## Comprehensive Analysis of Enterprise Resource Planning Strategy at Kohinoor Planet Constructions (KPCPL)

### I. Analysis of Business Problems Leading to ERP Adoption (Question 1)

#### 1.1. Data Accuracy and Reporting Issues

The main reason KPCPL began its Enterprise Resource Planning (ERP) project was a severe failure in data quality and consistent reporting across departments.1 This urgent situation arose in December 2009 when the Chairman and Managing Director (CMD) saw that the Accounts and Sales departments had given

**two different revenue figures** for the same time period for a single project.1

Widespread problems in reporting included sales, income, money owed by customers, and project completion status.1 The records of sales receipts did not match the records kept by the accounts department, and these figures also did not align with the bank’s statements.1 The top leadership lacked a single, reliable "dashboard" view needed for timely decision-making regarding work status and finances.1

#### 1.2. Management Rationale for ERP

Leadership believed an ERP system would solve these serious issues by creating a connected information system.1 The goal was to gain "reliable, accurate, and real-time information" and to eliminate the harmful outcomes of separate information flows and differences in reports from various departments.1 The decision was clearly intended to support KPCPL's rapid growth plans.1

### II. Evaluation of Real-Rise ERP Implementation Challenges (Question 2)

The implementation of the Off-the-Shelf Real-Rise system stopped due to major mismanagement, high spending, and poor control, occurring five months into the scheduled 12-month period.1

#### 2.1. Effect of Poor Scope Management and Change Control

The project failed critically in the initial planning phase, particularly in Project Scope Management:

* **Insufficient Scope Planning:** The project started *without a clearly defined and agreed-upon scope management plan*.1 The team did not spend enough time gathering requirements, which is essential for strategic initiatives like ERP.1
* **Business Model Mismatch:** Real-Rise was made for a **traditional construction business model** (focused on raw material buying and inventory).1 KPCPL, however, used a  
  **contract management model**, outsourcing materials and labor while focusing internally on sales and accounts.1 This difference required major customization from the start.1
* **Unchecked Scope Growth:** Because there was no formal **change management procedure**, departments started asking for changes without limit.1 These requests were accepted without proper analysis, leading to rapid and unchecked growth in the project scope.1

#### 2.2. Results of Customization Requests

The large number of customization requests led to severe financial and scheduling problems:

* **Cost and Time Overruns:** The cost of making changes increased quickly.1 An internal review showed that  
  **more than 50 percent of the total project implementation cost had been spent** without finishing the first main goal after five months.1
* **Technical Risks:** The vendor warned that the heavy customizations would **threaten the product's compatibility** with future software updates.1
* **Contract Failure:** The vendor eventually asked for a revised cost that was nearly **ten times the original price** to cover the bespoke requirements.1

#### 2.3. Project Governance Issues

The project lacked a dedicated management structure, worsening the cost and time problems:

* **No Single Authority:** There was **no single leader** or dedicated project manager from KPCPL to manage the implementation.1
* **Weak HR Management:** A project team was not formed to help the Vice President with planning and decisions.1 He relied informally on his secretary and other executives for occasional updates.1 This divided leadership meant that the major cost and time problems were not seen or addressed in a systematic way until they reached a crisis point.1

### III. The Role of Project Management in ERP Failure (Question 3)

The failure of Real-Rise was fundamentally a failure of project control, stemming from the systematic neglect of key Project Management Body of Knowledge (PMBOK®) areas.1

#### 3.1. Neglected PMBOK Knowledge Areas

The failure was characterized by widespread neglect across several PMBOK areas:

