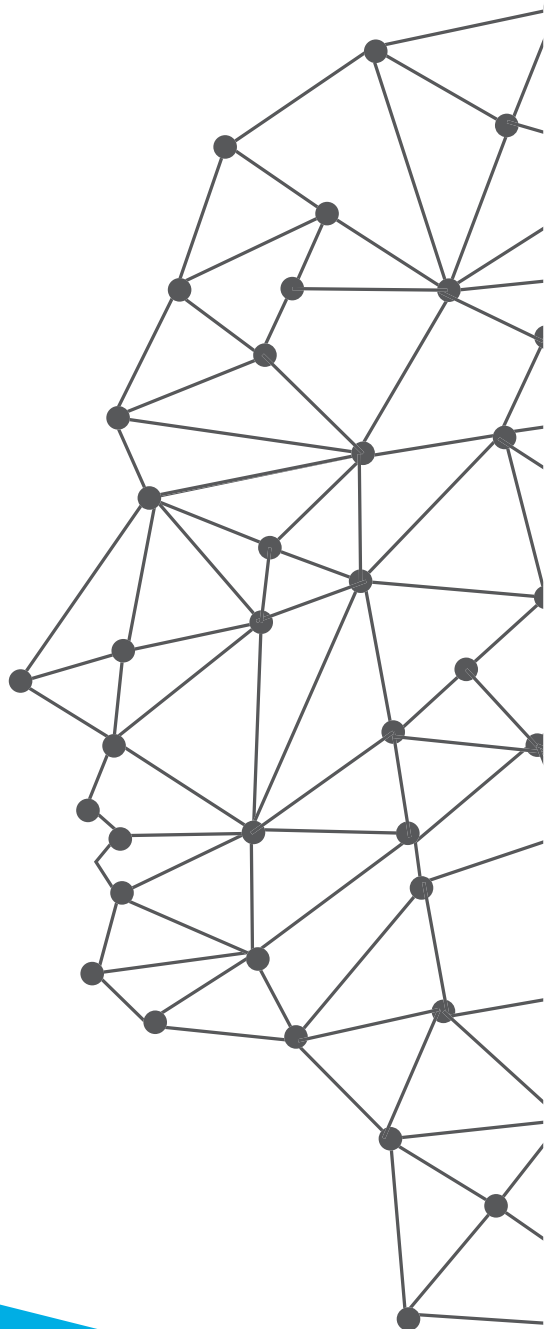


3RD EDITION

DYNAMIC SUPPLY CHAINS

How to design, build and
manage people-centric
value networks

JOHN GATTORNA



*"Dynamic Supply Chains is a masterpiece
in the field of supply chain management."*

Dr Rakesh Singh, Chairman, Institute of
Supply Chain Management, India

FT PUBLISHING
FINANCIAL TIMES

Praise for *Dynamic Supply Chains*

‘With 40 years of experience in supply chain development, John Gattorna still is one of the most important thought leaders in the domain. Not only is his broad experience on show in this new book, but also his clear thinking about the development of supply chain management, which is truly dynamic. This requires clear leadership from current and upcoming supply chain executives. For them, and also for their colleagues with other functional expertise, this book is an excellent guide to the (near) future of supply chain management and potential success of their organization.’

Edwin Tuyn, Founder and Managing Director of Inspired-Search

‘John Gattorna has been studying supply chains for as long as they have existed in their modern-day manifestations. He has followed, interpreted – and indeed influenced – the dramatic ways in which operating environments and business models have changed over the years. His book reveals deep knowledge and understanding of our multi-faceted and complex supply chain universe. Gattorna’s book should be read by all practitioners.’

Dr Victor K. Fung, Group Chairman, Fung Group; and Founding Chairman, Fung Global Institute

‘This 3rd edition of *Dynamic Supply Chains*, is comprehensive and an easy read about leading-edge supply chain techniques and methodologies. The combination of thought leadership insights and best practice examples provides the reader with knowledge and inspiring input on how to create competitive advantage through the application of supply chain management.’

Bo-Inge Stensson, Senior Vice-President Purchasing, SKF Group

‘Does our future depend on supply chains? For over 40 years Professor John Gattorna has answered in the affirmative. But never without questioning the nature and evolution of supply chain design in an increasingly complex and interdependent global economy. In this book, Professor Gattorna draws on a deep well of research and experience to provide a unique understanding of supply chains which incorporates a “dynamic alignment” framework linking market conditions, strategic choices, internal capabilities and effective leadership behaviours. The objective is to move thinking from the “logistics operations” mind-set of the 1980s to a more comprehensive “business transformation” mind-set, taking into account pressures for sustainability and corporate social responsibility. The book has been written to be as accessible to the practitioner as it is to those with a more specialized academic interest. It succeeds on so many levels as the culmination of the author’s “journey of discovery through the maze of logistics and supply chain networks that pervade our lives”, and can be strongly recommended as such.’

