

# Supply Chain Productivity

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# 3 things...

1. Importance of productivity
2. Supply chain productivity – a missing link?
3. Improving supply chain productivity



# Importance of productivity

# Manufacturing sector plays a critical role



UK manufacturing sector  
accounts for **£192 billion**  
of output

**2.7 million**  
**employees**



# Main contributors to the UK's productivity growth decline

		France	Germany	Spain	United Kingdom	United States
Primary	Agriculture, forestry and fishing	0.0	-0.1	0.1	0.0	-0.1
	Mining and quarrying	0.0	0.0	0.0	-0.1	0.2
	Electricity, gas and water supply	0.0	-0.1	-0.1	-0.1	0.0
Manufacturing	Total manufacturing	-0.3	-0.4	0.1	-0.5	-0.9
Boom/bust	Financial and insurance activities	0.0	0.3	-0.4	-0.4	-0.2
	Real estate activities	0.1	-0.3	0.4	0.3	-0.2
	Construction	-0.1	0.0	0.5	0.0	0.0
Consumer-facing services	Wholesale and retail trade; repair of motor vehicles and motorcycles	0.2	-0.2	0.2	-0.1	-0.3
	Transportation and storage	0.0	-0.2	0.3	-0.1	-0.1
	Accommodation and food service activities	0.0	0.0	0.2	-0.1	0.0
High-skilled and support services	Information and communication services	-0.2	0.1	-0.1	-0.3	-0.5
	Professional, scientific, technical, administrative and support service activities	0.0	0.1	0.5	-0.1	-0.1

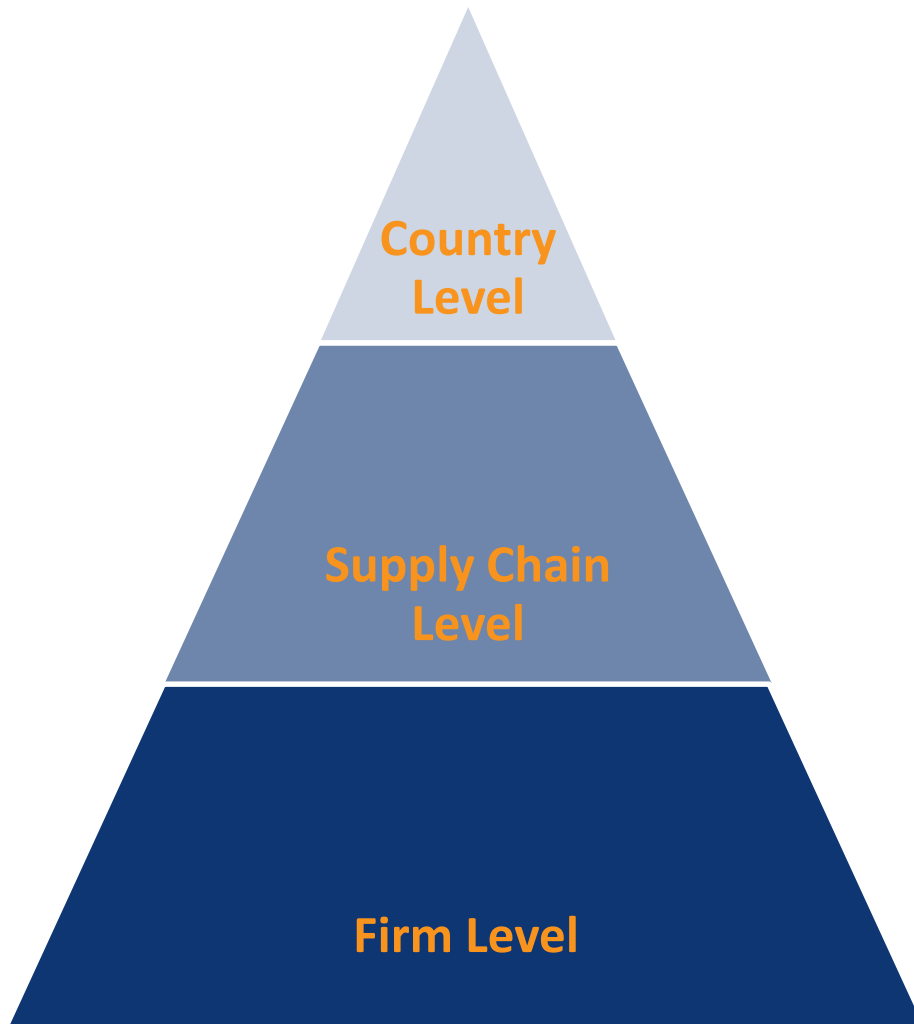
## Top 3 contributors

- Manufacturing (-0.5)
- Professional services (-0.4)
- Information and communication services (-0.3)

