Level 11 is a user experience and software development firm that can help you transform how customers interact with your company.

Level 11. Be Disruptive™
What we do

Experience Design Engineering

We use design thinking to build smart spaces in hospitality, healthcare, and urban development. This means leveraging the entire suite of UX design tools, from business strategy and graphic design to script writing and special effects.

Platform Products & Services

Level 11 offers a technology portfolio of experience enablement platforms. These mature solutions for location, communication, and analytics services are flexible and can handle millions of transactions simultaneously.

Custom Development

Working for some of the largest international consumer companies in the world, our complement of designers and engineers build custom solutions from firmware up through IT architecture and from DevOps to global deployment.
How we do it

01. DEFINE THE MISSION
Plan successful outcomes with Design & Systems Thinking and ROI benchmarks.

02. ASSESS THE PROBLEM
Understand the gap between status quo and what's possible.

03. ENVISION THE SOLUTION
Light a path to opportunity. Re-imagine brand experiences using technology.

04. PROVE THE CONCEPT
Validate hypotheses with rapid prototyping, storytelling and video demonstration.

05. EXECUTE THE VISION
Engage internal and external multidisciplinary teams to build all facets of the vision.

06. ANALYZE THE RESULTS
Identify the success factors to guide future growth.
Case Study: Disney MagicBand/xConnect

Launched in 2013, MagicBand is recognized as one of the largest and most successful launches of a consumer wearable technology in a connected ecosystem. Over 10 million guests and 100,000 daily visitors have experienced the xConnect system, which powers over 250,000 events per second.

• Level 11 was brought in as a skunkworks to assist Disney’s Next Generation Experience team with the design and development of a system which could read the ping time/flight from a new consumer wearable.

• Level 11’s role was to build the xConnect system which today manages all events from the MagicBand to all contact readers, long range readers, door locks, tables, and attractions.

• Level 11 was instrumental in re-thinking how to manage the volume and scale of the events expected from over 40 million annual guests and design a resilient system with a high degree of maintainability.

• Level 11 maintains an ongoing role as the key development partner for MagicBand V2 and also provides ongoing maintenance and support for the xConnect system.
Overview & Case Studies

My Disney Experience

The Park Entry removes the lines to Disney Parks and turns a stressful, transactional moment into an elegant, magical experience. The MagicBand users design unique entrance badge graphics together and can even have exclusive, looping soundtracks added for additional personalization. The system also produces a seamless service model, allowing the guest to simply check in or out of the Park. Disney's MagicFare ticketing system is the future, necessary, and a key to unlocking a future theme park, its magic, its magic, and more importance to all.

Park Entry

FastPass+

Disney FastPass+ service removes to check-in later if he want to alternate the sequence of action. It was added for the Disney Passholders. Upon entering the Park, the MagicBand reader was able to register the no-date pass for the day on the My Disney Experience App, which worked on the day or the date of the pass. Once the FastPass+ pass was registered, it will open the My Disney Experience Mobile App, your can use this app for the entire day and receive a reminder when the FastPass+ is due to expire. This system is a key to unlocking a future theme Park, its magic, its magic, and more important to all.

FastPass+

Memory Maker

The most memorable way to capture your visit is to have the Memory Maker. With Memory Maker, guests can choose to purchase a Memory Maker for their visit. Memory Maker includes a Memory Store app, which allows guests to view and share photos and videos from their visit. Memory Maker also includes a MagicBand, which allows guests to unlock the magic of the MagicBand at any time. This system is a key to unlocking a future theme Park, its magic, its magic, and more important to all.

Memory Maker

Pre-Park

In Park

Post-Park

Proprietary & Confidential

January 2017
Level 11’s event processing efforts today handle 15 millions guests annually.

Long- and short-range sensors handle trillions of transactions to reduce waiting times by 30%, while increasing guest dwell-time. Seamless payment systems allow guests to pay with their Magic Band, reducing payment friction.

Guests no longer wait in line to enter the park; bio-authentication is fast and outliers are handled by friendly staff without slowing down the line.

Disney’s FastPass enables guests to plan their vacation, and schedule rides, meals, and experiences – ahead of time, or from their mobile phone. Notifications of upcoming appointments or shorter lines or can be pushed to guests immediately.
Global Analytics

Disney is now able to track customer happiness, movement, and conversion across the entirety of its parks, resorts, and cruise lines thanks to xConnect.

