ARTICLE

Repairability and Reliability as 'Lead-Steer' to Sustainability

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A recent visit to my optometrist for eye test was an instigator to this article. After my test and a new prescription for lens, I chose to use an old frame of mine which was in good nick. I was told because I was not buying a new frame, I would have to wait longer to get the new lens fitted. It seemed odd, but I guess, that organisation lost a chance of some incremental revenue and hence the lower priority or a disincentive for me. I am still wonderstruck though. Could I have received my newly fitted old frame earlier by a week or did I miss a 'combo-discount' by reusing an old frame?

As per International Monetary Fund's recent announcement, India became the fifth largest economy in the world in the last quarter of 2021. And with the growth projections, the forecasted trajectory for the economy seems to be a safe bet. Increased investments, improvement in core societal sectors like education, health, and other social parameters have led to growing participation in the market, leading to strong domestic demand and consumption. However, what is not good is the increased pollution and the impact to the environment. These are established facts and follow the same pattern as in other economies of the world as aggregate consumers around the world grow and consumption keeps increasing. Emission and waste management have naturally attracted a lot of attention. There have been some improvements in managing manufacturing waste both by reduction of the quantity and its disposal. With adoption of Lean Manufacturing processes, there is increased attention to reduction of waste emissions. As manufacturing increases, economies like India will have to continue to keep the focus on sustainable processing and, reregulate or legislate for better consequence management.

While waste management has become more sophisticated and is continuously improving, it is equally important to manage what gets into the hopper. We know this is not easy, instead will require persistent efforts. This article is directed at the product or solution offerings by companies by ensuring longer life, reusability, upgradeability, and transferability without adversely impacting customer experience. This is complex as it involves changes at the producer or seller's end and at the customer / consumer's end.

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Simplistically viewed, longer life products will affect company's Sales (at least) in the short to medium term and if that outcome is punished by lower share price, it will be a bitter pill to swallow. On the other hand, if the customer experience is not fulfilling enough, no amount of 'save the world' sloganeering will improve traction. Customers will resort to substitutions or trade-offs only if the equation is worthwhile.

This entire change covering producer-seller and customer-consumer will have to be across all sectors and industries.

Design for Repairability & Reliability

Over the past few decades, we have advanced well in pursuit of excellence in 'Design for Manufacturability' (DFM), making product-design assembly-friendly leading to increased productivity and eventual reduced costs. We have journeyed in the manufacturing space from deep/ vertical manufacturing to lighter and economically rewarding manufacturing models. We have seen companies offering contract manufacturing services grow from one small site to a virtual township. Value separation of design, product IP from manufacturing in a business model is an 'Operational' decision and not a heavy strategic discussion anymore. This journey has served its purpose but most certainly has run out of its shelf life.

It is the right thing to support *'Design for Repairability & Reliability' (DFRr)*

DFRr has clear touch points to all the elements of ESG as well as long term economic rewards. Service providers, System Integrators, Consumers – all can benefit.

Repairability is well entrenched in large value Capex items as the sheer cost and time needed for replacement makes repair work economically attractive. However, for everything else repairability has been bobbing up and down, and this makes up the bulk of consumption.

It is time to make this a 'must have' of any product or solution along with Reliability. **DFRr must be embedded at the concept stage of R&D drawing board. This may make the development time longer and product costlier and that's where advocacy for economic value becomes the main play**.

There have been some efforts in ensuring Repairability and Reliability in B2B space, albeit in a vicarious way of 'managed service'. However, when it is B2C or even a smaller business as a customer, we have a poor report card.

A worthwhile business-case

I remember reading a news item in 2021 talking of Apple's co-founder Steve Wozniak, issuing an endorsement of the right-to-repair movement. Wozniak's rationale is that being able to repair can be 'very motivating for creative minds and lack of repairability is hurting innovation'. I would add to his rationale by saying that repairability as a concept also goes to the heart of sustainability and large companies with sizable market capitalisation can be effective pace setters in this space.