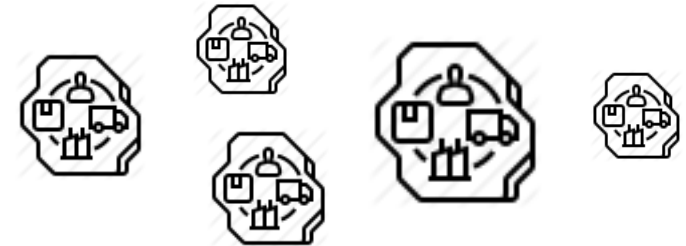
\*Sector contribution to productivity growth difference between 2000-05 and 2010-15 (Percentage points)

McKinsey Report (2018)

# Productivity at three levels



Labour productivity



Cost, quality & time



Firm Level

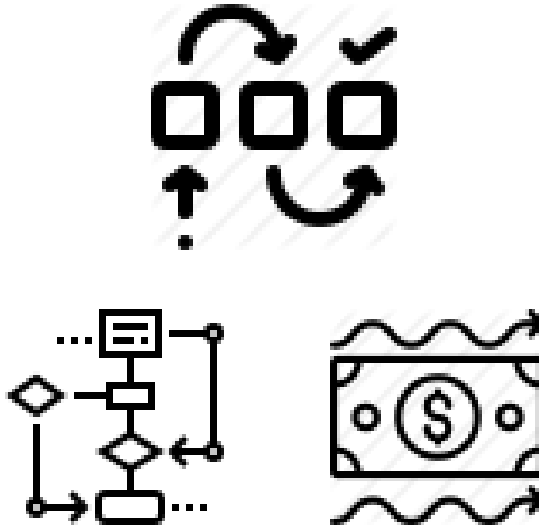
# Supply chain productivity – a missing link



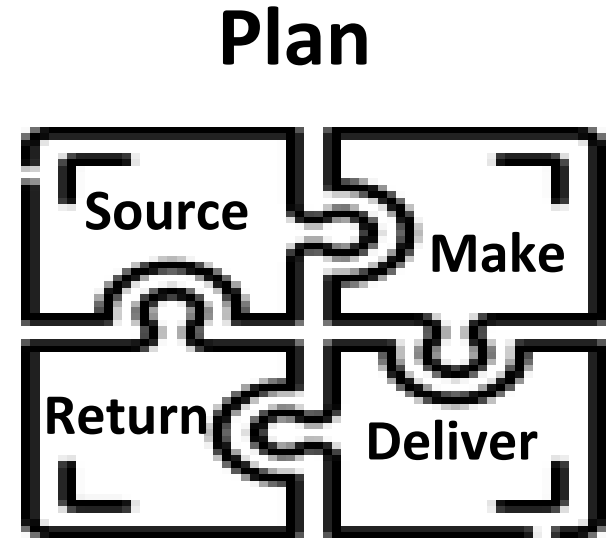
# 3 lens through which to view supply chains...



