# OMIS 697 – Digital Transformation Strategy

# Indian Railways

# Group Project - C

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# By

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This assignment is a brief description of various assessments to analyze the position of Indian Railways, the primary and only source of Rail transport in India. The assessments are divided into six categories to know the condition and position of the company better on the digital mastery, scale those six categories are Digital, Leadership capabilities, Framing the challenge, Focus Investment, mobilizing organization, and sustaining the Transformation. All these assessments are scored in an excel sheet; its description is given here in this word document. These assessments marked are purely done with the results based on the research (both Inside and outside sources) and the knowledge that we have.

**Digital Capabilities**

Indian Railways started building its digital capabilities in a way that, the company wants its customer services to satisfy every customer and to be the number one in the race of transportation with other means of transport in India. Indian Railways to provide better quality services started using technologies like social media (Twitter) to be up to date and monitor the problems of traveling customers and to respond with immediate actions, and Data analytics to assess the seating charts with the ongoing trains and to update them perfectly to provide a greater number of seats on time to its passengers to overcome the problem of overcrowding situation of trains. Indian Railways also started to sell its ticketing services through better digital channels like improvised and fast websites and its own customized app of IRCTC and through new addition by which spot ticketing on the train. Now passengers can purchase tickets even after boarding the train with UPI (The fastest digital payment in India) or through debit and credit cards like never before. This initiative was taken to provide better customer service. This Monopoly transportation company started making potential use of technology in enhancing their digital capabilities in various other ways of intercommunication between the departments and stations using the latest 5G technology in the country for hassle-free communication.

The Indian Railways has access to a large amount of data to combine critical operational and customer information for improved customer experiences and operational decisions. Indian Railways is present all over the country and it needs more cutting-edge technology, like cloud implementation into everything, to process the enormous amount of customer data it has. It has already begun using blockchain and cloud technologies for data storage and retrieval, which will simplify data handling and improve operational performance, but it is still in the very early stages and requires more significant time and financial investment.

Customers perceive Indian Railways as it consistently runs behind time, delivers poor quality services, and doesn't add value to its customers. The key solution to this issue with digital capabilities is to standardize rail transit more. It can be done by working with Google Maps, just like in the United States of America, recommending additional rail routes and rail transportation options while looking for directions, as well as precisely presenting schedules and timings on digital maps. Cross-app collaboration, providing minute-by-minute updates on delays, prepones, postponements, and weather updates along the path of the passenger journey, customer onboarding, possibilities for onboard food purchasing, and requests for additional services within the IRCTC app, and making every operation user-friendly is one of the ways to turn the disadvantage into an advantage and making Rail transport as favorite transportation in India. Also, operational wise, the usage of IOT and predictive analysis to predict the maintenance and service issues beforehand can help better optimization of things at regular intervals. These crucial elements can aid in delivering a better customer experience and will propel them to the top of domestic transportation.

**Leadership Capabilities**

The current Indian Railways has shown some effort in growing the knowledge of senior leaders (SL) regarding Digital transformation. They set out three workshops to help SLs think about the customers perspective to come up with solutions on how to deal with the realistic situations and unforeseen circumstances travelers face. This shows that IR is focusing towards educating the leaders on what they need to solve. However, this is a good time for attempting transformation because they do not have an existential crisis, but they do have problems.

As we have discussed in class, transformation works best in a top-down approach. Leaders are the ones setting expectations and leading digital transformation efforts. IR has lasted 150+ years and faced several crises, which means there must be capable and honest people also. IR should streamline efforts by removing consultants and drive transformation with its own people. They can do this by empowerment. Empowerment in contrast with delegation is more powerful when bringing about change. Delegation means assigning a task without asking and monitoring until the task is done. Empowerment will build trust with leaders whereas delegation will suppress changes and new ideas. Furthermore, in government sector, there is a built-in safety net for when you avoid taking decisions. You may get punished for taking a decision IF it fails, but you can work your way up the ladder without having to take many decisions. I would suggest the organization incentivizes by monetary or non-monetary means the ones that suggest and drive the change towards digital transformation. IR should also uphold accountability. Accountability is not just holding those that are meant to decide accountable, but also to ensure through empowerment and incentivizing that the team is at least charged up to make a decision. I think when you do something that is very different and not routine, you need to ensure that the team is charged up.

**Frame Challenge**

Indian Railways is one of the oldest and prestigious company of Indian government. The organization digital challenge is always improved year after year but at a slow pace, as it is the one and only rail transport in the country, and it is huge. As it is India’s largest company and the one and only company in the train transportation field it never had competitors but kept on challenging itself for the betterment of the company. Our senior leaders are aligned in the digital transformation because, at first you can book tickets only in the reception of every station, later, you can call and book ticket like tele ticketing. Now, we can book tickets online and can purchase tickets during the journey too. If we talk about the train status, earlier, we would have never known where the train is until you reach the station and after reaching the station also it may not be clear as they can’t know about the status of the train without going and checking. Whereas now a days we can check the exact location of the train in the IRCTC mobile application and at various third-party apps and websites.

The senior leaders are very much interested in changing the journey of company digitally towards digital masters. They try to know about the new technology and give additional features and added advantage to the customers to increase the value of customers. The only thing that affects the development is the implementation. They spend a lot of time to discuss and implement a new feature which in turn makes the company be behind in the digital transformation. As we discussed, being the only Rail transportation services in the country, it must start comparing internationally, which can give them a lot of inputs to be implemented in the company.

