout the project (Shore, 2008) (Cresswell, et al., 2013.

Creswell (2013) documents the further challenges of rejection by user and undermining system requirements. The literature has demonstrated that poor communication results in

reduced motivation by stakeholders for involvement in future improvement projects in healthcare (Stelson et al. 2016). While the research undertaken in Portugal by Gomes (2014) has shown that internal factors and project team problems represent the major cause of failures in project management implementation.

Furthermore, lack of stakeholder involvement to plan the project from the onset and define the project requirements can result in problems as the project implementation progresses (Jahangirian, et al., 2017). The literature recommendations 'vendor selection' good practice for HIT projects as the selected EHR vendor cannot only meet current clinical needs and project requirements but fails to have the functionality to adapt with future advances (Ruggles, 2012) (Cresswell, et al., 2013). This is recommended to project manager working in healthcare organisations to assist in overcoming barriers to successful project implementation.

2.5 Contribution of existing literature

There is a growing expectation for healthcare organisations to implement projects and innovations that assist in overcoming the challenges of today's healthcare. The literature implications for healthcare policy makers and healthcare management teams in facilitating successful project implementation necessitates strong leadership with well-defined governance structures, clear communication of project vision and goals, and provision of support and training to implement change in the organisation. The presence of strong leadership to support all stakeholders in healthcare organisations but also an awareness of the value project managers offer healthcare organisation in facilitating successful project implementation.

The research presented in this review contributes to the growing stream of literature on facilitators and barriers to successful project implementation in healthcare organisations. The literature explores and identifies ways that project managers can use facilitators in practice to positively influence implementation of projects in healthcare organisations. This research answers to two significant areas for successful project management identified in the literature. First, this research contributes to exploring and identifying facilitators to supporting project managers with successful project implementation in healthcare organisations. It calls for greater involvement and participant of management teams within the organisation to support projects undertaken in healthcare organisations and to contribute to successful implementation. From an organisational perspective, strong healthcare leadership is important within well-defined governance structures of the organisation and the provision of training and knowledge necessary to implement the change.

Stakeholder satisfaction is essential for project managers to achieve for project implementation success in healthcare organisations. In addition to strong leadership the literature identifies stakeholder engagement through clear communication of project vision and goals. Communication is identified as a facilitator associated with successful implementation and adoption of healthcare projects and is necessary when there is change planned. Project managers are required to ease employees into the change associated with the project and a culture of improvement within the healthcare organisation. Early engagement with the project stakeholders from the start of the process and a phased approach to implementation waves contributes to facilitating successful project implementation.

Secondly, it is critical for healthcare organisation to overcome the challenges it encounters with improvements in work processes, enhances quality and safety of patient care through a patient centred approach. If healthcare organisations don't change information technology and incorporate project management practices, successful project implementation and healthcare improvements will not be achieved in overcoming the challenges of todays' healthcare. A fundamental shift is required in how organizations manage projects in healthcare organisations with the adoption of project management practices, information technology management, and change management disciplines to increase the likelihood of project success.

In conclusion, the identification of the determinants such as facilitators and barriers to successful project implementation in healthcare organisations is important as recognising them may positively improve implementation outcome.

2.6 Research hypothesis

This research is focused on exploring and identifying the determinants such as facilitators and barriers to successful project implementation in the Irish healthcare setting. A deductive approach is used in this research, "developing a hypothesis (or hypotheses) based on existing theory, and then designing a research strategy to test the hypothesis" (Wilson, 2010). The deductive approach used in this research to develop hypotheses deduced from theory identified in the literature review and testing its applicability to the Irish healthcare setting.

The research hypothesis aims to determine the relationship between the facilitators and barriers to successful project implementation reported in the literature holds for project

managers with experience working in the Irish healthcare setting. The research looks to establish if the determinants such as facilitators and barriers of successful project implementation in healthcare organisations globally, translates to the Irish healthcare setting.

Chapter 3: Methodology

This research aims to fill the gap in knowledge by exploring and identifying the determinants such as facilitators and barriers to successful project implementation. This section presents the procedure and participant sampling, survey design, materials used for data collection of both quantitative and qualitative data, ethical considerations and outlines the methods of analysis.

This research was undertaken using an online survey and required participant from project managers working across Ireland in various healthcare organisations or consultancy firms. As described by Braun et al. (2020), online surveys facilitate affordable and offer easy accessibility to large geographically dispersed populations. This research uses a cross-sectional time horizon as it provides an experience from project managers as a snapshot at a point in time.

A mixed method approach to this research was undertaken as it incorporates both qualitative and quantitative research methods of data collection and analysis in one study (Creswell, 1999). This type of study approach allows the researcher to understand the phenomena, facilitators and barriers to successful project implementation in the Irish healthcare setting qualitatively and to explain findings through numbers and charts.

A variation of question styles were incorporated into the survey to achieve the research aim. Multiple choice, Likert scale and ranking questions were used as part of the quantitative research, open-ended questions were used for the qualitative research. Multiple choice with select predefined answers were used to collect participant demographic information as it is easy and efficient for the participants to answer and for the researcher to analysis. The Likert scale was developed by Rensis Likert as a psychometric tool, includes a set of statements of research

study's hypothesis (Taherdoost, 2019). Participants in the survey were asked to state their level of agreement with given statements using a five-point scale from strongly agree to strongly disagree.

Ranking questions were used to explore the ranking preference of the survey participants to facilitators and barriers informed by the literature review. This style of question allows participants to order the facilitators or barriers that were most likely for successful project implementation in the Irish healthcare setting. Smith et al. (2018) describes ranking questions as difficult for participants as typically requires a good deal of cognitive effort. While ranking questions provide value to the researcher in participant ranking of facilitators and barriers to successful project implementation, only two ranking questions were included in the survey.

The mixed method approach incorporates open ended qualitative questions. Traditionally, qualitative research is undertaken using interviews but due to time constraints the researcher incorporated open-ended questions into the online survey. Braun et al. (2020) describes the use of open-ended questions as having a rich potential to generate qualitative data that is not always realised by researchers through data collection and data analysis. The use of qualitative questions in this research provides the benefit of openness and flexibility to address a wide range of participant views, experiences and practices that achieves a deeper understanding of research. While the use of qualitative questions provides the researcher with a 'wide-angle lens' on the research topic as described by Toerien & Wilkinson (2004).

3.1 Participant Sampling

The participant sample for the online survey was defined as project managers with experience of working with projects the Irish Healthcare System, both private and public. The research used non-probability purposive sampling for this research due to time availability and practicality from a pool of project managers working in Irish consultancy firms and the project management office in Irish public and private hospitals.

The feasibility of this research was reviewed prior to commencing and confirmed through the researchers existing contacts that Irish healthcare organisations have a project management office and numerous consultancy firms were involved in projects within the Irish Healthcare setting. For practicality and accessibility reasons, project managers were contacted by the researcher by email and invited to participate in the research. This sample was identified from the researchers existing contacts working in the Irish public and private healthcare system and Irish consultancy firms. The researcher's aim was to spread the sample as broadly as possible in the Irish healthcare setting, and participants were required to possess experience necessary to undertake the role of project manager on projects in healthcare organisations. The inclusion criteria was project managers with experience working on projects in the public or private Irish Healthcare setting. The exclusion criteria were project managers with no experience in the Irish Healthcare setting or project stakeholders who are not directly involved in project management.

The purpose of the research survey was explained to the participants in the written information provided in the participant information sheet prior (Appendix 1) prior to commencement of the survey.

3.2 Survey Design

It is noted by Hynes et al (2011) that accurate planning, structuring and analysis of the survey results in the greatest reliability of the results. For empirical studies the survey design is the most important aspect of the research.

A pilot of the survey was circulated to a small sample of five participants. Any queries or concerns detected by the pilot participants were feedback to the researcher and adapted before wider distribution of the final version. The survey used in this research is presented in appendix 2. The survey was designed to be short and included 14 questions with a variation of question styles, multiple choice, Likert scale, ranking and open-ended questions. Braun et al. (2020) reported that a smaller number of questions worked best when using online surveys.