**Network**



**Flow**

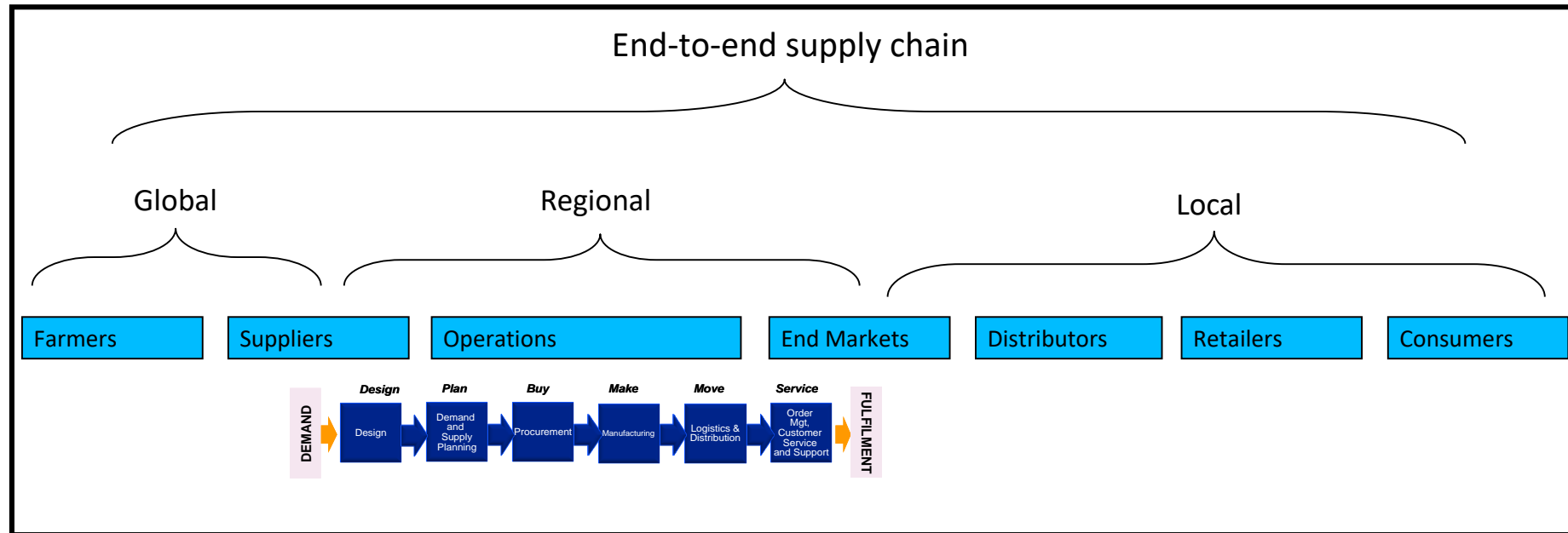


**Process**



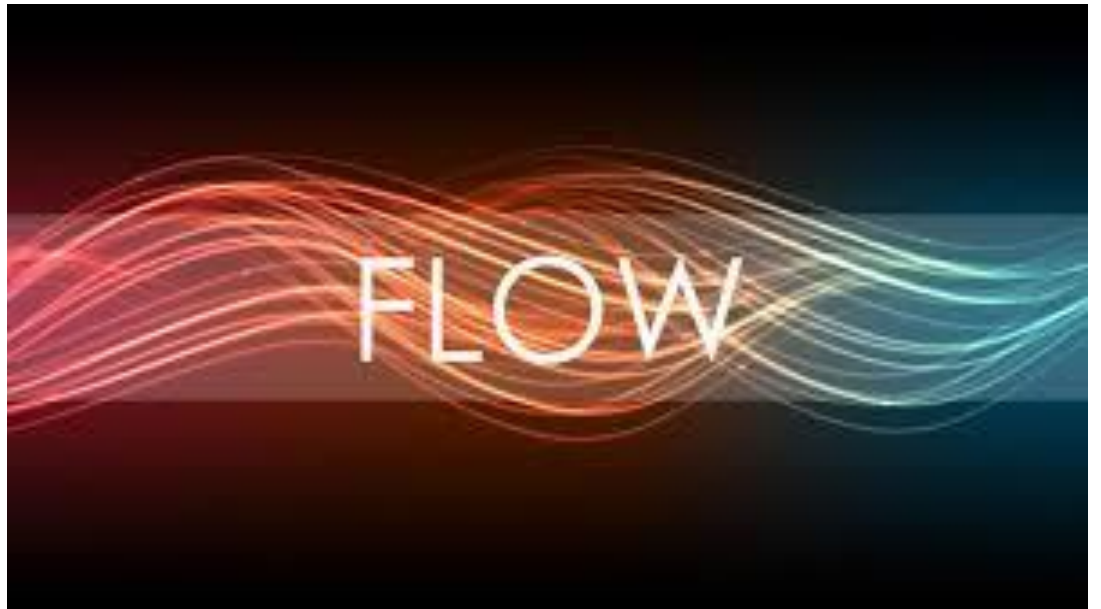


# SCs reach beyond the bounds