

# A LOOK INSIDE THE NATIONAL PROSTART INVITATIONAL



*400 competition finalists,  
90 high schools represented,  
48 restaurant business proposals,  
42 culinary menus, 144 dishes,  
10 winning teams.*

*Brought to you by Oracle Hospitality and the  
National Restaurant Association Educational Foundation*





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# 2017 NRAEF REPORT Forward

Every year, nearly 140,000 students enter the hospitality industry through the ProStart curriculum, a program aimed at teaching them about the culinary and business aspects of the restaurant, foodservice and hospitality industry.

ProStart is a hugely important program for our industry. Hospitality is all about people and we all know that recruiting and retaining talented staff is a constant challenge. Proving to young students that working for a restaurant or a hotel can be a rewarding and exciting career and not just something they do while pursuing other options, is important to all of us. Oracle Hospitality is extremely proud to be supporting the ProStart program.

For two years, I have had the honor of being a business skills judge at the annual National ProStart Invitational. I get to meet the top performing students and watch them present their creative concepts. One plan that stuck with me this year centered around invasive fish species in the Chesapeake Bay. These students wanted to create a market for invasive species to help balance the ecosystem in the Bay. Many of the business plans this year incorporated ideas around giving back to the community; assisting veterans or the homeless. These are just a few examples of how forward-thinking these young minds are.

We don't just judge them on their creativity — they get grilled on menu detail, crisis management, public relations and marketing. It's tough, but the rewards are huge — the winning students get life-changing scholarships to college to help them pursue their dreams.

Technology remains a key focus. The National Restaurant Association Educational Foundation (NRAEF), asked students to share their idea for the next great restaurant technology on social media. The submissions were all unique and creative — students submitted ideas based around "internet-of-things" technology, as well as extremely insightful suggestions for solving problems that restaurants face every day.

If these students are anything to go by, then the future is very, very bright for the hospitality industry. On behalf of Oracle Hospitality, I offer my congratulations to all the ProStart students of 2017 for their accomplishments this year.

Brett R. Smith  
Senior Director, F&B Solutions Management  
Oracle Hospitality



# EXECUTIVE Summary



**T**he National Restaurant Association Educational Foundation's (NRAEF) **PROSTART PROGRAM** is a two-year career and technical education program that focuses on teaching culinary arts and restaurant management fundamentals. Offered in more than 1,800 high schools and career and technical centers in all states, Guam and Department of Defense Education Activity schools in Europe and the Pacific, the program reaches nearly 140,000 students annually.

With a goal of developing the next generation of leaders in the foodservice industry, ProStart brings together industry and the classroom, giving students a platform to discover and develop new interests and talents, while teaching employability skills such as teamwork, professional behavior, time management and communication.

## The Teams

Students also have the option to participate in competitions that focus either on culinary arts or restaurant management skills. These students form teams and begin preparation for their State ProStart Invitational. Teams are comprised of two to four students with an optional team manager.

Teams that win first place at their state competitions are invited to compete at the **NATIONAL PROSTART INVITATIONAL**. Nearly 400 students, alongside their educators, mentors and families, participated in the 2017 National ProStart Invitational, bringing with them innovative ideas, confidence and a desire to be the best.

## The Data

This year, in order to provide insight into the minds of these future customers and aspiring leaders of the restaurant industry, the NRAEF collected data from the **90 JUDGED PRESENTATIONS** at the event. Additionally, 2017 brought a new source of analyses. In an effort to take the pulse of the future industry and its perspectives, NRAEF launched the Technology Competition. Judged by Oracle leadership, NRAEF crowdsourced ideas for the next great restaurant innovation.

Based on the qualitative data collected from participant-submitted materials at the 2017 National ProStart Invitational, the NRAEF tracked methods used, ingredients included, restaurant concepts, as well as additional metrics. This curated data has been synthesized to determine core themes of the competition, and to tell a story of what these high school students accomplished in 2017 as part of their ProStart studies.

# CULINARY

## The Competition

**M**any students get involved with ProStart because of an interest in food. Those students who excel at culinary arts spend countless hours honing and refining their techniques before arriving at the National ProStart Invitational.

Forty-eight teams competed in the culinary competition in 2017, presenting to judges from across the foodservice industry. The judges, who volunteer their time, are committed to guiding and encouraging these young people to pursue their dreams, whether it is to open a restaurant, become a chef or manage a kitchen.