By considering the corporate steward as a user of the data – whose experience is just as important as the Guest’s – Level 11 insures that Disney will be able to employ continuous innovation and improvement within their ecosystem, based on real and actionable intelligence.
Case Study: Carnival Ocean

Since 2014, Level 11 has partnered closely with Carnival Corporation to create a the world’s largest, most revolutionary guest experience platform: the first ever to fully deliver on the promise of personalized experiences based on location, identity, and context.

The Ocean Medallion and Ocean Compass were designed to create seamless IoT integration, location-based services, and unprecedented guest service and personalization. Level 11 has played key roles in all phases of Ocean development, ranging from early ideation to technical engineering and solution deployment.
Level 11’s Designers, Engineers, and Strategists have built applications for guests to plan their trip door-to-door, to maximize every moment of their vacation.

The Medallion pairs seamlessly with guests’ mobile device to enable personalized and flexible itineraries, on-demand food & beverage delivery, frictionless payment, and personalized content.
Level 11 has built technology that enables seamless movement throughout and beyond the ship.

By enabling guests to plan their trip ahead of time and authenticate themselves at home, boarding the ship is now hassle-free: simply walk onboard as your Medallion positively identifies you to security personnel and crew.
Wayfinding provides orientation and spatial awareness for guests and their travel party.

Level 11 looked at the problem holistically by exploring the space as guests. The known problems within Wayfinding were addressed with an eye towards delight. The services we created were designed to be leveraged in games, scheduling, notifications and other areas where location is relevant.
Our systematic approach componentizes all the elements of Wayfinding.

This disciplined methodology ensures we create a system that can be deployed on a variety of devices and leveraged on over 100 different ships.
Guests can easily locate themselves, their travel party and any points of interest.

Working with the analytics systems, Wayfinding is designed to be contextual, showing guests where they need to be, when they need to be there and how long it will take them to get there.
Level 11’s Wayfinding, location services, and safety systems guarantee the best vacation ever.

Sensors throughout the ship sense guest’s location, and the Ocean Portal allows guests to communicate their every whim; book a massage for tomorrow, find your friends, or play your favorite game – from anywhere on the ship.
Level 11’s location services enable the crew to do what they do best: interact with the guest.

By enabling eyes-up service of the guest through facial recognition and location awareness, the crew can engage with guests on a personal level, while keeping them happy and safe.
Photos Up to Now

A small group of pro photographers takes pictures at known events - arrival, special events and posed photos in on-ship studios. On average, each guest has about a picture a day taken.

Prints are created and guests can browse them and optionally buy one or more along with add-on items (frames, DVDs, etc.)

However, the resulting set, while valuable in their own way (eg: to commemorate the event), are usually posed and do not capture the memories made during the cruise.

Observation
Photos Today

Digital photography has brought us to an era of device proliferation. Smartphones and easy-to-use cameras give everyone the chance to capture memories and create mementos on their own.

Photos are often stored and shared online through album services and social media so very few photos ever get printed.

Adoption of larger screens, many with touch interfaces, opens the door to new ways of experiencing the large quantities of media that consumers generate today.
Strategy

Journey Mapping helps identify key UX touchpoint for both guests and crew.
EIC Prototype

By building prototypes early and to a high degree of fidelity, Level 11 achieved stakeholder alignment, buy-in, and budget early in the project.
Large quantities of photos generated and shared by guests and crew and automatically associated with events, create a starting point for guests to tell their stories.

Ocean Memories
Photo Management.

Although photos are displayed in context in different parts of the experience, they share a core set of capabilities.

Photos for events you attended are automatically used as a starting point to create Collections.

From there, guests can tag and edit the photos and eventually print them if desired.
Level 11’s event processing and analytics will handle trillions of transactions

The IoT-connected ships will not only empower guests to create their dream vacation, but will empower crew to understand every moment of the customer journey, as well as view real-time individual, group, and ship-wide analytics; from embarkation and boarding times, to luggage location and handling, to housekeeping and emergency management; the Ocean Compass provides service delivery and operationalization to an unprecedented depth and scale.
COMPASS ENABLED FAN EXPERIENCE
CONFIDENTIAL & PROPRIETARY
Seamless Entry

Level 11 identifies friction points along all points of the journey – including the physical. By identifying slowdowns in the customer journey, Level 11 can provide objective advice on the appropriate technology solutions; from apex technology experiences that empower sponsors, to future-proof IT infrastructure.