of a firm or country...

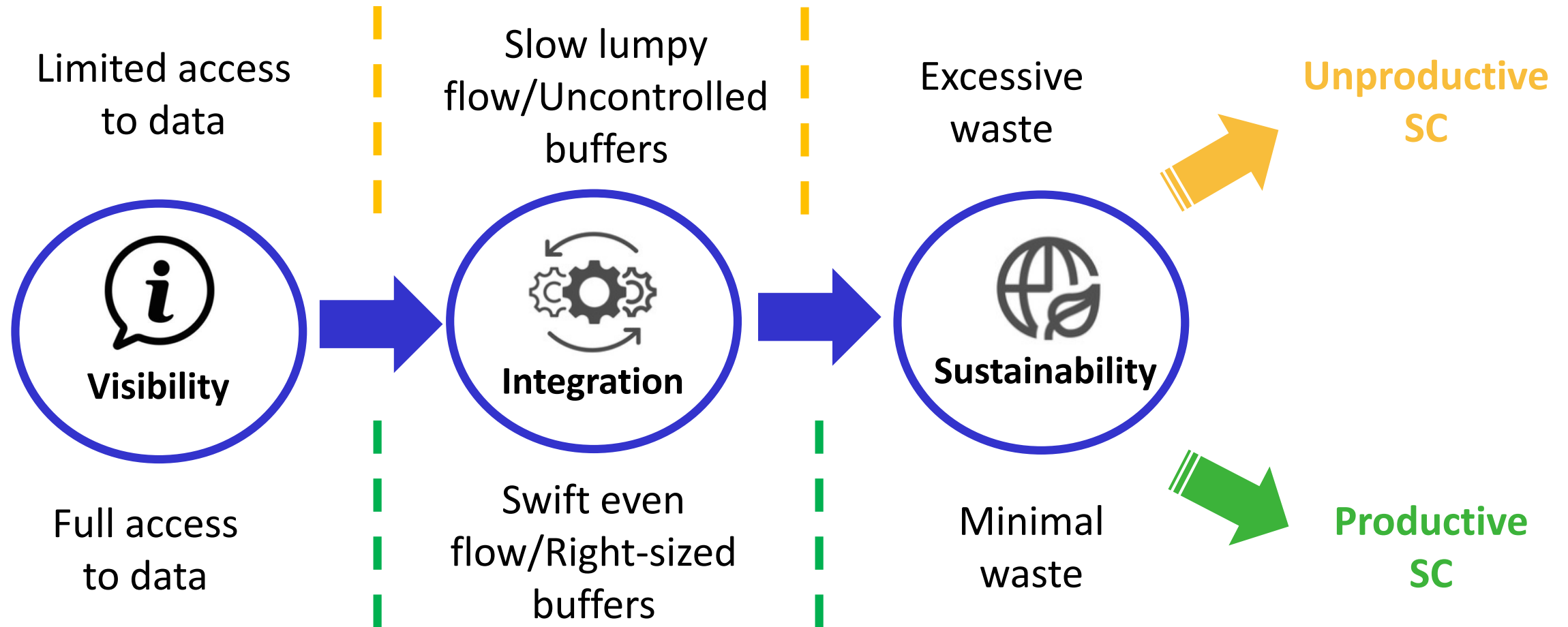


*'Competition is no longer company to company, but supply chain to supply chain'*