The survey consists of three sections:

3.2.1 Section A: Respondent demographics.

This section of the survey seeks to capture the key demographic traits of the respondents including their current project manager role in the HSE, private hospital or consultancy firm and if the respondent has obtained a professional project management qualification such as project management professional (PMP), PRINCE2 or others. Project manager experience and the number of projects and type of projects undertaken in the Irish healthcare setting.

The questions in this section were designed as multiple-choice questions where the respondents were asked to select pre-determined answers. This allows the participants to complete the section in a timely manner and easier for the researcher to analyse.

3.2.2 Section B: Facilitators to successful project implementation

The section of the survey explores the determinant, facilitators to successful project implementation in the Irish healthcare system. A Likert scale used a five-point scale to express how the individual feels they strongly agree to strongly disagree with two statements *'From your experience, communication is critical for successful project implementation'* and *'Successful project implementation is when the project deliverables generate value to customers and stakeholders'.*

Furthermore, in this section the survey sought to elicit ranking preference to explore the facilitators to successful project implementation in the Irish healthcare system. A ranking question is used to elicit the individual's participant experiences of the facilitators to successful project implementation with, with 1 being the most likely facilitator and 5 being the least likely facilitator. The facilitators used in the survey to rank preferences was informed by the literature review.

A qualitative question was used in this section as question 10, *'From your experience, are there any other facilitators to successful project implementation in the Irish healthcare setting?'.* This sought to identify any additional facilitators experienced by project manager that were not included in the ranking question 10. The use of open-ended questions in the survey was to provide the researcher with additional insight and deeper understanding to assist with supporting project managers improve project implementation success in the future.

3.2.3 Section C: Barriers to successful project implementation

The final section of the survey explores the barriers to successful project implementation in the Irish healthcare system. A Likert scale used a five point scale to express how the individual feels they strongly agree to strongly disagree with the statement that *'Lack of management support is a barrier to successful project implementation'.*

The research aimed to elicit ranking preference to explore the barriers to successful project implementation in the Irish healthcare system. The ranking question is used again in this section to elicit the individual's participant experiences of barriers to successful project implementation with, with 1 being the most likely barrier and 5 being the least likely barrier. The survey sought to elicit ranking preferences from barriers based upon findings in the literature review.

Similar to section B, qualitative questions were used to explore and identify any additional barriers experienced by project manager, *'From your experience, are there any other barriers to successful project implementation in the Irish healthcare setting.'* The third qualitative question in the survey, *'If you were to give one piece of advice to assist project managers in overcoming the barriers to successful project implementation in the Irish healthcare setting, what would it be?'* The use of open-ended question by the research was to obtain a descriptive answer from survey participants that shares their personal experience and lessons learnt from working on projects during their career to date.

The final version of questionnaire used in this research is included in the Appendix 2.

3.3 Materials

An online survey using 'Google Forms' was used to collect data for this research from project managers with experience working in the Irish healthcare setting. An online survey provided the researcher an affordable and easy to distribute to a wide group of project managers in this study (Braun et al. 2020).

McMaster et al (2017) results have shown that online surveys produce *"significantly higher response rate.... compared with the paper-only strategy"*. Additional benefit of the online survey is that they can generate more honest responses from participants due to the appearance of privacy provided by the use of an anonymised online survey (Braekman & Berete, 2018).

3.4 Procedure

Data was collected using both primary and secondary research. The researcher commenced using secondary research to review the literature. This was undertaken through Dublin Business School online library, Dublin Business School database EBSCO, Project Management Journal, Project Management Institute Publications and Google Scholar. Secondary data sources through the literature review were used to develop the survey. Primary, first-hand data gathered from project managers using an online survey.

To answer the research questions, it is vital to communicate directly to project managers with experience working on projects in the Irish Healthcare system. The online nature of the survey enabled it to be circulated through email by the researcher. The email contained the participant information sheet (Appendix 1) prior to access the survey link. The survey was

anonymised, and data stored in compliance with the General Data Protection Regulations (GDPR). The survey was open for respondents to complete during a four-week period during November and December 2021. The response rate was 63% and exceeds the average response rate for online survey responses reported in the literature (McMaster, et al., 2017).

3.5 Ethical considerations

The sample used in this research was not considered a vulnerable group in society and this section details the ethical considerations undertaken by the researcher. Survey participants were provided with information to allow informed consent prior to participation in the research and advising participants that the research was for academic purposes. Prior to completing the survey, participants were provided with contact details of the researcher to provide an opportunity to ask questions if they have any queries or concerns about their participation in the study. Participation is voluntary and the option to opt-out of the research at any time will be clearly explained in the participant information sheet, appendix 1 and before commencing the survey as a mandatory question (Figure 5).

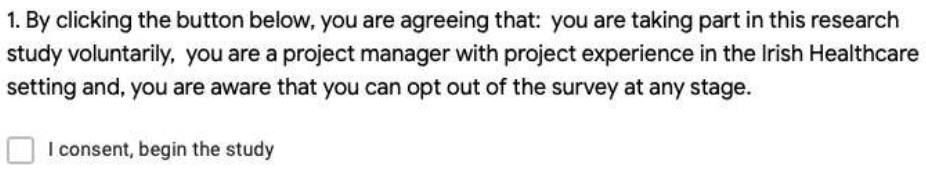

Figure 5. Participant consent prior to completing survey

Anonymity and confidentiality of the research participants was maintained. The survey did not ask for any personal information to be submitted through the online survey. Demographic

information was related to the research undertaken (area of work, level of experience, project management qualification obtained etc.). The data gathered for this research project was based on the participants' experiences and stored securely and anonymously on a password protected device. Only individuals directly involved in the research had access to the survey responses collected through 'Google forms'. Each participant was assigned an identification number to code the participant in the survey data.

3.6 Data analysis

The examination of the data collected with the survey was analysed using Microsoft® Excel 2016. A descriptive approach to the statistical analysis of the quantitative data from the survey respondents was undertaken. This was using tables and graphs to obtain a good sense of the distributions and overall trends of the responses. Qualitative thematic analysis was performed on open-ended survey responses. Thematic analysis is a method for identifying themes in qualitative data, non-numerical data (Terry, et al., 2017). The thematic analysis use Braun and Clarke's (2006) six step framework on the participant survey data (Maguire & Delahunt, 2017).

The research goal with thematic analysis is to identify themes, patterns in the participant responses to address the research question and to enable an enhanced comprehension in the research area. The research reviewed the survey initially for repeated words or phrases from the participant responses. The researcher identifies themes at the semantic level which looks at the theme within the explicit or surface meeting of the data and does not look beyond what the

participant has written in their response to the online survey (Maguire & Delahunt, 2017). Themes from the secondary data in the literature review are compared with the primary data from the survey participants working in the Irish healthcare setting. The researcher identified themes in the responses using Microsoft® Excel 2016. This provided the researcher with common themes to code the data obtained from the survey participants.

3.7 Limitations

Limitations of the methodology used are encounter by the researcher with participants confined to a pool of project managers working in Irish consultancy firms and the project management office in Irish public and private hospitals, confined to existing contacts of the researchers working in consultancy firms and the project management offices. As reported in the literature by Braun et al. (2020), the research reports the limitation of the use of a pre-determined question structure and the use of an anonymous survey does not allow for further clarification of the responses provided. This limitation has the potential that the depth of the data generated by as survey compared with interviews is lost. Additionally, the time constraint provided to undertake this research was over a three-week period which had to be extended to four-weeks by the researcher as the participant responses were slow at the start.

Chapter 4: Results

This chapter presents the results of the online survey. Subsections cover the graphical and numerical description of the data, the assessment of the benefits and facilitators of successful project implementation. The most likely facilitators and barriers analysed and ranked from the participant responses to the survey. The open-ended qualitative questions will be analysed by theme using Braun and Clarke's (2006) six step framework (Maguire & Delahunt, 2017).

The six-step framework approach to the open-ended questions is as follows:

Step 1. Become familiar with the data from the survey participants by reading and re-reading the responses.

