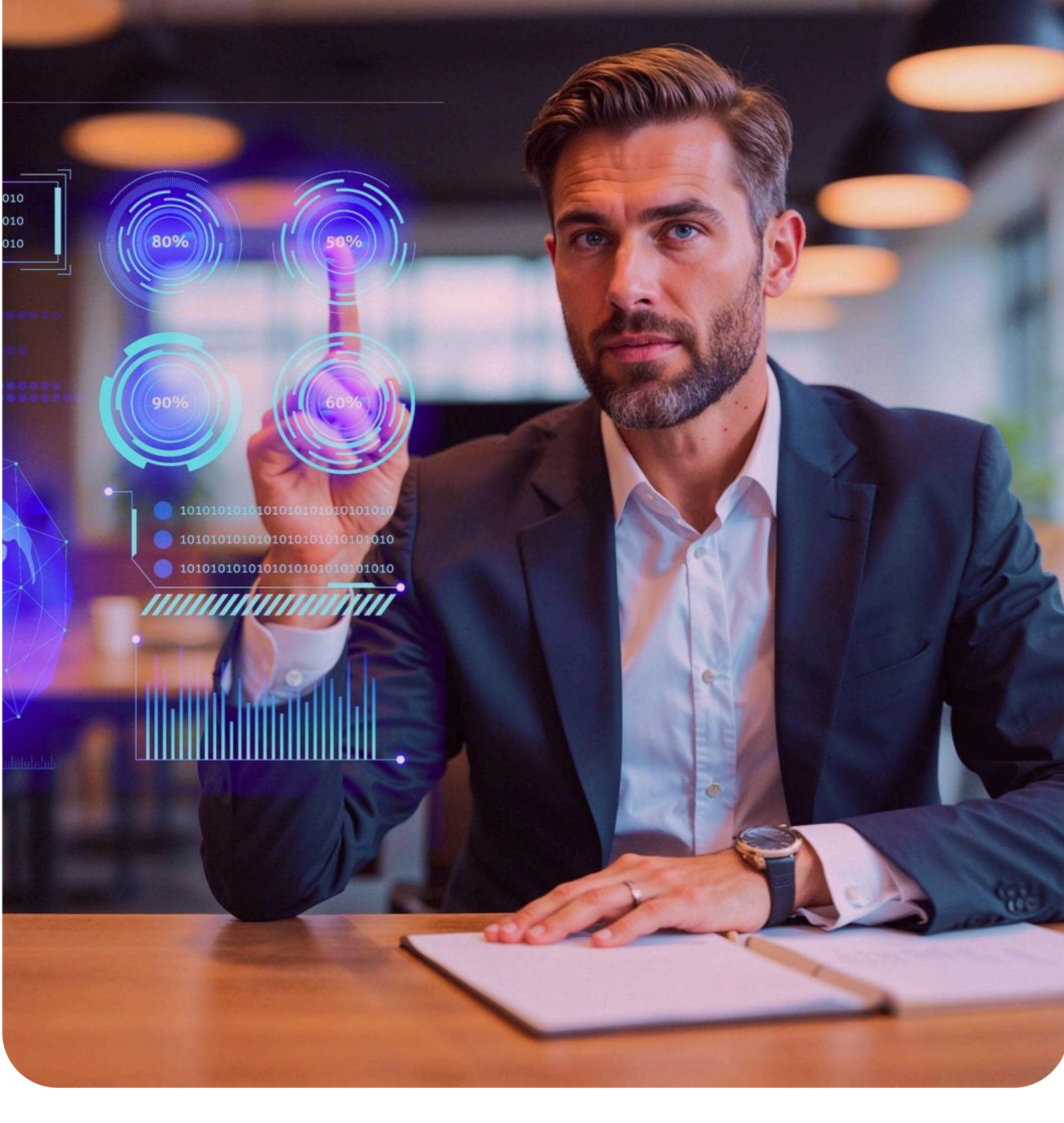


# How did DRC Systems transform the concept of skilling & upskilling by creating a robust platform?



## An Overview

The client wanted to build a responsive and user-friendly digital platform to transform skilling, reskilling, and upskilling initiatives across the country. They wanted to build a platform that provided skills beyond traditional learning by combining online courses, multilingual support, AI-based recommendations, and many other features. The final product was built to improve skill development while bridging the gap between education and employment opportunities, making quality learning accessible to all.

