

Making business model innovation happen: the Business Model Cohesiveness Scorecard



Digital transformation is failing to live up to its hype, at least as far as productivity gains are concerned. If, as research suggests, a lack of business model innovation is the main culprit, we need a way of making it happen. Dr Chander Velu thinks a balanced scorecard approach could be the answer.



Over the last decade, as huge advances have been made in digitalisation, productivity growth has slowed in all the major economies. Counter-intuitively, it is those sectors that are most intensive users of information and communication technologies that appear to have made the largest contribution to the slowdown.

How can we account for this paradox? Some blame the 2008 financial crisis, but the decline predates the crash. Others think that it is a dispersion problem: large companies *are* actually very productive but are let down by a long tail of inefficient SMEs. Is it that the developed world simply doesn't have the skills to benefit from a digital economy? Or perhaps it's a measurement problem? The tech giants like Google have different business models, often predicated on free services which conventional ways of measuring productivity don't always cope with.

Are business models to blame?

Or could the problem be a lack of business model innovation – particularly amongst incumbent firms? There is a precedent here. In the last industrial revolution when electric motors replaced steam-driven machinery, factories carried on doing what they had always done – just swapping electricity for steam. It took 30 years and a complete change of business model to bring about the long-anticipated surge in productivity.

The same thing may be happening today, with the big global firms that have dominated our industrial landscape for years, organised around outdated technologies.

If that's the problem, how do we solve it? Firstly, we need to understand what we mean by a business model. If a

business strategy determines a firm's products and services, a business model is effectively its 'go-to-market logic'. It is a highly complex, cross-functional system encompassing those activities that are part of the business model, how those activities are interlinked and who has the right to make decisions about them.

To understand it requires 'big picture' systems thinking. However, most large, pre-digital firms are organised by function. In this context, no one 'owns' the business model. It is often seen as a 'given', something that each function needs to optimise but no one questions.

Avoiding the 'piecemeal syndrome'

One of the dangers of such organisational silos is that it may make sense for one part of a firm to adopt a new technology to make a particular process more efficient. But, if the system is not looked at in its entirety, this can be problematic and create conflicts with other processes.

To help us think about the complexities of business model innovation, we have invented the following scenario. If a part in a washing machine stops working, it can take weeks to order a new one from the manufacturer, who has to hold a large number of spares in stock. In a future enabled by IoT, 3D printing and distributed ledger technologies, when the washing machine detects a fault, it could contact the manufacturer who shares its intellectual property with a local firm that prints the part and replaces it.

This is an example of a whole-system innovation that could result in more agile customer service, greater efficiency for the manufacturer and less waste thanks to a better repair service. However, if only parts of the process are

adopted piecemeal – for example, if the manufacturer used 3D printing to make new parts and hold them in stock – then the benefits of business model innovation would not be fully realised.

Looking beyond profitability

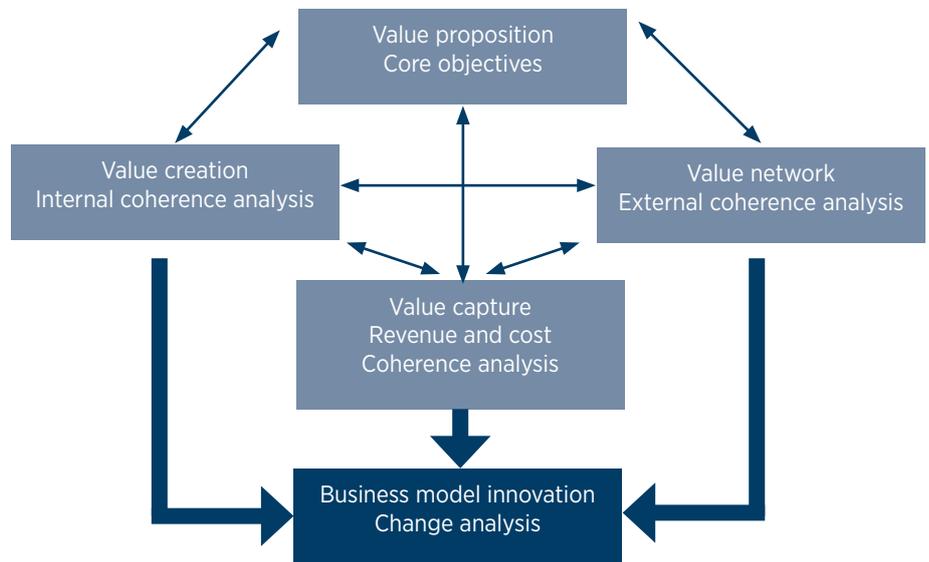
Another inhibitor of business model innovation is that many firms rely on profitability as their principal indicator of success. Further, most accounting systems tend to look at the profitability of different parts of the business independently, without taking into account the value they might be generating elsewhere in the organisation or ecosystem.

Focusing solely on profitability (at either the firm or business unit level), makes it difficult to identify and measure all the interactions within the firm and across the whole value chain that comprise the business model. Yet studies have shown that being able to manage those linkages is a major source of competitive advantage.

