

MuSA
museum sector alliance

The Procurement Process

A brief debate on
“make, lease or buy” options

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Aim and objectives

- The aim of this presentation is to:
 1. Investigate the options available in terms of how we deal with an identified need; do we make, lease or buy the required service or product?

Learning outcomes

- At the end of this presentation, you will be able to:
 - **LOut5** Debate on “make, lease or buy” options

- **Business Process control**

Business Controls are a framework of processes and activities designed to reduce the risk of error or fraud.

- **In-house development**

The process where the organization uses their own workers (in-house team) to develop or implement an IT system or service that fits the specific needs of the organization. This process allows for the creation of a more customized system that can have an exact fit in the organization.

- **IT services**

The application of business and technical expertise to enable organizations in the creation, management and optimization of or access to information and business processes. IT services are for example: Computing (eg cloud computing), Software applications, Networks, Data Storage, Data Synchronization, Databases, Data analytics, content management, transaction processing, event processing, information security, mobile apps, artificial intelligence, etc

- **Lease**

A contractual arrangement calling for the lessee (user) to pay the lessor (owner) for use of an asset. Property, buildings and vehicles are common assets that are leased. Industrial or business equipment is also leased. It may typically also involve an option to transfer the ownership of the asset to the lessee at the end of the lease.

- **Outsourcing**

Is the process of acquiring goods and services to satisfy the needs of a private entity (usually a business, for profit or not).

- Section 1 **Intro**
- Section 2 **A brief debate on “make, lease or buy” options**
- Section 3 **Software and IT services/In-house vs Outsource Approach**
 - Motivational factors for Software/IT-service Outsourcing
 - Feature comparison of In-house & outsource IT projects
 - Risk factors comparison of In-house & outsource approaches
- Section 4 **Synopsis**

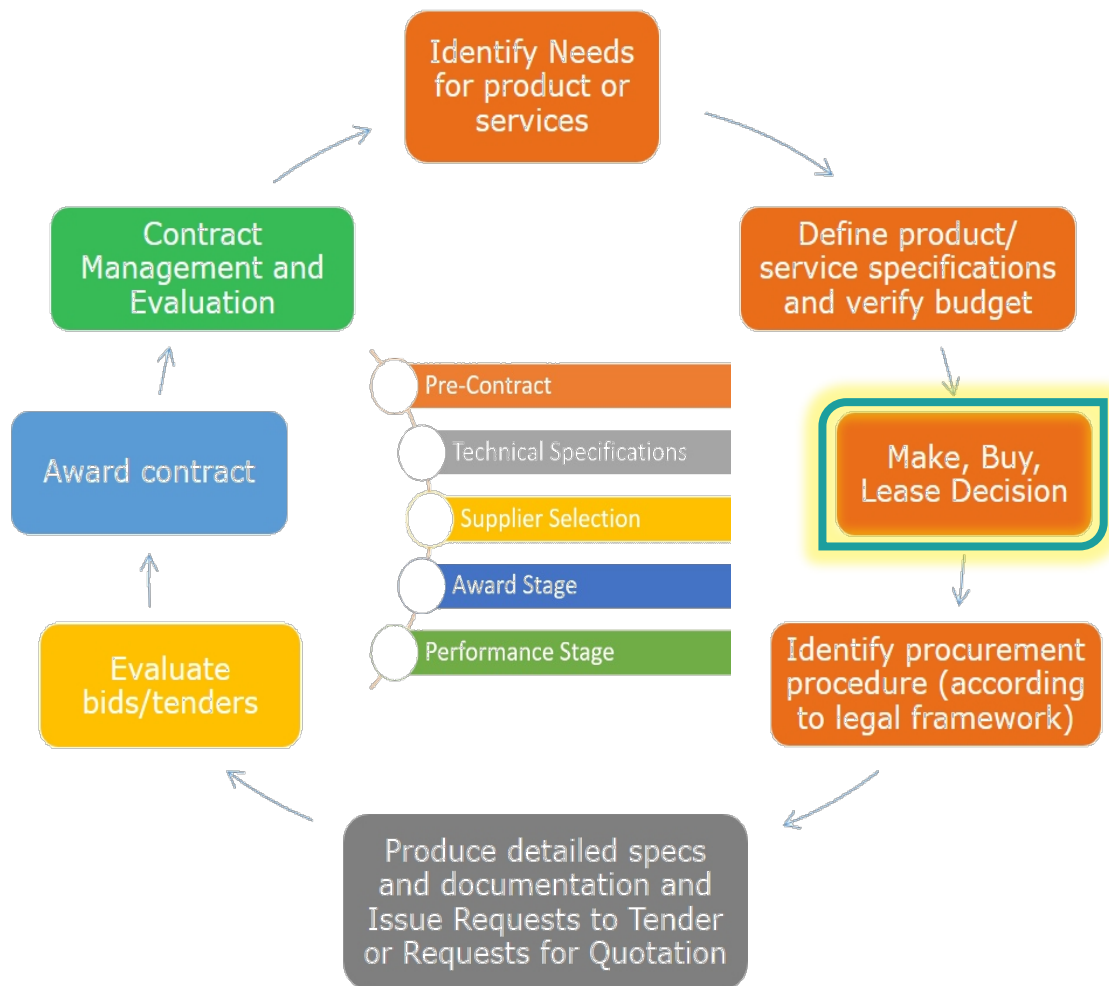
“Do what you do best.