Step 2. Generate initial codes for the data by the researcher reviewing the survey responses to organise in a meaningful and systematic way. This reduces the data into small groups.

Step 3. Search for themes or patterns that captures interesting data from the participant responses and organised into broader themes that answers the research question.

Step 4. Review themes along with modifying and developing on initial themes. The researcher collates all of the survey data that is relevant to each theme. Each theme is colour codes as part of this step.

Step 5. Define the themes with the aim of the researcher to establish and identify what the theme is saying. Using this, map of the thematic analysis is generated to illustrate the relationship between the themes.

Step 6. Write up.

The results of the thematic analysis is discussed under the relevant sections on the facilitators and barriers to successful project implementation later in this chapter.

4.1 Description of the data

The survey had 57 participants and characteristics of the survey participants illustrated in table 2. Project managers working in the HSE account for 54.4% of the survey participants. Participant's demonstrated a high level of experience as a project manager with 66.7% had five years or greater experience and 59.6% of project managers had experience with being directly involved in more than three projects in the Irish healthcare setting. The participant sample with a high level of experience share a vast experience in this research setting and 71.9% of respondents have obtained a project management qualification such as project management professional (PMP), PRINCE2 or alternative qualification.

Table 2. Summary of survey participant demographics

Variable	Group	Number of participants (% of total participants)
Current Role	Work in the HSE	31 (54.4%)
	Work in a private hospital	4 (7%)
	Work for a consultancy firm	19 (33.3%)
	Other	3 (5.3%)
Experience as a project manager	Less than 5 years	19 (33.3%)
	5 to 10 years	20 (35.1%)
	Greater than 10 years	28 (31.6%)
Direct involvement with projects in the Irish healthcare setting	One project	10 (17.5%)
	Two to three projects	13 (22.8%)
	Greater than three projects	34 (59.6%)
Type of Projects	Information technology (IT)	36 (38.7%)
	Service Improvement	44 (47.3%)
	Other	13 (14%)
Project Management Qualification (e.g. PMP, PRINCE2 etc.)	Yes	41 (71.9%)
	No	16 (28.1%)

4.2 Facilitators to successful project implementation

Of the participants, 91.2% reported strong agreement with the statement, *'Communication is critical for successful project implementation'.*

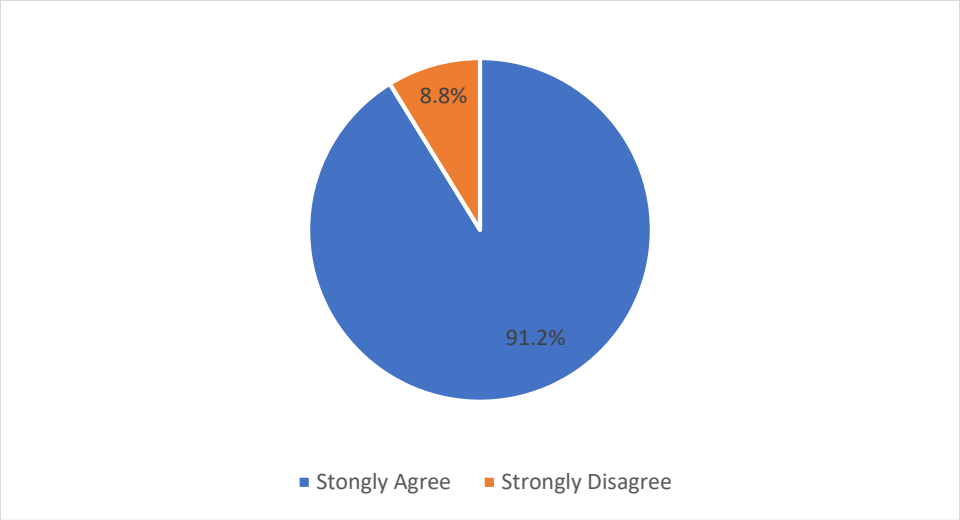

Figure 6. Participants reported 'strongly agree' or 'strongly disagree' to the statement 'Communication is critical for successful project implementation'

For the statement *'Successful project implementation is when the project deliverables generate value to customers and stakeholders'* 63.2% of respondents reported strongly agree, while 24.6% agree as shown in figure 7.

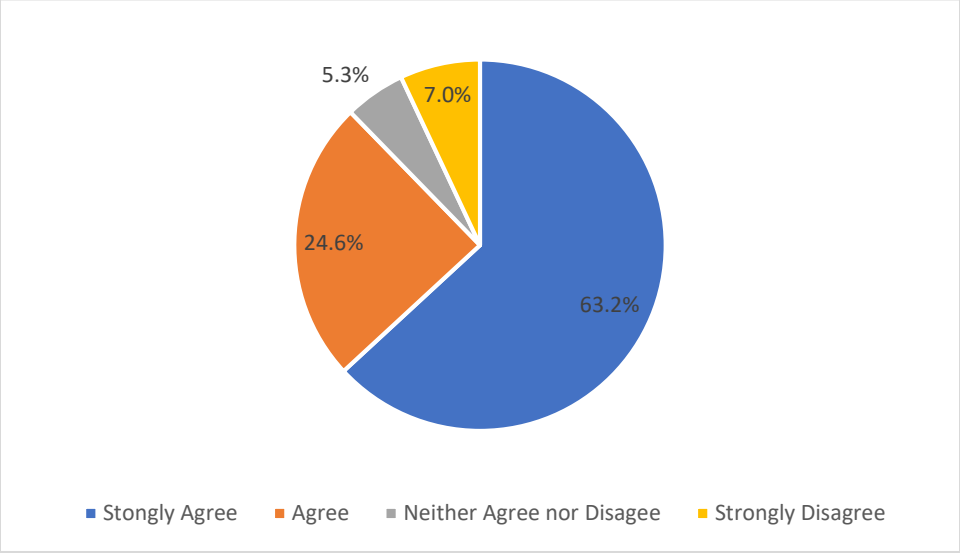

Figure 7. Participants reported to response the statement 'Successful project implementation is when the project deliverables generate value to customers and stakeholders'

The ranking of reported most likely benefits to successful project implementation by the respondents are illustrated in Figure 8. Of the respondents 61.4% ranked user engagement and input in product design followed by appropriate project planning with 42.1% of respondents ranking as 1. The results show that user engagement and input in product design and appropriate project planning are considered the most important facilitators to successful project implementation by project managers. These are followed by continuous evaluation of project progress, staff training and education and integration with existing work practices ranked third, fourth and fifth respectively. The results identify that project managers need to ensure that user engagement and input in the project design is of most importance when they are in the implementation stage to enable project success. The end user is critical that the project implementation is designed to meet requirements in the Irish healthcare setting.

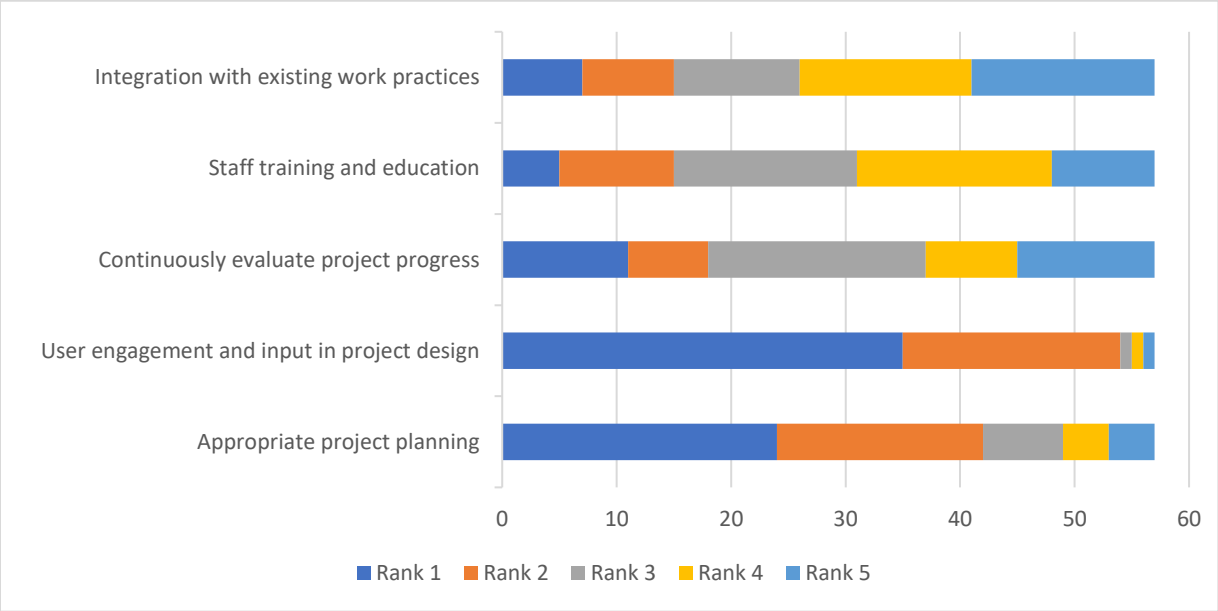

Figure 8. Facilitators ranked 1-5 with 1 being the most likely facilitator to successful project implementation by the respondents

