

# Impact of Digitalization on Sales and Operations Planning and Its Influence on Supply Chain Performance

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**Imagine an orchestra playing with different music sheets—chaos, right? Now, imagine they have the same sheet, but the composer's handwriting is nearly illegible. How would they perform? Would a typed sheet work better? Then how about Apple Vision Pro? Would that help musicians play well?!**

An orchestra playing with different music sheets will sound disjointed, out of tune, and without a clear rhythm, creating a disaster. S&OP is the unified music sheet that coordinates the performance of musicians (who are in sales and operations) and allows them to produce good pieces of music (supply chain performance). Now, even though all the musicians have the same sheet, if the composer's handwriting is nearly illegible, the performance would likely still be disastrous, as they would struggle to play it correctly. Clearly, a typed sheet would be more effective and easier to read. Now, consider the potential of Apple Vision Pro. By providing clear, digitized music sheets directly in the musicians' view and marking the tempo synchronously, this technology could significantly enhance their performance, ensuring precision and harmony. Apple Vision Pro represents digitization. Our thesis is not different from this example; we studied the impact of digitization on Sales and Operations Planning and its influence on supply chain performance.

Companies also face issues while playing their music, Sales and Operational Planning maintain the balance between supply and demand. It involves on one hand Supply planning which includes enterprise resource planner (ERP), Material requirement planning (MRP), Master production schedule (MPS), Rough Cut Capacity Analysis (RCCP) and

shop floor planning. On the other hand, we have the demand planning which includes forecasting and inputs from the sales team. Digitization helps many companies with the use of digital technologies to change a business model and provide new revenue and value-producing opportunities. When S&OP is combined with digital tools, companies can produce very nice symphonies.

We wanted to understand what makes companies' lives easier when they use digital tools and who improves their supply chain. To this end, we read a lot of literature discussing the benefits of S&OP, digitalization, the use of new technologies, enablers, and studies on factors that enhance supply chain performance. Based on this research, we developed a framework to help us engage with companies working with digitalization in S&OP. This allowed us to compare our findings with the practices being implemented in real companies.

The thesis concludes that while digitization significantly enhances S&OP and SCP by improving efficiency and accuracy, it also requires effective implementation, access to information, skilled personnel, and robust communication channels.

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