IOT SPECIAL

CIO Review

The Navigator for Enterprise Solutions

NOVEMBER · 4 · 2015   CIOREVIEW.COM

IN MY OPINION
**David Bartlett,
CTO,
GE Aviation**

CIO INSIGHTS
**Miguel A. Gamiño Jr,
CIO & Executive Director of the
Department of Technology,
City & County of San Francisco**

Pacific Controls: Shepherding the Age of Smart Devices

$ 15US

SE 84

0 74470 91626 0

Dilip Rahulan,
Executive Chairman & CEO

Dilip Rahulan,
Executive Chairman & CEO

Pacific Controls: Shepherding the Age of Smart Devices

Many saw Dubai as a mere desert and a stagnant landscape, before it became the economic powerhouse of the Middle East. Today, its ingenious skyscrapers, audacious islands, and techno marble airports are the epitome of preeminent engineering and projects, which has captivated everyone across the globe. In an effort to make the impossible possible, the government of Dubai, called as 'Dubai Smart Government' summoned the leading tech titans, whose unmatched prominence in engineering and machine intelligence could transform the vision of Dubai's government into reality. Dubai's very own native organization, Pacific Controls was one of them, whose mission was to realize the foresight of its city to make interconnected network systems for major infrastructures. Pacific Controls leveraged the nexus of Internet of Things (IoT), networked computing, and large-scale data management to provide technology solutions and values.

With the connectivity at the helm, we are aiming to deliver services that can go beyond the traditional methods

Going Beyond the Traditional Methods

Pacific Controls started its journey in 2000, at the same time when the word automation was becoming the bedrock and the definition for every infrastructure and government service such as water distribution, energy, and transportation. "The plan was ready, the decision was made. Automation wired with IT, networking, and engineering were ready to create unprecedented tides in Dubai," exclaims Dilip Rahulan, Executive Chairman and CEO at Pacific Controls. The company spent no time in lowering its sails and hoisting its anchors to begin its journey.

From the offset, Rahulan knew that traditional engineering methods would have zero significance in tech driven projects of Dubai. Internet of Things (IoT) technologies had to take the helm to shepherd the vision of setting up unrealistic infrastructures that could take care of themselves without any human intervention. Gartner defines a smart city as an urbanized area where multiple sectors cooperate to achieve sustainable outcomes through the analysis of contextual, real-time information shared among operational technology systems. Pacific Controls was among the few who possessed such expertise in conferring integrated services, backed with network solutions that could facilitate operations in hotels, residential, and airports. Guest room automation systems of Pacific Controls were designed to address the hospitality industry holistically. "It includes the whole concept of hotel automation, which gives guests the convenience of controlling multiple functions in their room including lighting, temperature, drapes and audio/video systems using automated interfaces," says Rahulan. Such innovative offerings are the reason behind the growing tenacity of Pacific Controls in the IoT domain. "With connectivity at the helm, we are aiming to deliver services that can go beyond the traditional methods," states Rahulan.

Creating New Frontiers in the IoT

Dubai International surpassed Heathrow as the busiest airport globally for international passengers last year despite major runway upgrades that limited traffic for 80 days. Ranked as the fourth busiest airport in the world in terms of international passengers according to Airport Council International's latest figures (ACI), Dubai International Airport caters to around

60 million passengers per annum. When Pacific Controls was mandated to enable the integration of multiple systems in the airport, the objectives and the demands came with unprecedented responsibilities. However, with Pacific Controls' Building Integration System (BIS), the company successfully integrated automation systems for security, fire alarms, lighting, public address, and resource management, and various other imperative aspects.

BIS functions as an Airport System integrator that empowers different Extra Low Voltage Systems to exchange data with each other in an effortless and comprehensive manner. "With BIS running in the background, there was now a seamless exchange of flight updates between Management Information System, Lighting Control System, and Access Control System," says Rahulan. He further goes on to add, "BIS aims to bring the different Airport systems to one common integrated platform where data can be monitored and analyzed for better operational efficiencies."

In 2005, Pacific Controls was bestowed with another opportunity—this time to embellish private and government buildings with its state-of-the-art M2M solutions. "The project was given the name of 24x7 National Life Safety," says Rahulan, which underlined the ambition of the project. The mission-statement of this project was to provide 24X7 real-time monitoring of infrastructures for fire, lift, and emergency alarms. The integrated system laid by Pacific Controls allowed authorized personnel to access relevant and up-to-date information at any time, and from any web-enabled devices— whether the individuals are residing at the emergency service headquarters or attending an incident. Over the next few years, 60,000 buildings will have this integrated system running within their infrastructure, enabling the admin to monitor them continuously.

