



BENEFITS CASE

Manufacturing Companies

Vivek Agarwal

Masters in Manufacturing Engineering
Cambridge University



OUTLINE

Project Objectives
Project Approach & Timing
Case Studies
Proposed Methodology
Key Deliverables for Users
Learnings and Conclusions



PROJECT OBJECTIVES

Scope some applications and benefits for manufacturing companies

Quantify main benefits for case study companies where possible

Propose methodology for future benefit studies



PROJECT APPROACH & TIMING

Week	0	1	2	3	4	5	6
Dates	26/3-30/3	30/4-04/5	07/5-11/5	14/5-18/5	21/5-25/5	28/5-01/6	04/6-08/6
Scope Project	█						
Understand Auto-ID	█	█					
Scope Applications			█	█			
Visit Sites & Collect Data				█	█	█	
Evaluate Benefits						█	█
Consolidate, Report & Present							█



CASE STUDIES

Unilever

- Improving on-shelf availability
- Automating proof of delivery

Gillette

- Improved security of products

Data collected and analysed

Company confidentiality

Yun Kang's work



PROPOSED METHODOLOGY - I

Ensure good understanding of Auto-ID technology

Consolidate previous work on Auto-ID

Understand supply chain and main problems faced

Focus down to product or plant/warehouse

Scope benefits from intelligent product applications



PROPOSED METHODOLOGY - II

Identify information required within company

Collect data from plant/warehouse/HO personnel

Evaluate monetary value of benefits

Conduct sanity check on numbers

Consolidate results



KEY DELIVERABLES FOR USERS

Identification of benefit areas

Identification of information required for evaluation of benefits

Methodology for future benefit studies

Potential white paper



LEARNINGS & CONCLUSIONS

Barcodes extensively used in case study companies, but data not utilised effectively

Numerous applications in industries not studied, e.g. automotive

Benefit to manufacturers not just from their own operations, e.g. on-shelf availability

Delay in implementation would reduce 'pot of gold' e.g. ECR

Future supply chain models can be enabled