

## At a Glance

Client

Grand Farm Research Test Facility, Fargo, ND.

#### Challenge

Enable smart crop management for sustainable agriculture to meet global food challenges.

#### Approach

Deploy Zyter Smart Agriculture running on the Zyter SmartSpaces™ IoT platform.

#### Results

- Improved crop yields
- Smarter, more informed crop management decisions
- More efficient farm operations

# Grand Farm Deploys Zyter Smart Agriculture for Research and Testing

## >The Challenge

Farming in the U.S. has a rich history and an enduring presence in American culture. However, today's farmers face many new challenges that their pioneering ancestors, or even 20th century farm owners, wouldn't have dreamed of. A new concept of food insecurity and an emerging global hunger crisis due to population growth and climate change are compelling farmers to produce higher yields, but with a dwindling pool of farm workers to do it. While automated crop management solutions are available, many rural farming communities lack the 5G connectivity and technology infrastructure to support sustainable agriculture solutions and the modern day "smart farm".

In July 2021, the Rural Cloud Initiative (RCI) launched the FarmGrid<sup>™</sup> precision agriculture solution at the Grand Farm research test facility in North Dakota. The RCI was formed to bring together 5G-enabled technology providers and solutions to enable smart, sustainable agriculture practices, as well as smart health and education services to rural American communities. In September 2021, Zyter, Inc. joined an RCI consortium of over 70 network, technology, and application leaders to deploy its Zyter SmartSpaces<sup>™</sup> Internet of Things (IoT) platform and the Zyter Smart Agriculture solution at Grand Farm.

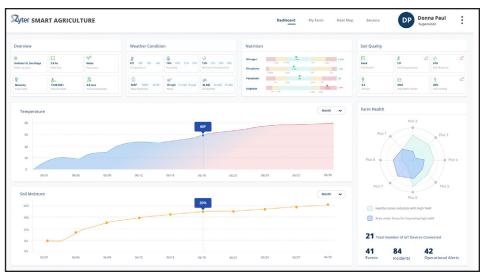
## >The Approach

The Zyter SmartSpaces IoT platform is supporting multiple FarmGrid projects at Grand Farm in collaboration with companies specializing in IoT sensor technology, unmanned drone systems, 5G connectivity, and edge and cloud computing solutions. For this project, Zyter is working closely with:

- **Trilogy Networks** Deploying its cloud-edge infrastructure and applications marketplace as part of its shared mission with RCI to bring an edge networking cloud platform to 1.5 million square miles of rural America.
- **Qualcomm Technologies, Inc.** Providing 5G connectivity solutions and 5G-enabled devices including IoT sensors, drones, and cameras.
- Veea, Inc. Providing on the farm connectivity for IOT sensors (such as LoRa on Grand Farm) while delivering the compute power to run the Zyter SmartSpaces software platform locally, at the edge, on the VeeaHub. The VeeaHub connects with Trilogy's network for on the farm connectivity to their cloud-edge solution.

#### Zyter Smart Agriculture<sup>™</sup> Case Study





Consolidated data affecting crop yield presented in real-time on the Zyter Smart Agriculture dashboard.

In one of the current projects, Grand Farm has deployed the Zyter Smart Agriculture solution to monitor the soil and other parameters affecting yield in over 12 acres of soybean crops. Traditionally, farmers physically walk or drive out to their fields to examine the soil to help them determine the right time to plant, harvest, irrigate, or spray with pesticides. Today, IoT technology automates that process and eliminates the guesswork and extra time associated with a manual procedure.

For this project, Grand Farm has deployed IoT sensors beneath the soil in the soybean fields that accurately sense and report data on multiple soil conditions – moisture content, nutrient levels, temperature, solar radiation, and other indicators of soil health. Zyter's consortium partner Veea has created a network hub that provides several types of connectivity to the Internet and the cloud, including Wi-Fi, 4G, and LoRa. LoRa is the ideal connectivity solution for devices that do not transmit data continually, such as the sensors in the soil. The sensors are designed to "wake up" at certain times to transmit small packets of data on soil temperature, moisture, and other various soil and atmospheric measurements.

