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Asia Pacific Facility Management: Smart Facilities, Unlimited Opportunities

Buildings in the Cloud:
FM Online in 3D

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As the world's population migrates from rural areas to urban environments, new enabling technologies are critical to the successful creation and maintenance of Smart Cities. Join us for an exploration of one of these a key innovations, The Cloud-based Urban Platform, and how it can change your world.

Screampoint Whitepaper: This whitepaper describes a Cloud-based Urban Platform that cities and real estate portfolio owners can use today as an immediate cost saving and communications solution with a built in, non-tax based recurring revenue stream and job creation model for all stakeholders.

CHALLENGE

Cities and their buildings are responsible for **75%** of the world's energy use, and **80**% of global greenhouse gas emissions. At the core of the problem is the lack of public and private access to the data that citizens need to live sustainably and improve their lives. **86%** of the cost of a building asset is assessed over its lifecycle post-construction. **30%** of that cost is wasted, resulting from inefficiencies that are exacerbated by this lack of access to authenticated, multi-stakeholder data. As a result, **cities and building owners incur an annual aggregated loss of $2 trillion globally.** As cities and companies grow and become more complex, **cities and building owners lack tools to efficiently model, monitor, and manage their assets and interface with citizens and building users.** Traditionally, technology solutions to this challenge involve individual, expert systems that are used in achieving success factors for each agency or department, which naturally creates silos of expertise, knowledge and data. One challenge city's face is how to cost effectively to have all expertise, knowledge and data be shared as a holistic process, increasing effectiveness, efficiencies and creating a better environment and experience for the people that will live, work and play.
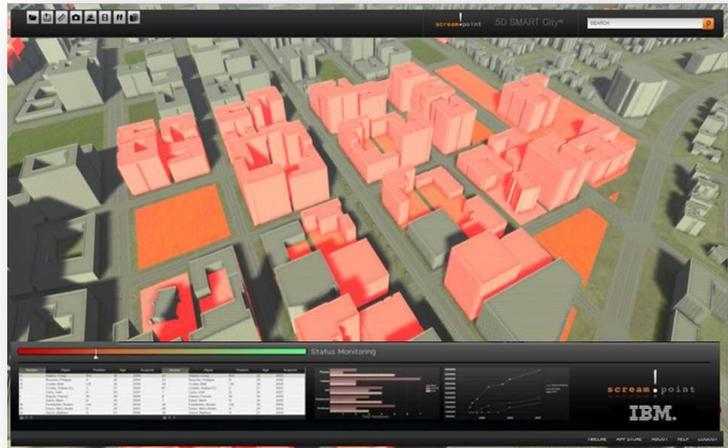
The solution is to provide managers and officials with a single-point-of-view, user friendly interface to the vast array of city data that surrounds them, transforming illegible data into meaningful, actionable information.

SOLUTION

A Cloud-based Urban Platform is this solution. A solution that provides you with an easy to use, intuitive 3D view of their entire city or portfolio, powered with Apps for measures, monitoring and communications. Using a mashup of Gaming technologies, Geographic Information Systems (GIS) and 3D data models, this solution allows stakeholders to access information over The Cloud on their PC, Smartphone (iPhone) or Tablet (iPad).

In the same way Geographic Information Systems (GIS) technology changed the way we interact with the world, the possibility of gaining a much deeper understanding of projects and assets has become a reality through the advent of Screampoint's spatial analysis tool. By 'seeing' your data in a 3D environment, users visually navigate layers of real-time, real world data, analyzing systems and creating a better, clearer picture of their world. The concept of 5D derives from the traditional description of an asset, starting with the First Dimension (1D) being program data, the Second Dimension (2D) being the graphic representation of the program, the Third Dimension (3D) being the geometric representation of an asset (commonly known as BIM - Building Information Model), the Fourth Dimension (4D) being time scheduling or sequencing of events, and the Fifth Dimension (5D) being all data associated to the 3D model and asset.