To imbue life in the buildings is the vision with which Pacific Controls is creating new frontiers in the IoT ecosystem. However, the expedition is not just limited to infrastructures. Pacific Controls has developed Galaxy, which is the world's first enterprise platform delivering city centric services for management of its ecosystem comprising of energy, real estate, homeland security, healthcare, hospitality, transportation, education, financial, industrial, and retail. Galaxy will integrate with management information systems to deliver optimization and governance centric data that will enable cost reduction of operating a city

> ## "
> ## We have spent a phenomenal volume of our resources to roll out low cost asset management of smart devices, which can meet the goals of the customers vehemently

and its services through increased operational efficiencies and peculation of real time data to the relevant decision makers in the city. "Hosted from our enterprise cloud, Galaxy ensures security of the embedded system as it creates value proposition based on observing abnormal behavior of the machine," explains Rahulan. The company is also offering its artificial intelligence framework GBots,

for virtualization of managed services and for the delivery of real time business intelligence. The intelligent, autonomous, experienced, and cognitive software agents will be deployed across networks and can be utilized for diverse tasks across the world.

Making M2M, a Success
"One of the predominant challenges associated with M2M was the cost of enabling devices to become smart and connected," says Rahulan. To enable organizations leverage the potential of M2M, it was imperative to introduce solutions that are not only resilient, but cost effective too. "We have spent our resources to roll out low cost smart devices for asset management, which can meet the goals of the customers vehemently," says Rahulan. "Today we are delivering our M2M products, which are cheaper than other embedded devices in the competition." Through collaborative relationships, the company possesses access to various protocols and services that ameliorate their M2M expertise to a completely new level.

It is Just a Start
Pacific is collaborating with laudable Telcos to enhance their capabilities. With Microsoft as their strategic partner, Pacific Controls has already embarked on a mission to launch the world's first Microsoft Center of Excellence in Dubai that will facilitate the government to migrate to the cloud.

These are just some of the snapshots of the 'to-do' list of Pacific Controls. IoT is still in its evolving state, and it's quite apparent that there will be a whole new range of unprecedented challenges stemming out from it. To make the world more technology driven in the coming days, the responsibility rests on the shoulders of preeminent organizations in the IoT space and it goes without saying that Pacific Controls is one of them. CR

CIOReview

The Navigator for Enterprise Solutions

50 Most Promising IoT Solution Providers 2015

'Connectivity' is a pioneering idea that has revolutionized the technological landscape. Right from basic telephonic systems to advanced wireless accessories, everything revolves around an initiative to craft a connected world. Amid this large arena of connectivity, lies the booming landscape of Internet of Things (IoT) that has spread its wings to foster whole new era of intelligence.

Realizing this crucial need of intelligence, today's enterprises are embracing the concept of IoT to significantly improve business performance, profitability and customer-experience. Retailers, warehouse systems, and manufacturers have already employed IoT within their workspace and are experiencing benefits of the connected world.

In spite of its current limited coverage, experts of the IT industry foresee high demand for IoT deployments in the coming future. All along this growth, is the emerging trend for Edge Computing in the field of IoT. Edge computing is an idea where one captures, processes and store the information locally. This allows organizations to filter out the inconsequential messages while also augment the value of existing data. The other advantages include—deployment of smaller and simplified sensors, and application of security at a local level.

Citing these innovative trends and expansion of IoT, the necessity for competent IoT solution providers has increased immensely. Subsequently, a number of companies have achieved distinction in delivering these services. In the last few months, we have come across hundreds of IoT solution providers and shortlisted some of the pioneering companies who have helped manufacturers, retailers and several other enterprises in tackling the IoT's impediments. We present you 50 Most Promising IoT Solution Providers 2015.

Pacific Controls

recognized by **CIOReview** magazine as

CIO**IoT** 2015
Review SOLUTION PROVIDERS
50 MOST PROMISING

An annual listing of 50 companies that are in the forefront of providing IoT solutions and impacting the marketplace

Pradeep Shankar
Editor-in-Chief
CIOReview

Company:
Pacific Controls

Description:
A global provider of end-to-end managed application services and solutions for machine-to-machine (M2M) and Internet of Things applications.

Key Person:
Dilip Rahulan, Executive Chairman and CEO

Website:
www.pacificcontrols.net