The thematic analysis undertaken by the researcher identified five themes to facilitate successful project implementation by project managers in Ireland: project management practices, stakeholder engagement, organisational, wider environment, and communication. The theme of project management practices included participants reporting facilitators such as, project planning, scope definition, risk analysis, clear deliverables, and objectives. Stakeholder engagement is where project manager gets to know their project stakeholders better using stakeholder analysis, application of changes management methodologies, sharing of lessons learnt from previous project experience and the inclusion of training and education. The theme of organisational includes facilitators like governance, long term strategic vision for the organisation, management support and leadership for the project. Wider environment as a theme are facilitators outside the project team and the organization including cross collaboration with other organizations and networking with other healthcare organizations. A summary of the participant responses under each of these themes from the thematic analysis is illustrated in figure 9.

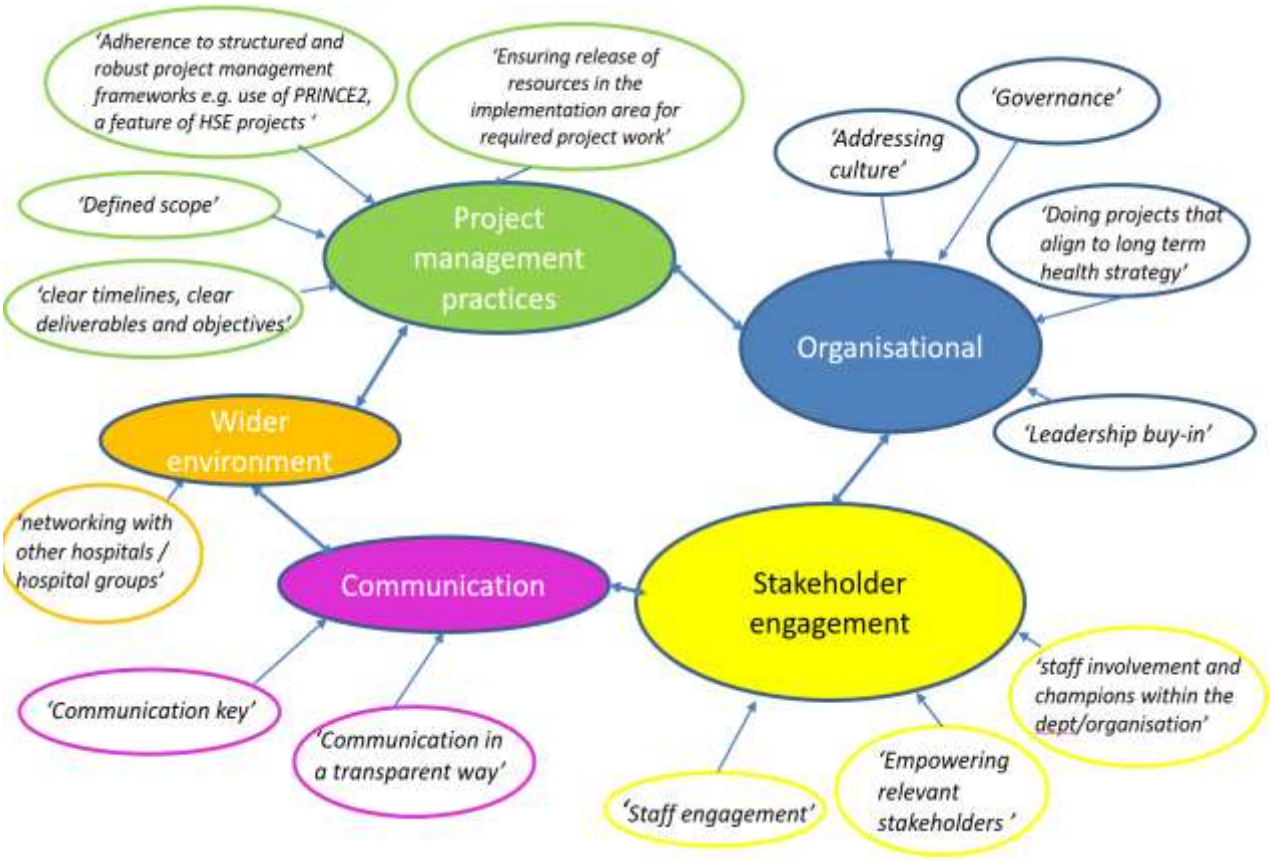

Figure 9. Main themes identified from thematic analysis as facilitators to successful project implementation including examples of participant responses

The most frequently identified theme by the survey participants is stakeholder engagement followed by organisational then project management practices. Communication was not as common and wider environment less frequent. Of the responses 32.6% reported stakeholder engagement as a facilitator to successful project implementation.

4.3 Barriers to successful project implementation

The survey finding reported that 93% of respondents reported that they 'strongly agree' or 'agree' that lack of support from management is a barrier to successful project implementation as shown in figure 10.

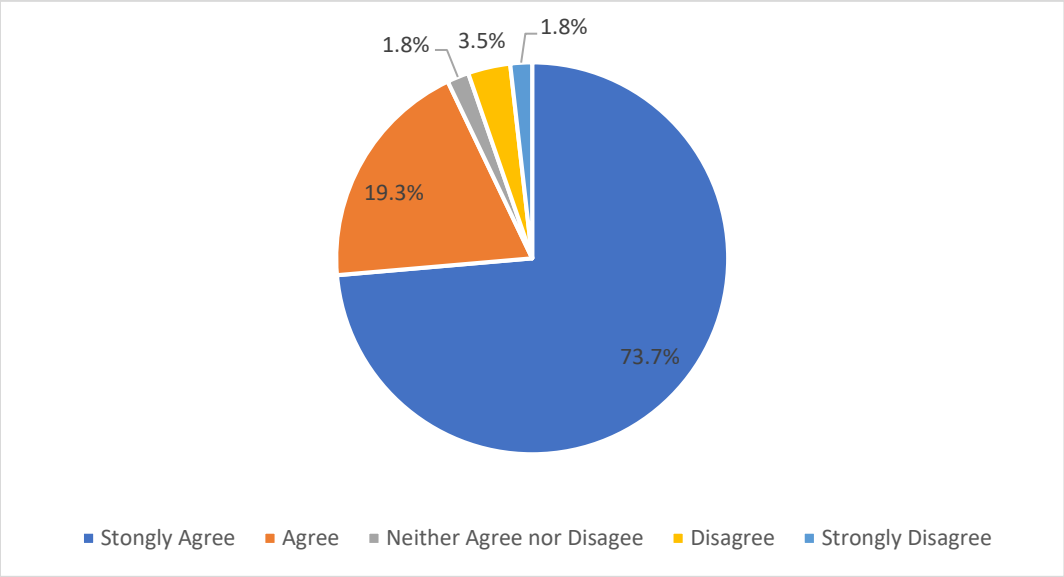

Figure 10. Participants reported responses to the statement 'Lack of management support is a barrier to successful project implementation'

Barriers reported by the survey participants in the ranking stage are the following order with poor definition of project as the highest ranked barrier followed by inadequate project planning, rejection by user, large number of stakeholders and financial constraints. Of the participants 47.4% ranked poor definition of project as the most likely barrier to successful project implementation in the Irish healthcare setting as shown in figure 11. A large number of stakeholders or financial constraints, the results demonstrate are not ranked as a highly likely barrier to successful project implementation by project managers.

