Lean and Six Sigma – can they really be applied to the public sector?

Lean and Six Sigma tools are very useful but we need to use them in the context of delivering better outcomes for service users and not simply trying to replicate what has been successful in manufacturing, says **Max Moullin**

There is no doubt that many public sector organisations using Lean and Six Sigma tools in public services have achieved significant improvements. However what about the underlying philosophies of these approaches; how well do they transfer to the public and third sectors? To answer this question it is important to look at the origins of these philosophies.

Lean was originally developed in the automotive industry by Toyota. Toyota knew exactly what product characteristics they wanted to achieve.

Therefore in that context quality of the product corresponded directly to achieving consistency of both the process and the finished product, while reducing waste and unnecessary cost.

The Toyota Production System was designed to do just that.

However, in most services - whether in the public or private sectors - quality and consistency are not the same thing. Because individual requirements differ, a quality service for one person may not be the same as for another. This can be seen by looking at customer ratings of hotels. People who experience essentially the same service – room, food, location etc – will give very different opinions about the quality of a hotel.

Another example is the target for a GP to see patients within 48 hours. Patients who feel their need is more urgent may not be satisfied with this, while those whose need is not so urgent may be more concerned with having an appointment time which fits in with their busy lifestyle.

Therefore, a GP surgery which consistently meets its 48 hour target may not be providing a better quality service than one which does not.

Nevertheless, by focussing on those activities that deliver value to service users - and eliminating those that don't - Lean has considerable potential to improve both the efficiency and effectiveness of public sector processes (Radnor at al, 2006).

Six Sigma, too, has its origins in manufacturing – including Motorola and GE. It is an extremely effective method of reducing variation and fits in very well with the philosophy of Deming, one of the founders of total quality management, who once said: "If I had to reduce my message to a few words, I'd say it all had to do with reducing variation."

This approach, which has made dramatic improvements in manufacturing, can be very effective in situations like reducing the number of street lights not working as planned or the number of incorrect tax assessments. However, where individual customers have differing requirements –which is the case in most public services - reducing variation does not necessarily equate with improved quality.

Another problem is that public services have to meet the needs of a wide range of stakeholder requirements. For example a number of hospitals and city councils have used Lean and Six Sigma tools to reduce waiting times.

However, lower waiting times - while very important - is of course not the only outcome required by service users. In addition, processes need to be robust, so that the system can cope under pressure.

These tools therefore need to be used with care to make sure that other aspects are not compromised.

In conclusion, when re-designing processes it is important not to start by asking the question: "How can we use a particular tool" or "How can these tools be adapted to public services". Instead, we should start by identifying, with users and staff, the outcomes that matter most to service users and other key stakeholders.

The next stage is to understand the current processes from the point of view of the service user, and work with managers, staff, service users (where practical) and other departments or organisations impacting on the service delivered to improve these processes.

We need to be innovative in looking for alternative ways of delivering the outcomes required effectively and efficiently, using whatever tools, including Lean and Six Sigma, seem appropriate. But well specified processes are not sufficient. Many processes look good on paper, but do not work in practice due to low staff morale, lack of resources, or poor teamwork.

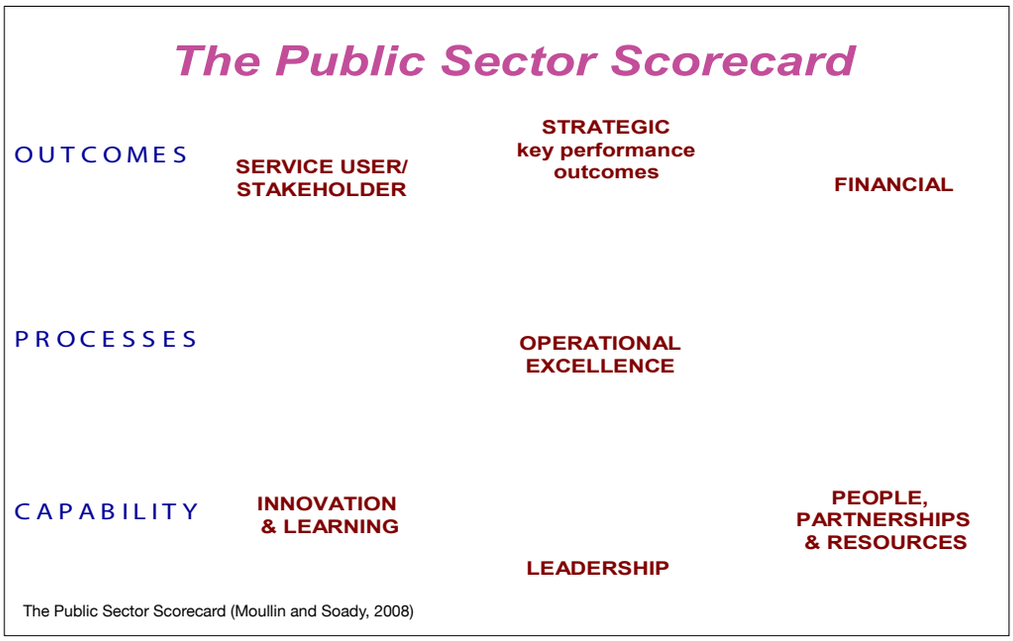
We need also to address the organisation's capability to support its people and processes in achieving the outcomes required. Leadership is of course fundamental to this, as is ensuring sufficient resources and being efficient in the use of those resources.

But, in addition, they need a culture which values and develops their people, engages positively with partnership working and user involvement, addresses risk issues and provides a supportive climate for innovation and learning from others.

Finally, it is important to develop - and learn from - performance measures which reflect the outcomes required and the key drivers of those outcomes within a culture of continuous improvement rather than a blame culture.

This is the approach taken by the public sector scorecard (Moullin, 2002) - an integrated quality management and performance measurement framework which extends and adapts the balanced scorecard for the public and third sectors.

As can be seen from the diagram, it is based on three fundamental building blocks – outcomes, processes and capability. Outcomes include the key performance outcomes required by the organisation, those required by service users and other key stakeholders, and financial outcomes such as value for money.



The Public Sector Scorecard (Moullin and Soady, 2008)

The processes element focuses on achieving operational excellence, while capability includes motivated and trained people, effective partnership working, sufficient resources, and innovation and learning - all underpinned by effective leadership.

The public sector scorecard is a workshop-based approach and has been used in several countries and in a number of settings including health, local and central government.

As well as being very useful for single organisations, it is highly effective working across organisational boundaries by focusing on common outcomes e.g. reducing substance misuse or obesity.

So, yes, Lean and Six Sigma tools are very useful, but we need to use them in the context of delivering better outcomes for service users and not simply trying to replicate what has been successful in manufacturing.

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Radnor Z., Walley, P. Stephens, A. and Bucci, G. (2006) '*Evaluation of the Lean Approach to Business Management and its use in the Public Sector'*, Scottish Executive, Edinburgh.

To learn more about the public sector scorecard visit www.shu.ac.uk/ciod/pss

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