



IS6017: Enterprise Business Processes and Applications

Implementation and Governance Report to Restart NPfIT Program

Student Declaration

BUSINESS INFORMATION SYSTEMS DEPARTMENT

NATIONAL UNIVERSITY OF IRELAND, CORK

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I hereby declare that this work is entirely my own and has not been submitted as part of any other examination or assignment. Nor has ChatGPT (or any other AI software) been used to generate content herein. Any use of the work of others in this assignment is duly acknowledged.

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The National Program for IT in the NHS

Executive summary:-

The National Programme for IT (NPfIT) is the UK's most ambitious public-sector IT project, with a whopping £6 billion budget. NPfIT was a project started by Prime Minister Tony Blair in 2002 to modernize healthcare services through the integration of patient records. However, the project encountered several obstacles and was eventually dismantled by the Liberal Democrat government in 2011. This paper attempts to provide insights and suggestions for the revitalization of NPfIT by navigating through the difficulties of its rise and decline. The paper takes a structured approach, based on an analysis that assumes common failures in NHS IT initiatives.

It begins with a thorough grasp of NPfIT's historical backdrop and the obstacles encountered both before and after deployment. The paper identifies significant concerns, such as stakeholder opposition and implementation challenges, through a systematic assessment using the 5Ws (root cause analysis). Prioritizing these challenges, the paper makes extensive suggestions, highlighting the importance of stable leadership, clear governance systems, and increased stakeholder participation. It also pushes for reduced project scope and administration, improved program planning, and reformed procurement practices. Recognizing the necessity for a strong governance framework, the paper suggests a detailed governance structure that includes important committees and boards to oversee the resurrection of NPfIT.

Furthermore, a detailed mitigation strategy is provided to address any risks connected with the provided suggestions. This plan includes proactive communication methods, capacity-building activities, and change management approaches to successfully deal with stakeholder resistance and resource constraints.

Finally, this paper attempts to define a road ahead for NPfIT, harnessing lessons from past mistakes to pave the way for a more prosperous future. By following the ideas and governance framework presented in this document, NPfIT can experience a dramatic resurrection, meeting its original aim of delivering realistic healthcare objectives through robust IT infrastructure and innovation (**Lecture Notes - npfit-mpp-2014-case-history.pdf, 2014**).

Assumptions:-

I am assuming that many failures happened in the IT projects of the NHS. This assumption is based on the various articles I went through. My analysis is based on this assumption (**Lecture Notes - npfit-mpp-2014-case-history.pdf, 2014**).

Approach:-

Initially, I didn't have much idea about where to start. This assignment was a nightmare for me, but I enjoyed the process. I went through the expectations given in the assignment report. This gave me a clear picture of how to start. Then, discussing with the professor gave me a clear picture of how to structure the report. I first read the 2014 case history report to understand the context of the case. This report gave me a brief background on Npfit. When I started reading this report for the first time, I skimmed through the report and made sure to note down the headings and sub-topics. Next, I again gave a second reading based on the highlighted headings and sub-topics and noted down the problems separately. This gave me a clear understanding of what the case is all about, i.e., introduction of EPR and beneficiaries, history of IT in the NHS and its failures, reasons for failure, specifically looking at the programs from the IM&T strategy(the EPR program from 1994–1997, the white paper from 1998, and the ERDIP program from 2000), evolution of the Npfit program from the IM&T strategy, problems faced in the Npfit program, and finally the end of Npfit. This level of understanding gave me a clear perspective on how to start with the report, and by referring to the document given by the professor, I managed to complete this report successfully. While writing this report, I initially took case studies of IT failure in the NHS. The idea behind this is to generate recommendation ideas for NPfit failures. Also, I have divided the problem section into two parts one is the problems faced before the implementation of NPfit and during the implementation. Under the section “Born of Npfit,” I gave a detailed study and analysis. The references used for this report are cited separately at the end (**Lecture Notes - Nickols 2016 Strategy - Definitions & Meaning, 2016**).