The VeeaHub platform sends data from multiple disparate sensor types to the Zyter IoT platform where it is normalized and made visible to farmers and other end users in a userfriendly, AI-driven interface on the Zyter Smart Agriculture dashboard. Then the Trilogy edge networking cloud infrastructure provides the backbone for the fast 5G connectivity to support the real-time, cloud-based availability of all data. Together, Zyter and its consortium partners have built and end-to-end framework for FarmGrid – a flexible and expandable solution that enables any number of sensor data points, from climate, soil moisture, CO<sub>2</sub> readings and more, to be collected, analyzed, and delivered in a single graphic interface to end users.

Zyter Smart Agriculture receives the soil data from the below-ground IoT sensors, as well as atmospheric data from weather stations and similar IoT-enabled devices, and makes it available in Zyter's web-based graphical dashboard that is easy to understand and use. As a result, Grand Farm crop managers have a complete and accurate view of real-time data on soil conditions and atmospheric conditions across all sections of the soybean acres without having to make multiple trips to inspect the fields. Moreover, Zyter Smart Agriculture is easy to deploy.



"The Zyter IoT platform allows us to take data from all disparate sensors and apps and make them accessible to farm managers in a single pane of glass for analysis and decision making based on both current and historical data," said Nancy Shemwell, chief operating officer, Trilogy Networks, Inc. "Zyter's solution is an integral part of FarmGrid because it adds a layer of user friendliness both in installation and as a management tool that brings a new dimension to support precision agriculture goals at RCI."

Zyter Smart Agriculture can also integrate data collected by unmanned drones being tested at Grand Farm, providing another way that farmers can automate crop inspections. Al imaging technology embedded in the drone cameras "learn" over time what a healthy soybean crop looks like and can identify when conditions have deteriorated. When fed into Zyter Smart Agriculture, data from Al imaging and IoT sensors are analyzed to provide farmers and agronomists alike with actionable insights and suggestions to support smarter crop management decisions – and higher yields.

### >The Results

The next-generation farming methods emerging from FarmGrid research at Grand Farm will translate to important business value for farmers as the costs for fertilizer and soil nutrients continue to rise and the demand for higher yields escalates. By enabling digital transformation for rural America, RCI and its consortium partners are making it easy for farmers to achieve more accurate and efficient practices with digital technology that is advanced, yet still easy to use.

By working together with other technology companies at Grand Farm as a part of the RCI consortium, Zyter is playing a major role in making the farm of the future become a reality. By participating in additional research at Grand Farm, Zyter Smart Agriculture will continue to help farmers embrace smart farming and its many benefits, including:

- Improving crop yield with precision agriculture practices
- Enhancing farm efficiency with fewer resources by automating crop management
- Making smarter, more informed crop management decisions based on real-time soil and atmospheric data

"Grand Farm has been working with FarmGrid during the 2021 growing season," said Grand Farm Director, Dr. William Aderholdt. "As the foundation of our signature initiative, we received two types of sensors from two different companies to use with this platform. Once on the farm, we had them installed and up-and-running in 15 minutes - seamlessly communicating with each other on the Zyter platform."

Zyter

#### **For More Information**

To learn more about Zyter Smart Agriculture or to arrange a product demonstration, please contact +1 (301) 355 7760, sales@zyter.com or visit www.zyter.com/SmartAgriculture

## >About Zyter

Zyter delivers a wide range of Internet of Things (IoT) solutions spanning buildings, stadiums, campuses, and even cities. The Zyter SmartSpaces platform supports solutions for multiple markets including healthcare, education, logistics, retail, travel, and construction. By integrating and consolidating data from IoT devices and applications, organizations can gain new insights to improve efficiencies while providing end-users with an engaging digital experience. In 2021, Zyter won more than 37 global awards for its IoT products including Best Technology and Company Innovation of the Year. Founded in 2017, the privately-held company is based in Rockville, Md. For more information, please visit **www.zyter.com/iot**.





# Zyter Improves the Customer Experience at Major Transport Hub

## >The Challenge

A vast multi-level transportation hub was a challenge to even experienced travelers who often struggled to find their way to boarding platforms and other station amenities. Every day, passengers crowd in front of a large passenger information display system (PIDS) in the main terminal to check times and track numbers, and must check back for schedule changes to avoid missing their train.

