Case Notes

# Chapter 5: Managing For Quality

# 3M – Finding the Delicate Balance between Six Sigma and Innovation

## Case Summary

*This case presents the challenges 3M faced in managing the twin goals of efficiency and innovation. 3M found that while Six Sigma programs are successful in reducing costs and improving quality, they are ineffective in fostering innovation.*

Case Analysis *The case illustrates how 3M contends with managing quality of conformance and quality of design simultaneously. It demonstrates that different dimensions of quality require a different approach of quality management. In particular, Six Sigma programs are only suited for improving processes that are orderly with clearly defined specification, i.e., quality of conformance. A different program (e.g., Buckley’s new product development initiative) other than Six Sigma is needed to improve ill-structured processes such as innovation.*

## Sample Answers to Case Questions

1. In your opinion, does this case illustrate significant problems with the Six Sigma philosophy? Why or why not?

This case does not illustrate significant problems with Six Sigma philosophy. It shows Six Sigma is the program of choice for process improvements provided that the process is orderly with clearly defined design specification. It will not be applicable to processes that are disorderly and ill-structured such as new product development.

2. Do you agree with the assessment that a company can either focus on quality or innovation? Why do you think 3M had such a difficult time balancing these two goals?

A company can focus on both quality and innovation using appropriate quality management approaches. 3M was successful in producing quality products efficiently with Six Sigma programs. However, when 3M did not separate quality of conformance from quality of design, it produced quality products (based on quality of conformance) at the expense of creative product design (based on quality of design), damaging the reputation of 3M as an innovative company. It took a change of leadership from McNerney to Buckley before a balance between Six Sigma and innovation was achieved.