Professor Roy Green, Dean, UTS Business School, University of Technology, Sydney

‘Dr Gattorna’s thought-provoking book is a must-read for business professionals. He articulates an insightful, practical and congruous work-culture roadmap which invariably will help many companies in different businesses to achieve significant levels of success. Dr Gattorna demonstrates a practical approach towards implementing a resonant and profitable supply chain. I thoroughly enjoyed reading the book.’

Yacoob Piperdi, Executive Vice-president (Gateway Services), SATS

Designing responsive organization structures

How to get people working together, and focused on customers

Of all the internal *capabilities* in an enterprise, organization design is perhaps the most important, after leadership of course. The structures that we set people to work in have a major influence on the responsiveness of the enterprise. Unfortunately, most contemporary enterprises have fallen behind in their organizational development, and consequently their organization structures are flawed and misaligned with increasingly demanding customers and consumers. In this chapter we go in search of new organization designs to underpin the added dynamism needed to service contemporary customers. We start with conventional wisdom and then proceed to critically review the designs of the past two decades. Finally, we propose a way forward that combines the strengths of functional structures with the embedded responsiveness of customer-facing, multi-disciplinary ‘clusters’. Indeed, help is on the way!

It never ceases to amaze me how seemingly sophisticated enterprises go about their business. They construct an edifice they call an organizational structure; they develop plans and then execute operations with only scant regard for their customers’ expectations and preferences. Far too many enterprises have fallen into an ‘apathy trap’ – apathy about their real operational and financial performance. To be brutal, many of these enterprises have been guessing for years, and seemingly getting away with

it. But lurking underneath this façade of success have been the seeds of failure.¹ This apparent good luck has just run out. The big banks were the first to fail, big-time, and they will be followed by many other enterprises in the real economy. If anyone is still in doubt, let's be clear: you simply cannot conduct a sustainable business over time in a volatile operating environment unless the structure of your organization evolves with the operating environment, enabling you stay very close to your customers, and in some cases the consumers or end-users served by those customers. Everything starts and ends with customers and/or consumers.

During the past two decades I have been developing and refining, through empirical fieldwork, the *dynamic alignment* model. This is what underpins my thinking on organizational design. Given the onset of increased volatility in the marketplace, it's time has finally come. To recap, this is a holistic business-to-business (B2B) concept, which involves segmenting your marketplace along behavioural lines, and then linking these customer (and supplier) segments to the enterprise with the appropriate value propositions and supporting operational strategies. It is no more, no less than this. Yet there is currently nothing like this anywhere in business or commerce.

Underpinning these value propositions and operational strategies, there needs to be an array of equivalent subcultures that will be capable of, and have the will to, propel them into the marketplace in ways that align with customers' expectations. Behind all this action is a leadership team which must understand and empathize with the target marketplace. This leadership needs to develop the appropriate value propositions, strategies, and capabilities to serve customers and develop the corresponding subcultures inside the organization; everything has to be aligned, *dynamically*. This concept of *dynamic alignment* is one of the most powerful contemporary business models available today. It is relevant to enterprise supply chains because businesses are in effect just an aggregation of all the supply chains/pathways running through them – between all parties, upstream and downstream. The full array of multiple supply chains and all their possible variants are depicted in Figures 13.2 and 13.3 in Chapter 13. We will get to them in due course.

Essentially, this is all about looking from the outside in. We need to work back from the marketplace, through the enterprise and back to the supply base, and forward again. The right organizational design is essential to achieve this, and yet we rarely see organizational structures that will enable this particular sequence to occur. Little wonder that we have so much

under- and over-servicing going on, with all the attendant consequences of increased costs and lost revenue potential. Forget about taking the soap out of the bathroom and cancelling the newspapers in these tough times. Focus seriously on re-designing your organization, and realign your business (and its supply chains) with customers, suppliers and third parties. That will fix most things right there and then!

Organization design as a major shaper of culture

I introduced the *dynamic alignment* concept in earlier chapters as a major new business model that will revolutionize the way we think and work. However, my main focus in this chapter is on just one facet of that model – organization design. We need the structure to be right so that we can shape the appropriate subcultures inside the enterprise to enable effective albeit sustainable linkages with our customers.

Having discovered through rigorous empirical observations over many years that there are usually no more than five dominant customer buying behaviours evident in most markets,² we can extrapolate this finding into the equivalent five supply chain configurations. I have named these configurations: *collaborative*, *lean*, *agile*, *campaign* and *fully flexible*. Other variations around these five types exist, as described in Chapter 2, but are not as common.