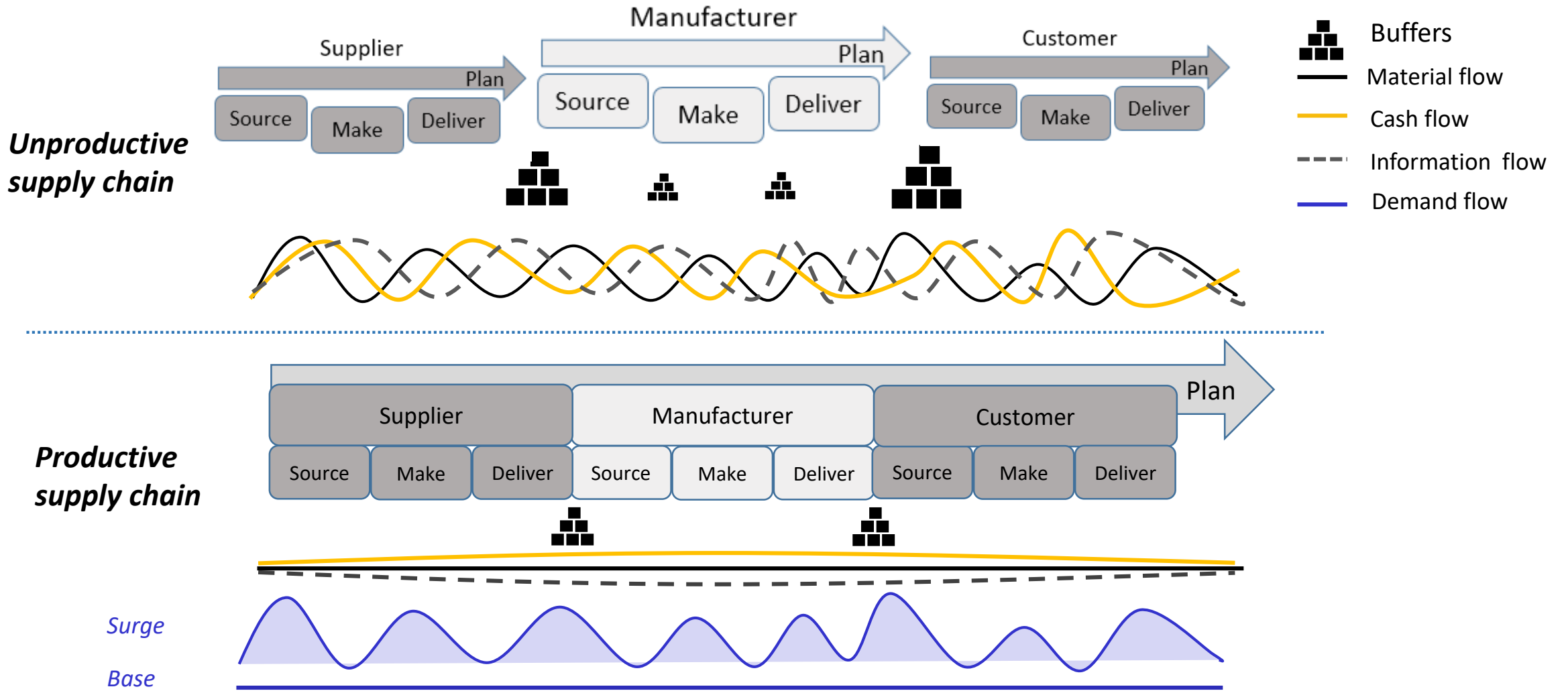
## 2 fundamental principles of SCM...



