



## STO Spring Seminar

# Integrating Profitability based S&OP and Production Execution

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It has become very clear to me that we are now firmly experiencing the 4th industrial revolution in manufacturing. If 1700 was underpinned by steam, 1890 by the production line, 1970 by computers and electronics, our current age is underpinned by DATA.

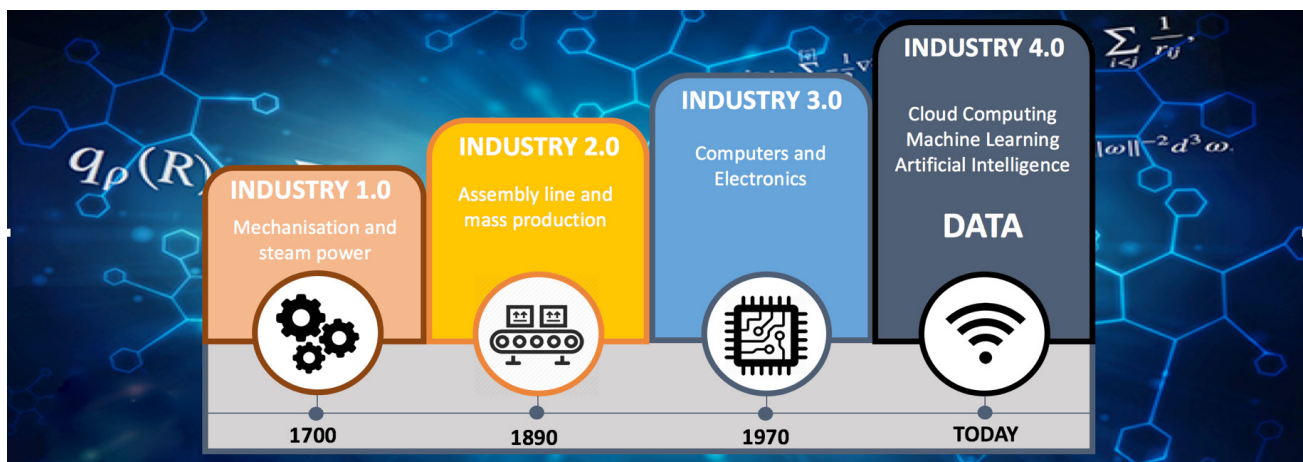


Fig 1. Industry 4.0 makes profitability-based decision making a reality through the supply chain from supplier to consumer, and through the organisation from strategy to execution.

Whilst manufacturing is clearly becoming smarter, it's in our ability to forecast, optimise, sense, model, synchronise, and teach our machines about the business environment, where the big gains are being made. In highly competitive markets, competitive advantage comes from operational agility. The capital investment arms race of the past is being replaced by

the need to become smarter with the existing assets. Industry 4.0 makes profitability based decision making a reality through the supply chain from supplier to consumer, and through the organisation from strategy to execution.

Market's continue in the direction of increasing volatility. Changing habits of consumers, emerging markets

and continued globalisation of supply chains increases the bullwhip effect<sup>1</sup>.

<sup>1</sup> The bullwhip effect: is a distribution channel phenomenon in which forecasts yield supply chain inefficiencies. It refers to increasing swings in inventory in response to shifts in customer demand as one moves further up the supply chain.

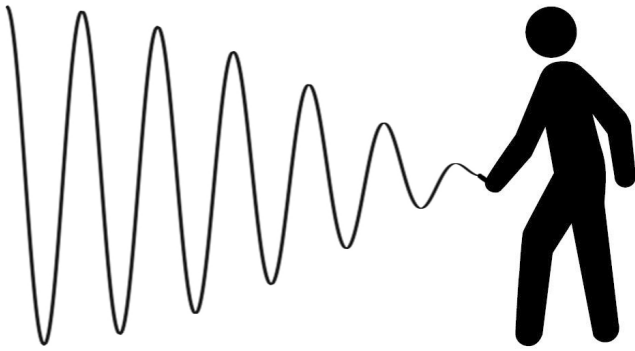


Fig 2. Changing habits of consumers, emerging markets and continued globalisation of supply chains increases the bullwhip effect.

Every organisation makes thousands of decisions every year that significantly impact profitability but with little understanding of the impact until after the event. The opportunity, as I see it, is to out-pace market volatility with the increase of high quality information, this is what profitability based S&OP is all about and where the leaders in industry are focusing their efforts.

### Increasing your circle of influence

The circle of influence concept<sup>2</sup> fits perfectly here. Too many organisations get too excited about things in their circle of concern. “Our market is too unpredictable to forecast”. “Our customers don’t know what they will order, let alone us.” The key to effective S&OP is to focus on your circle of influence, what do you know? What data do you carry that will allow you to plan for volatility? How do you increase the agility of your supply network to react to changing orders?

The principle is simple, as you focus on your circle of influence, the circle expands and with that, your circle of concern shrinks. This is the sweet spot, where the margin gains come

<sup>2</sup> Circle of Influence (Steven Covey): To be proactive, we must focus on the Circle of Influence that lies within our Circle of Concern- in other words, we must work on the things we can do something about. The positive energy we exert will cause our Circle of Influence to expand.

from, and where competitive advantage is found.