This confusing experience was about to get worse as a modernization project was fast approaching. The project included construction work on nearly 40% of the train tracks, which would result in additional scheduling changes and make it even more difficult for passengers to navigate the station to their trains. The client needed a way to improve and streamline station navigation and make the passenger experience less stressful.

"Zyter was retained to develop a secure, real-time passenger indoor wayfinding app with the requirement that it be delivered in just 45 days – just before the start of a modernization project," says Sanjesh Rao, chief product officer at Zyter. "In addition to deploying Zyter Smart Travel & Transit, we delivered a robust mobile app on day 42 after the client successfully tested every possible user scenario."

#### Product Spotlight: Zyter Smart Travel & Transit

Zyter Smart Travel & Transit is a module of SmartSpaces, a proven integration platform for intelligent IoT providing complete visibility of what is happening across your entire network of connected sensors and IoT devices in real-time – all from one intuitive dashboard.

- Simplify and automate day-to-day management tasks to achieve long-term efficiency improvements and significant cost reduction.
- Get actionable insights so you can make intelligent and informed decisions faster using real-time data streams, comprehensive dashboards, incident reports and prescriptive actions.
- Using a human-centered design methodology, Zyter Smart Travel & Transit delivers an intuitive and seamless experience across a full range of apps and services – regardless of devices and data sources.
- Identify and address potential issues quickly before they escalate using context-aware incident reporting, predictive analytics and contextual alerts.

### >The Approach

With the goal of streamlining every passenger's ability to navigate the transportation hub, Zyter developed an interactive station map powered by nearly 700 Bluetooth Low Energy (BLE) technology beacons positioned throughout the station that track a passenger's location and direction. The BLE proximity-sensing solution is accurate to approximately one meter for highly intuitive and accurate indoor navigation, as opposed to a common 10-meter GPS satellite signal that could be unreliable on the underground levels of the station.

## At a Glance

#### Client

A railroad passenger service.

#### Challenge

Create a robust, secure and user-friendly mobile app to help passengers navigate the transportation hub more easily and access real-time train information.

#### Approach

Deploy Zyter Smart Travel & Transit and install 700 Bluetooth beacons to enable an interactive map that provides both station navigation and real-time train schedules from PIDs.

#### Results

The mobile app has been downloaded over 120,000 times, helping passengers find trains and retail locations for a greatly improved and engaging customer experience.



Another key goal was to make it easier for the passenger to access train information and schedule changes – as well as reduce the concentration of passengers crowding around the station's PIDs. Zyter integrated the app directly with the station's PID system so it instantly displays the same schedule, track information, and updates that are pushed to the station's screens in real-time. In addition, the app seamlessly provides navigation for passengers to the locations of more than 400 points of interest – restaurants, shops, passenger services, and more – that span the station's three levels. Bluetooth beacons were placed at the entry point of each business to support an intuitive interface with the app and its PID information. As a result, passengers feel more comfortable spending time eating or shopping while waiting for their train since they need only glance at the app for real-time information on their train's departure time or any track changes.

## >The Results

With over 120,000 downloads of the secure app, navigating the transportation hub is no longer stressful and confusing for passengers. Instead of crowding around the station's PIDs, they can automatically receive train and arrival/departure track information, easily locate ATMs, restrooms, restaurants, and shops, and navigate all levels of the station – all from their mobile device. The app is available for free download on both iOS and Android.

Passengers entering the transportation hub from the street or from an arriving train get a pop-up alert from the app on their mobile device welcoming them to the station and asking them what they want to do – get directions to their train or find one of the shopping areas. They can simply tap a button to instantly see real-time train information and filter it by train number, departure time, and more. Passengers can also tap on a heart icon to save a train as a "favorite", which enables pop-up alerts if the train is running late or approaching the track. The app will then ask if the passenger wants directions to the platform. Regardless of the scenario, the passenger is always engaged and informed with instant visibility of real-time information.

The app also guides passengers directly and intuitively to their favorite coffee shop, restaurant, bar, or shop in the station with just a tap on the app. As the passenger moves through the station and passes within proximity of each Bluetooth beacon, the interactive map screen continually updates and displays the passenger's location with changing graphics and lines along the way, much like the familiar Google Maps. As a result, passengers always know where they are in the station and can quickly get the optimal directions to where they need to go. No longer do they have to worry about getting lost in the maze of corridors and tunnels and missing their train.