The competition highlights each team's ingenuity and ability to think on their feet in a high stakes environment. Official rules for the competition state that each team must create a three-course meal in 60 minutes using only two butane burners, without access to running water or electricity.

Menus are designed by the students in advance of the competition and must fall within certain guidelines provided by the NRAEF. For example, the entrée must include a center of plate item, accompaniments, such as vegetable or starch and sauce.

Additional rules require students to use a minimum of two out of six identified culinary cooking methods, including poach, braise and pan fry.

Teams may range in size from two to four, with an optional team manager who may act as an expeditor.

### The Challenge

Students have access to a 10' x 10' workspace with two eight-foot tables and two butane burners. Teams are required to bring all other materials necessary to execute their meal, including cooking equipment and ingredients. During the 60 minutes of cooking, teams are evaluated on skill, teamwork, safety and sanitation, knife skills and food costing.

“The ProStart program has impacted my life by giving me opportunities I would have never had, like being in a competition alongside people from different walks of life, and gain valuable experience, knowledge and skills. This program has taught me that it takes patience, hard work and trust to reach a goal.”

- ProStart Student

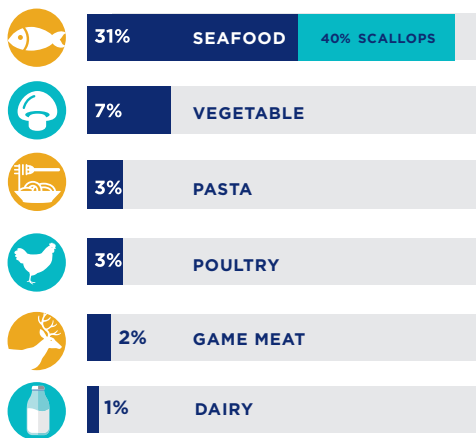


# DATA & TRENDS Analysis

Each team is required to submit their written menus to the judges, allowing the NRAEF to gather details on which foods were chosen and cooking techniques were used.

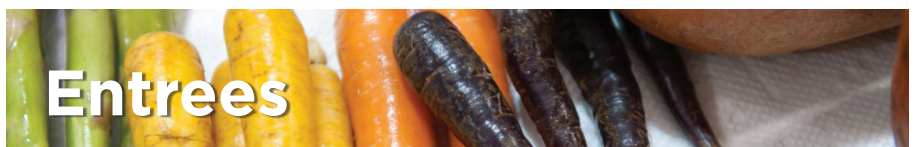
## Starters

The most popular focus for appetizers was seafood. Nearly 70% of students used either shellfish or fish in their meals. Ingredients included octopus, trout, crab, tuna, shrimp, salmon and lobster. Scallops served to be most popular, utilized in nearly 40% of starters.



Vegetables were the next most popular option as a starter ingredient, and were the most frequent accompaniment to appetizers overall. Students vegetable choices included mushrooms, peas, greens, potatoes, leeks and carrots.

Some unique ingredient choices included wakame seaweed, quail eggs, purple sticky rice, Chinese cabbage salad, chard, bean curd, mango beurre blanc, blueberry gastrique and prosciutto.



## Entrees

The use of poultry, seafood, lamb and beef was relatively similar amongst students. While there was no clear favorite main ingredient, outliers from the popular entree main ingredients include bison, game meat and veal.

For the required starch ingredient, participants divided evenly between potatoes and grains, including polenta, grits, couscous, rice, and risotto. Other teams displayed creativity in their starch selection, preparing pureed versions of turnips and parsnips.

Students prepared root vegetables, such as carrots, black carrots and yams. They also prepared dandelion, collared and foraged green, as well as kale and spinach. Other interesting vegetables include pea samosa, Chinese long beans and green apples.

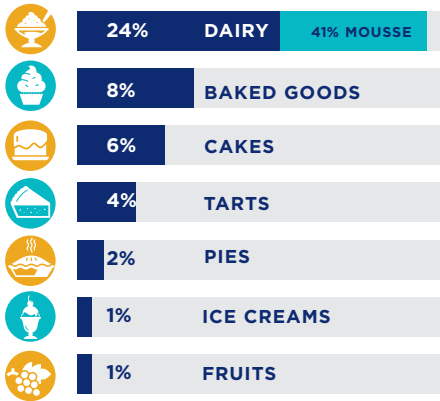
Teams were required to include a sauce in each entree, affording them an opportunity to display innovation in their culinary aptitudes. Chief among these sauces were reductions and butter sauces of varying flavor profiles, such as tarragon butter sauce, sage squab reduction, lemon beurre blanc and spiced huckleberry reduction. Other example sauces include curried kabocha puree, Gojuchang sauce, maple-Dijon gastrique and Kansas City BBQ.