These very different configurations require equally disparate subcultures to propel them into the marketplace, and one of the biggest factors in shaping the necessary array of subcultures is organization design (see Chapter 4). Why? Because to be truly effective and aligned with customers and suppliers alike, an enterprise must have different organizational capabilities embedded in it. The days of the *one-size-fits-all* organizational structure are just as ‘gone’ as one-size-fits-all supply chains.

From silos to silo busting

Perhaps the best historical review of the different types of organizational structures deployed in the logistics and supply chain arena is by Soo Wook Kim.³ He identified five organization types as follows: the non SCM-oriented organization, the functional organization, the matrix channel organization, the process staff organization, and the integrated line organization.

None of these designs ever had the customer in mind; indeed, they were all internally focused formats. I am not interested in exploring these organization structures further because they are largely irrelevant to today's externally focused operating environment, which demands we move away from thinking of supply chain as a function and embrace the idea that it is more of an operating *philosophy* for the whole enterprise to embrace.

Ranjay Gulati goes further in his seminal paper on what he calls 'silo busting'.⁴ He analyzes such globally successful companies as GE Healthcare, one of the world's leading retailers, Best Buy, and Jones Lang LaSalle, the real estate and investment management firm. All have had significant success with organizational structures designed around customer needs rather than internally focused dimensions. More recently, Best Buy has struggled,⁵ while GE Healthcare⁶ and Jones Lang LaSalle⁷ have continued their strong growth. The big mistake identified by Gulati is that 'many product-centric companies probably start out with a focus on customers. But after early successes, they institutionalize the notion that markets respond primarily to great products and services.'⁸ Wrong! If ever that was true, it certainly isn't true now.

If we search more widely in the world of organizational theorists we find Gareth Morgan's work. His classic 2006 study *Images of Organization*⁹ provides a much richer and more eclectic perspective using such metaphors as 'organizations as machines; organizations as (living) organisms; organizations as political systems'. Although not specifically directed at supply chains, his work provides valuable insights into how we might re-conceptualize supply chain structures to do the tasks required of them day to day. It's a pity that designers of supply chain configurations have not invoked his work more widely. In any event we are left with the impression from Morgan that the way organizations should shape their supply chain structures involves more closely integrating the overall business design, and I strongly agree with this proposition.

Atomization of organizations

In the 1980s, I observed McKinsey & Company experimenting with a radical new form of organization design called 'atomization'.¹⁰ This concept involved breaking up the organization into small groups of personnel to force accountability across the conglomerate of which they were part. However, this led to unexpected inefficiencies and duplication, together with in-house competition

and ultimately destruction of shareholder value. McKinsey tried the atomized configuration at BP, Fletcher Challenge (NZ) and Carter Holt Harvey (NZ), but the attempts failed to produce positive results. From a supply chain perspective, it is easy to see why. Supply chain management is about *integrating* processes across organizations, whether in real or virtual terms, but the atomization concept went in the opposite direction by *fragmenting* the organization, albeit for what appeared to be sound business reasons.

More recently, McKinsey & Company has again broached the topic of organization design, but its focus has been on seeking ways to make people inside organizations more productive rather than seeking to satisfy customers, as can be gleaned from the following quote:

Today's big companies do very little to enhance the productivity of their professionals. In fact, their vertically oriented organizational structures, retrofitted with ad hoc and matrix overlays, nearly always make professional work more complex and inefficient. These vertical structures – relics of the industrial age – are singularly ill-suited to the professional work process. Professionals co-operate horizontally with one another throughout a company, yet vertical structures force such men and women to search across poorly connected organizational silos to find knowledge and collaborators to gain their cooperation once they have been found.¹¹

I agree with many of these sentiments, but the point McKinsey & Company has missed is that if you are able to achieve superior alignment with your customers, it's very likely that the internal processes will fall into line and by definition will be more productive.

McKinsey revisited the topic in 2011 when they introduced the notion of 'splitting monolithic supply chains into smaller, nimbler ones . . . [to] tame complexity, save money, and serve customers better.'¹² This sounds very much like my own multiple supply chain alignment concept, but McKinsey got there indirectly by analyzing the metrics – volume of SKUs versus weekly demand volatility (expressed as a percentage) – and not as a direct result of probing the customers. While they certainly made the transition from a 'one-size-fits-all' configuration to a more flexible combination of four supply chain configurations, using the same assets and network resources as previously, they did not say anything about how these new supply chains should be organized.

Some three years later (2014), National Australia Bank has decided to break the organization down into 165 units in an attempt to lift accountability