SAP Innovation Awards 2019
ENTRY PITCH DECK
Real Time Business Intelligence for Topgolf
Village Roadshow Limited
Australia’s First Topgolf
Real-Time Business Intelligence for Topgolf
Village Roadshow Limited

"Quote"

“I was delighted how rapidly the team was able to deliver a comprehensive analytics solution, from real-time metrics to in-depth analysis. The insights helped us optimize operations, especially early on after opening and now the analytics are fully embedded in the way we work and a key instrument for decision making”

CEO
Kirk Edwards
Village Entertainment & Topgolf Australia

Challenge
Topgolf Australia (as a Village Roadshow joint venture) were building a new $35 million, 3 level entertainment venue on the Gold Coast. The project team had a pre-selected analytics solution but it could not incorporate all the Australian-specific requirements. A different analytics solution was required just prior to the launch of the venue. Without a solution we wouldn’t be able to launch, risking a loss of approximately $77k per day.

Solution
The Topgolf entertainment venue operate using real-time and near real-time business intelligence and analytics. We chose SAP because of the speed and it being the only solution comprehensive enough to deal with the complexity of the project. It also happened to be the lowest cost. The solution included SAP HANA, SAP Cloud Analytics, SAP Business Warehouse, and SAP Business Objects BI.

Outcome
The project went live in June 2018, in only three weeks from project start date. A 360-degree view of management and operational analytics were available on day-one and are utilized ongoing.

Labour Cost Reduction: 15% reduction in Labour Costs
Increase in Net Promoter Score (NPS): 23% Increased NPS
Lowest cost BI/Analytics project and ongoing cost: 50% saved (compared to other software vendors)
Business Challenge & Objectives

Business Challenges:
Topgolf started in the UK and USA and are expanding globally. Village Roadshow were introducing the concept to Australia. It’s a huge $35m investment for the venue. The game is interactive and innovative with micro-chipped golf balls. When you play the game, target sensors give you immediate scores at your climate controlled hitting bay. Business analytics are used to run virtually every aspect of the business. Due to localization, a different BI/analytics solution was required compared to the US software. The three weeks project timeline had the requirement to build, test & Go-Live with the near real-time business analytics that were needed to extract from five different non-SAP systems and then report to Operations, Sales & Marketing, Food & Beverage, Finance and the executives globally.

Objectives:
1. Deliver a 360-degree, near real-time view of the business in three weeks (including a real-time report for Point of Sale revenue, which was to be reported on a mobile device).
2. Create a detailed labor, spend, and cost-of-goods-sold analytical tools to improve margins.
3. Develop near real-time customer experience reports that marketing and other functions can act on based on instant feedback.
4. Extract data in near real-time from 5 non-SAP systems; including point of sale, gaming, labor, management, and customer experience as well as SAP ERP.
5. Leverage the available financial reporting layouts used by other Village Roadshow divisions.
Project / Use Case Details

**Labor Optimization** – Labor is the highest cost line item in the P&L. So any impact we can make on reducing labor cost has a huge impact. We are able to see where we are spending in every function, from the kitchen to the front office, and wherever we can see the labor costs and trends we can optimize. Changes can be implemented in weeks.

**Customer Experience** – In order to play you have to become a member so we have a lot of rich information about the customer. When they finish a game we immediately collect customer feedback data, analyze it in near real-time, and send that back to each of the key functions. The kitchen gets feedback on the food for example, and if customer had a problem with service or wait times at the park we can immediately issue a voucher for a free game next time they visit.

**C-Suite** – Our executives like to have a 360-degree view of the business and so we were able to provide live updates on the key KPIs anytime, anywhere via mobile.

