Gaining System Synergy

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With GIS and EAMS

syn· er· gy

The interaction or cooperation of **two or more** organizations, substances, or other agents to produce a combined effect **greater than the sum of their separate effects**.

in· te· gra· tion

An act or instance of combining **disparate units** into an **integral whole**.

in· ter· op· er· a· bil· i· ty

Ability of **a system** to work with or **use** the parts or equipment of **another system**.

Gaining System Synergy

Integration ≠ Synergy
Interoperability ≠ Synergy

The goal is to make **GIS** more **valuable** because of the **EAMS**, and make **EAMS** more **valuable** because of the **GIS**.

Framework of Gaining Synergy

- Design an **inclusive** and **extensible** system
- **Maximize** the **strengths** of each participating system (stay in the core functionality)
- **Deliver** relevant **data** regardless of it's system of **origin**
- **Write** relevant **data** to key repositories in order to maximize **value** and minimize **distribution**
- **Automate** intersystem **communication**, **data management** and **reporting**

Design an Inclusive and Extensible System

- Have a **plan** for full buildout (know the goal - and the **steps** necessary to get there - before you start)
- What are your key points of **interface** design?
  - Key values
  - Geometry considerations
  - Consider cardinality
- What **part** does the system play in the **constellation**?
  - Don't integrate for the sake of integration
  - Don't bring more data than you need
 - Avoid data duplication
  - Get data from the authoritative source

Design an Inclusive and Extensible System

- Where does this systems **data** need to be **exposed**?
  - What tasks need what data… when?
- What other **data** would **add value**?
  - Know your **resources**
  - Leave **access points**
- What are the **technical** challenges?
  - What are the **security** challenges?
  - What are the **latency** challenges?
  - What are the **accuracy** challenges?

Maximizing Strengths

Every system is designed to focus on particular process or output but is capable of functioning beyond the scope of the original design. This generally results in some strengths and weaknesses inherent in the system. Gaining **system synergy requires maximizing** the **strengths** of each system. Allowing each system to handle the tasks it was principally designed to handle while simultaneously supporting other contributing systems in the constellation.
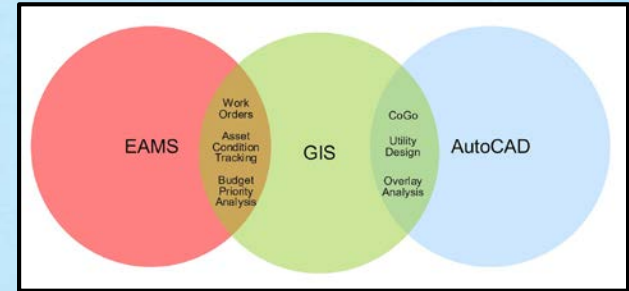
Deliver Relevant Data (O.T.& O.T.)

System synergy requires relevant business data be delivered where it is needed, when it is needed regardless of it's native system. This is core to the concept of synergy. Delivering data on time and on target makes every system more valuable.

- Example of calling the credit card company
- Example of text autocomplete

Gaining System Synergy

Write Data to Key Repositories

System synergy requires relevant business data be stored with strategic forethought. Store in relevant system(s) while minimizing data duplication. Think data logistics.

Systems Automation

System synergy requires automation. When systems can interact with little to no user input they can gain synergy. Automation allows information systems to model processes.

- Example of "ITTT"
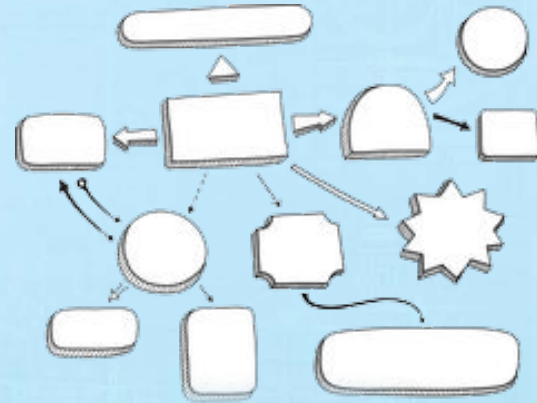
Elements XS Demo

Inclusive and Extensible

Elements XS Demo

Maximizing Strengths

Elements XS Demo

Read & Write

Elements XS Demo

Automate

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