Supply Chain Digital Transformation

Lessons Learned (the hard way)

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Sep 2021
“Project management is like juggling three balls: time, cost and quality. Program management is like a troupe of circus performers standing in a circle, each juggling three balls and swapping balls from time to time.”

- G. Reiss

“If everything seems to be going well, you obviously don’t know what’s going on.”

— Edward Murphy.”
Baxter Healthcare - Background

- Mission – To Save and Sustain Lives...we try to live this always
- Diversified Medical Device and specialty Pharma manufacturer
  - Solutions – IV’s,
  - Renal Care – Hemodialysis (in center), Peroneal Dialysis (home)
  - Pharma – specialty and generic + Contract Mfg
- Global footprint
  - 100+ countries sold into
  - 50+ manufacturing sites – highly disparate maturity
- Complex supply chain
- Highly regulated – FDA, MOH’s, etc.
- Highly competitive industry environment - Lots of change in industry vertical + major Pandemic challenges

Really clear and urgent business case to complete a major digital transformation
Digital Transformation - Objectives

For Operations:
- Expand Mfg/Operations 4.0
- Improve Legacy Processes and reduce redundant systems – focus on key processes for payback
- COVID-19 – have had to change the way we operate
- Innovation within Industry

Overall:
- Deeper connection with customers and business partners
- Speed to market with innovations
- Process Optimization
Our challenges to Digital Transformation

- Operations 4.0
- Legacy IT debt reduction
- Process optimization
- Ongoing automation
- COVID-19

Timeline

**Initial Assessment***
- What is critical and why?
- Smallest Gaps in tech and people readiness?

**Strategy development***
- 2-3 months

**Short term projects**
- 2-3 months
- 3-6 months
- Data infrastructure
- Maintenance based AI
- Global Planning
- Digital Twin
- ERP standardization
- Procurement BOTs
- Employee education
- Complaint automation

**Long term project workstreams**

Three key program challenge themes became clear through our planning and assessment:

- **Strategy Development**
- Data quality and standardization
- **Culture**

*Assessment and strategy development outlined in the following pages*
Emerging clusters of digital supply chains capability

1. Collaborative e-Sourcing
2. Digital Factory Design
3. Real-time Factory Scheduling
4. Flexible Factory Automation
5. Digital Production Processes
6. Customer-Connected e-Commerce
7. Extended Supply Chain (near) real-time Management
8. Digital Product Quality
9. Digital Supply Network Design
10. Product Lifecycle Management
Strategy Development – prioritization, sponsorship, and alignment

Key Challenges we faced...

- Prioritization of opportunities
- Flash vs. Substance
- Sustained sponsorship – executive

Why it was an important problem...

- We had “too many” digital transformation opportunities
- Lots of new leaders
- Other priorities hitting our target base (Mfg, procurement, quality and logistics)

Approaches to address...

- Worked with IfM for Supply Chain strategy framework
- Detailed business cases and “contracting” with leaders and sponsors

“The essence of strategy is choosing what not to do.” – Michael Porter
Data – “the oil that greases the skids” on digital transformation

Key Challenges we faced...

Data
- Legacy systems and associated “islands” of data
- Lack of standardized processes and data
- Who owns the data?

Why it was an important problem...
- Data inconsistency = sub-optimal processes and results
- Process inconsistency = inability to scale
- Felt like a “boiling the ocean” problem
- Major projects within program would fail without data quality (e.g. digital twin, global planning)

Approaches to address...
- Dedicated data team – cross functional and experienced
- New advanced data management tools
- Clear accountability for data clean up
- Focused on key data – not all in scope

“In God we trust. All others must bring data.”
– W. Edwards Deming
Culture – a key enabler or barrier to digital transformation success

**Key Challenges we faced...**
- Productivity gains vs. Change Management
- New approach to delivery
- Sustaining program mgmt.
- Multiple strategic initiatives

**Why it was an important problem...**
- Pressure on time to realization and other initiatives
- Multiple program approaches

**Approaches to address...**
- Leadership and team selection
- Agile approach – 80% of the projects
- Mix of quicker wins and long term projects with clear accountability
- Dedicated delivery team
- A focused effort on training
- Utilized existing corp mechanisms

“Culture eats Strategy for Breakfast, Lunch and Dinner!”
Summary of my Digital Transformation Lessons Learned

1. Technology is not the primary barrier to program execution – it is the people and the culture
2. Deal with key data consistency head on...accountability and transparency to decision
3. Balance within prioritization on short term efficiency gains with longer term transformation and quality gains
4. Strong and sustained program leadership/sponsorship (both executive and mgmt.) is critical, but not sufficient

Bottom Line: The opportunity for Supply Chain that Digital Transformation provides is HUGE, but the challenges, while not new, are significant