# 3 enduring supply chain issues....



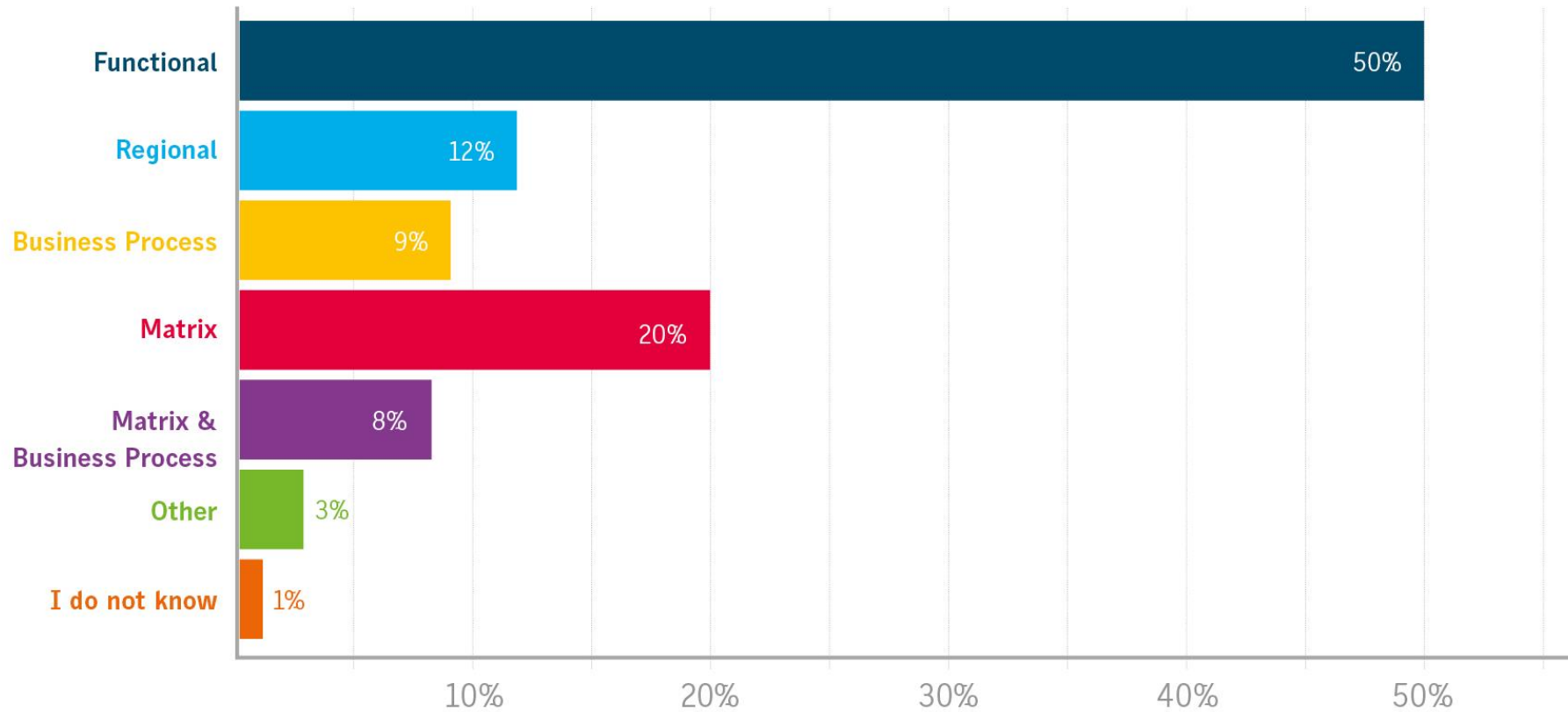
# Supply chain productivity is...



.... delivering customer value at the lowest possible cost as a result of maximizing flows and right sizing buffers.


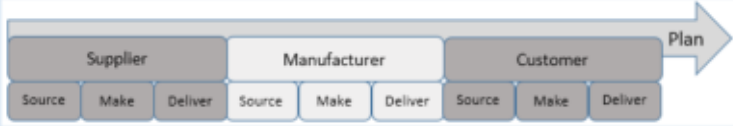
# Improving SC productivity

# Functional and regional organisational structures inhibit end to end SC thinking...



> Only 17% respondents had a business process orientation as part of their organisational design

