The three most common reasons for project failure are:

1. Issues in requirements gathering and engineering
2. Lack of software testing
3. Insufficiencies in project management and leadership

Importantly, all above are interlinked with causal relationships between them, as demonstrated by Lehtinen et al. (2014). Insufficient management and leadership can result in a lack of testing resources assigned to project and inadequate balance between quality and delivery, which, coupled with poor requirements gathering, can result in wrong prioritisation of tasks. Inefficiencies in requirements gathering have generally been recognised as an issue in software project management and one of the most common cause of failure (El Emam & Koru, 2008), alongside poor project management and execution (Schmidt, 2023). Hughes et al. (2017), also highlight the four types of failure, noting correspondence (system not meeting objectives), process (system not delivered, or delivered failing to meet key criteria), interaction (system not adopted) and expectation failures (system not meeting needs).

One of the examples to demonstrate above is the NHS National Program for IT (NPfIT) project, which ultimately failed incurring costs over £10 billion. One of the biggest missteps that significantly contributed to its failure was the rushed planning of the project which resulted in inadequate delivery timelines and lack of testing (Baumann, 2021). Additionally, key stakeholders were not sufficiently engaged and their requirements captured with many raising concerns on the systems not meeting accessibility or usage requirements (British Computer Society, 2006).

Additional example is the Sainsbury’s Warehouse Automation project, which failed to deliver the promise and more so resulted in the retailer having to hire extra 3000 people to manually fix the mistakes. One of the key system components, the barcode scanning system, was not sufficiently tested as immediately caused erroneous errors in reading the barcodes (Widman, 2008) and resulted in the system not being able to track its stock (Oates, 2004).

References:

Baumann, B. (2021) Lessons Learned from the NHS IT System Failure. *Panorama Consulting Group*. Available from: <https://www.panorama-consulting.com/nhs-it-system-failure/> [Accessed at 4 August 2024]

British Computer Society (2006) The way forward for NHS health informatics: where should NHS Connecting for Health (NHS CFH) go from here? *British Computer Society Health Informatics Forum*. Available from: <https://drive.google.com/drive/folders/11eyVkSufGYX5wGmegufqrkX5TalSgSac> [Accessed 4 August 2024]

El Emam, K. & Koru, A.G. (2008) A replicated survey of IT software project failures. *IEEE software*, *25*(5): 84-90.

Hughes, D.L., Rana, N.P. & Simintiras, A.C. (2017) The changing landscape of IS project failure: an examination of the key factors. *Journal of Enterprise Information Management*, *30*(1): 142-165.

Lehtinen, T.O., Mäntylä, M.V., Vanhanen, J., Itkonen, J. & Lassenius, C. (2014) Perceived causes of software project failures–An analysis of their relationships. *Information and Software Technology*, *56*(6): 623-643.

Oates, J. (2004) Sainsbury's, Accenture and the £3bn IT flop. *The Register*. Available from: <https://www.theregister.com/2004/10/19/sainsburys_v_accenture/> [Accessed 4 August 2024]

Schmidt, J. (2023) Mitigating risk of failure in information technology projects: Causes and mechanisms. *Project Leadership and Society*, *4*: 100097.

Widman, J. (2008) IT’s biggest project failures — and what we can learn from them. *ComputerWorld*. Available from: <https://www.computerworld.com/article/1560887/it-s-biggest-project-failures-and-what-we-can-learn-from-them.html> [Accessed 4 August 2024]