













	and Taiwan	
<b>Beta</b>	Furniture manufacturing company (listed in the Hong Kong Stock Exchange market), headquartered in Hong Kong, with a production plant located in China	Around 140 million
<b>Gamma</b>	Electronic component manufacturing company headquartered in Hong Kong with a production plant located in China	Around 10 million
<b>Delta</b>	Multimedia speaker manufacturing company headquartered in Hong Kong with a production plant located in China	Around 10 million

*Table 3 Four business cases (Wong et al., 2005)*

The researcher discussed three common factors identified as failure factors.

### **.1.2 Poor consultant effectiveness**

Project phase communication issues lead to the controversy between ERP and business process reengineering. According to the literature, consultants were considered by their project team members to be inexperienced with ERP systems and unable to provide professional advice on ERP project planning. As suggested in the previous research, intangible assets have a significant responsibility to implement ERP (Chua, 2009; Menon, 2019; Moeuf et al., 2020; Prasetyo et al., 2019; Wong et al., 2005).

### **.1.3 Poor quality of BPR (Business Process Reengineering)**

The project team mentioned that the given business process reengineering (BPR) vision was unclear. The consultant's advice was not professional in conducting BPR. The project team noted solutions did not correctly solve the business process issues. ERP was not matched with the business process. Poor quality of BPR led to incorrect system configuration problems.

Consultants did not conduct mapping analysis to map the ERP functionality with business requirements. Users and the business process were not ready for ERP implementation. ERP vendors led awareness programs to users, which was inefficient to operate the new ERP (Chua, 2009; Menon, 2019; Moeuf et al., 2020; Prasetyo et al., 2019; Wong et al., 2005).

#### **.1.4 Poor project management effectiveness**

Project success core factors are plan, lead, management, and monitoring of the different phases of the project. Core factors failure is the significant reason for failing the implementation project. ERP implementation failures occurred due to the same reasons. ERP systems are more complex, and project teams were required to collaborate with top management, different department, users, and consultants during the implementation process. None of the organizations' project managers could effectively manage ERP implementation due to a lack of ERP knowledge, capability, and project management abilities. Poor time planning and unrealistic project time periods are two additional factors discussed separately during the research articles. Project time schedules with human resources and human capability vary with available resources. When reviewing their communication and training effectiveness, conducting BPR, and testing system performance, it is critical for the project manager to manage the consultants successfully (Chua, 2009; Menon, 2019; Moeuf et al., 2020; Prasetyo et al., 2019; Wong et al., 2005).

Chua, (2009) identified four failure factors related to ERP implementations by analyzing eight failure projects and their risk factors. These are Correspondence failure, process failure, Interaction failure, and expectation failure. According to the research article, critically analyzed case studies are numbered below.

<b>Case Number</b>	<b>Project Details</b>
Case 1	MANDATA large scale IT project initiated in Australian Public Service Board's
Case 2	Regional Information Systems Plan (RISP) in Wessex Regional Health Authority's
Case 3	CONFIRM system in AMR Information System's (AMRIS)



Case 4	Transfer and Automated Registration of Uncertified Stock (TAURUS) system in The London Stock Exchange's
Case 5	Baggage-handling system in Denver International Airport
Case 6	London Ambulance Service Computer-Aided Dispatch system (LASCAD)
Case 7	FoxMeyer Drug's Delta III Project
Case 8	The Federal Bureau Investigation's (FBI) in Virtual Case File (VCF)

*Table 4 Eight cases of ERP implementation (Chua, 2009)*

Each case has its failure factors that correlate with the four risk factors: people-related, process-related, Technical-related, and external project risk factors.

No.	Case name	Judgemental Failure factors
Case 1	Australian Public Service Board's MANDATA	The project lacked insufficient numbers of skilled IT staff
		Changes in the external circumstances led to a series of funding cuts
		Without an influential project champion, users remained ambivalent
		The poor alternative implementation strategy gave rise to technical difficulties that could not be overcome
		Its scope became reduced over time, and the project lost its legitimacy altogether.
Case 2	Wessex Regional Health Authority's (WRHA) Regional Information system plan (RISP)	WRHA had no prior experience in IT project management.