Unfortunately, too many S&OP programmes fall short of influencing strategic decision making. It could be that they lose sight of the overall goal of increasing informed decision making, but very often the weakness lies in an organisation’s inability to execute their plan. The sales and operations plan works on paper, it gratifies the senior leadership team, it feels good,

proactive, and forward thinking, but where is the tangible output?

### It’s not all down to culture!

The hardships of implementing a cross-functional S&OP process get written about time and time again. They focus on culture, behaviour, siloed thinking, and resistance to change. But I believe most obstacles are more straight-forward than this. The real complex part of S&OP is increasing execution agility. Can you, in real time, re-optimize your production schedule, and communicate this plan to your manufacturing units, as new information hits your sales team’s desks? If you can’t, you’re not alone. It requires significant integration of technology, and thought; organisational alignment, and vertical and horizontal collaboration through the organisation.

*S&OP programs fail because they are ineffective at delivering an executable plan.*

To put it bluntly, ‘stop blaming your people and culture for not getting on board with the program and give them something to get on board with!’ Without a tangible output at shop floor level, it would be cheaper and less dis-

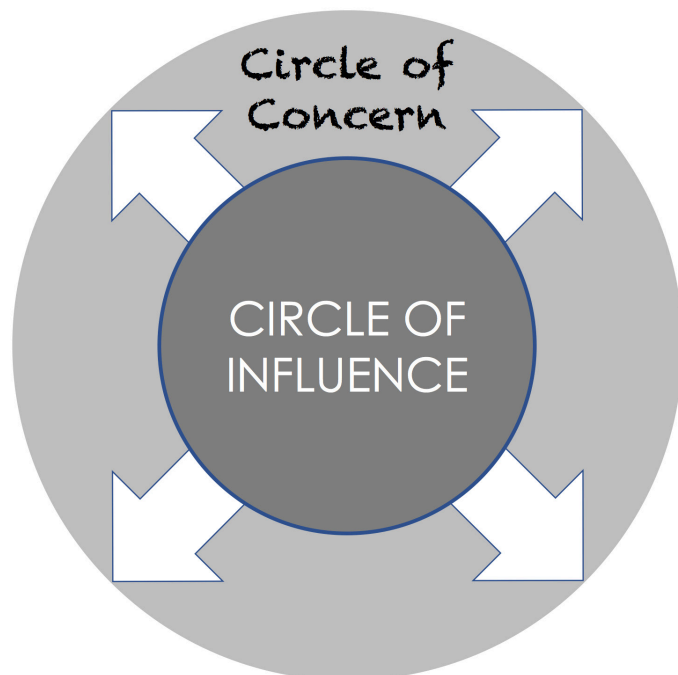


Fig 3. The key to effective S&OP is to focus on your circle of influence.

ruptive to organise a monthly game of monopoly than an S&OP meeting.

### **When profitability based S&OP thrives**

True digital transformation requires the coming together of capable technology, with a willingness and acceptance of change within the organisation. Let's not overlook the technological challenges required to make this happen. It's one thing to come up with the most profitable solution for the business over a short to medium term horizon. Translating and communicating those decisions to the factories, to the production lines, to the sales offices, to the warehouses so that the whole organisation can operate around the decisions that have been taken is something else entirely.

It comes back to data, it's about the flow of information. With the scale of information that we are talking about, it can only really be effective if you have some form of systems integration.



Fig 4. Alan Cheesbrough at STO Spring Seminar in Vantaa 8.5.2018

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## **“In highly competitive markets, competitive advantage comes from operational agility”**

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It's also the reaction times that are required to adapt when the plan falls out of alignment. So just being able to integrate the flow of information between strategic planning systems and execution systems is quite a technological challenge. This really brings the reason for the integration into focus because you need to be able to re-plan very quickly, and re-execute production around the reality. Without the integration, this becomes basically impossible as you cannot re-plan or re-execute fast enough to retain the value that you were seeking when setting the strategic direction.

### **Some critical areas of focus**

- Integration of technology is fundamental. Communication between systems delivers the efficiency to make decisions quickly. The goal should be real-time transfer of data

between business processes from strategic planning to operational execution. If re-running your sales and operations planning or optimising your production plan carries too much overhead the process will be avoided, and the potential to capitalise on profitable opportunities will be lost.

- Integration of technology should not be a headache. Effective decision making usually requires significant data processing. The way your process integrates with your sales systems at the front end, and manufacturing systems at the back end, are critical to an effective S&OP process, ensuring that it reflects the up to date reality of your business. Your IT landscape should be designed with integration in mind, and have the flexibility to integrate

effectively with all your other business systems.

- In highly competitive markets, operational efficiency comes from operational agility. Demand volatility is the norm. Demand volatility can be measured. Demand volatility is the opportunity. Your ability to react, and agility to take advantage of opportunities is what creates competitive advantage.
- “It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is the most adaptable to change” Charles Darwin. ●

*Alan Cheesbrough founded the I-Plan® Solution already back in 2000 and is leading the strategic product development activities of I-Plan teams as managing director ever since.*