* **Project Scope Management:** The project started without an accepted scope plan, and there were no formal procedures to manage change. This allowed the scope to increase unchecked due to the mismatch with KPCPL's business model.1
* **Project Time Management:** There was insufficient structural planning and sequencing of activities. Five months into the project, the first month's goals were still not met.1 The effect of change requests on the project timeline was ignored.1
* **Project Cost Management:** Cost planning and budget estimation were not carried out precisely, making it impossible to control spending against the original plan.1 This made it difficult to use measurement tools like  
  **Earned Value (EV)** management to track work completed versus money spent.1
* **Project Human Resource Management:** No separate IT division or formal project team was formed to support the Vice President.1 This lack of a single, powerful authority resulted in weak monitoring and an inability to guide key stakeholders.1
* **Project Communications Management:** The reliance on informal updates from support staff meant that the severe financial and timeline problems were not formally reported to the CMD in a timely manner, which delayed management action.1

#### 3.2. How Better Project Management Could Have Changed the Outcome

Following strong project management practices would have significantly improved the outcome:1

* **Early Alignment:** A thorough requirements gathering process would have identified the incompatibility between Real-Rise and KPCPL’s business model *before* the contract was signed.1
* **Strong Control:** Establishing a dedicated project manager and team (HR Management) would have allowed for strict enforcement of change control (Scope Management).1 This would have required every customization request to be assessed against the project plan, preventing unchecked growth in scope and allowing for objective measurement of progress (EV Management).1

### IV. Assessment of the In-House ERP Decision (E-Planet) (Question 4)

#### 4.1. Was Moving to E-Planet the Right Decision?

The decision to change direction and develop a custom-made ERP solution, E-Planet, was sensible and necessary after the failure of Real-Rise.1 The amount of customization needed for the Off-the-Shelf product to work with KPCPL’s unique contract model was financially impossible and carried too much risk.1

This change was strongly supported by organizational history (the education vertical had similar success with an in-house system after a COTS failure) and a clear financial benefit.1 The estimated

**Total Cost of Ownership (TCO)** for the E-Planet system was projected to be **15–20 times less** annually than the cost of maintaining the heavily customized Real-Rise solution with its ongoing vendor fees.1

#### 4.2. Advantages and Risks of Custom vs. Off-the-Shelf ERP

Developing a **Custom (E-Planet)** solution offers several advantages over an **Off-the-Shelf (Real-Rise)** product, but introduces unique risks:

**Advantages of Custom Development:**

* **Perfect Fit and Competitive Advantage:** Custom development ensures the system has a perfect functional fit, with features and tools made specifically for KPCPL’s contract-based model, potentially giving the company a competitive edge.4
* **Lower Long-Term Cost:** While the initial cost of developing a custom system is high, it can lead to a lower total cost over time by removing ongoing vendor licensing and high customization fees.5
* **Better Integration:** Custom systems can be designed to connect smoothly with KPCPL's existing software systems .

**Risks of Custom Development:**

* **Higher Initial Cost and Time:** Custom solutions require a larger initial investment and a longer time frame for development (E-Planet is planned for completion by March 2013) .
* **Maintenance Burden:** The full responsibility for ongoing maintenance, fixing problems, updating features, and managing outdated technology rests entirely with the internal IT team .
* **Vendor Support:** Unlike Off-the-Shelf solutions where the vendor provides timely support and updates, custom development creates reliance on internal talent . Conversely, Off-the-Shelf solutions are generally faster to implement and have a lower starting price, but may not meet the business’s specific needs without large, risky customization .

#### 4.3. E-Planet Success Factors

The E-Planet project shows that the organization learned from the past failure by adopting strong project management discipline:

* **Formal Governance:** A dedicated IT division was created, professional project managers were hired, and a deputy project manager completed **PMP® certification**.1
* **Disciplined Planning:** The new team spent "significant time in requirements gathering" to accurately capture KPCPL's contract-based business model.1
* **Proactive Control:** Crucially, **scope, schedule, and change management documents were clearly in place *before* the project started**, establishing the controls needed to prevent repeat failures and ensure the project stays on its planned path.1
* **Integration:** E-Planet is planned to be a web-based solution that will integrate the group’s existing HR and accounting software and include advanced tools like analytics and business intelligence to help top management make informed decisions.1

#### Works cited

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