From first-time visitors to veteran travelers, Zyter Smart Travel & Transit and a robust mobile app have succeeded in greatly improving the passenger experience at the transportation hub. Critically, Zyter helped the client meet its goal of turning around what would have been a very chaotic situation during the track modernization project.

Zyter

#### For More Information

To learn more about Zyter Smart Travel & Transit or to arrange a product demonstration, please contact +1 (301) 355 7760, sales@zyter.com or visit www.zyter.com/SmartTransit

## >About Zyter

# Zyter



## At a Glance

#### Client

A distribution company serving international markets.

#### Challenge

Logistics managers had zero visibility of the real-time location of goods transported by third-party trucking companies.

#### Approach

Implement Zyter Smart Logistics to provide real-time tracking of trucks and goods, temperature monitoring of perishable goods, and alerts and notifications for faster, smarter logistics decisions.

#### Results

- Improved operational efficiency
- Eliminated manual processes
- Gained analytics for rating driver performance
- Reduced insurance costs

# Zyter Delivers End-to-End Visibility of Shipments, Driver Analytics, and Cost Savings for Beverage Distributor

## >The Challenge

A large distributor serving international markets transports their goods using both a company-owned fleet of trucks and a fleet of hundreds of trucks contracted through thirdparty shipping companies. While the company's trucks are equipped with tracking sensors, the majority of the contracted vehicles did not support any type of tracking solution. As a result, the distributor had zero visibility into the real-time location of their goods along the route when transported by a third-party.

Even worse, if the logistics managers wanted to find out where the goods were at any given time, they had to make a phone call to someone at the trucking company, who would then call the driver, and then call the logistics manager back. This manual process was often unreliable and never satisfied the need for real-time information. In addition, the company had no way of knowing the safety record of third-party drivers, nor did they have a solution for tracking the driver's driving behavior along the route.

The company reached out to Zyter with the request for a logistics tracking solution that would track the real-time location of goods in transit on contracted trucks. The logistics managers were both surprised and pleased to find that Zyter Smart Logistics<sup>™</sup> would provide a far more robust solution than tracking alone.

#### **Product Spotlight: Zyter Smart Logistics**

Zyter Smart Logistics is the logistics module of SmartSpaces, a proven integration platform for intelligent IoT providing complete visibility of what is happening across your entire network of connected sensors and IoT devices in real-time – all from one intuitive dashboard.

- Simplify and automate day-to-day management tasks to achieve long-term efficiency improvements and significant cost reduction.
- Get actionable insights so you can make intelligent and informed decisions faster using real-time data streams, comprehensive dashboards, incident reports and prescriptive actions.
- Using a human-centered design methodology, Zyter Smart Logistics delivers an intuitive and seamless experience across a full range of apps and services regardless of devices and data sources.
- Identify and address potential issues quickly before they escalate using context-aware incident reporting, predictive analytics and contextual alerts.



#### >The Approach

Zyter Smart Logistics can connect to any kind of device (on-board diagnostics sensors, battery-powered trackers, mobile phones, and more) to provide end-to-end, real-time visibility of goods in transit. The distribution company licensed the Zyter Smart Logistics solution which consists of a mobile app that resides on the driver's smartphone and an enterprise dashboard used by the company's logistics teams.

Zyter Smart Logistics first and foremost fulfills the company's need to know exactly where their goods in transit on a contracted truck are located at any given time. Additionally, logistics managers receive alerts and notifications pushed from the driver's app to the dashboard if there are any anomalies along the route, such as an accident or breakdown, or issues with the driver or the truck that could cause a delay in shipment delivery.

Once the contracted truck drivers install the Zyter Smart Logistics mobile app on their smartphones, they sign in to the app to receive purchase orders and instructions as to where to pick up and deliver the next shipment of goods. When a driver arrives at the point of origin, they open up a QR code on the Zyter app and scan it to gain entrance to the facility and validate that they are the right driver from the right company to pick up the shipment. Another scan of the QR code notifies the warehouse staff and confirms which goods need to be loaded onto the truck.

