Visitors wait in line at the Space Mountain attraction at Walt Disney World in Orlando, Fla. Disney has installed game stations along the way to entertain visitors while they wait.

ORLANDO, Fla. — Deep in the bowels of Walt Disney World, inside an underground bunker called the Disney Operational Command Center, technicians know that you are standing in line and that you are most likely annoyed about it. Their clandestine mission: to get you to the fun faster.

Joe Burbank/Orlando Sentinel
Visitors wait in line at the Space Mountain attraction at Walt Disney World in Orlando, Fla. Disney has installed game stations along the way to entertain visitors while they wait.
To handle over 30 million annual visitors — many of them during this busiest time of year for the megaresort — Disney World long ago turned the art of crowd control into a science. But the putative Happiest Place on Earth has decided it must figure out how to quicken the pace even more. A cultural shift toward impatience — fed by video games and smartphones — is demanding it, park managers say. To stay relevant to the entertain-me-right-this-second generation, Disney must evolve.

And so it has spent the last year outfitting an underground, nerve center to address that most low-tech of problems, the wait. Located under Cinderella Castle, the new center uses video cameras, computer programs, digital park maps and other whiz-bang tools to spot gridlock before it forms and deploy countermeasures in real time.

In one corner, employees watch flat-screen televisions that depict various attractions in green, yellow and red outlines, with the colors representing wait-time gradations.

If Pirates of the Caribbean, the ride that sends people on a spirited voyage through the Spanish Main, suddenly blinks from green to yellow, the center might respond by alerting managers to launch more boats.
Another option involves dispatching Captain Jack Sparrow or Goofy or one of their pals to the queue to entertain people as they wait. “It’s about being nimble and quickly noticing that, ‘Hey, let’s make sure there is some relief out there for those people,’ ” said Phil Holmes, vice president of the Magic Kingdom, the flagship Disney World park.

What if Fantasyland is swamped with people but adjacent Tomorrowland has plenty of elbow room? The operations center can route a miniparade called “Move it! Shake it! Celebrate It!” into the less-populated pocket to siphon guests in that direction. Other technicians in the command center monitor restaurants, perhaps spotting that additional registers need to be opened or dispatching greeters to hand out menus to people waiting to order.

“These moments add up until they collectively help the entire park,” Mr. Holmes said.

In recent years, according to Disney research, the average Magic Kingdom visitor has had time for only nine rides — out of more than 40 — because of lengthy waits and crowded walkways and restaurants. In the last few months, however, the operations center has managed to make enough nips and tucks to lift that average to 10.

“Control is Disney’s middle name, so they have always been on the cutting edge of this kind of thing,” said Bob Sehlinger, co-author of “The Unofficial Guide: Walt Disney World 2011” and a writer on Disney for Frommers.com. Mr. Sehlinger added, “The challenge is that you only have so many options once the bathtub is full.”

Disney, which is periodically criticized for overreaching in the name of cultural dominance (and profits), does not see any of this monitoring as the slightest bit invasive. Rather, the company regards it as just another part of its efforts to pull every possible lever in the name of a better guest experience.

The primary goal of the command center, as stated by Disney, is to make guests happier — because to increase revenue in its $10.7 billion theme park business, which includes resorts in Paris and Hong Kong, Disney needs its current customers to return more often. “Giving our guests faster and better access to the fun,” said Thomas O. Staggs, chairman of Walt Disney Parks and Resorts, “is at the heart of our investment in technology.”

Disney also wants to raise per-capita spending. “If we can also increase the average number of shop or restaurant visits, that’s a huge win for us,” Mr. Holmes said.

Disney has long been a leader in technological innovation, whether that means inventing cameras to make animated films or creating the audio animatronic robots for the attraction It’s a Small World.

Behind-the-scenes systems — typically kept top secret by the company as it strives to create an environment where things happen as if by magic — are also highly computerized. Ride capacity is determined in part by analyzing hotel reservations, flight bookings and historic attendance data. Satellites provide minute-by-minute weather analysis. A system called FastPass allows people to skip lines for popular rides like the Jungle Cruise.
But the command center reflects how Disney is deepening its reliance on technology as it thinks about adapting decades-old parks, which are primarily built around nostalgia for an America gone by, for 21st century expectations. “It's not about us needing to keep pace with technological change,” Mr. Staggs said. “We need to set the pace for that kind of change.”

For instance, Disney has been experimenting with smartphones to help guide people more efficiently. Mobile Magic, a $1.99 app, allows visitors to type in “Sleeping Beauty” and receive directions to where that princess (or at least a costumed stand-in) is signing autographs. In the future, typing in “hamburger” might reveal the nearest restaurant with the shortest wait.

Disney has also been adding video games to wait areas. At Space Mountain, 87 game stations now line the queue to keep visitors entertained. (Games, about 90 seconds in length, involve simple things like clearing runways of asteroids). Gaming has also been added to the queue for Soarin’, an Epcot ride that simulates a hang glider flight.

Blogs that watch Disney’s parks have speculated that engineers (“imagineers,” in the company’s parlance) are also looking at bigger ideas, like wristbands that contain information like your name, credit card number and favorite Disney characters. While Disney is keeping a tight lid on specifics, these devices would enable simple transactions like the purchase of souvenirs — just pay by swiping your wristband — as well as more complicated attractions that interact with guests.

“Picture a day where there is memory built into these characters — they will know that they’ve seen you four or five times before and that your name is Bobby,” said Bruce E. Vaughn, chief creative executive at Walt Disney Imagineering. “Those are the kinds of limits that are dissolving so quickly that we can see being able to implement them in the meaningfully near future.”

Dreaming about the future was not something on Mr. Holmes’s mind as he gave a reporter a rare peek behind the Disney operations veil. He had a park to run, and the command center had spotted trouble at the tea cups.

After running smoothly all morning, the spinning Mad Tea Party abruptly stopped meeting precalculated ridership goals. A few minutes later, Mr. Holmes had his answer: a new employee had taken over the ride and was leaving tea cups unloaded.

“In the theme park business these days,” he said, “patience is not always a virtue.”