# Sustaining change in manufacturing companies

By Bob Lillis and Marek Szwejczewski.

Www.in others they peter out and decay? After all, for most companies, it is a strategic imperative to sustain change and its associated performance improvement. Sustainability means that the new working practices and the improved performance persist for an appropriate period of time. The change has become the norm. It is 'how we do things around here' and is not a one-off or a temporary improvement but is on-going. Unfortunately, the failure rate of change initiatives is high – 70-90% are believed to fail.

While studies have focused on the factors that minimise initiative failure and help ensure the successful implementation of the change, far less is understood about how to sustain the initiative once the initial implementation period is over. For example, research into change initiatives specifically in manufacturing organisations, have tended to cohere around either how to implement total quality management (TQM) successfully or the success factors affecting the process of lean production implementation. However, the most comprehensive study into how to sustain any organisation's change initiative once it has been successfully implemented, was that carried out by Buchanan et al (2005). Their thorough review of what is known and written about sustaining organisational change identified a set of 11 common factors. The outline definitions of these factors are shown in Table 1.

For example, the influence of Leadership is commonly accepted as important in successfully sustaining change. This factor would include facets such as, has the senior leadership team established a clear and consistent vision? Is the Leadership also leading the change once the implementation phase is over? Considering the factors in Table 1 and outline definitions at face value, what is missing is any understanding of the

FACTOR	DEFINITION
Leadership	Setting the vision, goals and leading the change
Individual	Employees' individual commitment
Managerial	Managerial style, approach, and behaviours
Financial	Balance of costs and benefits
Substantial	Perceived centrality, scale, fit with organisation
Organisational	Policies, procedures, system, and structures
Cultural	Shared belief, norms, and values
Political	Stakeholder and coalition power and influence
Processual	Implementation methods used
Contextual	External conditions and threats
Temporal	Timing and pace of change activities

Respondents' Job Title	Number of Years in Role	Number of Employees Affected by the Change Programme	Duration of the Change Programme (in years and all on-going)	Manufacturing Sector		
Operations site director human resources director	3.5 5	800 3.5		Food processing		
Deputy vice president	5	100	1.5	Engineering		
European operations director	3	18,000	1.5	Metals		
Production manager	15	80	1.5	Petrochemical		
Regional operations manager	4	100	2.5	Chemicals (detergents)		
Production manager Managing director	2 10	50 3		Chemicals (Coatings)		
General Manager	3.5	300	3.5	Semiconductors		
Head of integration compliance	4.5	200	3.5	Telecommunications		
Service director	6	400	3.5	Machinery		
Global environment manager	4	55,000	4.5	Chemicals (paint/ coatings)		
Operations director	4	170 4.5 Cement		Cement		
Plant controller	4.5	200	4.5	Car accessories		
Managing director	6	50	6.5	Plastics		

Table 2: Respondents' identification and interview sample.

Extent of factor's influence	SUB	IND	MAN	FIN	LEA	ORG	CUL	POL	PRO	CON
Strongly influential throughout	13	1	-	4	10	1	-	7	6	7
Strongly influential at the start becoming less influential as change was sustained	-	-	-	7	3	1	-	6	3	6
Not influential at the start becoming more strongly influential as the change was sustained		12	13			11	13		1	
Did not appear to influence or arise as significant	-	÷	-	2	-	-	-	÷	3	-
Total	13	13	13	13	13	13	13	13	13	13

relevance of all 11 factors in different contexts and the respective influence that each individual factor may have on encouraging sustainability. For instance, does employees' individual commitment to sustaining the change outweigh the managerial style, approach and its behaviours? Is Leadership more important than the Financial factor to sustaining change? In other words, do some factors have more impact than others on successfully sustaining change? In this article, we report preliminary findings from stage one of a two stage research project which sought to answer these questions.

### **Research study**

We divided the study into two separate but interconnected empirical stages. The first consisted of in-depth interviews with executives from 13 manufacturing companies which had sustained a change initiative in their business. During this stage, we investigated the relevance of the 11 factors. Several propositions were developed, some of which are reported here. Stage two seeks to test these propositions in three manufacturing companies, one of which is Maserati in Italy. We will be reporting the results of the second stage in a subsequent issue.

The interviewees in stage one came from a sample of individuals who had attended one of our courses at Cranfield School of Management. In seeking an interview with a particular manufacturing manager or manufacturing director, we knew in advance that the potential respondent's business had undergone a change initiative, although the length of the change period was unknown to us at the time of the interview request. Table 2 provides a list of interviewee job titles, how long the job holder had spent in that role, the number of employees in the company affected by the change initiative and the manufacturing sector of the business.

The duration of the change initiative varied from a minimum of 1.5 years to 6.5 years and all were still ongoing. We felt these periods of time would be of an appropriate duration to justify a change initiative being called 'sustained'.

