



Aftermarket Digital Transformation

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Introduction

Recent SEC filings and press briefs by senior staff of Fortune 500 heavy equipment and automotive majors indicate some common challenges. Companies like Caterpillar, Terex, John Deere, Walter surface and others indicate they have challenges a) tapping into wealth of real time customer data, b) sharing of information at various levels, c) inconsistent service, d) service parts inventory carrying costs and e) increasing revenue streams from installed base. Industry experts opine that OEM's and their dealers may be losing \$9-15 Billion unqualified sales annually to competitors. Even best in class companies, including the European and Japanese have challenges on complete visibility of repair (VOR). Return after repair is a grouse which happens with the iconic brands at dealer level and OEM's do not have complete visibility. OEM's and dealers can bill billions of dollars more only if they knew how to constantly ping the installed machines for sales and service opportunities

Auto Care association study highlights the growing clout of e–tailing. Online sale for parts replacement touched \$6 Billion in 2015 and expected to reach \$12 by 2018. U.S. Census Bureau data shows in-store sales ended down 1.5%. Importantly, most purchases are made by service providers than consumers. 70% of Business buyers will purchase from an online catalogue rather than through another channel. OEM's have less than 20% of visibility into their parts retail market and their genuine parts program revenue growth may be at jeopardy.

UPS Online shoppers survey shows online buyers are diligent about research, extensively use online reviews, ratings and social media. While they may have invested in social media vehicles like Facebook or Linkedin or Twitter they lack a comprehensive platform to push and hear chatter. OEM's also miss out user led innovations that happen on their products in a particular region and opportunity to adopt the improvisations across markets to out compete competition. OEM's also suffer from limited remote equipment connectivity leading to incomplete and inaccurate installed base management. Unscheduled down times, high service delivery variance and sub optimal data analysis leads to lower efficiencies and effectiveness. Counterfeit parts and accessories is a major challenge that affects global OEMs.

United State Federal Trade Commission estimated of the \$12 Billion international trade in spurious parts. Many of the counterfeits are manufactured, packaged or represented in such a way to mislead consumers. Fragmented aftermarket processes and incomplete IT systems hamper complete visibility of operations. Lack of comprehensive process affect issue resolution and first call fix rate. Inadequate delays may happen in field because of wrong technician attending machine, or unavailability of parts with technician. Many OEMs also do not enforce common policies across regions, especially on remanufacturing and recycling policies. Hence cannibalizations and brand value dilution does occur.

OEM's and their dealers can emerge out of this conundrum if only they could capture and manage both machine-chatter and consumer chatter in a unified platform. Companies recognize a need to quickly automate service and parts management process (parts planning, demand forecasting & planning) and increase collaboration amongst various functions (logistics, Operations, sales, marketing). Digital technologies help in alleviating pain areas related to poor customer experience, revenue leakages, and operational inefficiencies. High smartphone adoption, millions of connected devices using IoT and other technologies and ubiquitous connectivity are creating new opportunities at multiple levels for OEM's. These technologies are reorganizing and redefining internal and external structure and process of companies.

> Like any sport Content Marketing needs consistent efforts to reach the strategy.

After market Digital Transformation

Digital transformation pushes business strategies to evolve from selling a product or service to a customer experiencecentric value proposition. Digital technologies allow company and its ecosystem benefit from transformation, not just piece meal improvement. Digital technologies open up new opportunities for aftermarket services in six main areas, viz., Technology, Channels, Customer, Business Process, Business innovation, and Employee enablement, as shown in Figure 1.





Figure 1: Aftermarket Digital Transformation levers

Digital technologies connect ecosystem wide processes so that assets are efficiently managed using predictive analysis of potential errors and initiate corrective measures to prevent the same. Digital technologies such as mobile, cloud, Virtual assistants and native bots optimize business process by enabling predictive maintenance, Omni-channel support, driverless communication.

Digital technologies by enabling unified, experience rich and many-to-many collaborations provide opportunities for business to experiment novel business models. They help companies design "service-friendly" products, optimize their business processes and business model innovation. Business can gain efficiencies by digital modification or adopting new digital business model. Digital transformation helps improve visibility and management control process, support companies to pursue "outcome based" engagements as risks can be easily quantified and hence manageable. Finally, on employee front, digital technologies bring transparency at all levels, and drive ownership in a collaborative environment. They help achieve high productivity by maximizing first call effectiveness. This is achieved through integrating knowledge, tools and support procedures. Digital technologies enable products or services to be always connected, intelligent and selfmanaging. By using a combination of IoT, Telematics and predictive intelligence services can truly become "sense and respond". Remote diagnostics enabled by telematics dramatically reduces critical, unanticipated failures and reduces frequency and severity of recall. Digital transformation interconnects supply chain thus lowering costs and accelerates supply chain transparency by end-to-end process integration. Cloud based tools provide visibility for every party in supply chain look at same data and analytics would arrest defects are detected and corrected early in the chain. On customer front, digital transformation leads to better understanding of customer, personalize responses, and improve revenue by serving manifested and latent demands. By using social media and analytical tools customer touch points can be made comfortable and value adding. Unwanted waiting and reneging could be eliminated. Digital technologies allow companies to derive total life cycle value of their incumbent customer base. Digital transformation includes advanced algorithms for managing workflows and optimized service call effectiveness.