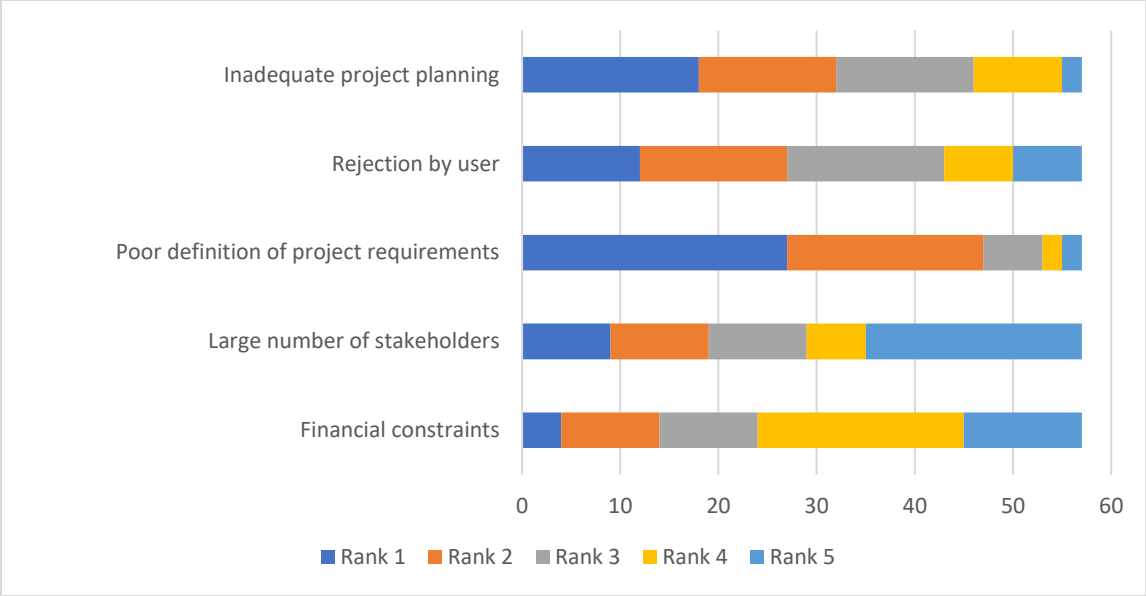

Figure 11. Facilitators ranked 1-5 with 1 being the most likely barrier to successful project implementation by the respondents

Four themes, emerged from the analysis of the survey responses, are organisational, project management practices, communication and stakeholder engagement. The themes are the same for four areas for barriers to successful project implementation that were analysed from the project management participants. The definition of these themes are slightly different to what was analysed from the qualitative data for the facilitators and in most incidences it's the lack or absence of the themes that the survey participants reported as a barrier to successful project implementation. The most common theme in the analysis of barriers to successful project implementation in the Irish healthcare setting is project management practices reported by 37.9% of participants. This is defined as the absence of a clear project plan, limited or shared resources, unsuitable timelines to successfully implement project and absence of clear scope definition.

The themes stakeholder engagement and organisational had an equal number of responses. The theme of stakeholder engagement is defined as barrier by participants due to insufficient engagement with stakeholders and end user or engagement with the wrong stakeholders who don't have the decision-making authority to successfully implement the project. Organisational is the theme where respondents reported lack of management support, lack of project governance, culture within organisation did not support successful project implementation and high staff turnover in the organisation and project team. The theme of communication is defined as poor communication on the project and the least commonly reported theme by survey participants. A summary of the themes and participants responses to the survey is illustrated in figure 12.

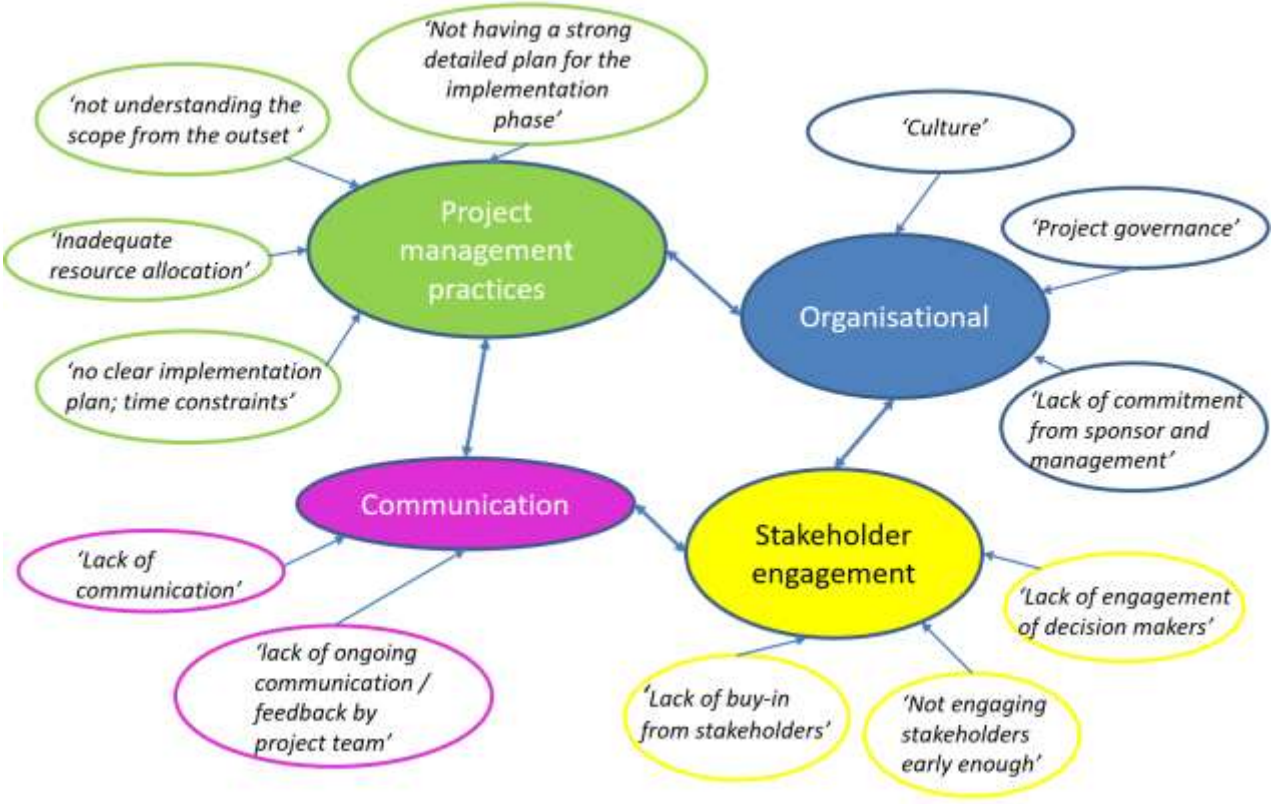

Figure 12.Main themes identified from thematic analysis as barriers to successful project implementation including examples of participant responses

In the final survey question participants were asked *'to give one piece of advice to assist project managers in overcoming the barriers to successful project implement in the Irish healthcare setting?'.* Again, the researcher undertook thematic analysis using Braun and Clarke's (2006) six step framework to report the survey results. Five themes emerged in analysis of the participant responses. For this question, the five themes are communication, end user, project management practices, organisational and stakeholder engagement which incorporates changes management.

