

Building a Business Case for ArcGIS Server

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Overview

- **What is ArcGIS Server?**
- **What are the advantages of ArcGIS Server?**
- **Business Case preparation and writing**
- **Building the ArcGIS components into the Business Case**
- **Summary**

What is ArcGIS Server

- **Allows sharing of GIS Resources**
 - **Across the enterprise**
 - **Across the WEB with Dekho**

What are GIS Resources?

- **Maps**
- **Address locators**
- **Geodatabases**
- **Tools**

Advantages of ArcGIS Server

- **Shared data and information that is current and accurate**
- **Disseminate GIS functionality and data management**
- **Reduce other licence costs**
- **Increased awareness and demand**
- **Scaleable**

<http://www.esri.com/library/brochures/pdfs/arcgis-server-functionality-matrix.pdf>

What is a Business Case?

- **Communication tool**
- **Justification for spend**
- **Business needs**
- **Understanding of investment of business opportunity**
- **Opportunity**
- **Multi purpose**
- **Allows discussion**
- **Part sales / part marketing**

What is a Business Case?

- States a problem
- Describes a solution
- Defines costs
- Defines benefit

**A well planned business case leads
to a GREAT GIS System**

Bad planning leads to -

- Rejection
- Expectations not being met
- Existing issues will continue and get worse

Framework

- **Place the initiative in a strategic context**
- **Develop the team**
- **Determine communication channels**
- **Develop a process**
- **Confirm place and priority**
- **Check the reality and achievability**

Sowing Seeds

- **Speak to approvers**
- **Speak to ALL stakeholders**
- **Early involvement**
- **Ownership**
- **Roadblocks**
- **Pros and cons**

1. Current Situation

Currently we provide our product through a network of regional sales offices. They order on line when stocks reach a specified level and the items are processed in Head Office and a Transport slip is forwarded to the closest warehouse where the order is delivered usually within a week. Some items are not available at an individual warehouse and need to be supplied from another. This is inefficient in that we don't know which warehouse the items are at any one time in a quick manner. The data is available but not easily accessible. There is no common access to all the information that we have. The GIS Unit have access to this information but need to run processes and provide reports on a daily basis to provide the information to a range of people including warehouse manager, regional sales offices and this information is usually out of date by the time it is provided to everybody. This needs to be improved by the provision of common access in an intuitive, timely and accurate manner. We also need to review the warehouse locations as many regional sales offices have shifted several times in the past 2 years and no account of the warehouse proximity to the types of sales at each office has been assessed.

Our regional sales managers have questioned the locations of some of the stores as to whether they are suitably located near our key customers. We need to be able to analyse the customer base to determine the best locations. This will also assist in determining the best routes for delivery as this is becoming a high propriety for our customers.

Business Case process

- **Current**
- **Needs**
- **Appraise options**
- **Preferred solution**
- **Costs and benefits**
- **Milestones and timelines**
- **Assumptions**
- **Risk**
- **Conclusion and recommendation**
- **Executive summary**

Cost and benefit analysis

- **Identify benefits and costs**
- **Overview of operational savings**
- **Overview of improvements in customer and employee satisfaction**

Costs and Benefits

- Important to include **EVERY** item
- **Conservative and reasonable**
- **Only impacted items**

Direct benefits	Indirect benefits
Increased revenue	Art
New revenue streams	Conservative and reasonable
Reduced overheads	Time savings
Easily identifiable	Increased productivity
	Improve decision making

Direct benefits	Indirect benefits
Decreased full time equivalent headcount	Decreased training requirements
Elimination of errors	Efficiency gains
Reassignment of human resources	Time savings
Increased production	Decreased employee turnover
Decreasing / eliminating paper and printing costs	Better management decisions
Opportunity costs	Job satisfaction
	Strategic competitive advantage

ROI – Return on Investment

- Standard measure of project profitability
- **REASONABLE ASSUMPTIONS**

NPV	IRR	Payback Period
Net Present Value	Internal Rate of Return	
Diff between market value of Investment and the cost	NPV as a percentage	Time needed for an investment to generate cash flows
Assumption that a dollar today is worth more than in the future	Use a Spreadsheet	Quicker the better
Positive figure required	Positive figure required	Positive figure required