## Desserts

The last, and seemingly most elaborate part of the meal, students showcased their skills with a dessert. The overwhelming majority created dairy-based desserts. While mousse was the most widely produced dessert, students crafted budino, tiramisu, Bavarian and panna cotta. Baked goods were the second most widely created desserts with a diverse set of offerings including pizzelle, eggroll and Guamanian doughnuts.

The majority of students used fruit flavors in their dessert dishes. Popular flavors ranged from orange and banana to blackberry and minted mango. More traditional flavors of chocolate, vanilla and nut were also used. Pear Bavarian with blackberry gele, salted caramel gianduja mousse, deconstructed s'mores and Braganza banana exemplify some of the creative deserts students prepared.



“ I have always had a passion for art and design. When I enrolled in ProStart, my teacher gave me ideas on how to apply my passion to the culinary industry. The more I worked with pastry making, the more I became interested in the learning experiences I can gain and concurrently enjoy.”

- ProStart Student

## Cooking Techniques

Students used a variety of techniques during the 60-minute culinary competition that they learned in ProStart classrooms. They sauteed, pan seared, fried and boiled most often, but other techniques including blanching, caramelizing, pureeing, baking and steaming were also prevalent. Required to showcase certain knife skills, many students chose techniques including chiffonade, julienne, small dice, brunoise and rondelle.

## Noteworthy

Game meat was given a place in a handful of appetizers and entrees. Elk, rabbit, veal, quail and bison were all prepared to showcase students' skills and unique ideas.

Several teams exercised pickling techniques across starters, entrees and desserts. They creatively pickled vegetables and fruits and paired with array of couplings, spanning from chicken wings to lemon curd.

For dessert, two teams incorporated herbs, namely lavender, in their creations. Other teams innovated by including beets or crafting a steamed green tea cake.



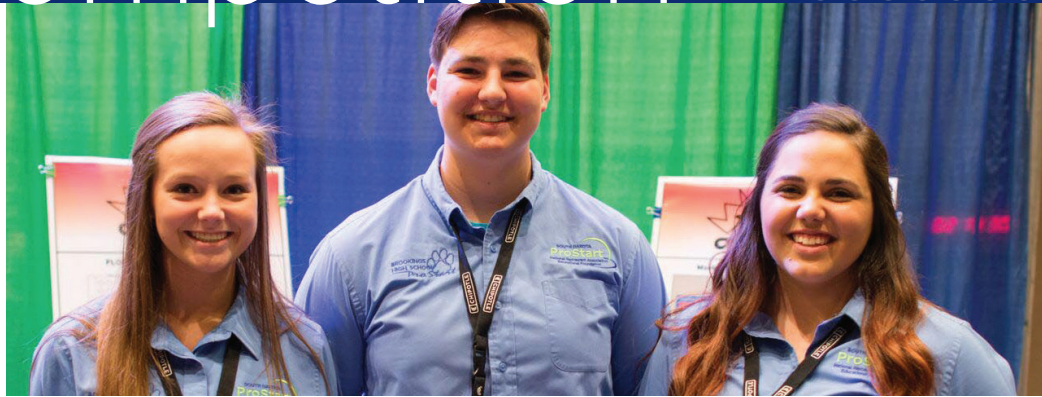


# MANAGEMENT

## The Competition

“ProStart has impacted my life through the ProStart management competition because I became more confident talking in front of people. The competition also helped me discover that I’m interested in hospitality administration and I want to [pursue a] major in that field.”

- ProStart Student



ProStart students who display a proclivity for the business side of the restaurant and foodservice and excel in their state competition participate in the management competition at the National ProStart Invitational. Forty-two teams competed this year by presenting to judges from across the foodservice industry, who provide feedback and guidance to the students.