Stakeholder engagement is the prominent theme of the responses, representing 28.6% as shown in the table 3 below. The theme stakeholder engagement was reported most frequently by the participants in the online survey. One participant recommended '*listen to stakeholders and be prepared to change your perspective as you learn more from them'*. Other participant recommendations include: '*patient groups as key stakeholders', 'stakeholder buy-in'* and '*stakeholder engagement frequently throughout'.* Within the theme of stakeholder engagement several participants recommend change management methods are used by project managers working on projects in the Irish healthcare setting. Examples from participant responses are to '*utilise change management strategies at an early point in all projects'* and *'communication of change to staff at an early stage*'.

Table 3. Themes identified by participants for advice to assist project managers in overcoming barriers to successful project implement in the Irish healthcare setting

Theme	% of participants
Communication	23.5%
End-user	8.2%
Project management practices	22.4%
Organizational	17.3%
Stakeholder engagement (inclusive of change management)	28.6%

The theme of communication is the second most commonly reported theme in the participant's advice to assist project managers in overcoming barriers in the Irish healthcare setting. Communication is project management terms is defined as a collection of processes that help make sure the right messages are sent, received, and understood by the right people (Project Management Institute, 2021). This definition from the literature was applied to this theme when the researcher undertook the thematic analysis. Participant responses recommend *'implement a strong communication plan and document and circulate all decisions'.* Another participant recommends '*effective clear, concise communication'. Other examples 'communication is key', 'communicate, communicate, communicate' and 'communication plan'.* The findings for this question demonstrate the importance of communication to assist project managers to overcome barriers to successful project implementation.

The utilisation of project management practices are advised by the participant responses. The theme of project management practices includes project planning, defining project deliverables and user requirements, project timelines, project resources. In this theme participant advice is *'implementation stage of a project requires a significant amount of work, so*

much that it is often underestimated .... ensure you give yourself enough time and space for the implementation phase'. this recommendation to project managers to plan enough time for the implementation phase to overcome barriers to successful implementation similar to advice from other participants '*plan appropriately',* '*have clear project objectives and deliverables'* and '*document everything and assume nothing*'.

For the theme of organisational the participant responses recommended the need to support from management and leadership, role of the sponsor and project governance. The participant responses include '*governance at the onset and seek senior stakeholder oversight*'. Also, in the participant responses '*get a director-level stakeholder to be a 'champion' and a 'driver' for the project'*, *'have clear governance structures'* and '*seek committed and focused executive sponsorship with very regular executive project updates'*. The theme of 'end-user' can be the patient likely to benefit from the implementation of this project or the staff in the organization who will be user of the system or new process implemented by the project. This theme was the least common in the analysis and participant responses including this theme advised project managers to *'know the patient's you are trying to help with your project'* and *'engage with service user, design with patients in mind'.*

In summary, analysis of the results identified several recommendations for project managers working in the Irish healthcare setting. The recommendation pre-dominantly focused on three main themes of stakeholder engagement, communication, and the application and utilisation of project management practices to overcome barriers to successful project implementation in the Irish healthcare setting.

This chapter illustrated the findings from the online survey that aimed to fill the research gap by identifying and exploring the determinants such as facilitators and barriers to successful project implementation in the Irish healthcare setting. Many participants that completed the survey had a prominent level of experience with 5 or more years' experience as a project manager and generated a collection of quantitative and qualitative data to assist the researcher to answer the research aim. The research acknowledges over half of the project manager's work in public hospitals, the HSE and the representation from private hospitals is small. The results identified the significance of barriers such as absence of a clear project plan, limited or shared resources, and lack of managerial and stakeholder support that has potential to impede successful project implementation. The researcher will discuss further in chapter 5 along with any correlations between the responses in the primary data from project managers working in the Irish healthcare setting to the secondary data presented in the literature review.

Chapter 5: Discussion

This chapter discusses the research findings and the correlation between the findings in the literature review to the experiences shared by the survey participants. Project managers working in the Irish healthcare setting acknowledge that successful project implementation in the Irish healthcare setting is challenging and barriers have to be overcome to achieve successful project implementation. The ability of project managers to recognise and identify determinants such as barriers and facilitators may positively influence successful project implementation. The research questions sought to identify and explore facilitators and barriers to successful project implementation in the Irish healthcare setting. To compliment, these research questions sought to offer value from the learning of participants who have experience in the Irish healthcare setting and to act as form of lessons learnt and recommendations for project managers who are currently working or new to projects the Irish healthcare setting.

There is an increasing expectation for healthcare organisations to successful implement projects and innovations that assist in overcoming the challenges of today's healthcare. The literature implications for healthcare policy makers and healthcare management teams in facilitating successful project implementation necessitates strong leadership with well-defined governance structures, clear communication of project vision and goals, and provision of support and training to implement change in the organisation. The existence of strong leadership is illustrated in the literature as a support role for all stakeholders working in healthcare organisations but also an awareness of the value project managers offer healthcare organisation in facilitating successful project implementation and improved processes. In summary, the identification of the determinants such as facilitators and barriers to successful project

implementation in healthcare organisations is important to support successful project implementation.

The research undertaken with project managers in the Irish healthcare setting supports the research hypothesis with a relationship between the facilitators and barriers to successful project implementation reported in the literature holds for project managers with experience working in the Irish healthcare setting. First the researcher will discuss the findings in relation to the facilitators to successful project implement before moving onto exploring the barriers and their association with successful project implementation in the Irish healthcare setting. Finally, the research will look to provide recommendations to provide recommendation to overcome the barriers to successful project implementation in the Irish healthcare setting.

5.1 Facilitators to successful project implementation

Multiple authors in the literature have looked to identify facilitators to successful project implementation and their success factors, i.e., the inputs of the management system that directly or in- directly influence the success of the project (Cooke-Davies, 2002). The results from the survey identified a correlation between stakeholder engagement, managerial support, project management practice and communication for successful project implementation by project managers with experience working in the Irish healthcare setting.

The role of the project manager in the literature has been shown as vital enable for optimise healthcare resources and minimise in efficiencies (Gomes, 2014). Gomes (2014) also discusses in the literature how project success can be perceived differently by various

stakeholders involved in implementing projects in healthcare organisations while Jahangiran et al. (2017) describes project success as multi-faceted and multi-perspective. The findings in the research in relation communication as critical for successful project implementation in the Irish healthcare setting support this as 91.2% of project managers were strongly in agreement that communication is critical while the rest of the participant reported the opposition, with strong disagreement. Similarly variations in the responses provided to the statement on successful project implementation is when the project deliverables generate value to customers and stakeholders, 87.8% of survey participants agree with the statement.

These findings support the literature with customers and stakeholders satisfaction of great importance in the iron triangle of project success. As Santosa, et al., (2020) reports in the literature project success criteria are not only include time, cost, and quality but also customer and stakeholder satisfaction has significant importance. Stakeholder satisfaction is essential for project managers to achieve for project implementation success in healthcare organisations. The main theme encountered in the thematic analysis of facilitators to successful project implementation in the Irish healthcare setting was stakeholder engagement. Similarities in the findings reported by the Palm and Fischier (2021) six theoretical perspectives to support the implementation of innovation projects in healthcare organisations in table 1 which includes engagement and collaboration with the core and wider stakeholders for the healthcare benefit. This facilitator was reported in the earlier literature by Shore (2008) along with lack of user feedback. Again, the findings in this research is similar as project managers ranked ‘user engagement and input in product design’ as the most likely facilitator to successful project implementation in the Irish healthcare setting.

The theme of organisational reported by participants as a facilitator to successful project implementation in the Irish healthcare setting included factors such as strong leadership with well-defined governance structure, culture and alignment with the long term strategic vision for the organisation. All of these were identified in this research as facilitators to successful project implementation in the Irish healthcare setting and support the literature by Laukka et al. (2020) who identified strong leadership with well-defined governance structures as a facilitator. Similarly, the literature from Weintraub and McKee (2019) stress that leadership always is important at all levels of healthcare organisations. Managerial support is a crucial factor in the success of implementing innovations in healthcare (Palm & Persson-Fischier, 2021). The literature reports that clear managerial support can increase project credibility, with clear communicate of long-term project goals to employees. Culture and leadership are reported as strong facilitators for successful implementation in healthcare organisations (Rogers, et al., 2020).