# Need a shift from 'functional' to 'process' thinking...

<p><i>Dimensions</i></p>	<p><i>From 'silo thinking'</i></p> 	<p><i>To 'process thinking'</i></p> 
<p><b>Organisation structure</b></p>	<ul style="list-style-type: none"> <li>• Business is organised around functions</li> <li>• Each function has identified tasks</li> <li>• Focus on resource efficiency in each business function</li> </ul>	<ul style="list-style-type: none"> <li>• Build business linkages following material/information flows to connect customers and suppliers</li> <li>• Take a coordinative approach in managing activities</li> <li>• Focus on customer and supplier satisfaction</li> </ul>
<p><b>Planning</b></p>	<ul style="list-style-type: none"> <li>• Decentralised planning</li> <li>• Segment supply chain within each function</li> <li>• Unable to 'see' demand patterns from the head of the chain</li> </ul>	<ul style="list-style-type: none"> <li>• Integrated business planning</li> <li>• Segment supply chain across the network</li> <li>• Everyone is able to 'see' demand patterns</li> </ul>
<p><b>Visibility</b></p>	<ul style="list-style-type: none"> <li>• Unable to 'see' real-time situation.</li> <li>• Take longer to identify critical issues</li> <li>• Poor information flow</li> </ul>	<ul style="list-style-type: none"> <li>• Able to 'see' real-time data through information sharing</li> <li>• Able to detect critical issues through visualisation of the 'big picture'</li> <li>• Enable faster information flow through the integration of end-to-end supply chain</li> </ul>
<p><b>Buffer management (e.g. inventories &amp; capacity)</b></p>	<ul style="list-style-type: none"> <li>• Buffers are managed by functional 'silos'</li> <li>• Buffers that are too big – tie up cash</li> <li>• Buffers that are too small – fail to deliver</li> </ul>	<ul style="list-style-type: none"> <li>• Take a coordinative approach in managing buffers across the chain</li> <li>• Right-sizing buffers to reduce the overall costs and lead time</li> </ul>

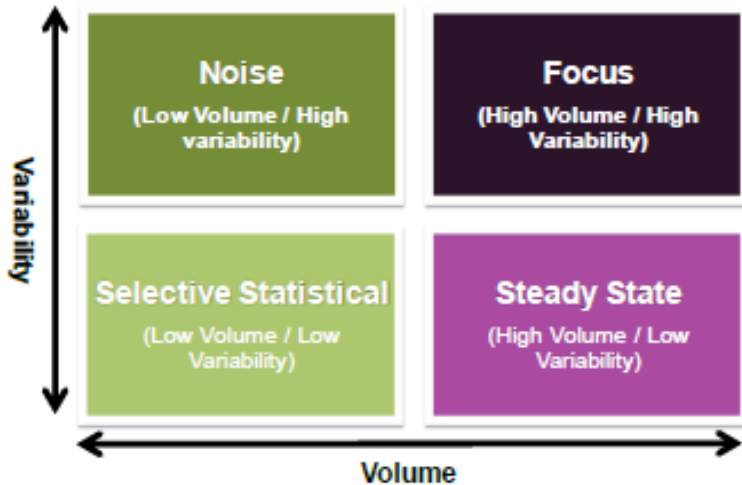
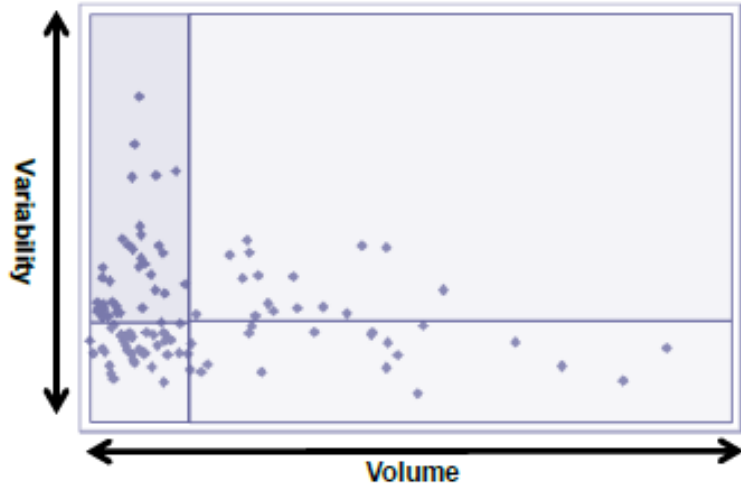


