

# MANG6143 Project Risk Management

## Performance Uncertainty Management Processes - Overview and Appraisal

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*Knowledge and Understanding On successful completion of the unit you will be able to:*

- *discuss the usefulness of a variety of risk management frameworks,*
- *explain the problems associated with measuring performance,*
- *explain the problems associated with estimating probabilities,*
- *explain related qualitative issues,*
- *understand the motives for undertaking formal risk management processes,*
- *be aware of limitations of some common practice,*
- *describe the issues to be addressed in establishing a formal process.*

*Subject Specific Intellectual Skills On successful completion of the unit you will be able to:*

- *discuss the application of a formal risk management process in a project context,*
- *show how to identify an effective structure for addressing uncertainty, opportunity and risk associated with any project.*

*Key Skills By the end of the unit you will develop your ability in the following skills: numeracy in terms of uncertainty, opportunity and risk, group working and communication during the module and subsequently through the assignment, key skills in information handling, critical analysis and written communication.*

## **1 Approaches to Uncertainty and Underlying Complexity Management - 1200**

Introduction to risk and opportunity, underlying complexity.

Challenge of traditional view of risk.

A traditional four stage view of the asset/change lifecycle is a useful starting point to consider the scope of a project. The four stages are conceptualize, planning, execution and delivery (E&D) and Utilization. Effective uncertainty management requires a macro-view of the entire project context, so that corporate and operational uncertainty is captured in addition to planning uncertainty. This leads to an elaboration of the lifecycle to incorporate 12 stages, each emphasizing a different management purpose and outcome. Both views are shown in figure 1.

This paper is particularly concerned with the E&D strategy shaping phase. This is within the broader planning category, and follows the design, operation and termination strategy shaping phase. The DOT phase aims are to ... The E

