CREATING A
GAMIFIED LEARNING
EXPERIENCE

Digital Platform for Learning
Traditional teaching methods are being replaced by a more experiential approach using technology as a tool for transformation.

As a leading publisher of books for schools and universities, the client wanted to provide students with a digital platform for learning. The platform offers courses based on existing school/university curriculum with integrated assessments for self evaluation and a gamified learning experience.

The company faced several challenges while offering courses for students.

- The existing web platform was not interactive or intuitive
- Absence of a mobile platform to facilitate learning
- The need to reduce time and effort involved in creating learning content
- Keeping track of courses and participants was cumbersome

QBurst developed a solution that uses game mechanics to create self-paced learning content and interfaces. The solution comprises a full-fledged eCommerce bookstore with categorizations based on university, grade, and topic. A secure offline player (for web and mobile) provides easy access to purchased books, videos, and assessments. User have the flexibility to manage course completion schedule along with sync option to show pre/post/summative assessment. The platform also includes an online forum which connects users to subject matter experts and student groups.

We successfully ported components of the existing learning system into the new platform. Key components of the solution are:

- eBooks (PDF documents of study material)
- Assessments (online tests and assessments of each subject/module)
- Digital content (stream video and audio content from a third-party website)
The web portal and mobile platform (iOS and Android) can be accessed by students, faculty, and guardians. The solution features role-based access controls, data encryption, and secure authentication to connect to the cloud.

**KEY FEATURES**

- Built-in integration with multiple payment gateways such as PayU
- Integration and settlement facility with Visa
- QR code scanner (mobile) to scan book codes and search for related digital content
- Reader app: Content protection, offline mode, PDF to Flash converter (SWF)
- Incremental Course Progression Management: Goals, challenges, and scores
- ‘Trial Copy’ to view book portions before purchase
- Recommendations on top sellers and discount/combo pricing
- Instant feedback
- Collective learning: Group/forum discussions and scoreboards
- Admin panel to add content, moderate forum, and manage pricing/licenses/banners
- Social media integration: View friends who access same learning content

**TECHNOLOGIES**

- PaaS
- Amazon Web Services (EBS)
- Integrated Development Environment
- OpenCart
- Mailgun
- Automated Communication Channels
- Reader App
- Programming Language
- PHP
- Java
- MySQL
- Android
- Swift
- iOS
- Android Studio
### BUSINESS BENEFITS

<table>
<thead>
<tr>
<th>Conventional System</th>
<th>Gamified Learning Solution</th>
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<tbody>
<tr>
<td>Greater marketing effort required for student enrollment</td>
<td>Enrollment effort reduced by 35%</td>
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<tr>
<td>High dropout rate</td>
<td>Dropout rate reduced by 28%</td>
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<tr>
<td>No metrics available to analyze engagement level or performance</td>
<td>Real-time analytics and reports on enrollment, engagement, and performance</td>
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<tr>
<td>Low course completion rate</td>
<td>Improvement in overall course performance</td>
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<tr>
<td>Reduction in monthly enrollments</td>
<td>Mobile application with over 100,000 new users added in 9 months</td>
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