When the driver is close to the delivery destination, the Zyter app alerts the warehouse of their impending arrival so they can prepare to unload the goods. After the delivery has been completed, the Zyter app sends a notification to the company dashboard that the trip has been completed. This is one of many ways that the Zyter Smart Logistics solution eliminates manual processes to save time while ensuring that goods are loaded, shipped, and unloaded when and where they should be.

The Zyter app is also tracking and collecting data on the contracted driver's driving habits, such as over-steering, changing lanes too quickly, speeding, harsh braking, and turning corners too fast. The Zyter app also tracks the driver's location at any point in time on the route, including any stops at rest areas and breaks. If a driver on break walks too far away from the truck, for example, or if the driver goes off of the designated GPS route, the Zyter app sends alerts to the driver and to the company's dashboard for follow-up by the logistics team. The Zyter solution integrates all of these data sources into driver behavior analytics that can be used to determine driver safety ratings and identify the safest third-party drivers for future contracts.



## >The Results

Zyter Smart Logistics provided the distribution company with a solution that far exceeded their expectations. Not only do logistics managers now have greater control over managing shipments with third-party companies, they also have unprecedented intelligence on contracted drivers so they know which drivers have the highest safety scores. The company can share these driver analytics with the third-party vendor, as well, to ensure that only the best drivers will be assigned to future jobs.

Zyter Smart Logistics drives many operational and cost-saving benefits for the company, including:

- · Eliminated manual processes for improved operational efficiencies
- Delivered real-time visibility of the location of goods in transit
- Provided insights on driver behavior so only the drivers with the best safety ratings and driving habits are hired
- Reduced the risk of theft or loss of goods during rest stops
- · Lowered the cost of insuring goods in transport, as well as trucks and drivers

Another unique benefit of the Zyter Smart Logistics solution is the per-usage pricing model. The distribution company pays only for the time a driver is using the solution during a delivery run. Other than a nominal onboarding or setup fee, no monthly fees are required making the solution not only invaluable to the beverage distributor, but also cost-effective.



#### **For More Information**

To learn more about Zyter Smart Logistics or to arrange a product demonstration, please contact +1 (301) 355 7760, sales@zyter.com or visit www.zyter.com/logistics

## >About Zyter

# Zyter

## Sports Camp Provider Scores Big with Real-Time Communication and Collaboration from Zyter

## >The Challenge

A provider of sports camps known for its elite training attracts dedicated student-athletes aged 8-18 every year from around the world. The enrollment process is usually handled by parents and involved the submission of a dozen or more forms by personal email. There are different forms for U.S. and non-U.S. applicants, and specific questionnaires that relate to the nature of the sport in each of the nine camps. Parents sometimes submitted the wrong forms and often used personal, unsecure email to submit the student's health and medication information, which was not HIPAA-compliant in the U.S. This very cumbersome process was also time-consuming, often taking four weeks or more. And if the wrong forms were submitted or they contained errors, the sports camps had to return them for corrections and re-submission — extending the process even more.

Delays in registration continued even on the first day the students arrived on campus. Students waited in long lines for 45 minutes or longer at registration kiosks as staff manually reviewed the enrollment forms once again.

In need of help, the sports camp provider approached Zyter for a smart and efficient digital solution to eliminate the confusion and delays in the sports camp enrollment process. The provider also wanted any solution to provide a secure, real-time platform for seamless communication and collaboration between students and coaches.

"We met the challenge by deploying Zyter Smart Universities & Schools and developing a mobile app to provide student-athletes and their parents a secure, user-friendly way to engage and collaborate - all the way from initial enrollment, to arrival on campus, and throughout the entire sports camp experience," says Sanjesh Rao, chief technology officer at Zyter.

#### Product Spotlight: Zyter Smart Universities & Schools

Zyter Smart Universities and Schools is a module of SmartSpaces, a proven integration platform for intelligent IoT providing complete visibility of what is happening across your entire network of connected sensors and IoT devices in real-time – all from one intuitive dashboard.