Official rules for the competition require students to develop a proposal to launch a new restaurant concept in ProStartville, a fictitious city used by all teams with a given set of demographics. Management teams give a series of verbal presentations on their restaurant concept to panels of judges, answer critical thinking questions and submit a written proposal.

### The Challenge

Proposals consist of a defined restaurant concept, supporting menu and supporting marketing plan. Information required in teams’ written proposals include: type of establishment, type of cuisine, meal served, hours of operation, location of restaurant in ProStartville, target market, description of interior and décor and an organizational chart of staffing plans. Students also design a sample menu for their concept with no more than 12 menu items, along with one sample recipe. Additionally, teams develop two marketing tactics to launch their restaurant concept that demonstrate their ability to advertise their concept and attract new customers.

### Demographics:

The geographic location of ProStartville, USA is at the discretion of each team.

ProStartville, USA attracts a diverse group of families, students and young professionals. Residents of ProStartville enjoy the use of a regional airport, a thriving independent restaurant scene and a large university.



### PROSTARTVILLE, USA

- Population — 130,000
- Median age — 31
- Families — represent 29% of the population

# DATA & TRENDS Analysis

Each team is required to submit their restaurant concept to include a sample menu, layout and marketing tactic information. The NRAEF used the submitted proposals to gather details on what types of restaurant concepts were chosen and what cuisines and culinary themes permeated the competition.

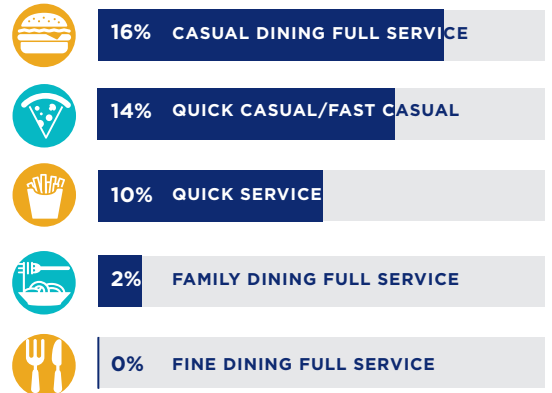


## Type of Establishment

Every concept presented by teams was casual in nature, classified as either casual dining, quick casual/fast casual, or quick service. Notably, no students pitched a fine dining option. Moreover, the number of fast-casual and quick service concepts doubled the number of casual dining concepts. The findings illustrate a critical trend in the industry — a shift away from traditional, sit-down, in-restaurant dining. The students' pitches reflect the notion that this trend is prevalent across target markets. People are seeking to access food easily and quickly.

“After winning third in the nation in the management competition, I have a lot to contribute to a future employer, like knowing how to develop a small business plan. Through this project, I learned the importance of working together as a team in developing a written proposal, verbal presentation and answering critical questions.”

- ProStart Student



The structuring of restaurant hours and prevalence of delivery options underscores this point. Restaurant concepts offered longer and later hours of operation. The median close time was 9 p.m., with some restaurants staying open as late as 2 a.m. Two teams proposed 24 hours of operation, and over 40% of restaurants offered delivery or carry-out options, lowering the barrier of accessing food and raising the convenience for individuals.



## Cuisine and Theme

Cuisine and theme are central to the students' restaurant proposals and are the true indicators of innovation at the National ProStart Invitational. This year's concepts centered on locally-sourced/health-conscious cuisine as well as fusion cuisines, such as American with an Indian flare, southern twist and Asian-American noodle hybrid. These global mashup restaurants included innovative flavor profiles in their sample menu items.

In addition to the 44% local and health-focused concepts, over half of all pitched restaurants had vegan, vegetarian, or gluten-free options. Some teams offered even more dietary restrictive options free of sugar, nut, soy, lactose and grain.

Many students ingrained community engagement and philanthropy in their restaurant concepts. While this practice was popular, the ways in which the students executed it widely varied. Some teams presented a profit-sharing model, with a percentage of sales going to a charitable partner. Other teams suggested fundraising nights, sponsoring local philanthropic events and adopting a "pay-it-forward" model. One creative team took a step further to embed charitable practice at the core of the business operations, proposing a paid internship program for at-risk youth and young adults. Those who specified which charities they intended to support focused on causes such as veterans support, children's health, improved educational outcomes and cancer research. The prominence of philanthropy in restaurant concepts speaks to an emerging trend in the industry - people want to eat at and support businesses that do good and give back to the community.

