BLENDING THE PERFECT BREW WITH INDUSTRY X.O
How **digital transformation** made HUL's vending machines smarter, efficient and faster

By

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There was a time when conventional products or services were all about rich features and powerful functionalities. To some extent, these qualities may still be relevant. However, in an era where hyper-personalization, automation and artificial intelligence are the new norms, these products and services are often found playing catch-up. With disruption rearing its head from unexpected corners, organizations are seeking desperate measures to survive and sustain the gusty winds of digital transformation.

As of 2018, there are 23.14 billion IoT-connected devices globally, and by 2025, this figure is expected to reach 75.44 billion.

Industry X.0 is Accenture's mantra for companies that aim to be future-ready, reinvent their businesses and deliver enhanced customer experiences. The approach uses advanced technologies to reinvent products and services from design and engineering to manufacturing and support while accelerating operational efficiency and enterprise-wide growth. By harnessing the power of digital technologies such as Internet of Things (IoT), data analytics, Radio-frequency Identification (RFID), Artificial Intelligence (AI), cloud and more, Industry X.0 helps in transforming core business systems and processes for companies across the world.

In India too, Accenture is leveraging Industry X.0 to help large and small companies unlock the power of digital to achieve new levels of efficiency, new sources of growth and unique customer experiences. An excellent example is Accenture's work with Hindustan Unilever Limited (HUL), a British-Dutch consumer goods and services company headquartered in Mumbai.

HUL teamed with Accenture to use the Industry X.0 approach to reduce costs, enhance efficiencies and accelerate growth in their tea and coffee vending business.

SMART MACHINES MAKE GOOD COFFEE
HUL, a subsidiary of Unilever, sells its beverages under various brands, including BRU Instant, Taj Mahal, Red Label, Brook Bond and Lipton.

HUL has a network of vending machines in offices, malls, railway stations, and other private and public areas across India that serve Unilever's Taj Mahal tea and BRU coffee brands to consumers.

Without a way to monitor the vending machines, HUL found itself in a constant cycle of machine breakdowns and time-consuming repairs, missing service-level agreements (SLAs).Also, the company could not track coffee and tea inventory or if the machines were being misused by dispensing substitute products from other companies. What that meant was, HUL's customers—the tea and coffee lovers—were being deprived of their beverage of choice.

With unmonitored vending machines a lot was at stake for HUL. It required nothing short of a breakthrough solution that was smart, living, connected and adaptive—driven by Industry X.0.

Accenture anchored a comprehensive collaboration program by bringing together industry leaders—Unilever, Microsoft (MS Azure IoT platform), Brainchild Technologies (embedded sensors provider) and Vodafone (telecommunication providers). The confluence also brought together Accenture experts in digital technologies and industry groups to tap into their strong industry and technology expertise to develop an innovative, state-of-the-art solution.

The team harnessed the capabilities of MS Azure IoT platform, RFID, Dynamics CRM, a field services mobile app and analytics using Power BI to make the vending machines smart and intelligent.

As a result, the machines are now equipped with real-time sensors that track 39 parameters or errors, promptly notifying any anomalies or malfunctioning in the system. An analytics dashboard gives deep and actionable insights into the consumption patterns, machine adulteration and misuse, timely maintenance tracking, and more. A service engineer mobile app helps the field services team to enhance accuracy and efficiency in servicing machine errors. The underlying IoT platform, powered by the various next-gen technologies, ensures that the machines are always well stocked, giving HUL's customers a perfectly brewed cup of tea or coffee every time, everywhere.

Enabled by an Internet of Things platform, a mobile service app and analytics, the smart vending machine is helping Unilever become more connected and consumer-oriented.

IOT DRIVES MORE SAVINGS PER CUP
Gone are the days when products could be sold solely on powerful features. Today's customers, while very much feature-conscious, also demand more involvement and engagement throughout their shopping process. A friendly shopping environment, helpful store employees or prompt service can create a memorable shopping experience for customers, ensuring they come back for more.

One of the critical outcomes of digital transformation is enabling companies to "pivot wisely," i.e., shifting from delivering features to delivering experiences and opening new streams of revenue. HUL made the wise pivot through a comprehensive and advanced digital

transformation. As a result, the company can now offer an unparalleled and engaging experience to its tea and coffee customers, while saving costs and enhancing revenue. Here are some of the significant benefits HUL has derived from the Industry X.0-led engagement.

A PENNY SAVED IS A PENNY EARNED
HUL can track their beverage inventory, so the vending machines are always well stocked, and no substitute products are used at the point of sale. Tracing spare parts is now easy using inventory analytics and warranty analytics, enabling HUL to reduce overall service management costs.

HYPER-PERSONALIZED SERVICES
The machine offers a personalized service to the customers by greeting them by their name displayed on the screen. RFID technology allows visitors to quickly place and pay for their favorite drinks at the touch of a card.

FASTER, QUICKER AND SWIFTER
The time to detect and report faults has reduced from 8-12 hours to a few hours, thanks to automatic ticket creation and the tracking of 39 parameters or errors simultaneously. The machines' uptime has improved, allowing more tea and coffee to be dispensed, which means more revenue for HUL. Moreover, a field service mobile app helps HUL's service engineers view alerts, route plans, machine history and machine fault codes, making service and support management highly efficient.

UNLOCKING THE VALUE OF DATA
HUL can track cup counts, consumption trends, SLA management with better clarity and efficiency through a powerful analytics dashboard. The company can also analyze consumption patterns (time of the day, day of the week, flavor preferences and consumption rate).

ADVANTAGE INDUSTRY X.0
In a world that runs on tea and coffee, a most tragic sight would be to watch a tea/ coffee lover being turned away with an empty cup because of a non-functional vending machine. For HUL and similar companies, such challenges can directly impact revenue, customer loyalty and growth.

By embracing Industry X.0, companies like HUL can elevate their processes, products and services, and outcomes to the next level. Smart and connected devices powered by IoT, RFID, Customer Relationship Management (CRM), mobility and analytics are helping companies maximize their productivity, efficiency and competitive advantage.

Not just that—digital capabilities are now driving the creation of entirely new revenue streams while also offering hyper-personalized services for customers. Moreover, as the results show, companies that leverage Industry X.0 reap differentiated advantages—of innovation, agility and time to value—while their competitors play catch-up.

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