

## Systematic Management CASE STUDY

# Building Full Commitment

## Creating a business critical organisation from scratch

### Profile

Emerson Process Management is part of a well-known electronics multinational with a reputation for innovative high-quality products. Over recent years more and more electronics manufacture has been sourced from the Far-East where labour costs are significantly cheaper; as a result, electronics manufacturing has become a commodity with very low profit margins. Emerson Process Management World-wide Supply Chain (WWSC) was recently created in response to these economic pressures; it is a Global supply chain with world-wide responsibility for realising the company's innovative designs through a global network of dedicated suppliers, and for delivering high-quality product to its customers on very short lead-times.

### Issues

Emerson Process Management's reputation and \$½Bn business rest on WWSC's ability to identify, develop and influence independent businesses to sustain exacting quality requirements and very short cycle-times at ever decreasing costs. The creation of WWSC represented a massive transformation for the business and its ways of working, with high rewards for success, but terminal consequences for failure. The organisation therefore used its best people for the task, and head-hunted a number of experts from external companies. The challenge then became one of forming them into an effective team with the means to harness their individual talents to ensure a successful result.

### Objective

The MD of WWSC recognised the power of QFD\* to harness a diverse group of people and talents in delivering an ambitious set of goals. Given the new and unproven nature of the organisation, he believed that QFD provided the best means for people to work through how the organisation needed to operate and to identify individual responsibilities therein. The objective for the work was to use QFD to:

- clarify the dimensions of success in terms of clear objectives and performance targets
- identify the key supply-chain processes, and define their responsibility for delivering the objectives
- explore the interdependence between the processes and establish how they needed to work together
- clarify how the processes would fulfil their responsibilities, and build commitment to that.

### Approach

#### Clarifying the objectives

The overall responsibilities of WWSC were reasonably clear, and had been defined through a strategy document commissioned by the parent organisation. However, there was still scope to translate them into a set of clear objectives, measures and targets for the organisation, and by means of this to build commitment and ownership for them within the team members.

QFD is a powerful methodology for determining objectives and for mapping out appropriate strategies to deliver them. For a more complete explanation of QFD, read the accompanying overview: 'Transforming Management Performance' available without charge from [www.tesseractacts.com](http://www.tesseractacts.com)



Fig. 1 Working together to refine WWSC's objectives

This was achieved in two ways. Firstly, a draft list of objectives was presented - this had been drawn from a series of structured interviews with the team and with key players in the supply chain. And secondly, the role of WWSC was explored as a single column QFD against the objectives of the parent organisation, so that new

opportunities to leverage value could be identified.

This initial draft was then further developed by means of flipcharts titled with each of the objectives and split into columns headed Scope, Sub-objectives, Success criteria and Benefits. In these columns, members of the WWSC management team stuck up sticky-notes that described what would be really important to them in a final set of objectives. To start with, this was done in silence, but was then reconciled into an agreed shared conclusion through discussion (see fig. 1).

These objectives were then weighted in terms of their relative importance; measures were developed in syndicates; and targets were set by means of the clothesline\*. A proposed embellishment to the clothesline was to include benchmark data on cards and include them along the length of the line, but unfortunately there was insufficient time to prepare for this.

**Understanding process responsibilities for delivering the objectives**

Conventional processes for supply chain organisations are fairly well defined, and provided a very good starting point for appointing people to roles, and for getting them to think through the boundaries of their process responsibilities and what was needed to make it happen. At the time of the workshop, each member of the management team had a reasonably clear idea of where things would work and where there would be issues.

In the workshop itself, adjustments were made by asking each manager to list the key current activities and responsibilities of their process on sticky-notes and place them in a column on the wall under their process title. The team were then invited to identify any overlaps or gaps, and to introduce new sticky-notes or move them around accordingly. Final reconciliation of each process was achieved by discussion - initially in plenary and then by having each manager meet with every other to clarify the boundaries between their processes and the qualities of any inputs or outputs that crossed those boundaries.