## Key Business Objectives

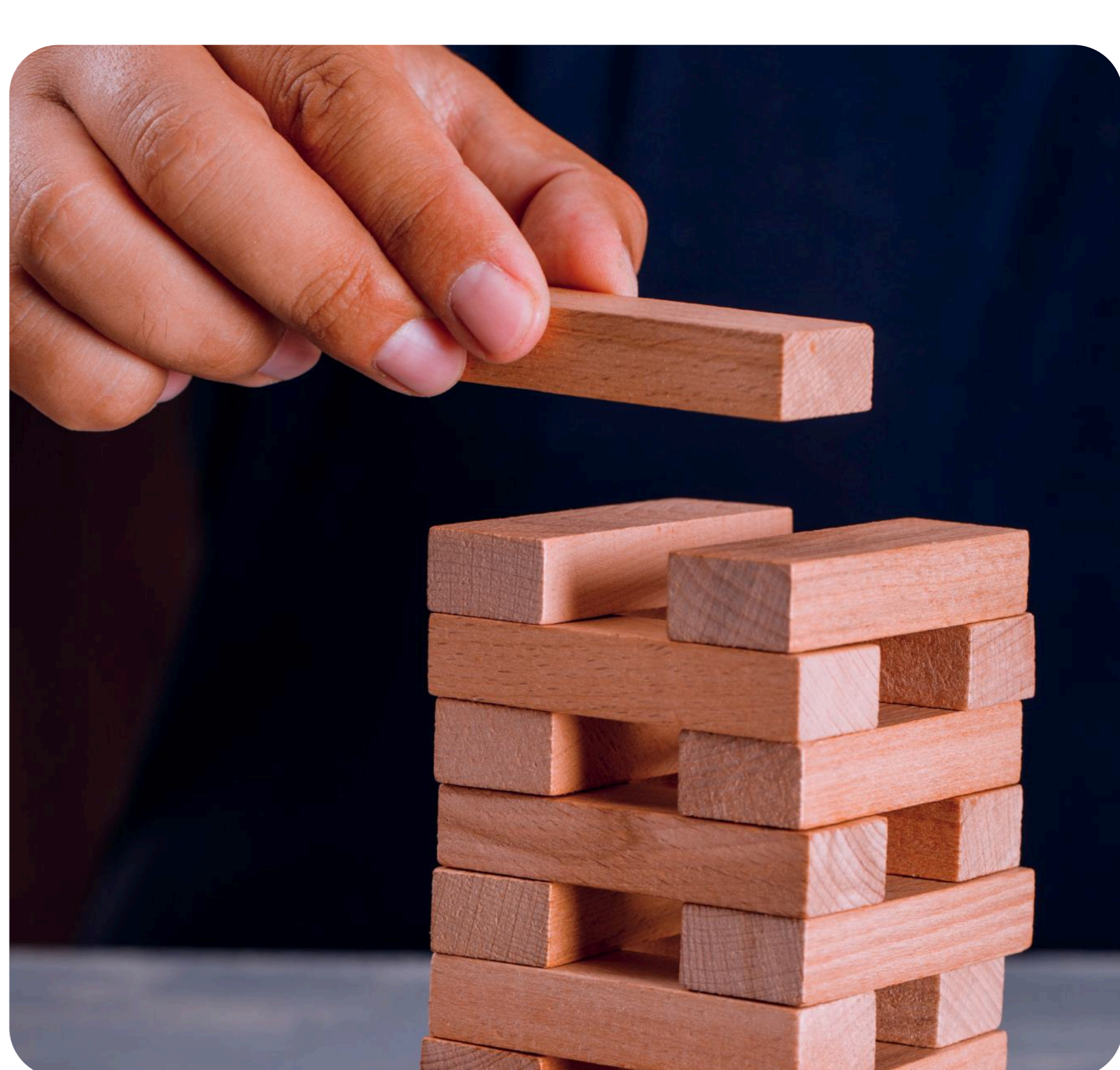
The primary purpose of the client was to change their course creation process quickly, more efficiently, and more engagingly for the learners. Let us look at the different objectives they wanted to achieve:

<p><b>Skill development</b></p> <p>Provide skilling, upskilling, and reskilling opportunities for users nationwide.</p>	<p><b>Job connectivity</b></p> <p>Provide a job marketplace to network skilled workers and learners with employment opportunities.</p>	<p><b>Secure access</b></p> <p>Offer verified and trusted access with national identity-based registration.</p>
<p><b>Multi-language support</b></p> <p>Due to the different languages spoken nationwide, courses were to be made accessible in these different languages for a wider reach.</p>	<p><b>Data-based insights</b></p> <p>Provide analytics for decision-makers to improve any learning outcomes.</p>	<p><b>Multi-device access</b></p> <p>Guarantee a smooth learning experience through web and mobile platforms.</p>

## The Challenge

Some of the challenges that we faced while developing what the client required include

- Project expansion:** Building a platform that can manage millions of users with high upkeep activity.
- Integration difficulties:** Integrating different systems, including job boards, AI recommendation engines, and analytics tools.
- High security:** Since it is a national platform, implementing measures for secure access with mobile OTP and national identity-based registration was required.
- Multilingual support:** Delivering content in 20+ languages without sacrificing usage was a difficult task to pull off.
- Content Standardization:** Managing course content, assessments, and SCORM compliance across different platforms and formats.