## Unique

Students are required to identify their target audience as part of their restaurant concept and are encouraged to reflect the needs and preferences of that market in their concept. While quick and accessible food emerged as a theme, two teams innovatively translated this trend onto a unique market, travelers. They chose to set up shop in airports, allowing travelers to enjoy a quick, delicious meal. One of these concepts included a mobile app with smartphone ordering, further increasing the speed in which travelers can access food. The second team took another innovative approach, opting to implement a bike bar in their airport terminal concept. Stools lining the bar had pedals attached, allowing sedentary travelers to stretch out their legs and fit some exercise into their travel schedule.

Another health-focused restaurant concept incorporated a gym delivery program. Informed by target market lifestyle preferences, they ideated a pick-up station at the local gym. Food would be delivered to the location for customers to pick up following their workout, improving the consumer experience. Customers could participate in weekly meal pick-ups after fronting a small enrollment fee. Meals would be stored in the pick-up location in a large refrigerator and clearly labeled with the customer's name. This innovation dovetails two trends: health and convenience of accessing food.



# TECHNOLOGY



**B**oth the culinary and management competitions encourage teams to use innovative methods and technologies to bring concepts to life. While it might be more obvious that the management competition sparks the use of creative marketing and point-of-sale systems to accompany presentations, cooking methods are also constantly being modernized, aided by science and technology.

## Culinary

In the culinary competition, teams exhibited their talents through a variety of cooking techniques and tools on the cutting edge of food technology. Limited to two butane burners as a heat source, teams used innovation creation to cook and prepare foods. Two teams created homemade sous-vide, one using a hand pump and a pressure cooker and the other submerging the sealed bag in a steam bath. A number of teams used blow torches, as well. Purposes spanned from toasting meringue to candying and caramelizing other ingredients. Aeration, maceration and sugar pulling were among other techniques used.

## Management

The management competition allowed for creative uses of technology throughout almost every aspect of the restaurant concept. Students used restaurant floor planning software to design a layout of their concepts, designed websites as a marketing technique, created social media campaigns, ideated smartphone applications, allowed ordering through tablets and included a variety of point-of-sale systems in their proposals. One team specified the use of the new Amazon-Go system, which uses a highly-stylized GPS and camera system to read self-service choices, tally purchases and email charges to a bank account without the customer stopping to pay.

The use of technology was not simply limited to the customer and employee experiences. One innovative team leveraged solar panels, biogas generators and geothermal energy to sustain restaurant operations. This exemplifies the focus of many students on sustainable, green foods and business practices.



**ProStart**  
National Restaurant Association  
Educational Foundation

# #ProStartTechCompetition

## Tech Competition

To build off of the technology and innovation ideas seen at National ProStart Invitational, Oracle Hospitality leadership judged the first-ever ProStart Tech Competition, hosted by the NRAEF. The competition called for all high school students to submit their idea for the next great restaurant technology. Submissions were collected on an online platform, marketed via social media. Common themes across entries were convenience, sanitation, safety and efficiency.

One innovative technology honed in on these themes as they relate to the customer experience by mapping social media concepts onto the restaurant space. The student proposed a system by which individuals can scan the food and record their reaction to it, by “liking” it in a similar fashion to Facebook. Past consumer responses could be aggregated, and the information and rating could inform future consumer’s choices.

Two entrants offered innovations in restaurant and foodservice apparel, as it pertains to food sanitation. One pitched a self-cleaning fabric for chef coats, uniforms and gloves. Using small particles, combined with chemicals to create a protective coat, this fabric could kill bacteria, or any other microorganism, preventing their transfer from the clothing to the food. The other student suggested the use of gloves with absorbent pads, allowing direct application for food drying.

Another student focused on sustainability. She proposed an app that would enable restaurants to alert local farmers and ranchers of excess food, allowing the food to be repurposed. This app addresses the market failure of food surplus, improves environmental outcomes and lowers the barrier for both parties communicate. It provides mutual benefits, providing farmers with resources and taking the load of excess food away from the restaurant.

One submission focused on “tap-and-go” travel mugs with sensors that automatically charge for refills. The double insulation keeps drinks cold or hot for several hours and has 12-month battery capability. The sensor is imbedded into the cup and connects to a specialized POS system. By allowing customers to purchase a beverage without waiting in line or requiring assistance, they free up an employee to complete more important tasks. This idea creates a fast and convenient way for restaurants to keep lines moving, while still making a profit. It increases guest satisfaction and improves all-around efficiency.