## Stage one findings

Findings suggest that most of the factors had a role to play in sustaining change, but their influence varied depending on the stage of the change programme. Four types of influences were gleaned which are shown in Table 3. These were:

- i) The factor was strongly present at the start of the change and throughout the change period.
- ii) The factor was strongly present at the start of the change but its influence waned as the change continued.
- iii) The factor was not strongly present at the start of the change but became more influential as the change continued.
- iv) The factor was not seemingly influential at any point in the change or appears not to have arisen.

The research results of stage one indicated that 10 of the 11 factors identified by Buchanan et al (2005) had an impact on the sustainability of change initiatives. The analysis of the interview data indicated that the Temporal factor (the timing

Table 3: Frequency of influence of the 11 factors across the 13 companies.

and pace of the change initiative) did not appear to contribute to sustainability in our sample and is therefore not included in Table 3.

The interviews suggested that factors differed in when they had most influence. Based on the analyses, several propositions were developed. The four propositions we consider to be of most interest were:

- P1 Leadership [setting the vision, purpose, goals, and challenges] remains strongly influential throughout the duration of a sustained change programme
- P2 Political [stakeholder, coalition power and influence] is at its most influential in the early stages of a sustained change programme
- P3 Managerial [managerial style, approach, behaviours] is at its most influential in the later stages of a sustained change programme
- P4 Individual [employee's individual commitment] is at its most influential in the later stages of a sustained change programme

Our data analyses in stage one also provided some interesting interactions between the various factors. So for example, at company 2 in the engineering sector, whose change period at the time of interview had been 1.5 years and affecting 100 employees (Table 2), the factors Substantial, Financial, Leadership, Political, Processual and Contextual were strongly present at the start of the change programme and had remained so throughout its duration. Four of the factors namely, Individual, Managerial, Organisational and Cultural were not strongly present at the commencement of the change but became more influential as the change continued.

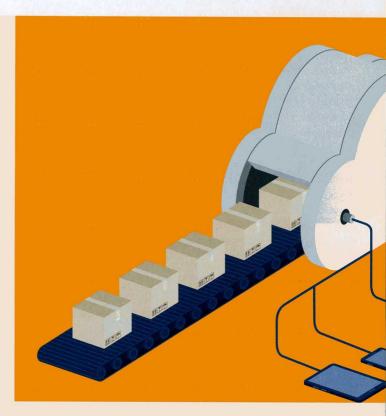
In addition, we were also interested in whether the company had replaced its Managing Director or Chief Executive Officer at the commencement of the change programme. We believed that this could have been an important factor in sustaining the change. It transpired that 7 of the 13 companies were so affected and on the basis of these statistics, we consider the impact of replacing a company's MD or CEO on sustaining a change programme is inconclusive and requires further research.

### Conclusions

Sustaining change is not a simple procedure. Our research findings suggest that managers need to put emphasis on different factors at different stages of the change. It has long been recognised that Leadership is important at the start of the implementation process. Our research supports this view but in addition points to just how critical it is later in the life of the initiative. The leadership cannot afford to reduce its efforts once the change initiative has been successfully launched. If it takes a back-seat and hands over to the management team, such action will invariably lead to sustainability failure.

The influence in sustaining change of the political aspect is often forgotten. It is assumed that having good Leadership is more important. However, concern with the political aspects of the change initiative is vital if it is to be sustained. In the interviews, most of the senior managers pointed to the fact that they had obtained obvious and visible support for the initiative from various stakeholders at the start of the implementation.

The research also suggests that getting the commitment of



the Individuals in the organisation at the start of the change process may not be as important as some claim. However, to succeed, the Leadership needs to get the commitment from most of the Individuals once the implementation is complete in order to sustain the change. A successful initiative launched can be achieved without the vast majority being committed. However, once the implementation phase is over, if the vast majority of Individuals are not committed then the initiative is likely to peter out and fail. The Managerial factor is also important in sustaining the change initiative but only at the later stage of the process. Managers have an important role in helping the leadership team to ensure that the new ways of working introduced by the change initiative are adhered too.

The research is still ongoing in stage two, with one case study completed and a further two currently being conducted. Therefore, it is too early in the study to categorically state the respective influences of the various 11 factors on sustaining change in manufacturing companies. We hope the research, by indicating which factor to focus on during the various stages of the change programme, will ultimately prove helpful to those manufacturers keen on making change initiatives in their organisation stick.

### References

Buchanan, D, Fitzgerald, L., Ketley, D., Gollop, R, Jones, J L, Sharon Saint, L, Neath, A and Whitby, E (2005). 'No going back: A review of the literature on sustaining organizational change', International Journal of Management Reviews, Vol 7, No 3, pp 189-205.

# **About the Authors**

Dr Bob Lillis is senior lecturer in service operations management at Cranfield School of Management, Cranfield University Dr Marek Szwejczewski is professor of operations strategy at Cranfield School of Management and Director of the UK's Best Factory Award Scheme. To find out more about sustaining organisational change, email bob.lillis@cranfield.ac.uk Copyright of Management Services is the property of Institute of Management Services and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.