## Implementation & Solutions we Offered

<p><b>Digital Learning Platform</b></p> <p>DRC Systems implemented a digital learning platform that helps users take skilling, upskilling, and reskilling courses from anywhere at any time.</p>	<p><b>Learning Milestone</b></p> <p>The platform has achieved 5.5 million registrations and 1 million successful enrollments.</p>	<p><b>Skill-based Hiring</b></p> <p>It integrates a job board where opportunities are listed, functioning as a marketplace connecting job seekers and job providers with specialized skills.</p>
<p><b>Smart Recommendation</b></p> <p>The platform includes an AI recommendation engine that suggests courses and opportunities based on a user's education, location, and demand trends.</p>	<p><b>Chatbot Assistant</b></p> <p>A WhatsApp chatbot enables users to ask questions, explore the platform, and find relevant courses, content, and job opportunities.</p>	<p><b>Analytics Dashboard</b></p> <p>Analytical reporting tools assist decision-makers in leveraging insights to improve the quality and reach of skilling initiatives across the country.</p>

## Features

- Online Learning - Skilling, Upskilling & Reskilling:** The platform enables users to earn new skills, upskill and reskill themselves, helping to better employment and skilled resources in the country.
- AI-based Recommendation Engine:** Users/learners, based on their demographics, can choose skills they should do for better opportunities to increase their income or get a job through AI recommendations.
- Registration/KYC with the National Identity:** The platform provides role-wise dashboards where each role has its own dashboard and activities to be performed accordingly.
- 20+ Types of Assessment:** The platform empowers you to have 20 types of quizzes like MCQ, Text input, Numeric response, Checkboxes (multiple choice, multiple correct answers), File submission, and more.
- iOS and Android Native Application:** The platform supports both native applications like iOS and Android, so this is built with a mobile only approach for users/learners.
- Discussion Forum:** The discussion forum in the platform enables peer-to-peer discussion between users and authors, so the learners can ask the question that can be answered by the course author.
- GIS:** GIS is enabled to see graphically various skills centers available, employers available, Institutes, Universities, Trainers etc.
- Mobile OTP for Authentication:** An otp is sent for the authentication of users on their mobile number and this mobile number has to be the same as on their national identity.
- Course Authoring Studio:** A course authoring studio which helps to configure and author the course as per your requirements. Also, comes with a course catalogue.
- SCORM Compliant:** Offers SCORM support via a third-party XBlock, providing seamless interoperability between content and learning management systems.
- PowerBI based Reports:** Various reports and dashboards are shown publicly using Power BI as a data analytics tool, which helps decision makers to make the right decision.
- Other Features:** Additional features include 1). Digital CV 2). Zoom integration for courses and webinars 3). Auto-graded assignments 4). WhatsApp & Push Notifications 5). Reports and more.

## Business Impact

<p>This platform has significantly transformed the way learners access skill development opportunities, creating measurable outcomes for both the users and administrators.</p>	<p>Due to the platform, more than 5.5 million registrations and 1 million successful enrollments were achieved, making skill development available nationwide.</p>	<p>Learners gained the required skills and accessed to job opportunities with the integrated job marketplace.</p>
<p>The AI recommendation improved course engagement by suggesting required learning paths for user profiles.</p>	<p>Power BI analytics and reporting tools allowed admins to track progress, identify gaps, and improve skilling initiatives.</p>	
<p>The AI recommendation improved course engagement by suggesting required learning paths for user profiles.</p>	<p>Multilingual support and mobile apps made sure that learners from different regions could participate effectively.</p>	

## Technology Stack

<p><b>Frontend</b></p> <p>React JS, HTML 5, CSS3, Mako, JQuery, JavaScript, BackboneJS</p>	<p><b>External Services</b></p> <p>Celery, Elasticsearch, Redis, uWSGI, Caddy Server</p>
<p><b>Backend</b></p> <p>Python, Django, ROR</p>	<p><b>Databases</b></p> <p>mongoDB, MongoDB, MySQL</p>
<p><b>Mobile App</b></p> <p>iOS and Android, React Native</p>	

## Conclusion

The digital learning platform reinvented skilling and upskilling across the nation by joining personalization, accessibility, and engagement together in a single solution. The platform powered millions of learners while connecting them to the right employment opportunities. The solution also enhanced learning outcomes, but also fortified the entire skill environment, which made quality education and employment scalable.