Purpose and scope of this report:-

This report aims to provide advice and make recommendations on how the failed NPfIT program can be restarted and turned to deliver realistic healthcare objectives. To do this I used the following steps:

1. Making assumptions.
2. Understand the case thoroughly.
3. Identify the problem.
4. Showing evidence of why this problem had occurred.
5. Analyze the problem and prioritize – To analyze the problem I am going to use the 5W's (root cause analysis) and based on this I am going to prioritize the problem.
6. Treat the problem – In this, I am going to provide recommendations for the problem identified and create a plan.
7. Governance structure – Setting a governance structure for my plan.
8. Mitigation – Planning a mitigation plan for my plan (**Lecture Notes - Nickols 2016 Strategy - Definitions & Meaning, 2016**).

Born of NPfIT:-

A new more centralized IM&T strategy was made which became known as the National Programme for IT in the NHS. Here, I am going to address the problems that happened **before the implementation** and **during the implementation** of the NPfIT Program. The reason I chose to do this way is because the problems before the implementation phase are well-connected to the problems during the implementation phase. So here, I provide **evidence** for the problems before the implementation phase and the **root cause** with recommendations for the problems during the implementation phase. This gives a well-connected approach to the problems (**Lecture Notes - npfit-mpp-2014-case-history.pdf, 2014**).

Problems Faced before the implementation of the NPfIT Program:

National EPR systems which were part of IM&T's strategy had many issues, but without addressing these issues PM went on to implement the NPfIT program.

Key Issues: Confidentiality issues, change in strategy, lack of stakeholder engagement, and lack of cost-benefit analysis.

1. **Confidentiality issue** – There were patient privacy issues and data security issues. To overcome these issues medical expert Ross Anderson suggested some

recommendations, but the government neglected those recommendations. Even the Caldicott review in 1997 aimed to address these concerns about PII and provided recommendations, but the government only had little response to it. The government failed to take this issue seriously.

Evidence - For instance, The 2001 Health and Social Care Act empowered the Secretary of State to collect and control personal health data in identifiable form.

On 18th February 2002, a seminar was held which was intended to implement the NPfIT program. In this seminar instead of discussing the core issues of the IM&T strategy program, the PM went on to force the implementation of the NPfIT program. Even in this seminar, the PM didn't much care about the confidentiality issue. These instances show clear evidence that the confidentiality issues were not considered seriously by the government.

2. **Change in strategy for urgency** – The PM wants this program to be completed in a short span before the next election.

Evidence - The local ownership model which involves individual NHS trusts managing their own ERP systems was no longer continued. Instead, a more centralized approach is being used. Which leads to a change in IM&T's strategy. This clearly shows evidence of the urge to complete the project rather than focusing on the quality of the project.

3. **Lack of stakeholder consultation** – There were no consultations with key stakeholders regarding the adoption of NPfIT.

Evidence - Because of the government's urgency to start the program's procurement phase as soon as possible, parliament was not consulted and was given little to no opportunity to provide input. This limited the opportunity for policymakers who were involved in previous IT projects.

4. **Lack of detailed cost-benefit analysis** – There was a lack of detailed cost-benefit analysis, which was misaligned with Wanless review recommendations.

Evidence - This issue is because of a lack of stakeholder consultation. Stakeholders play a crucial role in cost-benefit analysis. Because of the domain knowledge they bring into the project their inputs are very important for cost-benefit analysis (**Lecture Notes - npfit-mpp-2014-case-history.pdf, 2014**).

Problems during the Implementation of the NPfIT program :

1. **Leadership Instability** - NPfIT had many leadership changes including senior responsible officer and chair of NPB. These people had very extensive experience in the domain, and due to their sudden resignation, there was a lack of instability and inconsistency in the direction of the project. There was also no clear governance structure and there was a lack of clarity in roles and responsibilities.

Root cause – These frequent leadership changes are due to personal reasons, political changes, and challenges in aligning stakeholder's interests. For instance, Lord Hunt resigned due to his reason to invade Iraq. The exit of Sir John Pattison due to his retirement in 2003, then Dr. Halligan was SRO who resigned after 6 months, then Alan Burns who also served only 6 months. In March 2006 the man Sir Nigel Crisp who reports to Sir John Pattison also retired (**Lecture Notes - npfit-mpp-2014-case-history.pdf, 2014**).

2. **Procurement Issues** – There was a haste to procure and there was an emphasis on speed, centralization, and aggregation of services, lack of proper testing, and lack of consultation and stakeholder engagement.