		The vision for RISP was also a lofty one.
		The budget was poorly controlled, Internal audits for RISP were also found to be inadequate.
		End users' perspectives were not taken into consideration.
		Implementation delays and changes to the main RISP project.
Case 3	AMR Information System's (AMRIS) CONFIRM	The vision for CONFIRM was overly grand
		Too technical system
		The CASE tool used by the development team could not integrate two important components within CONFIRM.
		Unable to make the database fault-tolerant, a critical requirement of the system.
		Unable to track the project progress due to the infrequent meet in both parties.
		To aggravate the situation, middle-level managers from AMRIS deliberately concealed news of technical glitches, delays, and cost overruns.
Case 4	The London Stock Exchange's Transfer and Automated Registration of Uncertified Stock (TAURUS) system	Recession in the early 1990s diminished TAURUS' commercial attractiveness even before it was completed.
		The technical team was overly ambitious to meet a myriad of stakeholders' demands

		It was impossible for TAURUS to be completed within the original budget and schedule.
Case 5	Baggage-handling system in Denver International Airport	The project failure was the sheer expanse of DIA, which was twice the size of Manhattan.
		BAE was asked to design and build the system in one year, even though it was estimated to take four.
		Clients had no prior experience with managing projects of such scale
		The poor management of users' expectations
		Clients were not aligning with the design
Case 6	London Ambulance Service Computer-Aided Dispatch system (LASCAD)	The developer of LASCAD, had no previous experience in building such a dispatch system.
		The project's schedule was too aggressive
		LASCAD development, the emergency backup system was untested.
		Insufficient training hours for users.
Case 7	FoxMeyer Drug's Delta III Project	The unrealistic expectation is cast on the system.
		Even before the benefits from the ERP were realized, the management committed the folly of entering into the UHC contract.
		The system proved to be incapable of coping with the vast transaction volume.
		The decision to couple the ERP implementation and the integration with the warehouse

		automation system was unwitting.
		FoxMeyer also lacked skilled personnel and relied heavily on the vendors.
		Quality assurance was relegated to external consultants
Case 8	The Federal Bureau Investigation's (FBI) Virtual Case File (VCF)	The requirements provided by FBI were not sufficiently defined in terms of completeness and accuracy.
		The decision to develop VCF within 22 months was overly unrealistic.
		Change control was poorly managed even though there was a change control board.

*Table 5 Judgemental failure factors of eight cases (Chua, 2009)*

The identified failure factors are related to people, processes, technological and external.

People related failures are,

- I. Inexperienced clients or vendors.
- II. Lacks of stakeholder's commitment.
- III. Overly- impressive top management.
- IV. Users' unawareness of the systems.

Process related failures are,

- I. Unclear scope and requirement.
- II. Unrealistic schedule.
- III. Poor budgetary control.
- IV. Lack of change control.

Technical related failure factors are,

- I. High technical complexity.
- II. Inappropriate approach to project development.
- III. Incomplete software testing.

Extra project risk failure factors are,

- I. External environment changes.
- II. Tightly coupling with other ongoing high-stake projects.

Further to the research concluded by Garg & Garg (2013), they identified six primary roots related to ERP implementation failure factors after analyzing data from the Indian retail sector. The researcher used a cause and effect diagram ( It is sometimes referred to as the "Ishikawa diagram", because Kauro Ishikawa developed it, and the "Fishbone diagram", because the complete diagram resembles a fish skeleton) to determine the correct roots to identify failure factors of the industry.