One can look at the electricity metres in India. India has a meter population of more than 250 million and growing. With advancement in electrification, this number will keep growing. Normal warranty associated with these devices is less than 5 years, meaning more than 50 million meters are likely to come up for replacement every year. That is a large pool of electronic and plastic waste. In the OECD countries, this warranty threshold is between 8-10 years and product life in excess of 10 years, which in theory makes the waste pool less than half.

There is no question that Repairability should be in addition to Reliability. A favourable environment must exist, so the DFRr metric can move up the priority chain. Large buyers too will need to think hard on how to set the tempo by insisting on Repairability and Reliability. It is easier said than done, but so was 'Outsourcing' when it started few decades back.

The fundamental premise being that the customer experience does not take a beating. Customer or user experience cannot be that you wait for an inordinately long time to get the product repaired/upgraded or at a frightening cost. Instances like my personal experience as an anecdotal example noted at the beginning of this article goes against the entire sustainability direction. This will have to start from the drawing board, requiring a different approach to designing of products and solutions. A product can be 'smart' yet unsatisfactory on DFRr. This is a very fundamental change and calls for new R&D orientation, product development and innovation in every sphere of business and commerce.

For the Producing/ Selling company

- The immediate effect is a drop in revenues and that could easily lead to some shrinking of the bottom line.
- As the market/ customers warm up to longer product life, a shift in revenue type follows over time i.e., service revenues increase, while growth in product sales would slow down.
- Questions remain on Company valuation/ share pricing of mature companies as a reaction to top-line or bottom-line shrinkage. Much as I would like to go with ESG stock as a separate label to set expectations, I struggle as the new category must be part of every stock and not another category.

Governance as a lead-steer

The change must be holistic and across all sectors, including the financial eco-system that sits underneath asset-pricing/ valuation. The simplistic Accounting Model of valuation, based on EPS and P/E ratio will not be of much assistance. Indeed, we have left the simplistic model behind as we rely more on the on Economic Model based on quality of future earnings. We know this is already happening when we see valuation of start-ups or even early-stage companies. As is normally the case, most investors are 'price takers' and we need 'lead steers' to set the basis for takers to follow. Joel Stern's thoughts (well known for popularizing 'Economic Value Added' as a concept for stock valuation) on lead steer and price taker of 1990s continues to have relevance even now.

Creating an environment that supports sustainability endeavours is very pivotal. We don't want speculative valuations; instead we need well-regarded and understood fundamentals that will underpin a strong foundation for sustainability and preserve the sanctity of valuation, thus ensuring protection of investors' interest.

The question is whether this righteous company would be attractive to investors or merely a 'help' in reducing the pile of used and no-longer-loved products. If I were to take a punt, I would put money on success of this service assisted model as the average life of a product is extended via a mix of economical repair and product upgradeability. It is highly likely that used product hand-offs will become more widespread and safer across the world. As more people come out of subsistence level and can participate as consumer, a once-loved DFRr'ed product will have a loving user.

To give this a thrust

- The buyer must have better enforceability rights to hold the seller true to the commitments of product warranty and product life.
- In return, the buyer must veer away from the practice of preferring the lowest price. Large buyers will have to be the 'lead steer'.

The UNDP Human Development Report 2021-22 says in its finding "When it comes to choices about the future, people appear to be motivated less by accurate scenarios of what the future may hold than by collectively held narratives."

The work of Richard Thaler on behavioural economics (2017 Nobel Prize) indirectly supports the above assertion. Though, he cautions by noting that it is easier to make money by catering to customers' biases than trying to correct them. In other words, a gap ensues.

Board governance will need to seek out and help to 'bridge' the gap. While lessons from behavioural economics will be helpful in strengthening this bridge, the transformation calls for very deft oversight and management of the transition to sustainability. It includes establishing credibility with the investing community as well as other stakeholders. It will have to be leadership in the spheres of governance and advocacy to assist the management in getting the story out. It is a trifecta of successful transition with the Producers-Sellers, Market-Customers and Regulatory Environment. ■

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