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GIS NEWSLETTER



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When you celebrate this New Year, MicroCenter wants to take a moment to let you know how much we appreciate you being our customer.

Thank you for everything you do.
We can't wait to keep working together in the new year.







December 07th GIS Day 2022

(Discover the world through GIS)

The GIS day is an Annual global event that fosters discussions, and exchanges among GIS professionals. The event brings together Social leaders, Policymakers, and Geospatial professionals from around the world for a day of presentations about using Geospatial technologies to tackle global challenges.

GIS Day is an annual event for Students, Staff, Faculty, Ministries, and the broader community to learn more about Geographic Information Systems (GIS) and to celebrate the power of Geospatial data, methods, and technologies for answering research questions and solving real-world problems. It brings together Academicians, Industry practitioners and Government officials to discuss the past, present, and future of Geo-spatial technology.

GIS Day 2022 was organized by the MicroCenter Gulf, Kingdom of Bahrain and It was conducted successfully on 07th December 2022. The day consists of presentations and discussions on Geospatial technologies, techniques and trends. Many experts from Universities, Ministries, Industries were participated in this virtual event and shared their knowledge about the geography of space.

GIS Day focuses on the latest trends in the Geospatial technology and how it can help solve problems in various industries.

This year 2022, GIS Day is all about the latest trends in Mapping, 3D modeling, Geospatial Infrastructure and how they can transform the way we see our world. Topics that are explored include how to collect, manage and visualize Geographic data in different ways.

On this GIS day event, there are presentations like "Reducing the Dimensions of our World using a Geospatial Infrastructure, BIM & 3D GIS for Building Permit System, Experience in calculating the UN - SDG 11 indicators using Spatial information and Planning System that has been implemented successfully in the field of Geospatial Information Systems.

The goal of GIS day is to explore new ways for Geospatial professionals to think about and use their skills. Attendees have an opportunity to discuss how spatial thinking can be used in fields beyond geography like Engineering, Smart City, Urban planning, Design, Environmental Science and more.

Please watch the recordings of the event: GIS Day 2022

Smart City Digital Services & Modern Economic Development

(Economic diversification and Modernization program)



Business overview

In today's global economy, the marketplaces are characterized by trade and investments. In order to maintain a competitive edge, it is important for any City to be able to attract as many corporations and investors as possible.

Smart Cities are interconnected, data-driven and digitally enabled. A smart city should have a digital infrastructure that is connected to the city's work processes and able to provide services that facilitate economic growth and prosperity.

Smart City Digital Services are a popular extent in the modern economic development. It is an essential component of a Smart city, as it assists in developing the social, environmental and economic aspects of the city.

"Modern Economic Development" is a great way to improve the city's profile and interact with international businesses. A Smart City will attract higher quality of life; create more sustainable, green neighbourhoods; and provide better public services, jobs and the level of connectivity between people, data, and communities then shapes how we interact with our environment, each other, and the services we use every day.

A Smart City has a few components including infrastructure, data, and people. The infrastructure includes the smart buildings, transit systems, power grids& smart energy, and water supplies. Data includes the information on how well everything is working in the city as well as sensing technologies that monitor air quality or water quality. And finally, people are essential to a smart city because they make decisions based on the data from sensors or from their interactions with technology.

Geographic Information System (GIS) for Smart City

Smart City development is mainly based on the use of Internet of Things (IoT) and Geographic Information System (GIS) mapping, technologies that can be used to optimize every aspect of a city.

GIS can help identify where potential problems are occurring in the city and make corrections. **For example**, if a water main breaks, tracking traffic patterns an area of the city, locate public transportation facilities and services, study demographics, Public utilities, track water usage/quality, visualize air quality levels over time, and IoT technologies & GIS systems to improve day-to-day living conditions of the citizens.

Innovative tools such as GIS technology are being used to map, monitor, and analyse all data related to transportation, land use, economic development, Public utilities, infrastructure and more. The goals of these tools are to build a Smart City that is clean, safe and sustainable. This can be achieved by using GIS tools in various fields like land surveying management or regional planning initiatives. With these innovative tools we can monitor the progress of an economic development agenda across different sectors like health care or education.

