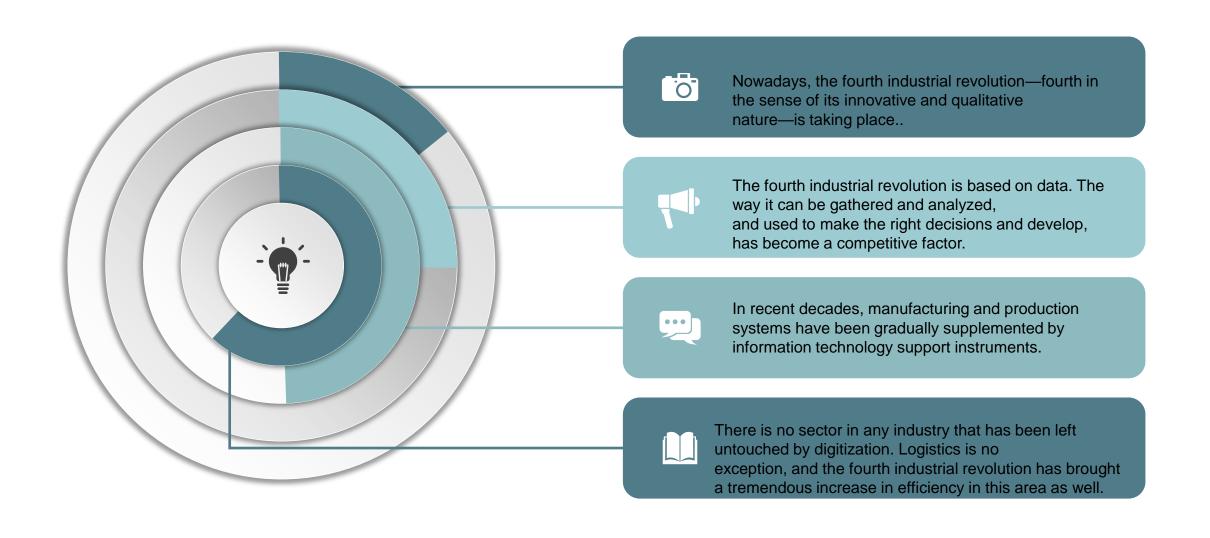
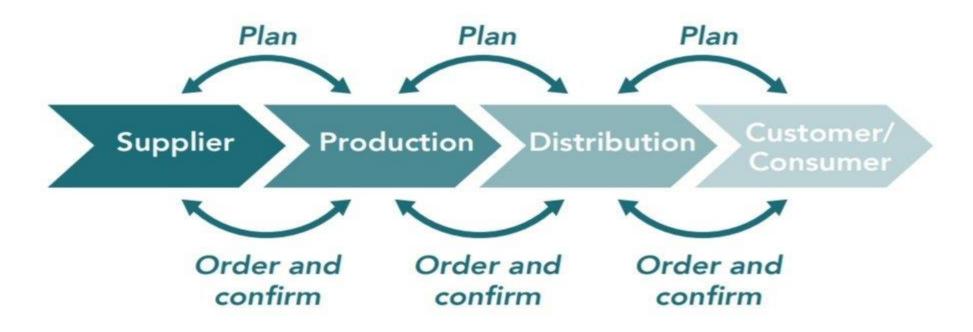


Introduction



Traditional SCM

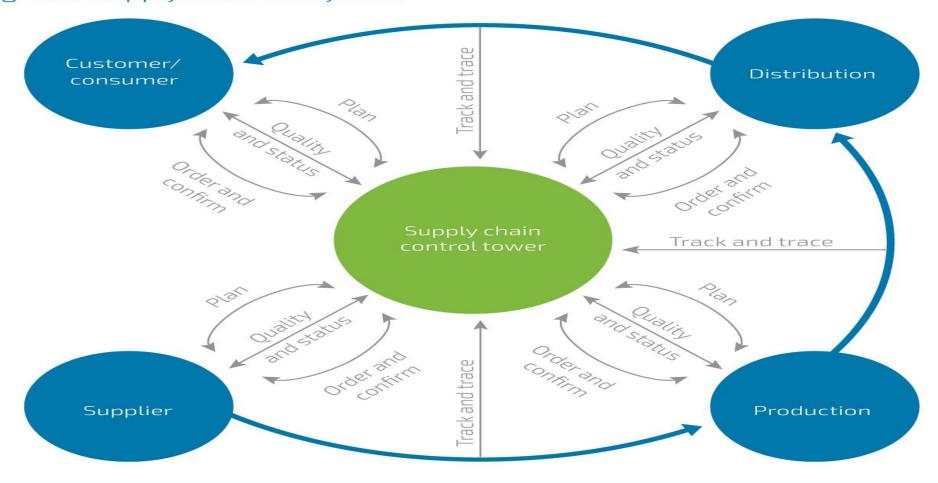
FIGURE 5.5 Traditional supply chain model



Source: PWC 2016b.

Integrated supply chain ecosystem

Integrated supply chain ecosystem



Big Data and Supply Chain Analytics

technologies gather prodigious amounts of data. In the last decade, the cost of bandwidth has decreased by a factor. of nearly 40 times. processing costs have declined almost 60 times, and many of the sensors used in IoT technology cost no more than 60 cents.



Big data analytics thus are about using data to drive useful business intelligence, answering the "What auestions. happened?", iust "Why did it happen?", and "What are we going to do next?"



The desire to collect and distribute data rapidly across a supply chain explains much of the recent enthusiasm for blockchain technologies in the context of supply chains



Blockchain technology also has potential application in port logistics, improving tracking and tracing of containers and coordination among the diverse actors in ports such as carriers, ship agents, terminal operators, insurers, customs agents, financial institutions and inland transport.

Smart Logistics and the Warehouse of the Future

Smart logistics encompasses not only scheduling of transport. but also activities within the warehouse. It is within warehouse that many of the most profound changes are already taking place.



In e-commerce, the Internet makes the warehouse visible to the customer. A familiar example of this is the notice one encounters at Amazon.com, "Only three left! Hurry!", which can be used to influence both consumer behavior and trigger re-stocking



predictive The maintenance techniques discussed above can reach into the warehouse as well. which can similarly optimize delivery of spare parts to factories. Indeed. with a flexible 3D printer, spare parts can be produced in the warehouse. triggered by demand.



traditional warehouse involves a good deal of "pick and pack" activity. Employees search around in the warehouse for products that have been ordered, take them off the shelves, and pack them.

E-Commerce is ideally, but not uniquely, suited for Supply Chain 4.0