# A LOOK INSIDE The National ProStart Invitational

Nearly 400 high school students traveled to the 2017 National ProStart Invitational to showcase their culinary and restaurant management skills — bringing with them innovative ideas, confidence and a desire to be the best. Collected data from 90 presentations was used to tell a story about core themes of the competitions and what these students accomplished.

## 1 SERVICE AND POS SYSTEMS

The majority of teams proposed fast casual or quick service restaurant concepts where patrons purchase meals at the service counter. No team proposed a fine dining full service restaurant concept, a declining trend seen in recent years.

Teams employed different point-of-sale systems, allowing customers to place orders through tablets, kiosks, or mobile applications.

## 2 TECHNIQUES

Students used a variety of techniques during the competition. They sauteed, pan seared, fried and boiled most often, but other techniques included blanching, caramelizing, pureeing, baking and steaming. Required to showcase certain knife skills, students chose chiffonade, julienne, small dice, brunoise and rondelle. Teams also spun sugar into designs, used blow torches to caramelize and created a Sous-vide to steam cook.

## 3 TECHNOLOGY

Students ideated an array of cutting-edge restaurant technologies, in and outside the kitchen. One student proposed a technology to improve reservation management, allowing the host(esses) access information on tables' point of the meal through an automatic updating system. This automation provides customers with a more accurate wait time and optimize efficiency.

## 4 TOOLS

Many proposals included marketing tools such as mobile apps and social media. Three proposals discussed the use of mobile ordering. One team leveraged media influencers to promote the restaurant. Teams highlighted philanthropy and fundraising events as a way to connect with the local community and market their brands. Students also emphasized the importance of WiFi capabilities in their restaurants.

## 5 INGREDIENTS

More than half of the menus featured gluten free, vegan and vegetarian options, accommodating those with dietary restrictions and allergies. Many students centered their concepts on farm-to-table cuisines featuring locally-sourced and all natural ingredients. Many also ventured into the fusion space with twists on traditional concepts and cuisines.

## 6 THEMES

Common themes of sustainability, philanthropy and efficiency showed up in the majority of team proposals. Nearly 50% of management teams' concepts promoted community engagement and contained a philanthropic component, such as a culinary internship for at-risk youth, a book donation drop, a pay-it-forward giving model and a weekly fundraising night for local non-profits. Popular sustainability models included reusable cutlery, solar panels, geothermal energy and interior restaurant design with an indoor garden wall to source small products and ingredients.



# Oracle Report

## Methodology

This report presents the findings of an initiative by the National Restaurant Association Educational Foundation to study the proposals and presentations students presented at the 2017 National ProStart Invitational in Charleston, South Carolina.

The National Restaurant Association Educational Foundation collected qualitative data from participants and participant submitted materials at the 2017 National ProStart Invitational. The data tracks the methods used, the ingredients, restaurant approaches, menus, techniques, technology and additional metrics from the written proposals submitted for both the culinary and management competitions. This data has been reviewed and synthesized into core themes and presents a picture of what these high school students accomplished in 2017.

Ninety teams participated in the event, made up of 383 ProStart students from 48 states, Guam and DoDEA Europe.

## About Us

As the philanthropic foundation of the National Restaurant Association, the NRAEF exists to enhance the restaurant industry's service to the public through education, community engagement and promotion of career opportunities. The NRAEF works to attract, develop and retain a career-oriented professional workforce for the restaurant industry. The restaurant and foodservice industry comprises 1 million restaurant and foodservice outlets and a workforce of 14 million employees, making it one of the nation's largest employers.

For more information on the National Restaurant Association Educational Foundation, visit [ChooseRestaurants.org](http://ChooseRestaurants.org).

## Brought to You By

Oracle Hospitality brings 40 years of experience in providing technology solutions to food and beverage operators. We provide hardware, software and services that allow our customers to deliver exceptional guest experiences while maximizing profitability. Our solutions include integrated point-of-sale, loyalty, reporting and analytics, inventory and labor management, all delivered from the cloud to lower IT cost and maximize business agility.

For more information about Oracle Hospitality, visit [Oracle.com/Hospitality](http://Oracle.com/Hospitality).





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