- Simplify and automate day-to-day management tasks to achieve long-term efficiency improvements and significant cost reduction.
- Get actionable insights so you can make intelligent and informed decisions faster using real-time data streams, comprehensive dashboards, incident reports and prescriptive actions.
- Using a human-centered design methodology, Zyter Smart Universities & Schools delivers an intuitive and seamless experience across a full range of apps and services – regardless of devices and data sources.
- Identify and address potential issues quickly before they escalate using context-aware incident reporting, predictive analytics and contextual alerts.

## At a Glance

#### Client

A provider of year-round sports camps for elite student athletes from around the world.

#### Challenge

Simplify and shorten the student enrollment process while reducing errors and missing information.

#### Approach

Deploy Zyter Smart Universities & Schools™ and a mobile app to increase engagement and real-time collaboration among parents, students, and staff.

#### Results

Reduced student enrollment process from 4 weeks to 3 days; reduced student wait time at registration lines from 45 minutes to 5 minutes. Over 5,000 users access the mobile app concurrently for real-time collaboration with fellow students and staff.





#### >The Approach

Zyter first revamped the enrollment process by publishing all of the forms online and making them available through the secure mobile app for iOS and Android devices. Parents can now fill out, digitally sign, and submit all forms, plus upload the student's medical information securely without using personal email. Most of all, this smart enrollment app is context-aware in that it tells the parents which forms they need to fill out based on the information they enter about their student-athlete.

Medical staff located at the camp can also access Zyter's back office app to review the medical conditions of each student. Medical check-in and check-out is performed within the system and parents can monitor progress in real time via the app to ensure their child has been safely checked in or out. The smart intelligence built into the system enables medical staff to continuously track any student with allergy or medical needs, something that was not possible before.

Leveraging the power of the Zyter platform, the app provides digital training and communication capabilities utilized daily by students, their families and staff. Zyter developed the app to take advantage of the platform's channel-based communication, enabling specific channels to be set up for each of the nine sports camps. Based on their registration data, students are automatically subscribed to the channel or channels of the camps in which they are enrolled.

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- Social media integration
- Push notifications / alerts
- Access camper details



- Secure files transfers
- Review / approval workflows

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- CRM integration
- Prepopulate data
- Forms validation
- HIPAA compliance



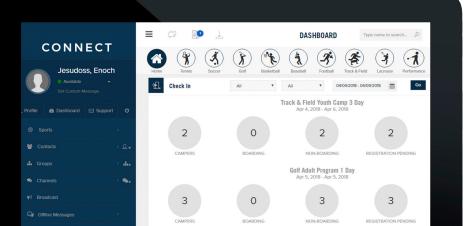
- Schedule integration
- Content publishing
- Chat communication
- Transportation requests



The mobile app enables seamless communication and collaboration between staff and students, as well as pushes real-time updates of class schedule variations or changes. With student safety in mind, the app also supports broadcast communication to inform all students in real time of any emergency issues on campus, as well as send reminder alerts of campus curfew times.

## >The Results

By bringing a secure mobile solution with context-aware capability to a very complex process, Zyter helped the sports camp provider reduce the average time for sports camp enrollment from four or more weeks to just four days. Because staff can now review all enrollment forms dynamically, the sports camp provider has achieved its goal of fostering real-time communication and collaboration with student parents and making the enrollment process faster, easier, and less confusing. What's more, with the elimination of the previous manual paper process, errors have been significantly reduced.



#### A powerful dashboard provides staff with visibility into operations, workflows and communications across campus.

Throughout the year, 5,000 students concurrently use the app to easily navigate the 500-acre campus and get real-time information on schedule changes and alerts, as well as viewing cafeteria menus and other campus amenities with just a tap on the app. In addition, the average student wait time at the registration kiosk when they arrive on campus is now an average of 5 minutes rather than 45 since staff no longer have to review paper forms and deal with potential errors. Most of all, students stay engaged with fellow students, coaches, and staff to make their sports camp experience richer and more meaningful.

"Previously, it was very difficult for students and staff to communicate and collaborate," says Rao. "If there was a change in schedule at the last minute, it was impossible to get the word out to everyone in time. But now, the app sends push notifications in real-time so that everyone is on the same page. It is a much more efficient way for coaches to engage with the student-athletes in their respective camps."

