

*The best way to achieve large step improvement is via a cross-functional project team using a re-engineering approach.*

## HEALTHCARE

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### Improving Performance through Process Re-engineering

To be successful, a company needs to continuously improve its manufacturing and business processes. All companies do this to a greater or lesser extent and what now differentiates companies is really the rate of improvement.

It is quite common to find that 'development' of processes happens in a piecemeal fashion in response to problems (i.e. a series of fixes to quality issues or budget concerns). This sort of re-active process improvement is usually more costly and much less effective than a planned proactive approach.

World Class companies use shop floor teams to pursue incremental improvements in performance. However by their nature shop floor teams can only deliver small step improvements. The best way to achieve large step improvement is via a cross-functional project team using a re-engineering approach.

Periodic re-engineering exercises are particularly relevant where the product life cycle is relatively long and despite noticeable trends towards shorter life cycles, it is still generally true that healthcare products have much longer life cycles than in many other sectors.

#### Aim High

A re-engineering project should aim for large improvements in measurable performance (i.e. 20 % plus). A target of this magnitude means that you can't just tinker with the existing process. This level of improvement usually requires a significant re-engineering or re-design of the process.



#### Use the Right People

To be effective, a re-engineering project team normally requires a mix of technical & project management skills. The team should be hand picked to include a skills set appropriate to the project. Consideration must also be

given to the personalities of the team members and the 'team role' that they represent. Belbin identified and defined 8 separate team role types. Having the right mix can greatly enhance the effectiveness of any team. Belbin also developed a test that helps to identify which team role individuals are inclined towards. Whether or not these tests are carried out, some consideration needs to be given to how the team members will interact and what skills (other than technical) they bring to the team.

#### Sector Trends - Healthcare Manufacturing

All participants in the Healthcare supply chain, including manufacturers, distributors and providers are coming under increasing pressure to deliver better quality products and services at lower costs. This pressure, in direct response to the rising costs of healthcare provision, is coming mainly from the state and private medical insurers both in Ireland and across Europe. This cost pressure is now one of the key drivers of change within the industry, prompting significant merger and consolidation activity (in search of economies of scale) and in-house programmes to improve the efficiencies of existing operations.

Many factors are continuing to drive the cost of healthcare provision upwards, including:

- Changing demographics leading to ageing populations throughout the developed world.
- Rising salary costs for providers and suppliers.
- More stringent regulatory requirements, resulting in increased development and approval costs.
- New technologies are being introduced at an unprecedented level. Many of these technologies require more expensive equipment and specialist staff.

Companies that recognise and respond early to this continuing trend will maintain a competitive advantage.

Source: **"Trends in Healthcare Manufacturing"**  
A major report on the Irish Healthcare manufacturing industry by BSM and Prospectus.

*It is essential that there is a clear link between project objectives and overall company objectives.*

### Set good objectives

The project team should set S.M.A.R.T. objectives which clearly address strategies from the companies business plan and/or the 'order winning criteria'.  
S.M.A.R.T. = Specific, Measurable, Attainable, Relevant and Time Bounded.

**Specific:** The objective should be clear and unambiguous. e.g. "We will reduce customer returns to 0.01% of units shipped" not "we will improve outgoing quality".

**Measurable:** There must be an accurate measure of performance versus target. Sometimes this will require the creation of a new report or additional data collection but an objective without measurement is to a large extent pointless.

**Attainable:** While Objectives should always be challenging they must also be realistic and achievable. Where appropriate use benchmarking and/or time studies to help set realistic objectives.

**Relevant:** There must be a clear link between the objective and the company's overall targets and business strategy.

**Time Bounded:** Objectives should have a completion date commensurate with the difficulty of the task involved.

**Order Winning Criteria:** The criteria by which customers decide who to buy from e.g. price, lead-time, quality, etc., are normally defined and ranked during the development of the business plan.

### Do the Work

Map the current process: It is important to understand and document the current process. This is normally done by using simple flowcharting techniques.

- Identify 'value add' and 'non - value add' activities within the current process.
- Develop strategies to eliminate, reduce or combine the non value add activities.
- Develop strategies to reduce or combine value add activities.
- Define an implementation plan.
- Implement.
- Document the revised process.
- Monitor.

### The Tools of the Trade

Activity	Tools
Objective Setting	SMART Objectives, Order Winning Criteria, Hoshin Planning
Defining The Process	Activity Studies, MTM, Time Studies, Flowcharting
Problem Definition	Problem Statement Pareto Analysis, Cause & Effect Analysis
Defining Solutions	Brainstorming, Affinitising, Nominal Group Technique, Cost Benefit Analysis
Project Management	Gantt Charts, Critical Path Analysis

### Manage the Project

The project team should document a time bounded project plan early on in the project. They should hold regular structured meetings at which progress versus the project plan is reviewed. This project plan should include presentations to a Steering group or the Management team.

Process re-engineering is a structured approach to process improvement aimed at delivering large improvements. It is particularly relevant to processes that are more than a couple of years old and when properly structured, supported and resourced is a highly successful approach.

#### Useful Web sites

<http://www.medmarket.com/medmarkt.html>  
A comprehensive product/service directory for medical device and pharmaceutical companies.

<http://www.medicaldata.com>  
A useful website containing up-to-the minute medical information.

<http://pharminfo.com/phrmlink.html#contents>  
'Pharminfo' provides practical links to pharmaceutical related topics and resources.

<http://home.imany.com/entry.htm>  
This site focuses on creating and developing contract-based purchasing relationships between buyers and sellers in healthcare.