# 2 strategies to unlock productivity

1. SC planning
2. Digital technologies

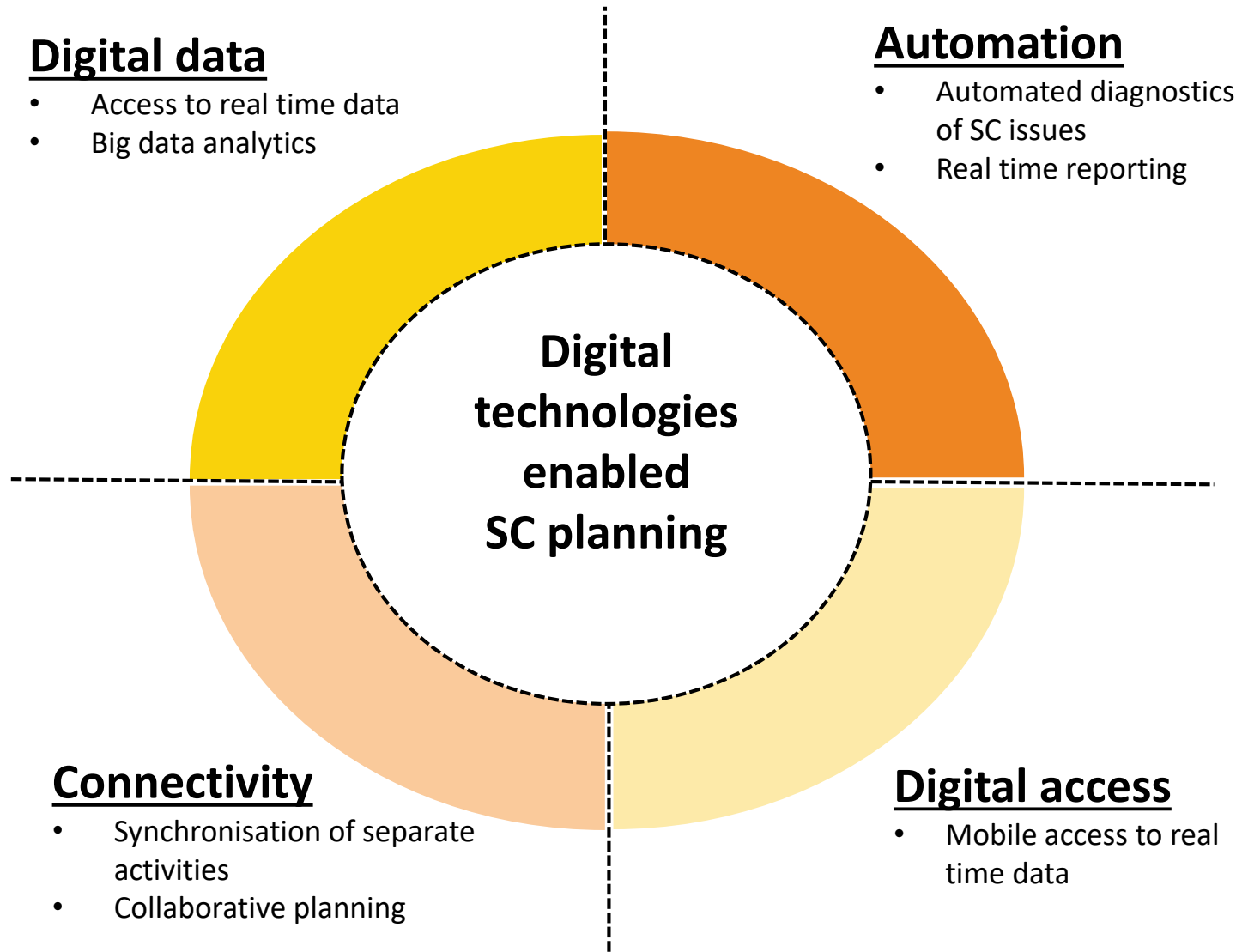


# 1. Improve SC planning through the adoption of demand profiling



Function	Tailored Practices			
	Steady State	Selective Statistical	Focus	Noise
Sales	Minimise promotions	Avoid promotions	Drive volume through promotion in close collaboration with customer	Avoid promotions and validate why SKUs in the portfolio
Marketing	Build SKU base	Increase volume base and consolidate SKUs	Build flexibility into the portfolio	Reduce SKU complexity
Planning	Statistically forecast	Statistically forecast	Manual forecast based on past history	Collaborative forecast with customer & commercial teams
Manufacturing	Minimise production cycle and production costs	Minimise/maintain production cycle	Maximise agility with a must respond mentality	Make to order
Procurement	Focus on quality and cost	Focus on quality and cost	Minimise order lead time	Cover variability with inventory

# 2. Adopting digital technologies enables better planning



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