Zyter

#### **For More Information**

To learn more about Zyter Smart Universities & Schools or to arrange a product demonstration, please contact +1 (301) 355 7760, sales@zyter.com or visit www.zyter.com/SmartUniversity

## >About Zyter

# Zyter

# Zyter Smart Events and Mobile App Bring Christmas Festival into the Digital Age

## >The Challenge

Over a decade ago, a small Christmas funfair started with just a few attractions. Today, this multi-million-dollar festival continues to grow in popularity and attracts visitors from around the world. Not surprisingly, such rapid growth has made marketing to the event's enormous customer base and managing the ticketing process much more complicated.

While tickets could be purchased online through the festival's website, the festival owners wanted to streamline the process – and bring the festival into the Digital Age – with an interactive mobile app. Most of all, the marketing department wanted a way to engage festival attendees with the app beyond just purchasing an e-ticket. The festival's owners asked Zyter to develop a custom mobile app that would help them create the ultimate attendee experience.

### >The Approach

Zyter Smart Spaces was deployed along with a custom mobile app that integrates the festival's ticketing platform with other systems to drive a smart and satisfying attendee experience. Zyter also added a custom integration with the festival system's payment functionality to enable the purchase and downloading of festival e-tickets for the first time.

#### Product Spotlight: Zyter Smart Events

Zyter Smart Events is the event module of SmartSpaces, a proven integration platform for intelligent IoT providing complete visibility of what is happening across your entire network of connected sensors and IoT devices in real-time — all from one intuitive dashboard.

- Simplify and automate day-to-day management tasks to achieve long-term efficiency improvements and significant cost reduction.
- Get actionable insights so you can make intelligent and informed decisions faster using real-time data streams, comprehensive dashboards, incident reports and prescriptive actions.
- Using a human-centered design methodology, Zyter SmartSpaces delivers an intuitive and seamless experience across a full range of apps and services regardless of devices and data sources.

A highlight of the Zyter app is the comprehensive, interactive geographic map of the vast festival grounds to guide attendees to the multiple festival attractions and other amenities. The map uses a Google Maps API to enable attendees to see their real-time location and navigate easily to the next attraction. In addition, all of the attendee's pre-booked attractions are automatically embedded into the map when the attendee books them through the Zyter app.

## At a Glance

#### Client

An annual international Christmas festival.

#### Challenge

Festival owners wanted an interactive mobile app to enable e-ticket sales and create the ultimate visitor experience.

#### Approach

Deploy Zyter Smart Events<sup>™</sup> and develop an intuitive mobile app that engages visitors from initial registration and e-ticketing to navigating festival events.

#### Results

- E-ticket sales have more than doubled
- Number of app users increased by 20,000 in just one year
- Attendee engagement has increased before, during, and after the festival



Attendee engagement was a top priority for the festival's marketing team. Zyter developed a dynamic content management system for marketing to create and send real-time push notifications based on the attendee's proximity to a specific attraction. Marketing can also create and send information flyers and other promotional materials through the app before and during the festival. Providing even more convenience for attendees, the Zyter app is also integrated with a third-party scanning system so that attendees can purchase cash cards to be used at the festival.



#### >The Results

User response to the festival's new e-ticketing procedures, made possible with Zyter Smart Events and a new mobile app, has been very positive since its initial launch in 2017. Between 2018 and 2019, 12,000 e-tickets were purchased through the app, and a total of 35,000 festival participants used the app to navigate the festival attractions and learn more about them. The number of tickets sold the following year more than doubled to 28,000, while the number of users grew to 55,000.

Today, festival attendees can purchase e-tickets and pre-book reservations for the attractions of their choice using the Zyter app on their mobile device. Once they register for the festival, they can download their e-ticket, see attraction highlights and access all of the information they need for planning their visit. While on the expansive festival grounds, attendees can easily find their way around using the app's interactive map already populated with the locations of their pre-booked attractions. Real-time push notifications from the festival's marketing team help attendees quickly locate food vendors and other festival amenities near their current location. The app is also integrated with social media so users can easily share event information. This high level of engagement has delivered an exceptional attendee experience.

The Zyter app remains an effective marketing and user engagement tool even after the festival is over. Attendees can use the same app year after year to register for the festival, and they can always refer back to previous bookings.



