Chapter Three: Benchmarking Your Current Position

For many manufacturing businesses the smart factory and digital supply chain of the future is still many years away, and there is a misconception that only big corporate organisations are near to making this dream a reality. Undoubtedly, it will be the OEMs and corporates that will exert Tier pressure on Tier 1s, Tier 2s and Tier 3s to comply with their Supply Chain standards.

There will be plenty of people in manufacturing who don't yet see the need to benchmark where they are currently, and these will be the ones running the risk of failing in the future. But there are also many smaller manufacturing businesses that are seeing the opportunities and seizing them. These businesses are already taking steps to automate their production lines, servitise their business models and embrace new trends. For example, many manufacturing organisations are already performing predictive scheduling to help them forecast and prepare for demand, but they don't label this an Internet of Things adoption, nor are they taking it a step further by integrating their raw material suppliers into the process.

It must also be recognised that there are some very real challenges, especially for smaller manufacturers aiming to construct a digital supply chain, which will require a clear strategy that is fully responsive to the opportunities available in a fully digital environment. A strategy must be based not just on the company's current operations and business model, but also on new business models available once digitisation has been implemented, such as creating direct sales channels or 3D printing production.

With a clear strategy in place, companies can consider step-by-step actions in key areas, such as:

- **Processes:** Introducing new end-to-end processes, facilitated by digitisation, which connect the supply chain, such as collaboration on cloud based systems.

- **Skills:** Developing a new company culture with the expertise needed to build the infrastructure and manage the digital supply chain

- **Performance:** Introducing new business rules and KPIs concerning supply chain management.

- **Partnering:** Looking into potential collaboration with a network of suppliers, distributors and technology providers.

- **Technology:** Mapping out the technologies used by the digital supply chain, including the cloud, ERP system and data analytics. Ensuring there is maximum end-to-end visibility in the supply chain.

- **The key to successful progression:** is taking small steps, beginning with an assessment of your current position and a review of the technologies that will be most beneficial. Some of these digital technologies will be disruptive, requiring fresh thinking, new skills and approaches from management.

10 Benchmarking Basics

1. Focus on your key business drivers. These are the processes that underpin the success of your company, and will vary from sector to sector and business to business. If you provide a service, customer care is likely to be a key business driver; if you are a high-volume manufacturer, production-line speed will be a key business driver.

2. Decide who to benchmark against. Pick businesses firms of a similar size and with similar objectives to help work out industry yardsticks; but also compare with firms outside your sector who excel in areas you want to measure adopting their approach could help you leapfrog competitors.

3. Compare strategic objectives. Can you learn strategic lessons from benchmarking partners? Does a focus on quality standards give them an edge, for instance? Are they developing online sales channels? Think what other company's strategic objectives would bring to your business, if anything.

4. Assess the efficiency of your processes. Look at the mechanics of your business - the production techniques, quality controls, stock management and so on. How effective are they? How well are you using your technology? Are other businesses benefiting from new ways of doing things?

5. Analyse your allocation of resources. Are you putting resources into the same areas as your benchmarking partners? Do they have more employees, or fewer? In which parts of the business? Have they invested more in IT and other equipment? Are they spending more on marketing?

6. Weigh up your costs against industry norms. These might include utility bills, wages or research and development costs. If you can highlight areas where your costs are higher than the average, you may be able to make savings.

7. Calculate sales per employee. This will provide a straightforward measure of productivity and efficiency. If your sales are comparatively low, investigate the reasons; you might find the problem is not with your sales staff but your product, or that you are pitching to the wrong market.

8. Work out your profit margins. Your gross profit margin (direct profit on the cost of goods and services sold) will tell you how efficient your production processes are. Comparing this with your net profit margin (profit after all your costs have been taken off, including marketing and administration) will tell you how effectively you earn profits from sales. But how do you compare with other businesses? Should you streamline your operation?

9. Measure your customer service standards. Customer service is a key battleground for businesses with similar products or services. Working out the proportion of sales accounted for by returning customers will give you a picture of your service levels, as will the number of complaints you receive and the time it takes to fulfil an order.

10. Obtain benchmark information without approaching an external benchmarking partner. You can benchmark your firm's key statistics against widely available industry norms - salary surveys and published information on financial ratios for your industry, for example.

Check Your Supply Chain Integration

Supply chain integration is vitally important to a fully functioning digital supply chain.

> **Companies need to prioritise digitisation opportunities and assess only the most promising. Ultimately the end consumer defines the requirements that a supply chain has to fulfil in order to drive the company's success.**

The customer experience can be quantified using the perceived value. This measurement consists of the supply chain costs on the one hand and the service quality on the other.

Supply chain segmentation

Current supply chains of global manufacturing companies have plenty of suppliers, production sites and distribution centres around the world. The immense variety of products, business partners, distribution channels and customer requirements results in a loss of control, which is magnified even further by new technologies and changing business models.

As an example, customers buying standard make-to-stock products focus on fast delivery. OEM customers of the automotive industry plan weeks in advance, but need their products just in time for production. Here, the focus lies more on the reliability of the delivery than the speed. The requirements vary greatly – a different supply chain setup up is required to recapture control. Big data analytics supports a more sophisticated segmentation through dynamic clustering. The analysis of demand patterns, for example, replaces simple ABC customer segmentation in terms of sales.

Identifying the segment's critical success factor

Critical success factors have to be identified for each defined segment: Why is the customer buying this product? Which role does the supply chain performance play in the customer's choice? A clear understanding of customer needs is required.

Modularisation

Modularisation enables companies to in and out-source modules quickly, depending on the changing customer requirements and the partnering opportunities on the market. The modularisation limits the change impact and allows technology to be embedded quickly across the supply chain.

MIND THE GAP: THE STEP FROM DIGITAL SUPPLY CHAIN TO DIGITAL SUPPLY NETWORK

Chapter one	What is a Digital Supply Chain What do we actually mean when we talk about Digital Supply Chain? How is this going to change business process in the manufacturing and engineering sectors?	27th October
Chapter Two	Navigating the Technology Landscape Important terms and phrases and technologies you need to understand if your company is to be ready for Digital Supply Chain Networks.	2nd November
Chapter Three	Are You Ready? Benchmarking Your Current Position How to know if you are ready to take the next step to become Digital Supply Chain ready. It is not only the OEMs and Tier 1s who should be benchmarking their progress.	8th November
Chapter Four	Beyond the Horizon: What's Next? What is next for manufacturing companies working on Digital Supply Chain Networks? How will the industry change as manufacturers start to truly embrace Industry 4.0 and the Digital Supply Chain?	14th November

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