

# The Logistical Tracking System (LTS©) Five Years Later: What Has Been Accomplished?

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# Introduction



- Purpose of development of LTS
- Evaluation of changes in processes and procedures
- Capabilities added for strategic planning
- Role of OSPA in development of LTS

# Evolution of Facility Information



- Researcher's exposure to different facilities management systems.
- Hypothesis to use technology to improve accuracy and efficiency with facility information.
- Hypothesis expanded to use technology to improve existing business processes and practices and add capability that did not previously exist to UTD.
- As project evolved streamlining the ease of use for the application became a priority.

# Why OSPA Became Involved in Development of LTS



- Primary reporting department for the university
- OSPA interfaces with various departments
- Technical skill of the staff
- Access to all university databases
- Global view on how to tailor needs to different departments

# Organizational Theory Used to Inform the Research



- Decoupling Issues in the organization – Reality is different than what ideally should occur
- Life Cycle Theory – Growth of the University
- Organizational Drift – Limited resources caused alignment to go astray
- Agency Theory – Priorities are different for each department which are not necessarily the priority of the organization on the whole.

# Methodology of Research



- Case Study approach
- Used a Grounded Theory approach
- Gathering data method 1 - Participant Observer
- Gathering data method 2 – Unobtrusive Observations
- Gathering data method 3 – Archival Data

# Why UTD is Typical



- State of Texas Regulations
- California, Utah and Nevada guidelines
- Utilization rates and square footage allotments
- Indirect Cost Recovery

# History of Facility Information at UT-Dallas



- Origins of UTD – 1962 - 1969 private research think tank
- 1983 Texas Higher Education Coordinating Board  
“Facilities Inventory Procedure Manual”
- DSPACE (Mainframe pre-1998)
- SMS (1998)
- SID (2001)
- LTS (2003 - Onward)

# Development of LTS



- Use of GIS to accurately calculate square footage
- Texas Higher Education Coordinating Board report on facilities could cause an over estimation of square footage due to older system's data storage.
- CAD vs. GIS Decision
- Platform and interface Software
- Functional areas of LTS
- LTS is expandable

# Resource and Technical Issues



- Personnel resource issues
- Hardware resource issues
- Software issues

# Process Issues



- Gaining input from stakeholders
- Data entry process improvements
- Conversion of existing data
- Reduction of programmer reliance
- Decentralized data streams and empowered users
- New platforms allow for use of new technology
- Improved processes by using GIS

# Advantages to Developing an In-House System



- Innovation
- Improved processes
- Students trained
- Intellectual property rights
- Understanding the data streams
- Good public relations
- Possibility for federal research and development grants
- Low costs involved

# Problems and Drawbacks to Developing an In-House Software System



- Political issues
- Issue of resources
- Transition of personnel
- Maintenance of software
- Upgrading application
- Increasing demands for development

# Conclusion: What Has Been Learned?



- In-House built systems are practical if resources are available
- Estimated cost savings to UTD was 3.2 million dollars during the first five years of implementation of LTS\*.
- Development of LTS allowed for business processes to be re-engineered.
- Data is now collected more efficiently and effectively LTS has been implemented. This has also allowed for data to be reported quickly and accurately to government agencies.
- Certain processes were automated allowing personnel to be freed to perform other tasks.
- LTS also resulted in an increase in capability in tasks that can now be accomplished that were previously completely manual or were not undertaken.
- Stakeholder support is critical for such a project.
- To develop such as system a long time will need to be allotted for research, development and debugging.
- LTS fostered cooperation across departments and allowed for data to be standardized for the entire university in regard to facility information.

# LTS Demonstration



# Questions?



# End of Presentation