Impact of Digital transformation

What changes happen with digital transformation of Aftermarket?. Without digital technologies the customer interaction with dealer or OEM is limited by time and geographic reach. Cloud and IoT enabled infrastructure enables a highly cost-effective, rapidly responsive and elastic IT, better aligned with the business needs. Cloud enables business to innovate faster while leveraging existing systems and capabilities. With legacy and disjointed systems, aftermarket processes suffer from high latency and lagged response. This may be because of restrictive technologies and interfaces or high cost of wrap up solutions. For example, waiting time for a service ticket is so high that it may dissuade customer from reaching out to OEM or their dealers. Moreover, legacy systems may not be enabling customer to do self-service. Management reporting and control without realtime automation only provides lag information, while the management needs lead information. Hence, management may not find data objective and relevant to take current decisions.







OEMs in stage 3 of maturity are more externally focussed with aftermarket. They exhibit more data driven planning, control and measurement of parts, spares and services. While these OEMs have evolved to plan, predict and manage service failures, there is room for improvement in incidence management, information integration and partner management.

Setting a clearly defined scope and context is the key for digital transformation. Goals, both short term and long term, how the activities at each stage are connected and lead to the next broader goals needs explicit enunciation. Assessing current organizational capabilities, customer pain areas, and benchmarking of competition is critical to define value levers of digital transformation.

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<u>Aftermarket digitization</u> <u>program: Planning & Roll out</u>

Aftermarket digital transformation starts with a vision, what is that needs to be achieved. Identify current status of your aftermarket process. Your aftermarket maturity may be 1) Rudimentary, 2) Internally evolved, or 3) externally focussed. In rudimentary stage no formal aftermarket processes exist. Part planning is either weak or completely reactive; support and service are completely reactive. Customer engagement is mostly transactional, limited to purchase and use philosophy. At internally stage OEMs in this stage would have defined service standards; planned CM, PM processes and dealer sales and service SOP are defined and will be in place across OEM's network chain. OEMs in this stage have defined key performance criteria and customer engagement process. However, these OEMs suffer from incomplete, inconsistent, islands of process, systems and controls.

Identify key capabilities that may have to be harnessed further with investment and capabilities that may have to move towards mooing phase. Derive short-term focus areas and detailed the activities and outcomes required to transform to meet new pole position.

Spell put capability improvement roadmaps that would be targeted in this year detailing the initiatives, investments and ownership. It is neither desirable nor practical to completely overhaul existing IT systems and procedures to implement aftermarket digitization. While considering digital transformation think of a bimodal mode: one to sustain current operational requirement of the business and other that brings agility for future business requirement.

Use cross functional governance structures to balance company priorities with individual business area's priorities. Cross-functional units are not only involved in pre-planning, but also in consolidation and definition of common interest areas. Define overreaching governance mechanisms so that changes could happen with little micromanagement, but with high sense of ownership and outcome. Roll out digital transformation in a limited zone or with few distributors. Perfect the system by removing bugs and standardizing reports and inputs.



Figure 3: Aftermarket Digital Transformation Roll out



- How to leverage assets
- Key Objectives
- Investment
- Impact
- Pace & priority



- Rationalize digital assets
- Build capabilities
- Governance Structures
- Digital services roll out



- Extent scale
- Enterprise wide Integration
- Meat-mediation
- Service led enterprise

30-60 days

- AS IS analysis
- Executive sponsorship
- Internal PR
- Mobile enhancement

60-100 days

- Process digitization
- Application roll out
- Training adoption

>100 days

- Scale Enterprise wide
- Focus on governance
- Centralization of knowledge, process

Finally, digitization programs need to be scaled up across enterprise to make desired impact. Scaling up requires careful assessment of options and plan for manageable risks. Scaling up must not only assess scale of operations, but also nonlinear inhibitors in systems, process and skills that may hold back outcome. For desired scale of operations, function-wise do a stretch map indicting how flexible are department's resources (people, infrastructure and process). Identify what activities can be automated or eliminated, what may be bundled and or outsourced. Measurement that improves managerial effectiveness, ownership and accountability in achieving results is needed to drive a scaling up program.

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Our aftermarket digital transformation experience has taught us few do's and don'ts which are presented below

Do's

- Phased manner digitization, with priority on capturing retail side pays huge dividends
- Digital transformation that deepen end customer visibility and VOR have high payoff
- Create process, product and change owners at all levels
- All process must be redesigned from customer perspective
- Top management team has to consistently create the sense of urgency
- Keep challenging the assumptions, ask for data
- Prioritize key pains, invest wisely on 2 fronts only
- There is no need to pursue state of art technology, mature technologies and low cost also work
- Set your dealers, service and sales teams to enjoy "smaller wins"
- Communicate the changes to the employees and let it percolate to various levels
- Digital transformation need not be complex, simple solutions yield quick & significant impact
- Hold weekly reviews with the heads of departments, and other decision makers.
- First objective is to achieve working solutions
- Improvisation is a continuous process and sometimes it is necessary to tweak certain areas after the implementation has been done.

Some don'ts

- Never thwart innovation and initiative while transforming
- While digital transforming opens new business channels, do not neglect Business as usual, sustain them

Conclusion

Aftermarket services and support do influence customer relationships to a significant level. OEMs must begin an active assessment of where their aftermarket future lies and that discussion must at earliest. There is no time to waste or prolong their decision on focus towards aftermarket. Hence, an effective aftermarket strategy with right operational model is a strategic arsenal for every future-oriented OEM to drive superior customer value and higher revenues. Digital transformation is panacea for challenges OEM's and their dealers face on aftermarket front. Digital transformation is not just an IT project but a change management process. OEMs must begin an active assessment of where their aftermarket future lies and that discussion must at earliest. There is no time to waste or prolong their decision on focus towards aftermarket. Hence, an effective aftermarket strategy with the right digital roadmap is a strategic arsenal for every futureoriented OEM to drive superior customer value and higher revenues.

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