



A telecom merger provides an opportunity to innovate

Vi becomes a digital-first organization

by Catherine Palmer

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With a population of 1.38 billion people, India has one of the largest telecom markets in the world. Up until 2016, there were more than a dozen telecom service providers operating in the country.

But in 2016, a new provider entered the marketplace, causing major disruption to the telecom market and triggering massive changes, including increased competition and price wars.

To adapt to these changes, two of the top telecom providers in the country—Vodafone India and Idea Cellular—decided to merge to become Vodafone Idea Limited (Vi). According to Vineet Chauhan, Vice President and



Head of Digital Technology at Vi, the two businesses decided to embrace the market changes. “It was a great opportunity to serve more and more customers through our ever-improving network, best-in-class data speeds, and great products and services,” he says.

A merger of this size was unprecedented. The two companies needed to consolidate without significantly disrupting operations or service to customers. At the same time, Vi wanted to execute on its vision of becoming a digital-first company.

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Vineet Chauhan

Vice President, Vodafone Idea Limited

A new digital retailer app platform adds

7

million subscribers per month

The digital retailer app is used to manage revenue of

USD 200

million each month

A new digital sales acquisition platform boosted acquisitions

100%

in 3 months

Application consolidation led to

USD 600

million in savings

Leveraging a long-standing partnership

Vi had a long history with IBM, so it turned to [IBM® Consulting](#) to help plan and execute its massive digital transformation and its consolidation and integration projects. “We partnered with IBM to drive digital transformation at the scale that we needed to,” says Chauhan. “And in this partnership with IBM, our three pillars are trust, transparency and agility.”

A key component for the merger was digital transformation. “We set out to transform ourselves,” says Chauhan. “As a digital-first organization, we wanted to make sure that we delight



consumers at every touchpoint, every time. We have the kind of products and offerings that are innovative, personalized, contextual and relevant.”

Working alongside IBM, Vi created a “digital factory” to help transform the various Vi digital properties, including websites, mobile apps and new

digital platforms. As it rolled out the new Vi brand, the company launched these new websites and mobile apps during the day with zero downtime. “Our consumers use the website for information, to subscribe or to recharge their prepaid phone,” says Chauhan. “Our postpaid subscribers come and make a bill payment. And we can present exciting offers. So, we turned all these functions around and we were seamlessly able to transition into the new brand.”

The digital transformation enabled new digital platforms for Vi’s channel partners. Vi worked collaboratively with IBM in the digital factory to launch several first-of-a-kind solutions, such as a new digital retailer mobile app platform supporting contactless recharges and contactless UPI-based balance transfers. Using the digital retailer app, customers

can recharge their prepaid phone easily while maintaining the social distancing required for COVID-19 safety. In addition, distributors can make contactless UPI-based balance transfers, so retailers can always get the recharges they need without requiring representatives to travel to retail locations.

These initiatives help some 300 million Indian citizens stay connected, without any issues, during the COVID-19 pandemic. With the new digital retailer app, Vi is gaining seven million new subscribers per month and managing monthly revenue of USD 200 million. Plus, the company launched a new digital sales acquisition platform, driving a 100% increase in digital acquisitions in three months.

Nirupmay Kumar, Executive Vice President of Technology at Vi, oversaw

integration strategy, solution design and demand management for enterprise and consumer business during the consolidation and integration projects. “We interacted very closely with IBM to identify our business requirements and to determine how to design the systems,” says Kumar. “IBM also helped us detail all of our requirements to make sure that nothing was missed.”

Kumar and his team handled the job of consolidation design of the IT systems from both Vodafone and Idea. “So the challenge was how to identify the right set of applications that can support double the subscriber base, along with future growth and functionalities,” says Kumar. This was no easy task, considering the size and IT landscape maturity of the two companies. “IT

Transformation project for a telecom company is like changing the engine while the flight is in the air, you have to upgrade with minimal or no downtime” says Kumar.