In addition to strong leadership the literature identifies clear communication of project vision and goals as a facilitator. As mentioned previously communication is identified as a facilitator associated with successful implementation in both the literature and survey findings. Communication to stakeholders and the end user of project progress should also incorporate an opportunity for feedback (Cresswell, et al., 2013). Clear communication ensured cross regional and programme alignment contributed to project success (Fleron & Pries-Heje, 2021). The survey findings also reported communication as critical for successful project implementation in the Irish healthcare setting.

Literature supports the role of project managers and project management practices are recognised as being a vital enablers to use in developing initiatives that are aimed at promoting the implementation of organisations' strategies and healthcare projects (Gomes, 2014). The theme of project management practices was identified as the second most commonly reported theme as a facilitators to successful project implementation in the Irish healthcare setting. Project management practices included participants reporting facilitators such as, project planning, scope definition, risk analysis, clear deliverables, and objectives. Furthermore the literature by Coplan and Masuda (2011), believes those adoptions and application of project management practices, information technology management and change management are equally if not more important than the project and technical aspects of the implementation. Further research is required on the adoption of integrated project management skills in the Irish healthcare setting to facilitate the successful project implementation.

Training is reported in the literature as a facilitator to successful project implementation by Creswell et al. (2013) reporting staff training a key consideration for successful implementation and adoption of HIT projects and suggests that investment in training is often lacking. Laukka et al. (2020) also identifies the roles of leaders and managers in healthcare organisations as an enabler to ensuring that training is in place for healthcare professionals for successful project implementation. The findings in this research undertaken with project managers in the Irish healthcare setting did not identify a correlation between training and successful project implementation. Survey participant's ranked training low in the ranking question for most likely facilitators and the findings are not applicable to the Irish healthcare

setting. Further research with a more focused research on the correlation between training as a facilitator to successful project implementation in the Irish healthcare setting.

5.2 Barriers to successful project implementation

Healthcare organisations are described in the literature as representing one of the most complex organizations due to the number of stakeholders and decision makers with a shared aim to improve the quality, safety, patient-centeredness and cost-effectiveness of care in the organisation. To add to the complexity of the organisation the existence uncertainties can result in barriers to successful project implementation. Barriers reported in the literature by Gomes (2014) include financial constraints, interoperability and system restrictions pose as a barrier to successful project implementation. The healthcare sector in general and in Ireland is reported to have many disconnected silos, and the perspective of having to work collaboratively across disciplines in the healthcare organisation (i.e. project team) rather than the usual ongoing work arrangement compounds the problem with implementation (Chiocchio, et al., 2015) (Department of Ireland , 2013).

Some of the findings in this research did not support the hypothesis as the literature reports financial constraints which was ranked lowest as a barrier to successful project implementation in the Irish healthcare setting by project manager participants. Similar to the findings from Gordan and Pollack (2018) healthcare organisations need further research to the process of healthcare integration as the theme was not prominent in the thematic analysis. The focus and area of much frustration in Ireland is the lack of integration and disconnected silos across the health system is reported by both clinicians and patients (Darker, 2013) (Department

of Ireland , 2013). In addition the national eHealth strategy incorporates the improvement in integration of healthcare records as the long term vision for the Irish health service and the researcher would invite project managers in the Irish healthcare setting to consider aligning HIT projects with this strategy.

The findings from the previous section on facilitators to successful project implementation identified the importance of strong leadership with well-defined governance structures as an important facilitator to successful project implementation. The findings in this section support the finding from the earlier thematic analysis. The quantitative research findings are aligned with 93% of survey participants agreeing that the lack of management support is a barrier to successful project implementation. This supports the research hypothesis as the literature by Stelson et al, (2016) refers to managerial support as a prerequisite for real and perceived healthcare project successful implementation.

The themes encountered in the survey responses in relation to the barriers to successful project implementation are similar themes to the findings from facilitators, organisational, project management practices, communication and stakeholder engagement. However, in terms of barriers, participants reported the lack of or absence facilitators within these theme as the barriers experienced in healthcare organisations. The most commonly theme reported as a barrier to successful project implementation was project management practices. Similarly, poor definition of project requirements and inadequate project planning were ranked the highest by survey participants as the most likely barriers to successful project implementation in the Irish healthcare setting. Project management practices are recognised as being a vital enablers to use in promoting the implementation of healthcare projects (Gomes, 2014). The literature reported

barriers are shown by the research findings to be applicable to experience of project managers in the Irish healthcare setting.

Culture and leadership in healthcare organisations are documented in the literature as strong facilitators for successful implementation in healthcare (Rogers, et al., 2020). Laukka et al. (2020) reports that despite major investment, information technology project implementation in healthcare organisations often fails due to leadership barriers, where leadership is poor or lacking support. This theme of organisation barriers was encountered in the thematic analysis reported by participants as lack of management support or culture within the organisation did not support successful project implementation. This support the research hypothesis deduced from theory identified in the literature review and testing its applicability to the Irish healthcare setting through the online survey.

Challenges to successful implementation of projects in healthcare organisations reported in the literature include resistance to change Fleron & Pries-Heje (2021) and Shortell et al., 1993. Resistance to change can commonly present as the implementation wave in the project progresses the more and more obvious that user resistance is present and the barrier to successful implementation is observed (Fleron, et al., 2019). The findings in the survey supports the literature rejection by user was ranked a likely barrier to successful project implementation after project management practices.

The findings in the literature reports healthcare projects are extremely popular with healthcare professionals citing that at one time they are involved into two to five projects (Chiocchio, et al., 2010). Despite their popularity, the difference between ongoing healthcare service delivery and project work is not clearly understood by healthcare professionals. This

barrier reported in the literature was not observed in the participant responses to the survey as the absence of training for healthcare professionals involved in projects and knowledge of project management skills is due to being too busy to invest the time in planning for successful project implementation even where the project can offer significant value by saving time on the future through better coordination and reduced rework (Chiocchio, et al., 2012). Training was reported earlier in the literature as a facilitator to successful project implementation by Cresswell et al. (2013) but ranked low by the survey participants as a likely facilitator.

Project managers with the knowledge and understanding of the reported can look to overcome the barriers and challenges faced by today's healthcare system when undertaking future projects.

5.3 Recommendations for project managers

The research aims to provide recommendations on how project managers can optimise the use of facilitators and assist in recognising and overcoming the barriers to successful future project implementation in the Irish healthcare system. The research is based on personal experience of project managers in the Irish Healthcare system and offers the strength and value to the research undertaken as the learnings and recommendation are from participants who have experience in the field of study, the Irish healthcare setting. The recommendations will act as form of lessons learnt for project managers to overcome the barriers to successful future project implementation in the Irish healthcare system.

The research finding recommends that project managers consider the following to support the successful implementation of projects in the Irish healthcare setting:

- Stakeholder Engagement: The identification of core and wider project stakeholders from the onset on the project with early engagement and collaboration in combination with the utilisation of change management methods to support successful project implementation.
- Project Management Practices: The application of project planning, defining project deliverables and user requirements, project timelines and resource requirements.
- Communication: Clear concise communication of project goals and objectives to make sure the right messages are sent, received, and understood by the right people.
- Stakeholder satisfaction: Project success criteria is not only include time, cost, and quality but also stakeholder satisfaction. Stakeholder satisfaction is essential for project managers to achieve for project implementation success in healthcare organisations.

The limitation's or weaknesses of this research is that over half of the project managers work in public hospitals, the HSE and the representation from private hospitals is small and confined to a pool of project managers working in Irish consultancy firms and the project management office in Irish public and private hospitals from existing contacts of the researchers. The use of a pre-determined question structure and the use of an anonymous survey does not allow for further clarification and depth from the participants responses to the survey compared with interviews is lost.

Further research is required on the adoptions and application of project management practices, information technology management and change management, collectively referred to in the literature as integrated project management skills in the Irish healthcare setting to facilitate the successful project implementation. The literature review identified benefits to project manager adopting and utilising integrated project management (IPM) skills in HIT projects to help improve patient care and healthcare outcomes (Coplan & Masuda, 2011). Also, further research on the process of healthcare integration in healthcare organisations in required to ensure that projects are aligned with the long term strategy visual of the healthcare organisation and with many transformative healthcare projects on the horizon for Ireland.

