



CURVE IT CASE STUDY

British Airways i360

British Airways i360 is the world's tallest moving observation tower, located in Brighton, conceived and designed by Marks Barfield Architects. The visitor attraction launched in August 2016 attracting international media attention and visitors from all over the world.

As a new construction project, British Airways i360 had extensive IT infrastructure requirements to be planned, designed, developed and installed to tight deadlines and budget. These included WiFi connectivity across the site and into the pod at 138 metres high! It also included the IT network set-up for the back office, the technical engineers, the event spaces and the restaurant.

IT STRATEGY

- To design and deploy the full IT infrastructure – including the main communications room – for the visitor attraction, guaranteeing that everything was designed to the very specific architectural vision.
- To deliver high-speed, building-wide, reliable and secure network connectivity to visitors, conference delegates and the operations team.
- To provide WiFi connectivity for visitors and operations within the giant glass viewing pod from sea level all the way up to 138m high in the sky.

PROJECT MANAGEMENT

- We worked closely with Marks Barfield Architects and the British Airways i360 operating team in the construction phases advising on design, procurement and installation of all the IT infrastructure.
- Throughout the project we collaborated with the main building contractor, the electrical contractor, CCTV supplier, ticketing system provider and other third party contractors to ensure that the IT infrastructure was aligned to optimise the building and operation management systems.
- At the start of our involvement in the project our consultants were involved in regular construction meetings. As the British Airways i360 approached opening our consultants and technical team were on site throughout, installing and configuring all aspects of the IT infrastructure to meet the launch deadline.



PLANNING

- Our team of consultants reviewed the client brief, architectural drawings, Mechanical and Electrical service proposals. Fully immersing ourselves in the build enabled us to highlight risks and constraints to IT delivery.
- We collaborated with architects, contractors and the operational management team to ensure IT requirements across all areas would be delivered.
- We helped advise on the selection of suitable connectivity into the building, facilitating the installation of the circuit in parallel with construction.

DESIGN

- Our consultants architected the complete IT infrastructure designed to deliver upon the client's requirements.
- We included security by design, including hardware and software that protects the client's and the public's data.
- A pre-build WiFi survey was completed using CAD architectural drawings and the latest technology. This enabled us to create a virtual model of the planned network, ensuring WiFi access points were placed efficiently to maximise coverage, reduce 'black spots' and minimise costs.
- We designed the main communications room for the building; we provided detailed drawings to ensure equipment fitted properly; that suitable power was provided; and we facilitated connectivity into the building.

- Our team identified enterprise grade equipment in line with the client's budget securing a great feature set and good warranty level.
- We designed the office network and physical space for cabling and power specification.

DELIVERY

- We supplied both hardware and software required for the IT Infrastructure including the data cabinets, power distribution units, networking equipment, server equipment, patch cables etc.
- We provided payment gateways and CCTV links.
- We installed and configured the WiFi network across the site including in the shop, restaurants, event spaces and the back office.
- We devised and tested the methodology for the WiFi radio link installation in the glass viewing pod to reach 138m high.
- We installed and configured IPTV across the network for several TVs throughout the building.
- We sourced and installed all IT equipment and VOIP telephone system for the office team.
- British Airways i360 is now being supported by the Curve IT Support Helpdesk through a managed service contract. This enables us to support the Operational Management team and manage the network proactively through our monitoring and alerting system.



BENEFITS

- Our IT Consultants were brought into the project half-way through the two-year construction period. Although this is relatively far into the RIBA Plan of Work* stages, we were quickly able to identify the necessary IT Infrastructure and help to shape the technology within the building to meet the client's vision. We influenced changes to the building during construction saving on post-launch retrospective IT installation costs.
- Our WiFi design practice ensures optimal wireless network design typically delivering better connectivity and significant cost savings by avoiding over-scoping on hardware.
- Visitors to British Airways i360 received high-speed and reliable WiFi throughout the building and in the pod from the day it opened. This enables visitors to connect to the WiFi to share their experience of the attraction in real-time on social media channels.
- Providing free WiFi in the restaurant and café is known to increase customer dwell time and therefore provides further opportunity to increase revenues.
- Dynamic VLAN configuration allows for bespoke delivery of WiFi and wired connectivity to conference and event clients.
- WiFi in the glass viewing pod enables PCI compliant card payments at the Nyetimber Sky Bar.

We are very proud to be the appointed technology partner to British Airways i360. We provide them with an on-going fully managed IT service and IT support.

“Curve IT were the client side IT consultant for British Airways i360 during the construction phase of the project. They understood the client’s aims for the building including the flow of people and the work spaces that would require guaranteed connectivity. They planned, mapped and implemented connectivity to suit the customers’ and operations team’s needs alike. Including designing & installing WiFi provision inside the moving glass pod.

As an architect, I can see real merit in employing Curve IT as a technology consultant in the early stages of the RIBA Plan of Work for construction projects. Their knowledge and experience of scoping and implementing the technology infrastructure for buildings can ensure that operational efficiencies are achieved, install costs are optimised, connectivity is guaranteed and end-user expectations are met.”

Ian Crockford, Director, Marks Barfield Architects

*The RIBA Plan of Work 2013 (devised by the Royal Institute of British Architects) organises the process of briefing, designing, constructing, maintaining, operating and using building projects into a key number of stages.

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To discuss our work with British Airways i360, please call us on 01273 806220

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