Root cause – The root cause for the haste is due to external pressure, as the PM mentioned the project must be completed within the next election time. This led to tight timelines, also there was a lack of consultation and stakeholder involvement which led to poor resource allocation. Testing usually requires more time, due to less consultation and tight timelines there was a lack of proper testing (**Lecture Notes - npfit-mpp-2014-case-history.pdf, 2014**).

3. **Gate zero review** - The Gate Review identified issues with poor involvement of stakeholders, a lack of thorough planning, and the program's failure to include change management.

Root cause – Stakeholders were not involved in the planning phase properly and also there was a lack of consultation with the key stakeholders this might have led to poor involvement of stakeholders. Also, there was a lack of detailed cost-benefit analysis. Only if the planning was done properly, the cost-benefit analysis could have been done

effectively this shows evidence that there was a lack of planning (**Lecture Notes - npfit-mpp-2014-case-history.pdf, 2014**).

4. **IT Partner Issues** – The quality of the project has been severely affected due to this issue, there was a drastic change in timeline and money loss for the project and also there was no proper contract management done.

Root cause - There was a financial mismanagement done by iSoft. The company had a money management problem back in 2000, which led to questionable accounting practices. The company didn't give proper information about its finances to its investors, and because of this serious accusations were made which led to a serious investigation made by a group called the Financial Services Authority(FSA) in 2010. The financials of iSoft became worse where at one point they made profit warnings to their investors. In 2006, the company had substantial losses. This made investors worried about the company's future. Due to this, the company's big project 'LORENZO' which is an electronic health record platform(EHR) didn't progress over time. So they decided to use the product without doing proper testing and so on, which made company hard to complete the project.

During the same period, Accenture decided to leave the company in 2006. This is because iSoft was taking a longer time to complete the key project 'Lorenzo'. So Accenture decided to hand over the contract to another company called CSC. This kind of situation made people start losing hope as they believed that big companies like Accenture were leaving the project so the project was not doing well. Since Accenture left the project they had to pay a big penalty but Accenture paid only less penalty fee than the original fee. This clearly shows that there are no proper contracts made where the contract had many loopholes which made the company set free with fewer penalties. Even after this, NPFIT faced many challenges like they missed deadlines, the software wasn't reliable enough, and they didn't have much consultations with end users which led to implementation issues.(**Lecture Notes - npfit-mpp-2014-case-history.pdf, 2014**).

5. **Delays in Electronic Care Record** - The NPfIT planned to develop a system in which patient records would be electronic rather than on paper. This would make it easier to update and access patient data from various NHS departments. There were two types of records planned: detailed care records (complete medical history) and summary care records (limited information such as allergies). The project, however, was severely delayed. It was planned to have Summary Care Records available by 2010 and Detailed Care Records by 2007. But they were still unfinished by 2008. This situation affected not only time but also money for the project. There was also a lack of stakeholder involvement in this case. The people working in the hospitals and clinics were not very involved in designing the system. Due to this, the system created was either not useful to end users or they didn't want to use it. Also, the project was focused on central control, which means the local hospitals and clinics couldn't adapt to the system to fit their needs. This made the situation worse.

Root cause – Scope creep - At first, plans were explicit about what the system should do and when it would be available. But eventually, the plans became unclear, and the project grew too large without clear goals.

Poor management - There were issues with the program not working properly, and they took too long to resolve. Furthermore, there was a lack of communication between the many people involved in the project.

Funding and contract issue - The Department paid a large sum of money to vendors upfront, even before they delivered anything. This payment structure approach didn't give the suppliers enough motivation to complete the project on schedule. In a typical contract, payments are made at each milestone or deliverable. Also, some contracts have incentive type, which pushes the suppliers to do work within the timeline. These types of contracts were missing in this case. Furthermore, the Department restricted Trusts from selecting their systems. They were forced to utilize the Department's temporary software instead, which was inconvenient and frustrating. This situation creates a lack of innovative ideas(restricting flexibility) from the trust and also creates a frustrating environment as there might be some systems that they don't even require for their daily needs. For instance, the Department's limited options and persistent IT system issues caused challenges with providers such as Fujitsu. Fujitsu eventually

withdrew from further negotiations, breaking the contract and causing more delays and issues (**Lecture Notes - npfit-mpp-2014-case-history.pdf, 2014**).

