

Background

AT&T is the world's largest telecommunications company with its origin dating back to Alexander Graham Bell's invention of the telephone. Through AT&T Labs and the AT&T Foundry, the company's legacy of innovation includes eight Nobel prizes and continues with more than five company-issued patents every day.

Since 2013 when the company was named the official wireless sponsor of Walt Disney World Resort, the relationship with Disney has developed into one that is rich in collaboration and innovation.

One such example of this is the collaborative work on Project Axle— a mobile application proof-of-concept developed jointly by AT&T and Walt Disney World Resort over a six-month period. This innovative tool was designed to aid Disney in maintenance roles like never before by creating a mobile application to readily equip them with the information they need, when and wherever they need it in the field.

Unlike the traditional vendor-customer relationship, AT&T representatives worked directly with Disney to better understand their business and technology needs to meet an evolving workflow strategy.

Collaboration/Ideation

AT&T and The Walt Disney Company have enjoyed a long-standing Corporate Alliance relationship. In the spirit of collaboration, teams from AT&T and Walt Disney World Resort developed this innovative digital tool that was designed to enhance the Cast's ability to approach maintenance workflow processes behind the scenes.

When Disney and AT&T first came together to determine how they were going to use technology to create this targeted solution, the companies engaged in a series of robust ideation sessions developed by the AT&T Foundry called "A Day in the Life."

Together, AT&T and Disney developed and tested an intuitive, interactive mobile application proof of concept. This innovation was designed to aid Cast Members in maintenance roles by providing a common interface to many backend data systems allowing a more seamless mobile delivery of the right content at the right time in the right place.

"Location based technology and data movement are two things we must have to be successful to get information into the hands of our frontline cast members."

Mark Todd, VP Engineering
 Services and Manufacturing,
 Walt Disney Parks and Resort.

The technology platform would require:

- Rapid credential authorization and validation
- Geo-location and mapping
- Schematic design information and required inspection data and diagrams
- Instantaneous video delivery and communication capabilities

AT&T and Disney selected a Walt Disney World Resort location where they could run field tests—the iconic Epcot attraction "Test Track Presented by Chevrolet." This attraction offers Disney guests a three-part experience:

- First, guests have the opportunity to design their own vehicle car, truck or crossover with some helpful hints from the Chevrolet designers built into the process. Designing a successful vehicle requires some careful thought about how to balance capability, efficiency, responsiveness and power some of the key elements that Chevrolet designers must consider with every new vehicle they imagine.
- Next, they have the chance to test drive
 their vehicle design, through the ride, on
 track surfaces that simulate the actual
 vehicle validation process that Chevrolet
 engineers use to ensure every new vehicle
 meets the highest performance standards.
 Each guest's vehicle design will be evaluated
 and scored based on how well their design
 balanced the core attributes.
- Finally, guests have the opportunity to race their vehicle over changing terrain and extreme conditions on a digital driving table, produce and share a TV commercial starring their custom vehicle and pose for action shots in front of their design.



Test Track proved to be ideal for testing because Disney maintenance and engineering Cast Members routinely inspect every single ride vehicle and attraction element daily.

AT&T engaged the AT&T Foundry in a traditional Foundry sprint operation. The innovation engagement refined a way to move to scoping a Foundry project, conducting a Foundry sprint and developing the eventual platform.

Then, AT&T and Disney refined concepts for the technology platform. AT&T even joined Disney maintenance Cast Members on a night shift to fully grasp the processes and techniques the Cast Members employ while conducting routine inspections on attractions before the park opens.

Challenge

The greatest project challenge for both companies was balancing quality and timeliness of the overall project. AT&T and Disney's legal departments needed to thoroughly examine intellectual property agreements and other aspects of the project to proactively mitigate any potential issues, while still ensuring that the project stayed on schedule.

Other challenges included process delays, technical issues and organization communication barriers based on the sheer size of both companies. These delays, however, enhanced the collaboration between these two large two companies, as they strived to come up with solutions together.

"Walt Disney World has many Cast Members who need to access technical documents and maintenance manuals. When a situation arises. Cast Members currently have to stop what they're doing and manually retrieve documents from where they're physically stored. We worked with Disney to understand their needs, and then we used that knowledge to develop potential solutions. We looked at different location technologies and machine learning algorithms to help transform that data into a list of documents that the end user might need. We presented the resulting proof of concept to automatically stream the right information to the right cast members as they moved about the park."

> Michael Albrecht, principal product development engineer, AT&T



Solutions

AT&T then developed a proposal for the technology platform, using insights from their field work with Disney. After the proposal was approved, the AT&T Foundry began programming the data transfer codes and machine learning codes to create an innovative prototype.

This prototype seemed to fit the need of Walt Disney World maintenance Cast Members by enabling them to:

- Receive notifications about the fastest way to arrive to the job site
- Pre-load all ride specifications, maintenance and inspection information on the tablet prior to their arrival
- Reduce maintenance and repair time

After building and pre-testing the prototype, AT&T presented it to Disney in November 2015. The response was overwhelming. It was the first time ever that the AT&T Foundry team members had ever received a standing ovation from another company after presenting a prototype, and they knew it set a precedent for future innovation.

Over the next year, AT&T continued working with Disney to refine, deploy and demonstrate the prototype to executives.

"Learning how to work together was always our number one priority in the initial stages of ideation, and creating mutually agreed to goals allowed our relationship to strengthen.

We also knew we had to think differently when it came to business processes Using proven collaboration methods and staying agile, helped our projects take shape much faster."

Brent Dutka, Associate
 Director Market
 Development, AT&T

The unique collaboration agreement became a development roadmap that resulted in several significant projects with WDPR. Magic was definitely an ingredient in the creative alliance of these industry leading companies.



About Walt Disney World Resort

Walt Disney World Resort is a world-class entertainment and recreation center located in the heart of Lake Buena Vista, Florida. Stretching across miles as vast as the size of the city of San Francisco, the resort features:

- Four theme parks (Magic Kingdom Park, Epcot, Disney's Hollywood Studios and Disney's Animal Kingdom Theme Park)
- Two water adventure parks (Disney's Blizzard Beach and Disney's Typhoon Lagoon)
- 28 resort hotels owned and operated by Walt Disney World Resort and 10 Disney Vacation Club properties
- Four professional golf courses and four mini golf courses
- Two full-service spas
- The 220-acre ESPN Wide World of Sports Complex
- Disney Springs, a 120-acre shopping, dining and entertainment district
- Disney's Wedding Pavilion

The resort is also the largest single-site employer in the United States with a workforce of more than 74,000 employees—known as Cast Members—in Central Florida. Walt Disney World Cast Members come from all over the world, representing more than 80 nationalities and speaking more than 50 different languages.