The value of 5D includes:
- Data integration keeps everything up to date
- Graphical interface allows for intuitive understanding of complex data
- Information integration reduces risks
- Quickly analyze alternatives for more informed decision making
- Data tracking and auditing for accuracy and assurance
- Integrated process allows greater control over an assets data and information
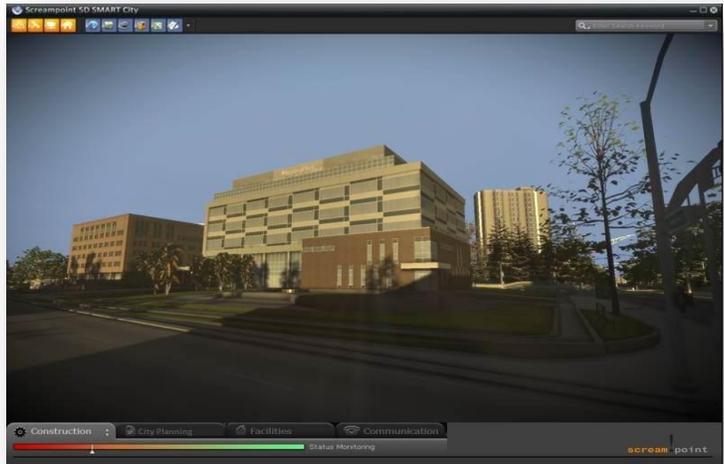
Screampoint has developed technology that allows you to efficiently access and powerfully apply your 5D data in an intelligent way by using this solution. These solutions not only provide easy, intuitive access to key asset data, but can also provide you with ways to monitor and view your information like never before.

RESULTS

The expected results by implementing a Cloud-based Urban Platform solution can be:
- Cost savings of approximately 5% of total project costs over the life of capital projects like buildings and infrastructure
- Improved decision making through more accurate, transparent and timely communication
- Creates efficiencies within agencies and departments
- Eliminates redundancies between agencies and departments
- Engages and enlists citizens and building users in the process of efficiently operating and using their built environment
- Increased job creation by creating a 3rd party software development network for the creation of Apps
- The creation of a revenue stream regarding the development of the Apps and captured data that can be used and subscribed to by other users around the world.

These solutions are designed to address important industry and city issues, from assisting design firms to design a better world to reducing congestion and carbon emissions, to sharing security information across agencies and constituents. We make easy to use tools that help people better understand and engage with the places where we live, work and play, and together build a more connected, livable and sustainable world.

KEY MESSAGES

- A Cloud-based Urban Platform enables a multi-dimensional, virtual representation of Earth, providing its customers with a limitless experience of interacting with people, places and things on a local and global scale.

- There are seven (7) key areas that the Smart City market is asking for in regards to App Development:
  - Air Quality
  - Energy
  - Green + Sustainable Built Environment
  - Waste & Recycling
  - Water, Wastewater, Stormwater
  - Transportation
  - Public Safety

- Cities and citizens gain enhanced visibility of a vast array of

data (on, for example, transportation, public safety, community services, energy performance, and sustainability measures), which is consolidated, analyzed, presented, and connected through the user-friendly, intuitive interface of a visual model.

- The Cloud-based Urban Platform provides a single point of view of complex, multi-agency, authenticated city data, creating efficiencies and cost savings and generating new, non-tax revenue streams for its city clients.

- The Cloud-based Urban Platform provides the environment for the development of "Apps"/data connectors for cities with municipal agencies and other stakeholders that, in addition to being used by the city for which they are created, can be licensed to other cities in a revenue-sharing arrangement.

The Cloud-based Urban Platform brings together previously disconnected operational programs and data, that allows for coordinated, efficient and **sustainable urban policies and strategies** across neighborhoods, businesses, and the entire social fabric of an urban area.

For further information on how a Cloud-based Urban Platform can help your city or building portfolio, please contact:
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Paul is one of the global Industry's most sought after thought leaders, strategists and integrators of process, technology and business. He is an author, educator, analyst and advisor to Fortune 500 organizations, global government agencies, prominent institutions and the most prestigious architectural, engineering and contracting firms in the world. A former Corporate Officer of K. Hovnanian Homes, (NYSE:KHOV) a publically traded Fortune 500 company, Paul is a licensed architect and is a prominent and highly rated speaker at numerous industry events around the world each year and has been appointed as a guest lecturer at leading universities throughout the world. A former Board of Director of the International Facility Management Association (IFMA), Paul is a co-founder of IFMA Shanghai Chapter, the first Western professional industry association in the People's Republic of China.

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