Or collaborative relationships with architecture and contracting firms mean that retrofit projects and new constructions provide myriad opportunities to plan for the dream event for sponsors, fans, athletes, and host.
Case Study: Philips Lumify

Philips Lumify is the world's first app-based ultrasound system. The Ultramobile point-of-care group was looking to disrupt healthcare imaging, by providing low cost ultrasound available to a new and broad customer base, including clinics, emergency rooms, sports facilities, ambulances and military locations.

- Level 11’s role was to bring Lumify, a portable, bring-your-own-device, subscription-based mobile ultrasound solution to market
- Level 11 was involved in the core areas of the solution, including customer facing eCommerce platforms, purchase and payment, integration with SAP enterprise fulfillment and distribution systems, online device provisioning, activation and event management, ongoing cloud-based image management, and app design and development
- Lumify is one of Philip’s first offerings to be developed based on the Philips Health Suite Digital Platform (HSDP), providing cloud-based services for HIPPA compliant, scalable and elastic cloud platforms based on AWS, as well as automation technologies providing continuous delivery and integration services
- Level 11 maintains an ongoing role as the key development innovation partner working with the Point-of-Care team both tactically and on additional product roadmaps
Level 11 worked in close collaboration with the Lumify business team, Philips Design, and Philips IT to define, engineer, and implement the full Lumify backend.

Level 11 provided a skilled team of developers, quality engineers, DevOps engineers, UX and UI designers, and project management and worked to support, augment, or function in place of Philips’ internal teams including CDPP and Philips Design.
The heart of the system is a scalable, web-service architecture that serves as the cloud backend for all Lumify medical devices.

This system meets commercial and regulatory requirements. Level 11 was able to leverage legacy Philips infrastructure where possible, but was able to innovate and deliver rapidly in areas of differentiation: Level 11 implemented a subscription billing model for Lumify, which became the first subscription model implemented for any medical device at Philips.

This single subscription feature represents an enormous disruption to the market and fundamentally lowers the barrier-to-entry for mobile ultrasound throughout the healthcare continuum.
The Philips Lumify team continues to rely on Level 11 as a sole development partner for the Lumify backend.

"Philips was first-to-market with the Lumify connected ecosystem thanks to our collaboration with Level 11. [They've] been our ally every step of the way, enabling us to focus on bringing Philips' outstanding image quality to a brand new type of customer"

- TONY GADES, PH.D., PHILIPS LUMIFY DIRECTOR OF TECHNOLOGY.
Starbucks Order & Pay

In order to make ordering from Starbucks painless and fast while increasing throughput and drink production, Starbucks launched one of the first QSR pre-order systems in the world.

- Level 11 designed the key use cases and the operational processes transformations, as well as driving the solution’s design, technology, rollout and adoption.
- Level 11 launched an initial pilot in Oregon, Seattle and the Washington region, which preceded a national rollout.
- Level 11’s Mobile Order & Pay solution for Starbucks is enabling some of the chain’s busiest stores to move more customers, thereby driving incrementally and significantly more transactions.
- In turn, the solution is also helping to improve customer satisfaction – Starbuck’s have noted a significant uptick in measured customer satisfaction following the introduction of Level 11’s Mobile Order & Pay solution.
- Level 11 has an ongoing role as a key innovation partner of Starbucks working with the company’s Chief Innovation Office and internal innovation team on 5 year forward looking initiatives and capabilities.
Level 11 worked in close collaboration with the Starbucks team to find front- and back-of-house opportunities.

By prototyping customer journeys from Planning, through to Arrival, Experience, and Remembering/Returning, Level 11 identified key technology stacks to facilitate speedy and accurate delivery.
Starbucks Mobile Order & Pay is one of the most popular ordering applications in the world.

Mobile Order & Pay is responsible for 96 million transactions per year and is available at thousands of stores nationwide.