As Kumar and his team worked with IBM to determine which enterprise applications could best support the newly merged organization, they found at times that the best choice was to transform an existing system rather than consolidating. And in some cases they created new functionality. In the past, neither company had a digital platform for the enterprise consumer, so Vi and IBM created a new digital platform to provide self-service options to Vi enterprise customers. In fact, the Vi enterprise digital platform won five awards at the prestigious ICMG Architecture Excellence Awards competition. The new enterprise digital platform has delivered a 35% increase in payments, a 60% growth in customer

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Nirupmay Kumar

Executive Vice President, Technology, Vodafone Idea Limited

self-servicing and a 70% rise in new customer registrations in one year.

Sanjeev Vadera, Vice President and Head of Integration Program Management at Vi, handled consolidation and operations for the consolidation and integration projects. Part of the consolidation program involved moving many applications and services to a virtualized cloud to reduce the cost of ownership. “In the back of our minds, we were always looking for ways to move to the cloud as much as possible,” says Vadera. “We did a lot of virtualization as well.” The IBM and Vi team successfully executed 32 parallel transformation programs within just 18 months. These projects impacted nearly 300 million customers (or approximately one in every four Indian citizens) and two million channel partners across more than 700 business processes.

Although the consolidation and integration program was originally projected to take three to five years, Vi was able to complete it within 24 months with help from IBM. The company also completed the digital transformation with minimal impact on its consumers. “For the majority of our consolidation projects, we ensured that there was zero customer impact,” says Vadera. “With IBM’s help, we did iterations of mock migrations to create the strategies for how we can reduce downtime.”

In total, Vi and IBM consolidated more than 350 applications down to approximately 200. In addition, the teams migrated 140 applications from three data centers to one data center. Ultimately, the project will result in the consolidation of four data centers into one. Through this consolidation, Vi has saved USD 600 million so far.

In addition, IBM is helping Vi with its network domains. Vi collaborated with IBM to deliver its first major production milestone for core network functions on its open universal hybrid cloud, powered by IBM and Red Hat. The platform enables IT and network applications to run on a common cloud architecture, which is designed to deliver ROI improvements through the optimization of CapEx, OpEx, skills and automation investments across both the network and IT application domains. The hybrid cloud is based on open technology and open standards from IBM and Red Hat, and it delivers a wide range of capabilities, including [IBM Watson® AI](#) and the [Red Hat® Ansible® Automation Platform](#) (link resides outside ibm.com), which can help strengthen Vi’s capability in network and IT planning.

A platform for the future

Vadera and his team also teamed with IBM to implement the Big Data Lake program at Vi. The Big Data Lake program is one of the biggest open-source-based data lakes implemented globally in a telecom company. “The business analytics and intelligence needs for the new company needed to be very different from the existing tools and applications used by Vodafone and Idea, so we decided build a completely new system,” says Vadera.

The launch of the new Big Data Lake data platform has delivered significant value to Vi. “The program has brought immense business benefits to Vi, with close to a 40%

cost reduction and a 60% reduction in operational complexity,” says Aditya Ghosh, Associate Vice President of IT for Analytics at Vi. “We’re going to be ahead of the curve with a future-ready, modern and open-source platform.”

The new data platform, which replaced two existing data warehouse platforms, processes over 15 billion records per day, creating more than 2,000 business KPIs daily. The data lake is a massive 10-petabyte platform. It’s helping Vi take the next big step into the AI domain, with the implementation of major AI- and machine-learning-related use cases for network experience improvements, new planning and customer experience improvement.

According to Himanshu Jain, Senior Vice President at Vi, the partnership with IBM was key to the success of the project. “IBM brings robust governance framework, agility to scale up and domain expertise to the table,” he says. “And IBM has really helped us digitize our organization during challenging times due to COVID-19.”

Vi anticipates that it will continue to work with IBM to achieve its goals. “Now we have a very strong platform that we can use as a springboard for more innovation, more features,” says Kumar. “Our relationship with IBM is growing day by day, and I look forward to working with IBM as a trusted partner for many years to come.”



About Vodafone Idea Limited (Vi)

Vi ([external link](#)) is one of the leading telecom providers in India. The company serves approximately 300 million subscribers across more than 480,000 towns and villages throughout India. In addition to having the largest telecom network in India, Vi provides pan-India voice and data services across 2G, 3G and 4G platforms. It is headquartered in Mumbai and Gandhinagar and reported revenue of USD 6.4 billion in 2020.

Solution components

- IBM® Consulting
- IBM Watson® AI
- Red Hat® Ansible® Automation Platform

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