6. **Issues in System Functionality** - There were ongoing issues regarding the effectiveness and reliability of the IT systems being developed. Hospitals and clinics experienced difficulties due to software malfunctions or freezing. These concerns have an impact on patient care and safety. For instance, in the event of a system failure, physicians may not have access to crucial patient data, potentially resulting in therapeutic errors.

Root cause – no proper planning, testing, and implementation. IT partner issues is one of the main causes for system functionality (**Lecture Notes - npfit-mpp-2014-case-history.pdf, 2014**).

7. **Confidentiality issue:-**

Patients and healthcare providers were not fully informed about the types of information collected in aggregated records or the reasons for sharing this data. There was a misunderstanding about consent processes, and patients were unsure how their information would be utilized. The opt-out method for aggregated care records was difficult to use, and patients were not given appropriate information about their alternatives. Concerns have been expressed about patient privacy and security, with the possibility of breaches and misuse of medical details. Smartcard access controls did not eliminate the possibility of security and confidentiality breaches; staff members were known to share personal smart cards. The usefulness of using data pseudonymization to protect privacy has been questioned, raising concerns about how well it protects individual rights.

Root cause – Lack of communication and consultation with end users, including health professionals and patients, caused misunderstanding and distrust over the processing of patient data. The haste to implement NPfIT without sufficiently addressing privacy, protection, and security concerns demonstrated a failure to balance clinical advantages with confidentiality (**Lecture Notes - npfit-mpp-2014-case-history.pdf, 2014**).

Overall Recommendations:-

1. Establish stable leadership and clear governance structure:-

To ensure the NPfIT project's success, steady leadership, and clear governance mechanisms must be established. This means keeping top leadership positions consistent to give consistent guidance and make decisions at every stage of the project's lifespan. To further reduce ambiguity and inconsistency, precise governance structures with clearly defined roles and responsibilities are crucial. The project can run more easily and effectively if everyone is aware of their roles and responsibilities (**Léautier, 2014**).

2. Streamline project scope and management:-

Streamlining project scope and management is critical for maintaining momentum and avoiding delays. Clear project objectives and scope help to reduce scope creep and guarantee alignment with project goals. Effective project management methods, such as regular progress monitoring, issue resolution mechanisms, and risk reduction strategies, allow for more efficient project execution. Timelines for projects and overall project success can be improved by proactively controlling project scope and responding to obstacles as they arise (**Webthesis Libraries, n.d.**).

3. Enhance Stakeholder Engagement and Consultation:-

Improving stakeholder interaction and consultation is another key component of project success. Stakeholders can be involved in various stages of the project to guarantee alignment with user demands and to acquire diverse opinions, especially from healthcare experts and end-users. Regular communication channels help to build trust and buy-in from stakeholders by facilitating transparent engagement and feedback loops. This cooperative method raises stakeholder ownership and satisfaction while also improving the quality of project deliverables (**Salloum, R.G. et al, 2017**).

4. Improve Program Planning and structure:-

Improving program planning and structure is critical for reducing risks and guaranteeing project success. Early in the project lifecycle, risk identification and mitigation are made possible by thorough planning exercises, which include extensive cost-benefit evaluations. Setting aside funds to improve program planning and structure before initiating procurement operations creates a strong base for later project stages. By being proactive, this strategy reduces uncertainty and creates the conditions for successful implementation **(Lecture Notes - Rise and Fall of Strategy, Mintzberg (1994) Extract, 1994).**

5. Reform Procurement Process:-

Reforming procurement processes is critical for improving project outcomes and reducing risks. Prioritizing quality over speed in procurement decisions and avoiding haste motivated by external demands are critical principles to uphold. It is essential to prioritize thorough testing and stakeholder involvement to guarantee that the selected solutions fulfill the project's needs. Strong contract management procedures, such as explicit deliverables, milestone-based payments, and incentive plans, can reduce contractual risks and encourage IT partners to do timely high-quality work **(Hulme, M.R., 1997).**

6. Mitigate IT partner Issues:-

To mitigate IT partner concerns, proper partner selection and management are required. It is important to carry out an extensive investigation when choosing IT partners, including evaluating their historical performance history and financial soundness. Efficient monitoring and prompt issue resolution are made possible by contracts that clearly define performance indicators and accountability procedures. Potential risks can be reduced and project success can be guaranteed by cultivating solid partnerships and holding partners accountable **(Lecture Notes - Markus 2004, 2004).**