The app is used heavily at Starbucks’ busiest stores, as it adds convenience for customers who can skip the line and frees up time for baristas.

“They can put more energy on making food and beverages and connecting with customers. This is a big capacity and throughput unlock. As a result, we are seeing Mobile Order & Pay meet or beat all expectations in a way that is very pleasing to us.”

— ADAM BROTMAN, STARBUCKS CHIEF DIGITAL OFFICER
Scott’s Miracle Grow

The most famous name in lawn care is building the connected garden, by using sensors, water and nutrient control systems, and other IOT technology to guarantee a low-maintenance, beautiful lawn and garden.

- Level 11 is implementing store-based interactive displays that will incorporate information gathered from web and mobile apps;
- Leveraging BLE technology and Level 11’s lok8, communik8, and korl8 platforms recognize customers through the Gro mobile app to provide personalized information and experiences;
- Level 11’s Platform Integration with store systems to provide value to retailer;
- Implementing wayfinding solutions to increase business volume for both Scotts and for retailers;
- Level 11 and its partner Helpful Human developed concept content media for Gro Co at SxSW 2016, garnering substantial press coverage;
- Assist with development of IoT solution;
- Develop and implement ideas at innovation center;
- Develop CEM concepts for deployment at retail stores.
Level 11 prototyped the experience using animation to envision the solution for retailers, customers, and investors.

The video shows how a Home Depot shopper will plan, experience, and engage with the Scotts Gro app, which identifies Smart Garden components, soil & weather profile, and water supply. The app then uses end-state incentives to plan out the shopper’s garden and points shoppers to simple location-enabled purchases at the retail location and easy-to-follow instructions for planting, feeding, and watering.
Google ATAP

Leveraging Level 11’s technology platforms will support hundreds of innovative ideas and applications from 3rd party software companies and service providers. Availability of the platform was announced summer 2016 at Google I/O.

- Jacquard is an exploration in wearable technologies via touch-sensitive strands of fiber that are woven into common textiles and made into garments and connected to a BLE-enabled button that communicates with traditional mobile devices and software.
- Level 11 has created APIs that service providers can use to connect to users and their garments.
- Registration and configuration, wardrobe catalogs, feature settings, garment and app context
- Real-time event and notifications from garments.
CONTROLLING YOUR DEVICES

Touch to play

Swipe

L11
Platform Products & Services

The fabric of experience design and delivery. Level 11 has combined high-end, specialized services and developed a software framework for locations services (lok8) and customer experience management (korl8) that enables new customer experiences by bridging real-world experiences via wearables, smart devices, and sensors with digital, online, big data analytics (korl8), and predictive behavioral systems. Our experience with these solutions helps drive engagement, loyalty, and brand affinity resulting in the realization of the vision of true digital transformation.
lok8 Location Services

- Providing location context with accuracy and scale.
- Supports inexpensive BLE devices.
- Innovative technology integrates data from static and mobile readers and beacons.
- Client and server software for use in mobile devices and backend processing.
- Supports both local and on-line solutions.
- Highly scalable system provides efficient use of hardware and high availability.
- Supports high performance data paths & algorithms providing location information with low-latency.
- Provides configuration and monitoring.
- Applications to facilitate installation, tuning and operation of system.
korl8 Analytics

- Supports inexpensive BLE devices.
- Innovative technology integrates data from static and mobile readers and beacons.
- Client and server software for use in mobile devices and backend processing.
- Supports both local and on-line solutions.
- Highly scalable system provides efficient use of hardware and high availability.
- Supports high performance data paths & algorithms providing location information with low-latency.
- Provides configuration and monitoring.
- Applications to facilitate installation, tuning and operation of system.
comunik8 Interaction Layer

- Engages users, customers and guests through visually appealing and emotive interactions.
- The embodiment of visual story telling through an artful and intentional set of integrated visual technologies, leading edge design and systems thinking, and visual design language.
- Level 11’s approach has been to combine the best of existing commercial solutions such as Tableau, Unity, D3js, WebGL and other graphical and video based tools and platforms to drive the intent and meaning of data and analytics, with the intersection of brand, entertainment, and emotions.
Our Clientele
Press & Accolades
Thank You.