APS1012 Management of Innovation – Final Team Projects, Winter 2010

The Management Consultant versus Management Engineer

Objective

Explore the differences between consultants and engineers in management roles, and answer the following questions:

External perspectives

- What do people external to these disciplines see the jobs as?
- What is the definition of these occupations?
- Why are engineers invisible?
- How does this affect perceptions of their value and contribution?
- Current State Analysis: What are the problems right now?

Knowledge base

- What do they know?
- How does this change/shape how they perform their work?
- What resources do they rely on?

Creativity Influences

- Using established models
- Responsibility for developing out-of-the-box solutions
- Leeway – where they have to stick to spec / have room to move
- Methods of introducing them to creative thought processes

Extracting Value

- How do you gauge success? (Metrics)
- How to you measure value from each discipline's perspective

Conclusion

Is there a framework to solve the "problem" of perception and separation?

Summary

The differences between management consultants and engineers were defined through investigation of four different areas: External Perspectives, Knowledge Tools, Creativity Influences and Extracting Value. The affects of engineers and consultants on these areas were examined and compared, and explained in a way that will help individuals better understand the roles, responsibilities and capability expectations of each job. The findings give valuable insight to students – graduate engineers and others – who are completing post-secondary degrees and applying for positions at both engineering and management consulting firms.

Engineers are often viewed as the technically minded side of the organization, respected and trusted as working professionals, but occasionally seen as socially awkward and narrow. Management consultants, on the other hand, are both distrusted and highly valued based on the situation. Although regarded by some as "all talk", their high-level solutions are thought to change the course of large organizations.

The knowledge tools available to engineers focus on specific analysis and usage of scientific data. Engineers are particularly innovative at the product level, often quick to brainstorm high-level and

creative solutions, but are prone to finding roadblocks along the way. Their greatest value lies in the ability to apply hard scientific data to optimize company processes. Consultants are generally responsible for determining overall project scope, taking into account the organizational culture, strategy and business environment before proposing systems or solutions; they may apply “trendy” and “new” methodologies to provide the most up-to-date recommendations possible for their clients. Consultants must also attend to their individual marketing needs.

Neither engineering nor consulting is the “better” discipline to join; it comes down to personal preference. The best solution is a qualified/certified management consultant who is also an engineer.