1. Operational
2. Tactical
3. Strategic
4. Cost
5. Technology
6. people

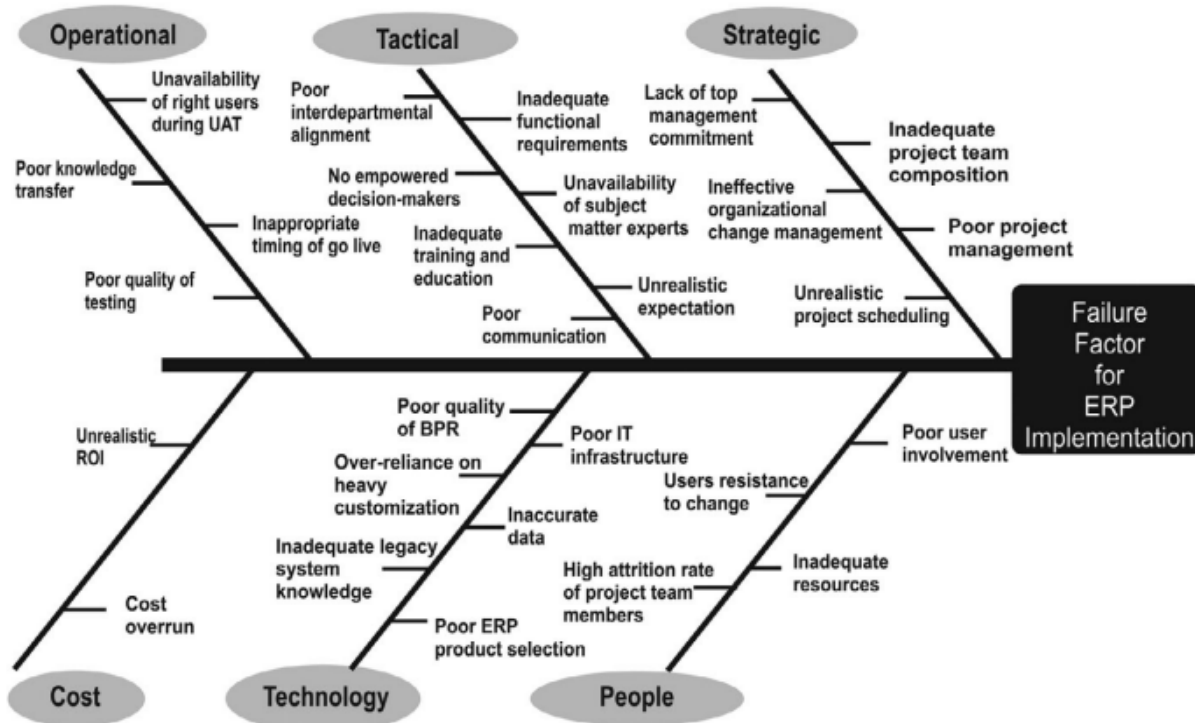


Figure 1 CE diagram (Garg & Garg, 2013)

## 6. Conclusion

The author of this concept paper wants to analyze all the factors under four main factors. Those factors are (1) People ( who are involved in implementing the ERP projects ), (2) Process (refer to the organization sectors/Divisions), (3) Technology, and (4) External factors (PPTe).

### 1. People factor

According to this study of the ERP implementation process and assessment of failure determinants, the effectiveness of ERP consultants has a significant role in deciding the ERP implementation failures. ERP consultants are third-party experts hired to fill in knowledge gaps and transmit expertise to project staff. ERP implementation failures were not clearly defined through the research papers on leadership and ownership failures during the analysis of all case studies. People who lacked ownership of the project were diverse in the ERP implementations to another root. Stakeholders always try to depend on the consultants' expertise (Consultants' perspectives are greater than operational perspectives) without analyzing deeply. This study extends current literature by studying the failure factors of ERP implementations to prioritize the managers' role.

## 2. Process

ERP misfit is the term researchers use to extract the process failure in ERP systems. Business process reengineering is three words some organizations are used to energize the process according to the cases selected by the author. Vendors are third-party ventures with exciting factors to decorate existing processes with multiple tools. The existing process is not precisely aligned with the reengineering adaptation that the vendors designed.

## 3. Technological factor

Prior literature also identified technological failure factors that vastly impact misconduct ERP implementation and operations. Multiple brands of a network component, machines with various generations of technologies (Motivations to use ERP), several platforms of servers, and operating systems created numerous issues.

## 4. External Environment

External environment changes that couldn't be controlled through the internal policies. Budget allocation, ERP objectives, and timelines could be changed by Political, Environmental, and Social changes.

Organizations seeking a competitive advantage in today's global market must have a robust, integrated, and seamless approach to BPR supported by a robust IT infrastructure. What appears to have come out of this research is that the potential benefits of reengineering are only attainable if an organization has the complete commitment, leadership, and dedication.

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