In order to help senior managers identify and evaluate these linkages and hence spot opportunities for innovation, we suggest adopting a scorecard approach alongside conventional profitability assessments.

Developing the Business Model Cohesiveness Scorecard (BMCS)

The 'balanced scorecard' is a well-established method of augmenting financial reporting with other key measures such as how the business is creating value for its customers, what internal processes does it have for satisfying customer and shareholder needs and how is it developing its people, systems and culture to achieve growth.



Business Model Cohesive Scorecard Framework

More recently, the approach has been extended to emphasise the alignment needed to capture synergies across the business through mechanisms such as having a clear business strategy.

While this more nuanced approach is a significant improvement on financial reporting, it still does not give managers the information they need to understand and manage the evolution of the business model.

The BMCS uses systems dynamics thinking to model the behaviour of the system as whole, rather than in a piecemeal fashion. It aims to measure the alignment between the different components of the business model, from four perspectives:

1. Physical flow: are the raw materials and finished products and services delivered at the right time and in the right place?
2. Information flow: is the information for decision-making delivered to the right people or systems at the right time?
3. Decision rights: do the right people or systems have the authority to take decisions?
4. Incentives system: are people appropriately incentivised to make timely and joined-up decisions?

By asking these questions of all the elements in the business model, it is possible to see if the firm is delivering on its customer value propositions while making a satisfactory return. In doing so, BCMS complements traditional financial reporting by enabling business model innovation while evaluating financial viability.

Evaluating business model's impact, internally and externally

How does this work in practice? If we return to our example of the washing machine manufacturer and assume that it has acquired the capability to print a spare part when a machine's IoT device orders one, we need a structured way to evaluate the pros and cons of changes to the business model. The first step is to examine its potential impact on the firm's coherence internally across all functions (product design, procurement, manufacture, sales, distribution, customer service, HR and IT) and then externally to include ecosystem partners such as the logistics firms, repair specialists and retail stores.

Internally, the effects could be both positive (better customer service and

opportunities for product innovation, for example) and negative: challenges for IT in supporting a new, standalone machine which may take longer to get the part to the customer. Similarly, there are pros and cons for ecosystem partners. Providing a bespoke service for customers needs to be traded off against the complexity of managing, for example, the logistics of delivery when the logistics firm might not know when the part is going to be ready.

Understanding how value is captured

Having assessed the possible impacts of the new business model on the firm and its ecosystem, the next step is to look at how it would generate revenues while delivering the value proposition to the customer.

In our example, the greater flexibility for product design could increase revenues but the increased delivery times could negate the benefits to the customer and decrease revenues.

For the manufacturer, holding less inventory could lower costs but the uncertainty and complexity of printing on-demand could increase them. Combining an analysis of revenues and

	Value Creation	Value Network
Revenue/Value Proposition	▲ increased flexibility increased time to delivery ▼	
Cost	▼ reduced inventory ▲ uncertainty from printing on demand	▲ due to uncertainty from printing on demand
Resource Velocity	▲ ▼ Could increase or decrease depending on the net effect of flexibility and time to deliver for the customer	
Margins/Profit	▲ Potentially increased margins/profits depending on the trade-off between revenue and costs and resource velocity	▼ Potentially decreased margins/profits from higher costs depending on impact of revenue and resource velocity

Revenue and cost coherence analysis

costs with the rate at which assets are turned over to make a profit (resource velocity) will indicate the likely impact of margins and profit.

Applying this value lens in conjunction with an analysis of the aspects of business models discussed earlier (physical and information flows, decision rights and incentive systems) is likely to highlight some of the problems with the proposed business model and catalyse discussions for improvements, such as moving the printing nearer to the customer, in partnership with the retailer or a repair firm.

The benefit of the BMCS is that it gives the management team a mechanism for discussing the cohesiveness of a complex system and a method for evaluating its effectiveness. It is important to stress that it is not designed to be a one-off exercise but a method of supporting continuous dialogue about coordinated, cross-functional changes to the business model. This will be critical both to identifying

new opportunities for business model innovation and also for implementing them across the whole business and ecosystem.

Putting the scorecard into practice

Our suggestion is to use interviews and workshops with senior management to create qualitative reports which would drive the changes needed to embed systems thinking across the organisation. In time, the quantitative elements of the analysis could be automated using data from various management systems: manufacturing support, enterprise resource planning, customer relationship management and accounting. In order to derive maximum value from the approach, it should be extended across the ecosystem, perhaps managed through a formal committee structure combined with appropriately defined data-sharing.

None of this is easy. But if firms are to take a more strategic – and effective – approach to business model innovation, they need a way both to cut through the complexity and to ensure that the process

is owned by and embedded in the whole organisation. We believe the BMCS can help them achieve this and, in doing so, make an important contribution to solving the productivity paradox.



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Read more: This article is based on “Business Model Cohesiveness Scorecard: Implications of Digitization for Business Model Innovation” by Chander Velu in *Handbook of Digital Innovation*, edited by Satish Nambisan, et al (Edward Elgar, 2020)