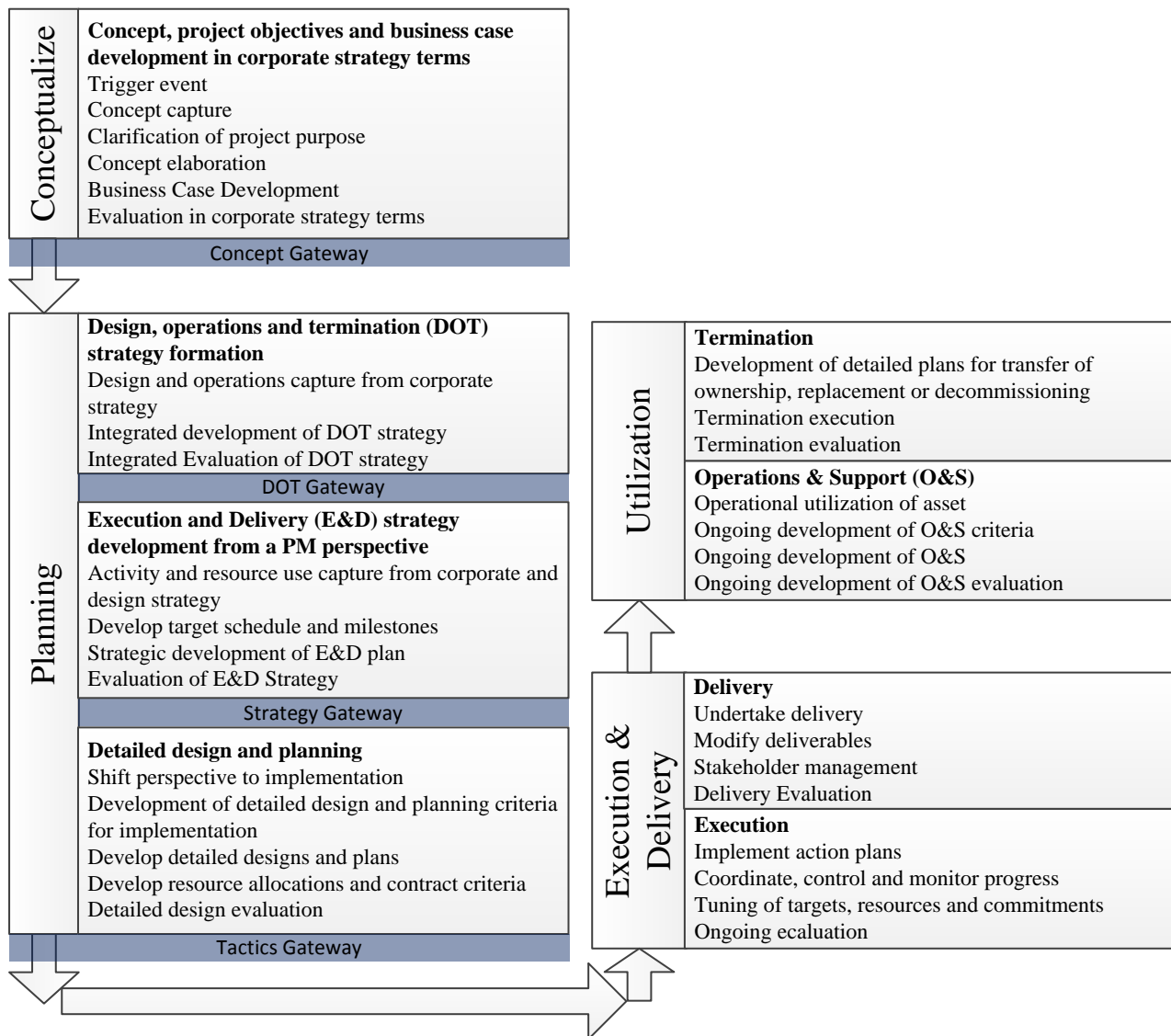


Figure 1: Twelve-stage asset/change lifecycle - adapted from Chapman and Ward (2011)

Procedures are a common way to ensure consistency and quality is maintained through a range of repeated applications. While a good procedure is often designed to be simple, repeatable and transparent, this cannot be a uniform approach. Some high complexity, high uncertainty projects require sophisticated, tailored procedures. The PUMP framework supports this concept through the idea of PUMP packs, that is a set of PUMPs tailored to specific projects and project lifecycle stages. This paper focusses on PUMPs within the context of the E&D strategy shaping stage.

### **1.1 The PUMP Process**

### **1.2 Contrast with Other Risk Management Processes**

Contrast with PUMP and PMI PMBOK and others.

### **1.3 The Clarity Efficient Approach**

Summarise that PUMPS offer a higher level of clarity for the project as a whole rather than

1200words.

## **2 Identification of Uncertainty**

For the identify phase of the PUMP approach, in the execution and delivery strategy shaping phase of a projects lifecycle, explain concisely in your own words what you believe are the key features of a PUMP approach, comparing these features with the PMI PIMBOK approach or any other form of common practice you are familiar with. Your discussion should demonstrate your ability to understand a particular area of the course material in depth, based on selective reading, critical analysis and the case study exercise. Use examples to illustrate your discussion if you wish, making use of the Samdo case study if you wish, but concentrate on concepts and principles. Build on your Part 1 answer, avoiding repetition of earlier discussion. 900words.

## **3 Evaluating Risk Management Processes**

For the evaluate phase of the PUMP approach, in the execution and delivery strategy shaping phase of a projects lifecycle, explain concisely in your own words what you believe are the key features of a PUMP approach, comparing these features with the PMI PIMBOK approach or any other form of common practice you are familiar with. Your discussion should demonstrate your ability to understand a particular area of the course material in depth, based on selective reading, critical analysis and the case study exercise. Use examples to illustrate your discussion if you wish, and make use of the Transcon case study if you wish, but concentrate on concepts and principles. Build on your Parts 1 and 2 answers, avoiding repetition.

900 words.

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## References

Chapman, C. and Ward, S. (2011). *How to Manage Project Opportunity and Risk*. John Wiley & Sons Ltd.