The IT department of the company and the senior leaders are the important contributors of the digital transformation and should work hand in hand. They should strive hard to improve themselves every day in the process of Digital Transformation, all the employees including the senior managers are very much in the path of digital transformation vision and goals to be achieved.

**Focus on Investment**

Indian railways, as an organization that has been the monopoly of railway transportation in India has been greatly prospered for 150 years of its existence. Indian railways have become a platform that hundreds of thousands of passengers highly rely on for transportation services. Indian railways have invested in many technologies and have highly benefitted over the years. Being the only railway transportation services in India, Indian railways has an annual revenue of more than $1 Billion. Indian railways have invested in many technologies over the years and have highly benefitted by cutting costs, using lean methodologies, and agile principles.

Indian Railways has a strong management that has managed the organization very efficiently. Having a Top-down Strategic Scorecard has highly helped the organization to guide the Digital Transformation process in the right Path. However, having an Open communication throughout the organization can help them better encompass all the organizational changes, and not just technological changes.

Their performance over the years shows that they have chosen a proper governance model to govern the Transformation. The organization encourages cross-functional teamwork, integrating all the departments to have a coordinated view of their processes, which further helps the organization to have a strategic view on every functional processes.

Their coordinated teamwork has helped the organization in integrating all the departments like supply chain, Information technology, and finance, working as a whole to share a common vision among the whole organization. However, having the roadmap strategically linked with the business case and key performance indicators can help the organization have a better view for funding Digital initiatives.

Investing in Research and development can help the organization better serve the passengers and can also help the organization work efficiently through the implementation of technological innovations from R&D. Indian railways being an organization that has an annual revenue of over $1 billion, which definitely has a well-structured strategic funding model.

**Mobilize Organization**

The Indian railways is emerging as one of the fast-growing rail networks in the world, it is more concerned with providing faster services and expanding the transportation network throughout the country. The viewpoint of the organization is shifting towards providing better customer experience with an intention of digitally transforming their operations provided through the rail network connectivity and the digital technologies that was newly introduced in providing the real time data, and services to the customers. But these changes that the organization is focusing on does not align with the required level of flexibility and advancement required by the customers in the aspect of technology and security. The fact that advancement within an organization happens, only when the focus of vision from the top-level management to the employee at the lower level has same understanding on the change, which in the case of Indian Railways is not the same due to large operational employees, only having few experts understanding technology is a disadvantage. So, explaining the benefits of the change to the valuable employees by having a clear communication throughout the firm and training employees to adapt to the technology, can help Indian Railways to a great extent.

The change within the organization is governed by the employees at the higher level, in a top-down approach due to lack of a shared platform between the higher-level management and employees at lower level. So, the chances of a proposed changes getting approved and getting into implementation has less chances. The organization can introduce a transparent two-way communication medium between managers and employees to mobilize the employees. These chances enable employees to translate their strategic priorities into their goals, action plans and into a better judgement call to adjust over the time. So, the people working for an organization can have more opportunities for their development and advancement with the visibility into the evolving digital changes. The introduction of the shared platform will benefit the Indian railways amid turbulence or business as usual. Indian railways have constantly built momentum through quick Wins throughout their existence.

The top-level leadership of Indian railways are implementing new workplace designs to enable interaction and collaboration supporting their future vision of digitization. They also invest in cultural offerings and other institutions to provide recreational experience for the employees and the residents to provide best work-life balance for employees. The decisions made to transform the organization may not always lead to successful implementation of it, so working on the reasons of failure and aligning with the WHY of the digital transformation and mapping the technological feasibility always led to a successful strategic move by an organization. The organization can improve its mobilization in leadership qualities through the strategy discussed above along with the providing sustainable office space supported by advancement in technology and eco-friendly building materials and techniques.

**Sustain Transformation**

Being an organization that has been in the industry for more than a century, Indian railways has great foundational capabilities. Their technological advancements through Partnering with tech giants like TCS, installing centralized Wifi around every Railway station, custom built mobile application, web application, and ticketless travel, are clearly evident that Indian railways are investing in the necessary technology and are using appropriate common digital platform, moreover, they should rigorously train their employees to adapt to the new technological implementation, to be updated to the current trends in the market.

Indian railways must deeply focus on encouraging their employees throughout the process of Digital Transformation. Financial Incentives, awards, and recognition mechanism are well-defined and aligned with the goals for the digital transformation in the organization. However, the management of Indian railways must focus more on providing personal rewards based on the performance and inputs contributed by the employee to the process of Digital Transformation. Having open communication throughout the organization makes the process seamless, and recognizing and rewarding an employee personally for the contributions made, can help in motivating employees to be efficient throughout the process of Digital Transformation.

Digital Initiatives are thoroughly assessed through a common set of Key Performance Indicators. Indian railways have always been proven to make a right decision before investing in any digital initiatives. They have a clear sight from project-level KPI to the goals on the Strategic Scorecard. Moreover, top Management play a major role in the process of Digital Transformation following a top-down approach. However, the Top management can enhance their progress more by better engaging with the employees, promoting a healthy work culture, having feedback sessions regularly, to make the employees feel heard. Also, the top Management should focus on incorporating slight adjustments to accommodate employees to voice their opinions through the Digital transformation process.

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