The grid\* of the QFD was developed in the conventional way, through voting cards and consensus reaching. But following this, each manager was asked to develop a 'rich picture' for their process. This involved them reflecting back on the opportunities in their column of the QFD, and on the interdependencies between processes, and translating these into a set of images of what excellence would mean for their process. It was a way of consolidating the learning from the discussions into a

The clothesline is a simple but very effective mechanism for developing group consensus on a numerical value. For more information, see page 100 of 'Managing by Design' available through [www.tesseractacts.com](http://www.tesseractacts.com)

The grid of the QFD is the central area of the QFD diagram where the potential contribution of each process to achieving each objective is explored and mapped out.

vision for their work; a way of reinforcing the left-brain logic with the more emotions-based right-brain visualising. The end result was very effective in stirring up energy and determination; and for developing even more enthusiasm for taking things forward.

**Building ownership for the responsibilities**

Having established the top-level model of the organisation, the next step was to cascade it down into the rest of the organisation. (See the diagram below.) It

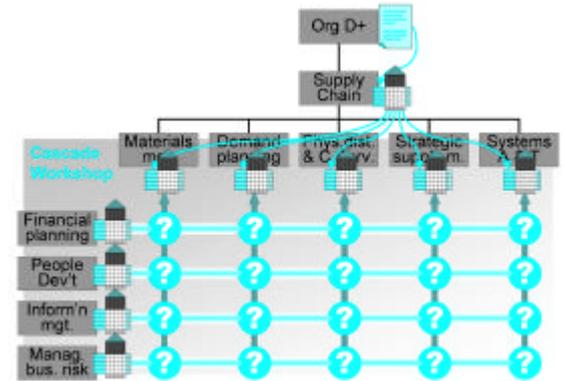


Fig. 2 Cascading the WWSC QFD into the responsibilities of the direct and indirect processes (and their QFDs)

was agreed to do this by means of one big event: a cascade workshop where the separate process teams could work both on their own, and with other processes, as they required.

To run such a cascade successfully requires that each process manager knows exactly what he or she is trying to achieve with their team through the workshop, and takes full responsibility for using the structure and opportunities of the workshop to achieve it. Accordingly, it was made very clear that each manager was responsible for developing their own performance targets and QFD with their team in whatever way they chose, but that the cascade workshop would provide a useful vehicle for getting most of their work done - if they were suitably prepared to make full use of it. The diagram shown below was used to reflect the cascade workshop as simply one mechanism among many that the process owner would need to employ, in order to develop full ownership for the agreed performance levels and approach within their people.

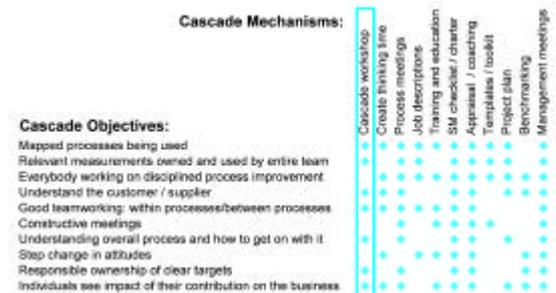


Fig. 3 Mechanisms of cascading responsibility for the WWSC top-level QFD

The workshop was developed with a subgroup of the management team, and was entirely led by them. Most of them were already very experienced in QFD and systematic approaches, and they wanted their full ownership of the event to signal that this was their way of managing, and not some separate consultancy approach driven by an outsider. The result of their ownership and commitment to the workshop was awesome in its effect on the commitment of their people and the quality of the work that their people produced.

**Anatomy of a cascade workshop**

The pictures shown below and on the right reflect various activities in the workshop, which was largely structured as follows.

- An introduction: to the workshop and to QFD; to the opportunities facing Emerson Process Management as a whole; and to the role of WWSC in meeting those opportunities.
- Within the process teams, each team member then had an opportunity to contribute their own ideas on how the process could fulfil its potential and to build further understanding and ownership through this.