7. Prioritize system functionality and reliability:-

Prioritizing system functionality and stability is critical to guarantee the project's success and influence on patient care. Investing in comprehensive testing and quality assurance processes ensures that IT systems are reliable and functional, with a focus on patient safety and care delivery. Usability problems are resolved and system adoption is increased by putting user-centered design ideas into practice and incorporating end users in system development and testing. The project can yield real benefits for patients and healthcare providers alike by placing a high priority on system performance and dependability (**Lecture Notes - Markus 2004, 2004**).

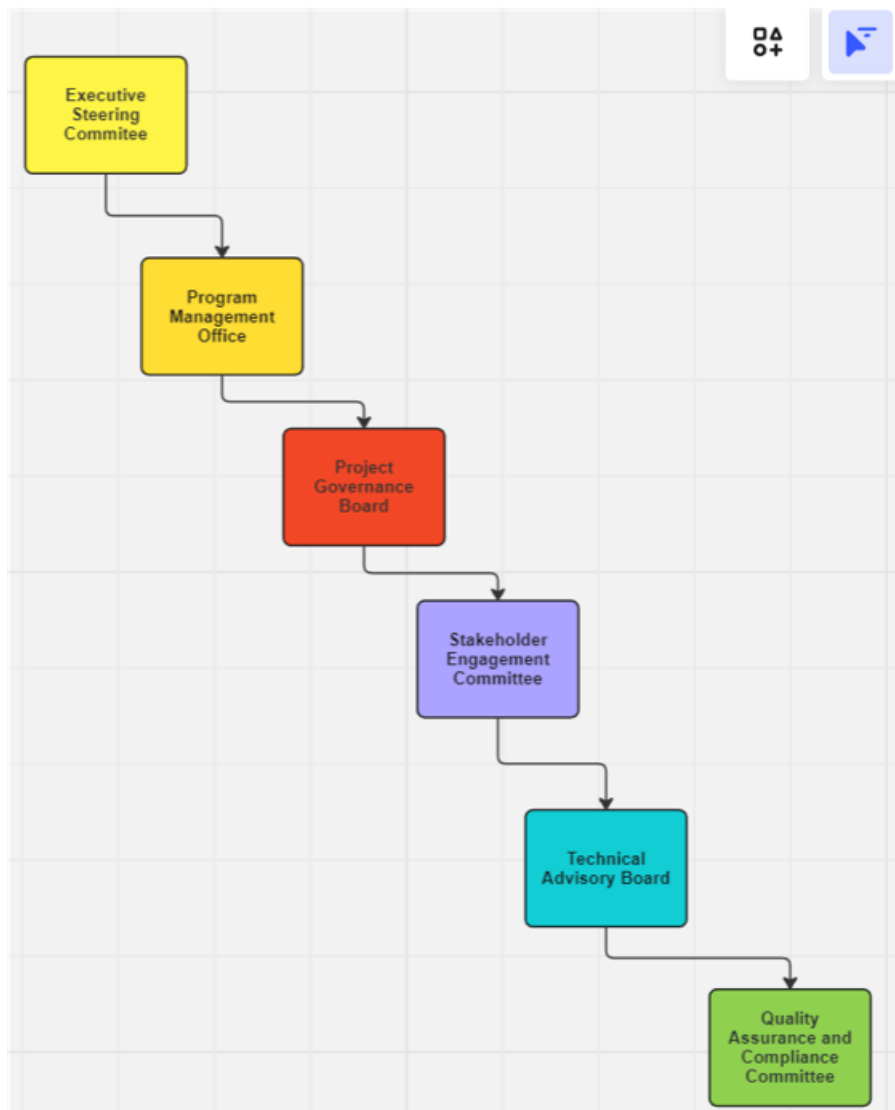
8. Addressing confidentiality and privacy concerns:-

Addressing confidentiality and privacy concerns is critical for retaining trust and complying with regulatory regulations. Identifying and resolving privacy concerns is made possible by involving stakeholders—such as patients and healthcare providers—in open lines of communication. Enforcing strict security protocols, such as data encryption and access limits, preserves patient privacy and guards against security breaches. The project can guarantee the security and integrity of patient data by placing a high priority on privacy and confidentiality, which will inspire confidence in all parties involved (**Lecture Notes - Markus 2004, 2004**).

