ICON Develops an Integrated Digital Solution for Lux-Airport

Lux-Airport is Luxembourg’s main airport and acts as the country’s focal hub for the rest of Europe. The boutique airport receives over 3 million passengers per year travelling to 72 directs locations around the world. The airport’s main terminal offers a huge range of facilities including shops and restaurants, a number of passenger services for general and business travel as well as over 7,400 parking spaces around the airport. Apart from passengers, the airport facilitates the transportation of cargo, having more than 800,000 tonnes pass through on a yearly basis.

Insert corporate video - https://www.lux-airport.lu/journey-starts-corporate-movie/

Business Objective: A Personalized Experience for the Connected Traveller

Technological advances combined with evolving user behaviours and expectations provide ample opportunities for enhanced personalized services in support of specific user tasks, differentiated by user profile and/or user location at the time of interaction: emphasis on way finding at the time of entering the airport parking; check-in information at the time of entering the main hall; special shopping offers matching user profile predicated by the closest duty-free shopping shelf are key to create a seamless experience.

The newly developed digital assets needed to establish the Lux-airport brand character as personal, aspirational, efficient, and easy. This is underscored by the new tagline “My Journey Starts Here” within the context of the SoLoMo (Social, Local, Mobile) digital strategy.

To further personalize the passenger’s experience, geo-targeted content in French, German and English was required. This needed to be supported by a user-friendly content & information architecture – which is targeted to meet different users’ needs, and content which is optimised for high visibility in search engines.
Business Objective: A User-Centric, Mobile First Design

Lux-Airport’s objective was to put the user at the centre of its design to clearly understand their needs and translate these into an elegant, intuitive, dynamic interface. The new assets needed to provide a seamless travel experience for Lux-Airport passengers by combining mobile app technology with the Lux-Airport website information designed to assist stakeholders through every step of their journey.
Solution:

While the project was expected to meet passenger’s high-expectations, a value conscious approach to the development process was required. With a deep understanding of the travel and aviation industry, and a highly-qualified team, ICON was able to offer a cost-effective solution utilizing a balance of ‘off the shelf’ technology frameworks, as well as bespoke software development to meet core airport-requirements.

Being a Microsoft Partner, ICON leveraged its skills and experience to develop the core technology in .NET4.5x framework, while an open-source content management system was integrated for the day to day management of the website’s content. An iOS and Android Mobile Application were developed through the Xamarin framework to increase agility during development and speed up the process to ‘go to market’.

To ensure the final solution is aligned to passengers’ needs, ICON, a Google Partner assigned its Digital Marketing experts to perform an independent study of passengers’ behaviour patterns during different stages of their journey to online purchase. This involved various techniques including persona identification & segmentation, passenger journey mapping, user-testing, heat-map analysis, competitor analysis as well as stakeholder interviews with Lux-Airport’s management, customer service, marketing and technical team.

The outcome of the research was very insightful and allowed ICON and Lux-Airport to design a highly-targeted solution for its customers.

UI & UX experts were involved to design a unique concept around the user’s experience which is encapsulated in a personalised tagline ‘my journey starts here’. Following a rigorous UAT process,
the design concept was translated into a highly responsive, user-centric web and mobile based-solution. Both channels aim at offering timely, relevant and personalised information to users based on their location and their activity on the airport’s digital channels.

Utilizing an Agile Development Methodology, ICON was able to plan, develop and deploy a number of innovative features within a relatively short-time frame, ensuring the project deadline was met. This process was supported by a dedicated Account Manager & Business Analyst and governed by ISO9001:2008 Quality Assurance processes.

Some of the key features which passengers can find on the Lux-airport website and mobile application are listed below:

- **Flight Status Tracker:** A custom-built widget featuring real-time flight status updates for passengers arriving and departing the airport.
- **Live Flight Tracker:** Integration to an open-source technology platform offering users the ability to track the geolocation of any flight in real time
- **Indoor Maps & Positioning:** An interactive map of the airport that supports the user path both before and during their experience at the airport.
- **Flight Timetable:** A custom-built flight timetable which allows passengers to quickly locate the different flights and destinations Lux-Airport supports.
- **A user-friendly and practical solution offering users the ability to locate the different car parks and easily obtain a parking quote online. This will be further advanced through the integration of a dedicated parking management system to facilitate the entire booking and payment process online, while helping the airport maximise its revenue potential through data mining capabilities.
- **Real-Time Personalisation Platform:** A custom-built platform allowing the airport to deliver real-time, personalized messages based on passengers’ micro-location and activity across the airport’s digital channels and physical location. Specific modules which were developed include:
  - **Business Intelligence (BI):** Advanced analytics allowing the airport to track the source, behaviour and intent of its visitors across the website and mobile application. A combination of quantitative data and qualitative data is measured across the different devices – such as downloading, subscribing, hovering, scrolling, clicking, inactivity etc.
  - **Permission-Based Marketing:** Importance is given to the visitors’ privacy and preferences towards receiving communication. Clear policies are outlined and an opt-in process is made available for users to give their consent to receive relevant and personalised information from the airport.
  - **Unified Customer Profile:** A single view of the customer is key to providing a superior experience. This is done through the integration of multiple data sources and storing the information securely in a central data warehouse. Big Data is eventually transformed into meaningful insights which the airport can access through a simple dashboard.
Targeted Messages: The airport can create personalized and timely messages through web and mobile push notifications, based on real-time segmentation. These can be pre-scheduled in advance or created on the fly. Through the integration with CISCO Wi-Fi spots, the airport is able to engage with passengers during their journey at the airport – this may include exclusive offers based on the passenger’s proximity to a retail/dining outlet, parking location with way finding capabilities, flight status updates and more.

Automated Marketing: Integration to a robust Email Marketing platform was necessary to support real-time communication regarding flight status updates. However, with the support of a content marketing plan, the airport can deliver relevant and practical information to assist users during the planning, booking and travelling phase. Day-after marketing is another key asset to collect feedback from passengers and continually improve the airport’s offering.

Dark Site: The website’s ‘architecture and hosting infrastructure needs to be able to cater for a high-surge in traffic should a crisis occur at the airport. Moreover, the content displayed in emergency situations is different to that displayed on a daily basis. As a result, a dedicated emergency response portal (also known as a ‘Dark Site’) was required. This involved the development of a simple-user interface, stripped down from all marketing material, and a backend for management to activate the Dark Site through unique key codes. Integration to Social Media was key to facilitate cross-channel communication.

Hosting & Support: Being a mission critical website, with millions of users visiting the portal every year, a secure, reliable and cost-effective hosting solution was required. ICON partnered with Microsoft Azure to offer Dedicated Hosting with uptime guarantees and full Disaster Recovery plans. A 24/7 Service Level Agreement is also in place to ensure continuous improvement and this is backed up by an independent management process and response time guarantees.

Following the website’s launch, ICON has provided a number of training programs to ensure Lux-Airport’s team will be able to independently manage the website content and its related functionality.

Airports are increasingly challenged to improve travellers’ experience and provide innovative solutions to support today’s age of ‘connected travellers’. Now that the solution has been deployed, travellers arriving and departing from Lux-Airport will be able to plan their trips better, decide on the best method to get to the airport and optimise their time while at the airport whether its enjoying a delicious lunch or buying presents for their loved ones. This innovative end-to-end digital solution will give visitors an excellent experience that extends beyond the airport terminal.
“The new website and mobile application work seamlessly together to offer a unique experience, making it more convenient for every person to plan their trip to and from the airport. This innovative end-to-end digital solution aligns perfectly with the ethos of the Luxembourg Airport brand and we are very excited by the new potential it has opened up for our business.”

Johan Vanneste,  
President & CEO  
Luxembourg-Airport

“We’re extremely privileged to be working on this assignment for one of Europe’s best airports. Luxembourg Airport turned to ICON to achieve true competitive advantage and accelerate the speed and agility of its digital growth. ICON’s deliverables are technologies that relentlessly help reshape the Airport’s differentiation and performance. Embracing the strategic importance of the web and viewing it as a crucial competitive advantage is undoubtedly a key to the success that has been achieved by Luxembourg’s Airport in recent years.”

Dr. Gege Gatt,  
Director  
ICON

“Exceptional value, worth more than we paid for it”

Chris Bruck  
Project Manager  
BeSpeak Inc (On behalf of Luxembourg-Airport)

Discover the Lux-Airport website now