GIS implementation in Organizations: Strategies and Issues

CRP 514

Semester 101

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Introduction:

- GIS technology facilitates data integration across organizations (Campbell and Masser 1991)

- Organization's strategies for managing GIS play a fundamental role in the success of the technology within or between the organizations (Rebecca Somers).

- There has been a general failure and often unwillingness to share data and information across boundaries, with along with low levels of coordination (Warnecke et al. 1998).

Challenges Toward Implementation:

- Generally every technology subjected to resistance. (Resistance to change)

- Issues toward implementation increase proportionally to number of participants.

- Initial cost obstacle.

- Willingness toward sharing data.

- Operating cost and effort.

GIS Management Strategies
(general)

- Benchmarking a successful process.
- Defined scope and needs.
- Resources implementation plan:

- Organization's Assets.

- project managements assets,

- information system development and management assets,

- re-engineering of business development

(No Need to Reinvent the wheel)

Best Practiced Management Strategies:

- GIS Implementation Process:

  basic steps:
  - 1) planning,
  - 2) Requirements analysis,
  - 3) Design procurement development.
  - 4) Operation and maintenance

Strategies: continued

- **Strategic Vision, Scope & Organizational Impact of GIS:**

  it will provide the direction and decrease level of conflict.

- **Assessment of Organizational Risks:**

  GIS mangers of implementation are commonly frustrated by illogical

  resistance toward GIS application

Strategies:

- ## Coordinating GIS Participants and Users:

    A harmonic emerging of GIS into structure or by forming adhocs.

- ## GIS Committee and Team Environment's Management:

    Adequate time= 25-100%   also   workable committee number of participants which is = 6 – 8 participants

Strategies:

- ## Communication and Providing Information:

  - Right information on right time.
  - A clear goals to participants and professional background to process information.

- ## Leadership and Support:

  manger who can influence the policy of the organization (Champion),

  Professional members.

Strategies: continued

- ## Managing and control of GIS:
  either to be centralized or decentralized as function of complexity of the system

- ## Personal Issues:

  staff configuration, staff responsibilities, position requirements, position

  descriptions and pay scale, job classes and career paths, staffing training

Strategies: continued

- ## Integrating GIS into organization's Operation:

  strategically considered to be the vocal point in the implementation process

After Implementation:
Interaction Mechanisms and Motivation:

- Motivation of Data Sharing. (people)

- Interaction Mechanisms. (Structure)

Motivation of Data Sharing:

1) Cost Saving:

2) Improved Data availability:

3) Enhance Interorganizational Relationship:

Interaction Mechanisms:

- Structure is highly recommended despite of type of communication, which could be formal or informal communication.

- Structure will help to avoid beurocratical style of managing GIS implementation process, which is the killing daises of proper implementation of any technology.

Conclusion:

- Any innovation needs high level of management effort to guarantee sustainability.

- It is easy to have GIS infrastructure, but it is difficult to run it properly. (adopt)

- Without managing GIS implementation well, until its full adoption, many research and organizations experienced failure.

THANK YOU

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