#### **For More Information**

To learn more about Zyter's healthcare solutions or to arrange a product demonstration, please contact +1 (301) 355 7760, sales@zyter.com or visit www.zyter.com/smartevents

## >About Zyter





## At a Glance

#### Client

A multi-location international art fair.

#### Challenge

Boost attendee engagement and the customer experience.

#### Approach

Deploy Zyter Smart Events<sup>™</sup> and develop an intuitive mobile app.

#### Results

- Art fair attendees now enjoy a more informed, interactive and personalized experience
- Easier, convenient navigation to specific locations and artwork displays
- Real-time alerts and notifications
- Increase marketing insights from a steady stream of user data

## Zyter Mobile App Increases Engagement and Convenience at International Art Fairs

## >The Challenge

Multiple international contemporary art fairs feature more than 100 art galleries each. Art lovers attend the fairs to view specially commissioned contemporary art projects from around the world and participate in discussion programs and artist-led education sessions.

The promoter of the art fairs wanted a way to engage more than 75,000 annual visitors to the fairs and create a more personalized experience. At the time, the fair's website was the only way to obtain information about each event. The promoters asked Zyter to develop an interactive mobile app that would enable interactive maps, push alerts, and other real-time functionality for engaging attendees at all three fair locations.

## >The Approach

To enhance mobile app functionality, Zyter first deployed Smart Events. Smart Events is a customized event module which leverage SmartSpaces, Zyter's IoT-enablement platform that connects to and consolidates data from a wide variety of deployed sensors and IoT devices.

Drawing upon extensive experience in the entertainment and event management industry, Zyter designed a single mobile app with personalized user interface themes for each of the three art fair locations. Users can simply click on the logo and color theme of the art fair location they want to attend.

#### **Product Spotlight: Zyter Smart Events**

Zyter Smart Events is the event module of SmartSpaces, a proven integration platform for intelligent IoT providing complete visibility of what is happening across your entire network of connected sensors and IoT devices in real-time – all from one intuitive dashboard.

- Simplify and automate day-to-day management tasks to achieve long-term efficiency improvements and significant cost reduction.
- Get actionable insights so you can make intelligent and informed decisions faster using real-time data streams, comprehensive dashboards, incident reports and prescriptive actions.
- Using a human-centered design methodology, Zyter Smart Events delivers an intuitive and seamless experience across a full range of apps and services – regardless of devices and data sources.
- Identify and address potential issues quickly before they escalate using context-aware incident reporting, predictive analytics and contextual alerts.



On the fairgrounds, attendees use the Zyter app to make navigating the art fair an easier and more personalized experience. Interactive gallery maps guide fair attendees to the geographic locations of the specific artwork and projects they came to see. A program listing by data and time provides information on exhibits which the user can "favorite" to receive alert notifications. Once they arrive at the gallery and view the artwork, they can scan a distinct QR code for each exhibit to hear audio commentary and view a description and images embedded in the Zyter app. In addition, attendees who register for VIP access to specific galleries can receive real-time news feeds, alerts, and notifications regarding gallery events.

To keep attendees informed of any additions or changes to the fair schedule, the marketing team can push real-time updates thanks to the dynamic content publishing capability of the Zyter mobile app. In addition to the content management system, Zyter also integrated a dashboard and reporting tool for user data analytics to help marketing gain new insight into the preferences and behavior of fair attendees.

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#### >The Results

Zyter Smart Events and the new mobile app have significantly increased engagement and the customer experience for all attendees at each art fair. Attendees now enjoy a much more personalized experience with custom itineraries and maps as well as relevant content and real-time notifications.

Because the Zyter mobile app was so well received by attendees, Zyter is expanding its contract with the art fair promoters to add new functionality. Currently, in response to the COVID-19 situation, Zyter is developing an artificial intelligence (AI) component to create virtual gallery viewing rooms in which attendees can remotely experience fair events and practice social distancing.

Zyter

#### For More Information

To learn more about Zyter's Smart Events solution or to arrange a product demonstration, please contact +1 (301) 355 7760, sales@zyter.com or visit www.zyter.com/smartevents.

## >About Zyter