9. Promote Innovation and flexibility:-

Promoting innovation and flexibility is critical for adjusting to changing needs and increasing project impact. Encouragement of creativity and adaptability in system design and implementation enables nearby clinics and hospitals to modify systems to meet unique requirements while upholding data standards and interoperability. Creating a culture of ongoing learning and development within the project team promotes experimentation and adaptability to changing needs and advances in technology. Fostering creativity and adaptability will enable the project to adapt to shifting requirements and provide long-term advantages to all stakeholders involved (**Anon., n.d.**).

Governance Structure:-



1. Executive Steering Committee:-

Team: Consists of senior executives and key stakeholders from respective government departments, healthcare organizations, and subject matter experts.

Responsibilities:

- Provide strategic supervision and guidance to the NPfIT project.
- Approve the project's objectives, scope, and important decisions.
- Track project performance, risks, and advancement using defined metrics.
- Address concerns that have been escalated and offer advice on how to allocate resources and set priorities.

2. **Program Management Office:-**

Team: PMO Director, project managers, program managers, project analysts, project administrator project controller, and subject matter experts.

Responsibilities:

- Create and maintain project management methods, tools, and templates.
- Encourage coordination and communication between government entities, stakeholders, and project teams.
- Monitor the project's progress, budget, and timeline.
- Guide and support project managers and teams to ensure consistency and adherence to best practices.

3. **Project Governance Board:-**

Team: Representatives from key stakeholder groups, including healthcare professionals, IT experts, procurement specialists, and legal advisors.

Responsibilities:

- Examine and accept project schedules, deliverables, and significant completion dates.
- Evaluate and reduce project risks, such as those related to purchasing, IT partner problems, and difficult stakeholder involvement.
- Provide suggestions and comments on scope modifications, budget management, and resource allocation.
- Make sure that all organizational plans, policies, and legal requirements are in line.

4. **Stakeholder Engagement Committee (SEC):-**

Team: Representatives from healthcare providers, patients, community organizations, and advocacy groups.

Responsibilities:

- Encourage meaningful interaction and cooperation between stakeholders at every stage of the project's development.
- Ask stakeholders for their opinions, issues, and recommendations, then take their input into account while planning and making decisions for the project.

- Inform stakeholders of project updates, developments, and results openly and understandably.
- Assist stakeholders with their complaints and issues promptly to build rapport and confidence.

5. **Technical Advisory Board (TAC):-**

Team: IT experts, technology vendors, cybersecurity specialists, and cybersecurity team.

Responsibilities:

- Offer technical advice and knowledge of systems design, cybersecurity standards, and IT infrastructure.
- Assess and suggest vendors, partners, and technological solutions by project specifications and industry best practices.
- To guarantee data security, dependability, and interoperability, review and approve technical specifications, standards, and protocols.
- Keep an eye on new developments in technology and fashion, and offer suggestions for advancements and innovations.

6. **Quality Assurance and Compliance Committee (QACC):-**

Team: Quality Assurance professionals, compliance officers, auditors, and legal experts.

Responsibilities:

- Create and implement quality assurance procedures and guidelines to guarantee that project deliverables satisfy quality standards and criteria.
- Verify compliance with contractual obligations, industry standards, and regulatory requirements by conducting routine audits and evaluations.
- Determine and reduce the risks associated with security lapses, data privacy, and legal consequences.
- Make suggestions for ongoing development and remedial measures to deal with shortcomings and improve project results.

This proposed governance structure will address the identified difficulties by outlining specific roles, duties, and decision-making methods. The NPfIT project may improve stakeholder participation, accountability, and transparency by putting strong governance bodies and processes in place. This will ultimately improve project outcomes and benefit patients and healthcare providers (**Lecture Notes - IS 6017 Governance and EWS, 2024**).