Fig. 4 Creatively exploring the opportunities for the process to contribute to the delivery of the objectives

The tables were then rearranged to facilitate a series of one-on-one process discussions where each process team met with each other process team to discuss how they needed to work together and what their interdependencies were.



Fig. 5 Exploring interdependencies between the processes

- Each process team then worked individually to develop a high-level process map of their process, reflecting the responsibilities of the top-level QFD and the

key interdependencies with other processes. Where it transpired that key inputs and outputs had been forgotten, members of each process team could discuss and agree these with other processes 'on the hoof'.

- Each process team then defined a set of clear objectives for their process (using sticky-notes from earlier sessions supplemented by further ideas from the process mapping) and developed appropriate measures (using the competition question\*) and performance targets (using a clothesline) for each of these.



Fig. 6 Using clotheslines to set performance targets for each of the processes

- The process team then developed a sheet for each of WWSC's objectives (one sheet for each cell in their column of the QFD). On this the team listed the specific measures and targets (for their process) which they believed would impact on the attainment of the top-level objective. These sheets were collected centrally and divided into piles for each objective - each pile containing a contribution from each process.
- The workshop then re-organised into six syndicates, each looking at one of WWSC's top-level objectives and the proposed process contributions to achieving it. Each syndicate discussed whether the process contributions collectively ensured the top-level objective. If not, they discussed what more was needed, and where appropriate they made counter proposals on the relevant process contribution sheets. The results of each syndicate were fed back to the main group, and the process owners were asked if they approved the amendments to their process objectives and targets. Because the teams that made these recommendations included a representative from each process team, this proved to be fairly straightforward and, following a small amount of in-team discussion, each proposal was accepted without a problem.
- Having defined their objectives and had them approved, the processes then worked through another

The competition question is a method for getting people to think through what is most important in their own organisation by asking them to identify criteria for judging the best of similar organisations. For more information see page 56 of 'Managing by Design, available through [www.tesseractacts.com](http://www.tesseractacts.com)

er series of one-on-one discussions to agree what communication they needed between them. And then they individually developed implementation plans for their processes.

- The workshop finished with each process team developing their own composite rich picture for their process, and gathering all their outputs and conclusions into a display. Everybody was given the opportunity to wander round the displays, and discuss the conclusions with a process team member (each display being manned on a rota basis).

The basic room arrangement for the cascade workshop is shown in the diagram on the right.

Following the workshop, each process team has made tremendous progress on implementing their conclusions, and the organisation is well on its way to achieving its vision of best-in-class response times with minimal stock and zero defects.

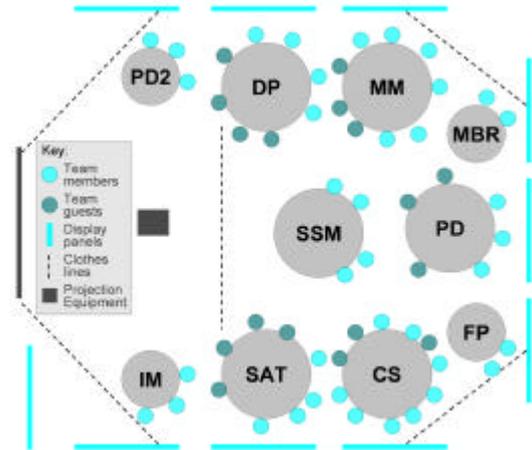


Fig. 7 Seating arrangements and facilities for WWSC's cascade workshop

Having been part of a Team that used QFD to turn a business around, it is now endemic to how I do my job. I simply would not want to operate without the clarity and structure the QFD process gives to the business.

Kevin Thompson, Material Manager, Emerson Process Management

To learn more about systematic approaches to management visit [www.tesseract.com](http://www.tesseract.com)

This case study has been extracted from 'Managing by Design: Transforming Management Performance through QFD' published by Tesseract November 2002, ISBN 0 9543021 0 9, with permission of the publishers.

'Managing by Design: Transforming Management Performance through QFD' can be obtained through the Tesseract web-site: [www.tesseract.com](http://www.tesseract.com), or purchased from Amazon.co.uk.

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