The research contributes to the growing stream of literature on facilitators and barriers to successful project implementation in healthcare organisations and its application to the Irish healthcare setting. The research explores and identifies determinants such as facilitators and barriers that project managers can look to optimise in practice when working on the implementation of projects in healthcare organisations.

Chapter 6: Conclusion

Healthcare organisations have embraced the role of project manager and adopted project management practices for many years in Ireland. The delivery of healthcare is changing and transformative projects are on the increase as healthcare organisations look to benefit from successful implementation with improvements in work processes, enhanced quality and safety of patient care, patient centred approach and cost-effectiveness of care. This research identified facilitators to successful project implementation in the Irish healthcare setting to overcome the barriers and challenges faced by today's healthcare system.

Project success criteria is defined not only by time, cost and quality but also the importance of customer and stakeholder satisfaction should be considered with implementing projects in healthcare organisations. The main obstacle in successful projects is the implementation phase and findings in this research have the ability to support project managers to overcome the barriers that can exist. Healthcare organisations represent one of the most complex organizations due to the number of stakeholders and decision makers with a shared aim to improve work process and enhance patient centre centred. Barriers are reported in this research an awareness of the common barriers including lack of user feedback throughout the project, lack or absence of stakeholder engagement and rejection by user to project implementation is important for project managers. The awareness and understanding of the barriers that exist in healthcare organisations can contribute to project managers utilising project management practices in overcome before they arise and to achieve successful project implementation.

The facilitators identified for successful project implementation in the Irish healthcare setting include stakeholder engagement, strong leadership with well-defined governance structures, project management practices and communication of project goals. The research calls for greater involvement and participant of management teams within the organisation to support projects undertaken in healthcare organisations and to contribute to successful implementation. From an organisational perspective the facilitators are strong healthcare leadership and is important within well-defined governance structures of the organisation and the provision of training and knowledge necessary to implement the change.

Implications for healthcare organisations is that strong leadership with well-defined governance structures with clear communication of vision and goals needs to exist in the organisation for successful project implementation. In addition to strong leadership the findings in this research identifies stakeholder engagement as a facilitator to successful project implication. Early engagement and collaboration with core and wider stakeholders in the implementation process from the start and a phased approach to implementation waves is supportive and contributes to facilitating successful project implementation.

Furthermore, the research assists project managers to achieve successful project implementation in the Irish healthcare setting. This is particularly important at a time where the healthcare organisations are required to adapt to changes in a time manner and looks to make a major contribution to the improvement of services to patients of healthcare organisations. It provides project managers with a better understanding of facilitators and barriers to successful project implementation in the Irish healthcare setting and recommendations for future projects undertaken. Healthcare organisations can benefit from the strengthening value of project

managers working to better the patients experience and enhance health outcomes through facilitating successful project implementation.

Chapter 7: Appendices

Appendix 1: Participant information sheet

Research project title: Facilitators and barriers to successful project Implementation in the Irish Healthcare setting

Student Researcher: Maeve Hynes (10578795@mydbs.ie)

Research Supervisor: Andrew Browne

My name is Maeve Hynes and I am Master Student at Dublin Business School, undertaking an MBA Project Management programme. The research is being undertaken under the direct supervision of Andrew Browne. As part of our research, I am conducting a questionnaire exploring and identifying the facilitators and barriers to successful project Implementation in the Irish Healthcare setting. Aim: The aim of this research is to explore and identify facilitators and barriers to successful project Implementation with project managers working in the Irish Healthcare setting. In this questionnaire, you will be asked to respond to a serious of statements and questions relating to your experiences of working on projects in the Irish healthcare setting. You will be asked to provide a response that best suits your experience. This study typically takes less than 5 minutes to complete. I will use the data to formulate my final analysis and to form my conclusion.

Data Protection: The data you provide as part of this survey will be fully anonymous. I will not gather any direct personally identifying information about you or anyone close to you. You will be asked to provide optional demographic information of a broad nature about yourself. Your data will be collated into a larger dataset and analysed at the group rather than the individual

level. Your data will only be used for academic purposes and will not be shared with anyone for commercial purposes.

What are the risks and benefits of taking part in this study?

In addition to providing much appreciated assistance to the student researcher, the main benefit of taking part in this study will be your contribution to academic research, which aims to expand knowledge and generate new insights. There will be no risks posed to you as a participant in this study, either physical or psychological, beyond that which is normally expected of day-to-day activities.

If you are interested in taking part, please review the information provided in the consent form and if you are happy to proceed with the study then please indicate your willingness to take part by ticking the appropriate box. You are under no obligation to take part in this study or to provide a reason if you decide not to take part. You may choose not to take part without fear of penalty. If you agree to take part, you have the right to cease participation and withdraw your data at any time for any reason without fear of penalty. The data will not be used by any member of the project team for commercial purposes.

Survey link; here

Please do not hesitate to contact me directly about any questions you may have in relation to this questionnaire. You may contact me at 10578795@mydbs.ie or my supervisor at andrew.browne@dbs.ie

Thank you for participating, Maeve Hynes

Appendix 2: Survey

Facilitators and barriers to successful project implementation in the Irish Healthcare setting

You are invited to participate in a short, anonymised survey to explore and identify the facilitators and barriers to successful project implementation in the Irish healthcare setting. The survey will take 5 - 7 minutes to complete. This work is being undertaken as part of my master's in business administration and is supervised by Dr Andrew Browne, Dublin Business School.

1. By clicking the button below, you are agreeing that: you are taking part in this research study voluntarily, you are a project manager with project experience in the Irish Healthcare setting and, you are aware that you can opt out of the survey at any stage.

I consent, begin the study □

Section A – Demographics

2. Which of the following best describes your current role as a project manager?

Work in the HSE □

Work in a private hospital □

Work in a consultancy firm □

Other: _____

3. Experience working as a project manager?

< 5 years □

5 - 10 years □

> 10 years □

4. Experience of being directly involved with projects (from start to finish) in the Irish healthcare setting?

One project □

Two to three projects □

Greater than 3 projects □

5. What type of projects have you undertaken in the Irish healthcare setting? (please select all that apply) *

Information Technology □

Service Improvement □

Other: _____

6. Have you obtained a project management certification such as project management professional (PMP), PRINCE2 etc.? *

Yes □

No □

Section B – Facilitators to successful project implementation

7. From your experience, communication is critical for successful project implementation. *(Online Survey to include Likert scale, 1 = strongly agree, 2 = Agree, 3 = neither agree or disagree, 4 = Disagree, 5 = strongly disagree)*

8. Successful project implementation is when the project deliverables generate value to customers and stakeholders. *(Online Survey to include Likert scale, 1 = strongly agree, 2 = Agree, 3 = neither agree or disagree, 4 = Disagree, 5 = strongly disagree)*

9. From your experience, rank the below facilitators 1 - 5, with 1 being the most likely facilitator for successful project implementation in the Irish healthcare setting.

Appropriate project planning: _____

User engagement and input in project design: _____

Continuously evaluate project progress: _____

Staff training and education: _____

Integration with existing work practices:_____

10. From your experience, are there any other facilitators to successful project implementation in the Irish healthcare setting?

_____

Section C – Barriers to successful project implementation

11. Lack of management support is a barrier to successful project implementation

(Online Survey to include Likert scale, 1 = strongly agree, 2 = Agree, 3 = neither agree or disagree, 4 = Disagree, 5 = strongly disagree)

12. From your experience, rank the below barriers 1 - 5, with 1 being the most likely barrier for successful project implementation in the Irish healthcare setting.

Financial constraints: _____

Large number of stakeholders:_____

Poor definition of project requirements:_____

Rejection by user:_____

Inadequate project planning:_____

13. From your experience, are there any other barriers to successful project implementation in the Irish healthcare setting. _____

14. If you were to give one piece of advice to assist project managers in overcoming the barriers to successful project implementation in the Irish healthcare setting, what would it be?

_____

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