Mitigation plan:-

To make a mitigation plan for my governance structure first I started with identifying significant risks using a risk assessment approach and categorizing them based on likelihood and impact. These risks include challenges including ineffective involvement from stakeholders and buy-in, poor decision-making because roles are unclear, resource limitations that impact project implementation, and a lack of experience within governing bodies. Several approaches have been suggested to reduce these risks. First, proactive stakeholder involvement can be ensured through establishing regular communication channels and engagement activities. Furthermore, accountability and transparency in decision-making processes will be enhanced by clearly defining roles and duties within the governance structure and creating frameworks for decision-making.

Resource planning and allocation assessments will be undertaken regularly to manage resource restrictions, while training and capacity-building programs will help governance members improve their knowledge. In addition, formal communication protocols will be established to promote the sharing of knowledge amongst governing bodies, and strategies and plans for communication will be devised to address stakeholder resistance to change.

The tool I used for risk assessment is the Risk Assessment Matrix. This RA Matrix is provided in the Annexure part (**Own Study - CAPM Notes, 2023**).

Annexure:-

Annexure A – Past IT Failure Discussion in NHS:-

Understanding the IT challenges in the NHS will give me a brief background about the mistakes they made. I personally, like this way of approaching a problem because as discussed in the report labor government had its victory in 1997, they just criticized the IM&T strategy failures rather than looking into what happened and what lessons could be learned. Without doing this they directly went on starting the Npfit program. This approach helps me understand the problems and will help me make ideas for recommendations.

1. 1984 - RISP Failure – The major reason behind the failure of RISP is that funds were not invested properly and there was no proper management. Due to poor fund investment, there is a loss of 20 million pounds. Due to no proper scope defined, there was poor management, which in turn affected the planning, which further affected defining the timelines properly. There were also issues in procurement because of a

lack of consultations. All these lead to the poor implementation of three core systems out of five. Even these three core systems were only partially implemented, i.e., not up to par. :

2. 1988 - HISS Failure – The main failure of HISS is due to absurd diversification which resulted in too many companies competing to provide services to the small number of hospitals. Due to project fragmentation, the project became complicated as it was challenging to develop solutions that were consistent and difficult to integrate throughout all the planned hospital locations.
3. RMI Failure - RMI aimed to involve clinicians in their hospital management structure by placing a case-mix box in every hospital that is involved in the scheme. However, it failed to achieve its goal because of difficulties in integrating the IT systems, which made the case-mix boxes useless and eventually outdated. Insufficient planning, lack of stakeholder involvement, and integration issues are some of the problems for failure.
4. 1989 - Working for Patients White Paper - In 1989, the Working for Patients White Paper proposed market-oriented reforms to the NHS, to increase efficiency through competition. However, the transition to a quasi-market system complicated things and this strategy created organizational silos and difficulties by splitting health authorities into independent providers and purchasers, making the smooth integration of computerized records impossible. This division made it difficult to collaborate and coordinate, which hindered the successful adoption of technology-driven initiatives throughout the healthcare systems.
5. 1993 - The IT strategy document "Getting Better with Information" – This document was first presented in 1993 alongside the government White Paper "The Health of the Nation." This approach placed a strong emphasis on ideas like safe and shared information throughout the healthcare system to enhance information management and technological infrastructure within the NHS. However, putting the plan into practice was difficult, especially when it came to fully integrating electronic records systems. Though there were hopes for integration, the plan lacked specific guidelines or directives for systematic integration efforts, and it only implicitly suggested that systems might be combined. This failure exposed a disconnect between strategic objectives and practical preparations, impeding the NHS's ability to create and deploy electronic record systems.
6. 1994 -1997 - The NHS faced difficulties implementing the Electronic Patient Record Programme (EPR), which came after the HISS effort, between 1994 and 1997. The EPR Programme had numerous challenges, including delays and problems with implementation, despite its goal of implementing electronic patient record systems

throughout hospitals. Overall development fell short of expectations, notwithstanding modest triumphs in particular institutions due to clinical concentration and capable management. The failure of the NHS to embrace and implement electronic patient record systems widely served as a reminder of the challenges and complications that come with implementing such large-scale technical initiatives.