The ability to use GIS applications is becoming important in the world of Smart Cities. They can be used to map out where various businesses and organizations are located, and then draw on that information to create a plan for development throughout. This can help narrow the gap between well-developed areas and those where development is struggling.

The Smart City economic development portal is interactive and can be customized to analyse the patterns of population, housing, employment, zoning, zoning changes, and other community related data and business growth over time. It can also help to forecast how the community will grow in the future.

Developers and investors have been very interested in Smart City development opportunities. The new economic development portals will be a great way to learn more about what is available and how a city can be developed.

GIS for Economic development Portal offers information on:

- Population, housing, employment, and business growth
- Existing top industries in the area
- Development opportunities including vacant land, market statistics, entrepreneurship, and planning frameworks
- Workforce demographics and employment and commuting data
- A query tool for business resources and tools
- Community amenities such as Transportation, Public Utilities i.e. (Water, Gas, Electricity, Telephone, and other communication systems), Public Safety facilities

"Smart maps" provide community leaders, businesses, and investors with key data and iterative development plans in real time.

- Attract new residents and businesses with destination branding powered by analytics, reports, and maps.
- Identify gaps in goods, services, and infrastructure to improve quality of life.
- Support site selection, planning, territory analysis, retail comparison, merchandise mix evaluations, and customer segmentation and targeting.
- Identify opportunity zones and empower sustainable growth using data-driven maps.

Transforming Urban planning & design

Smart Cities are one of the most popular ideas in the future of Urban development. They are more than a physical space where people live and work; they are an environment prepared for innovation. With this portal, developers can have access to geographic data that will help them make better decisions about where to build their Smart City.

Smart City development enables planners and design professionals to collaborate across teams with a **Web-based 3D GIS application** that supports scenario planning and impact assessment.

Challenges

One of the major challenges in the field of Smart City development is to design and implement a robust economic portal that can provide valuable information.

This economic portal should offer economic development opportunities, market statistics, entrepreneurship and planning frameworks to encourage development and create jobs.

To be successful, economic developers need to understand their community's strengths—whether it's an educated and diverse workforce, affordable housing, lower cost of living, great transportation, or a thriving local economy. **Leaders can use GIS based location intelligence tools** to visualize and analyse business and community growth potential, combining data about demographics, lifestyle, and spending. This strategic approach helps communities create jobs, identify opportunities for economic gardening, and attract new business.

Economic development agencies are trying to bring on board the private sector to collaborate on Smart City efforts. The goal is for the **Private sector**, **Government officials**, and other stakeholders to work together on these projects in order to create an economy that sustains both social and environmental well-being.

Smart planning and growth that take advantage of smart technologies will become the foundations for business success, inclusive prosperity, and community well-being.

Smart City Economic Development Portals enables the digital transformation of city and regional planning to encourage collaboration with community stakeholders and help all groups work toward a more sustainable future.



Going Places with Spatial Analysis

If you have a goal to stay current on technology, you won't want to miss our first free massive open online course (MOOC) of 2023. The opportunity to expand your analytics skills starts on February 1.

Join thousands of learners from around the world and explore the latest ArcGIS Online analysis tools and workflows. Over six weeks, Esri experts will show you how spatial analysis techniques enhance traditional data analysis and deliver more actionable insight.

Going Places with Spatial Analysis

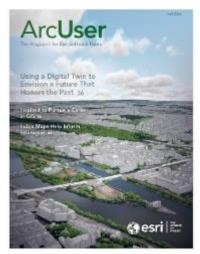
February 1-March 15, 2023

Register Now

The self-paced course includes the following:

- Access to ArcGIS Online for the course duration
- Hands-on exercises, videos, quizzes, and discussion
- Certificate of completion

Esri Publications



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MicroCenter Group

Founded in 1983, MicroCenter Group is a pioneer in providing information technology solutions in Bahrain. Initially it was starred with the aim of providing customized IT solutions to small and medium organisations but today with over 100 customers, both in the Government and private sector it has attained a leadership position in the industry within the country. With four group companies and an office in Saudi Arabia, today it has diversified into various other businesses that include IT Business Solutions, Geographical Information Systems (GIS), Utility network GIS surveys, LiDar Technology / BIM modeling, and Digital media solutions & Specialized training.













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