**Speed** – In order to deliver the project in the very tight timelines and meet the real-time requirements we needed to use every innovation tool that SAP has to offer:

- **SAP HANA** to fully optimize loading and & querying for query runtimes and data storage through the In-Memory columnar database.
- **SAP Analytics Cloud** to enable rapid deployment of dashboard style reporting by the VRL “Group – Business Systems” team.
- **SAP BusinessObjects Web Intelligence** and the **BI Launchpad End-User Portal** to broadcast the pre-formatted and background executed reports directly to a large distribution audience (including the executives in UK and U.S.)
- **SAP Analytics Cloud iOS App** to execute on any iOS device (while not being connected to the corporate network through VPN).
- Use of robust intra-day (hourly) loading mechanisms (in both **SAP Data Services** and **SAP Business Warehouse**) for near-real-time results and alerts for the business critical information areas.
- Use of lean data modelling and data cleansing/extension facilities such as the **Eclipse-based BW Modelling tools** for creating InfoObjects, Dataflows, BEx Queries, Global Variables etc.
- Use of rapid development configuration objects like **InfoObjects, Advanced ADSOs with Field-based Modelling, Open ODS Views** and **Composite Providers** for the **Virtual Layer** of the dataflow.
Benefits and Outcomes

Business / Social

The first business impact was being able to launch in 3 weeks. Since the venue opened, we’ve had approximately 300,000 total visitors, averaging 1,400 each day. At roughly $55 per visitor spend, that’s potentially $77k per day in lost sales revenue every delayed day (if the go-live was affected due to having no BI/Analytics solution). This loss was avoided due to meeting the rapid implementation timelines.

The second is labor optimization. With a view into all the different business functional areas, and the ability to analyze data and respond with new guidelines in weeks, labor costs were reduced by 15% over the first six months without impacting the guest experience.

IT

With SAP we were able to leverage a comprehensive set of tools that met all our needs including near real-time data, integration with five non-SAP systems, and a three week “build, test, and launch” window. The project was able to be delivered with in-house resources.

Based on the comparisons we did to alternative BI/Analytics solutions to meet this need, we realized a saving of $65K just by using the SAP product suite.

Topgolf Gold Coast also make use of the amazing self-serve capabilities of the SAP Analytics Cloud for generating new visualizations.

Human Empowerment

Customer Experience reporting provides each function with near real-time reports from our customer surveys at the end of the playing time. This allows our Operations Managers to make decisions about how to best serve the customers and improve customer service and guest loyalty.

For example: the improvement shown in the Net Promoter Score (NPS) metric was 23% over the first six months of operation as Managers were able to analyze results to make rapid and educated decisions due to having these analytics available from the business go-live.
Deployment

Date of Deployment: June 2018

Number of live users: 40

SAP Technologies Used:

- SAP HANA 1.0 (Revision 112) Live
- SAP Analytics Cloud Live
- SAP Business Warehouse (750) Live
- SAP BusinessObjects Data Services (4.2) Live
- SAP BusinessObjects BI (4.2) Live

Server / Processor: HANA 1.00.112 on LENOVO hardware

Linux Distribution: SUSE Linux Enterprise Server 12.1 ( LINUX_X86_64 )
# Emerging Technologies and Use Cases

The following emerging technologies and use-cases are part of the project and describe the contribution:

<table>
<thead>
<tr>
<th>Technology / Use Case</th>
<th>Yes / No</th>
<th>Contribution to Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Machine Learning / Artificial Intelligence</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>2. IoT</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>3. 3D printing</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>4. Blockchain</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>5. API Economy / Integrate the Intelligent Enterprise</td>
<td>Yes</td>
<td>Integration using Mulesoft for extraction of Survey Data into SAP Data Services and SAP BW/HANA</td>
</tr>
<tr>
<td>6. Cloud Native / Event Based Architectures</td>
<td>Yes</td>
<td>Lowered the per-user cost through use of SAP Analytics Cloud analytics. Used Live BW-based models in stories with SSO to Azure Cloud IDP.</td>
</tr>
<tr>
<td>7. Extending the digital core with SAP CP / ABAP in SAP CP</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>8. SAP Leonardo Application ( extending SAP application, using Industry Innovation Kits or result of Design Thinking workshop)</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>