7. 1997 - Significant changes to NHS policy were brought about in 1997 by the Labour party that took office, through the "The New NHS: Modern, Dependable" project. The goal of this program was to move the emphasis inside the healthcare system from internal market competition to more collaboration and integrated care. Despite emphasizing national standards, guidelines, and performance improvement strategies, the program had difficulties during its execution. Inadequate implementation of the policy led to administrative challenges and made it harder to foster collaboration and lessen inequality inside the NHS. Moreover, stakeholders used to the competitive framework resisted the shift towards collaboration, underscoring the difficulties in enacting systemic reforms in healthcare policy.
8. 1998 - The National Health Service (NHS) introduced the ambitious "Information for Health" strategy in 1998 to transform healthcare information management. The plan recommended universal access to online patient records, lifetime electronic health records for all, and smooth information exchange throughout the National Health Service (NHS). However, there were many difficulties and setbacks in putting this plan into practice. The National Health Service (NHS) encountered difficulties with interoperability, finance, and technical complexity despite its goal of having comprehensive electronic health data. Only a small proportion of hospitals had implemented Electronic Patient Records (EPRs) to the intended degree by the end of March 2002, highlighting the gap between the strategy's ambitious goals and the realities of execution. The failure highlighted the challenges of carrying out extensive digital transformation projects within the NHS's complex healthcare system.
9. 2000 - The NHS launched "The NHS Plan," a comprehensive reform initiative, in 2000 to reshape the healthcare system to better meet the needs of patients. The plan had several goals and actions to enhance the provision of services, such as the electronic scheduling of appointments, patient access to electronic personal health data, electronic prescription of medications, and the implementation of telemedicine in all local health services by the year 2005. Nevertheless, despite these lofty objectives, the NHS encountered difficulties and was unable to meet the targets within the allotted time. The deployment of electronic booking systems, patient access to medical information, electronic prescribing, and telemedicine services was hampered by delays in implementation, technical difficulties, and resource shortages. These shortcomings

brought to light the challenges of converting policy goals into concrete results in the intricate and resource-constrained healthcare setting of the NHS.

10. 2000 – 2003 - The NHS launched the Electronic Record Development and Implementation Programme (ERDIP) in 2000 to advance electronic record systems between 2000 and 2003. The program's goal was to provide funding for 19 demonstration sites that addressed several facets of electronic records, such as integrated care, patient access, and technical standards. Nevertheless, the ERDIP faced several difficulties and setbacks despite these efforts. These included problems with supplier management, cultural shifts, and stakeholder participation. Furthermore, even though the ERDIP aimed to collect lessons learned, it also brought attention to enduring organizational and technical obstacles that impede the successful use of electronic records. This time frame brought to light the intricacies and challenges involved in attaining the broad implementation and assimilation of electronic record systems in the National Health Service (**Lecture Notes - npfit-mpp-2014-case-history.pdf, 2014**).

Annexure B – IM&T Strategy Discussion:-

Study of 1992 IM&T strategy :-

In 1992, IM&T strategy was introduced which was the first nationwide NHS IT strategy. It introduced 5 main principles and several infrastructures which still exist today. Some of the infrastructures are NHS number, NHS administrative registers, and NHS-wide information network NHSnet. There were two programs initiated under the IM&T strategy, one is EPR and the other is ERDIP. EPR was a great success in two hospitals. Following that, the ERDIP program was introduced in early 2000. This program was tailored to user needs and welcomed by many users in different locations. However, this IM&T strategy lacked some key aspects that made both the programs partially successful and not fully successful. Some of the drawbacks of this strategy were a lack of overall objectives, specific targets, and program evaluation (**Lecture Notes - npfit-mpp-2014-case-history.pdf, 2014**) .

Some of the key Lessons learned from this would:

1. Sope must be properly defined.
2. Need to have proper KPI metrics to track the success.
3. Retrospective meetings must be held at each stage.
4. Stakeholder analysis must be done.
5. A proper communication management plan must be done in the planning phase.

Annexure C – Risk Assessment Matrix:-

Risks	Likelihood(L)	Impact(I)	Risk Level(L x I)
Lack of stakeholder buy-in and involvement.	High	High	High
Poor decision-making because of unclear roles.	Medium	High	High
Resource limitations affect project execution.	Medium	Medium	Medium
Lack of expertise in government bodies	Medium	Medium	Medium
Poor accountability approach for governance decision	Low	High	Medium
Inefficiency to change by stakeholders	High	Medium	Medium
Poor communication between stakeholders	Medium	High	High

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