Simple ROI

- Simple ROI = $\frac{\text{Gains} - \text{Investment Cost}}{\text{Investment Cost}} = \frac{\$700,000 - \$500,000}{\$500,000} = 40\%$

Cost / Benefits analysis considerations

- **Hardware**
- **Software inc
Maintenance**
- **Data changes
(conversion)**
- **Training**
- **Implementation**
- **Enhancements**
- **Staff**
- **Procedures and
documentation**
- **Communication**

•EXECUTIVE SUMMARY

This project arose from the identified need for improvements in revenue and the need to reduce costs associated with our logistics. There is also a need to ensure that we have the right locations for our regional sales offices, that delivery routes are optimised to ensure speedy deliveries, that we manage our assets, that we share information across the web such as nearest sales office. A review of available software has been undertaken and it is recommended that the company purchases the Esri Australia product ArcGIS Server 10. This software will allow the company to improve considerably the use of GIS that will allow for streamlining of processes, the evaluation of existing processes, the evaluation of the customer database and to ably assist in future planning.

Costs of alternatives have been evaluated with the ArcGIS Server 10 providing the best long term benefits.

The evaluation of each solution can be reviewed further in the document.

Background

In recent times as a result of the Global Financial Crisis our revenue has decreased due to the reduced spending of our customers. At the same time our costs have risen with distribution costs being the greatest increase. In order for the company to survive we need to look at reforms aimed at reducing cost and providing better value to our customer base in order to encourage that spend. Marketing goes a long way to assist in encouraging our customers to spend but they need assistance in being able to assess our market and being able to determine the best directions. Likewise we need to determine the best distribution points and improve our logistics to decrease the costs. Other issues that have arisen over the last couple of years also include determining whether we have the best locations for our retail stores, determining the best routes for deliveries, managing our assets and allowing customers to find their closest store on our web site.

Objectives

The key objectives of this project is to improve efficiencies, reduce costs and allow for growth within the market place.

Specific Project Objectives

Allow for improved communication throughout the company

Increase sale prospects

Improve targeted marketing

Reduce logistics costs

Improve turnaround time for processing of orders

Improve maintenance

Reduce turnover of staff due to increased job satisfaction through enhanced knowledge

Through scalability allow for further use through the company

Preferred ArcGIS Server 10 from Esri Australia

Description

Well recognised product that allows full Enterprise capability.

Costs

Cost have been defined above but total cost for purchase is \$100,000 plus ongoing maintenance of \$20,000. Plus a server for \$100,000. Total cost equals \$330,000

ROI

$$= \frac{\$2.4m - \$330,000}{\$330,000} = 6.27\%$$

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Advantages

ArcGIS Server is continually evolving as organisational needs change. It is recognised in the industry as the leader in this type of solution. It meets all our current requirements and has the scalability to grow with our company plans. The vendor's consultants have extensive experience across a broad range of industries and fully understand the requirements of this project.

Disadvantages

No disadvantages there could be discerned

Implementation plan

Feasible

•Cost Benefit Analysis

Total Cost 1st Year is \$332,000 (maintenance not payable 1st Year)

The cost benefit shows that the total expected revenue increase is \$1.4m plus the net savings of \$1m equalling \$2.4m and if we take away the initial investment we have a net increases \$2.068m net benefit.

Item	Cost
ArcGIS Server	\$100,000
New Server	\$100,000
Configuration & Enhancement	\$20,000
Data Cleansing and Conversion	\$50,000
Training	\$40,000
Maintenance	\$20,000 per year
Post Implementation Review	\$2,000
Project Management	\$10,000
Business Process Review	\$10,000

Increased Sales	Expected increase of \$1.4m per year
Reduced logistic costs	Expected reduction of \$1m per year

Assumptions

That finance will be available for the project

That support will be available from the Board and Directors

The preferred software will be able to meet all requirements with minimal development

The current sales and cost figures presented for this project calculation are correct

The estimate of projected sales is based on historical figures with analysed trend lines

Business case document

Risk Assessment

Change Management

Conclusions and recommendations

- **Brief paragraph or two**
 - **What and why**

Business Case development key points

- **Sow the seeds and market the idea**
- **Know your audience**
- **Do your homework**
- **Develop a strong business case**
- **Market your business case**

Finally

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Thank you

Questions?



esri Australia