Outsource the rest.”

Peter Drucker

Revisiting the Procurement Cycle, we see that after the identification of the need and the definition of the product/service needed, we need to decide whether we will make, buy or lease the product/service.

As we will see in the following slides, this is an important interdisciplinary “exercise” requiring input from various organizational departments, namely Finance, IT and Management.



A brief debate on “make, lease or buy” options

When dealing with the “make, lease or buy” dilemma in an organization like a museum, we usually have the following options:

| | Make | Lease* | Buy |
|----------|-------------|---------------|------------|
| Products | - | ✓ | ✓ |
| Services | ✓ | ✓ | ✓ |

*more common in privately-owned museums

Products are usually leased or bought, while services can either be leased, bought or provided/implemented using the organization’s own resources and means.

A brief debate on “make, lease or buy” options

As already mentioned in previous presentation, the questions to be asked in this stage are:

1. Is it more cost effective to implement the service/buy a product or outsource/procure it?
2. Does our organization has the ability/resources to implement a service using its own personnel and infrastructure?

Q1. Let's say that our Museum needs a new digital information board. In order to decide the way to go, an analysis is performed from the Finance dept., taking into consideration the budget required for the product needed. By using cash-flow analysis (not in the scope of our course to describe), the Finance department reaches the conclusion whether the board should be bought or leased.

A brief debate on “make, lease or buy” options

Q2. When it comes to services though, and especially those that are IT related, there could be the option to “make”. In this case, the question *“Does our organization have the ability/resources to implement a service using its own personnel and infrastructure?”* needs to be answered in a concrete and clear manner.

For example, the Finance dept’s suggestion to Management on a buy/make/lease dilemma for an IT service could be to buy (or lease). Yet, depending on the museum’s Digital Strategy, this could be eventually decided to be made “in-house”, by the museum’s staff.

A brief debate on “make, lease or buy” options

This is where the museum’s Digital Strategy comes into play, with the contributions of the Digital Strategy Manager and the Digital Collections Curator playing a significant role. Since they are responsible for defining and implementing the museum’s Digital Strategy, their judgement and professional opinion on whether to make or procure software and IT services is very important.

In order to be in a position to propose/decide on this issue, we need to examine the motivational factors, the pros and the cons of each approach; outsourcing and in-house development.

Motivational Factors for Software/IT-service Outsourcing

The motivation for/against outsourcing is mainly due to

- Strategic (focus on strengths, outsource/procure rest of the activities)
- Economic (aim for lower costs)
- Political (regulations, laws) and
- Technological (rapid change of technology, lack of know-how) factors.

Let's compare the key features between in-house & outsourcing approaches for IT projects to expand on the beforehand factors.

Software and IT services/ In-house vs Outsource Approach

Feature comparison of In-house & outsource IT projects

| Features | In-house development | Outsource development |
|-------------------------|--|---|
| Resources | Limited and defined | Supplementary resources because of specialty in such projects |
| Technology | Limited range of technology with respect to specific projects | Have more technology and tools for the project because company has specialized in that sort of projects |
| Cost | More cost to hire domain and technology experts. Hidden and unpredictable expenses may also come up (for purchasing new hardware for specific project, maintenance, etc) | Less cost because of availability of experts and potential geographical cost difference |
| Expertise | Narrow Range. Staffing and Training needs will probably arise. | Wider range. Specialized outsourcing organizations have already experts available. |
| Speed | Slow and gradual | Fast and progressive |
| Quality | Less quality variation | Prone to more quality variation |
| Flexibility | Rigid & less flexible because of local control and strict environment | More flexible because of having more expertise in the current project |
| Legal compliance | Less legal compliances because of domestic market and local laws | More legal compliances because of geographical variations in laws and regulations |

Software and IT services/ In-house vs Outsource Approach

The **key factors in favor of outsourcing are:**

1. Increased efficiency: Companies (museum) can concentrate on their core competencies and work more efficiently.
2. Quicker response to change: Be more responsive to change because can assign/procure these tasks to specialized third-party companies.
3. Quality improvement: Outsourcing often conveys quality improvements.
4. Cost savings: External companies have a high degree of specialization with regard to their services, so can work more cost-efficiently and therefore offer discounted rates.
5. Lack of in-house know-how: New processes and operations are often necessary in companies, but employees often lack the know-how and implementation skills required. Outsourcing, in this case, is an alternative to hiring skilled workers .

Nevertheless, if part of the museum's strategy is to be able to deliver IT services or develop software apps on its own, the beforehand outsourcing factors could very well become targets/goals for improvement regarding its internal team and their skills and competences.

In this case, we should discuss on the risks associated between these two approaches.

Software and IT services/ In-house vs Outsource Approach

Risk factors comparison of In-house & outsource approaches:

| Risk Factors | In-house | Outsource |
|------------------------------|--|---|
| Change | Change is easy to trace | Change is difficult to trace |
| Communication control | Communication is manageable due to local control | Communication is less manageable due to less control |
| Management | Management is centralized and efficient | Management control and efficiency is less as compared to in house development |
| Control | More Business Process control | Less Business Process control |
| Privacy | Privacy of the organization is in safe hands | Privacy of the organization is at stake |
| Security | More security of confidential data | Less security of confidential data |

Software and IT services/ In-house vs Outsource Approach

To conclude on this debate, we should keep the following in mind:

- In principle, for the reasons mentioned in the previous couple of slides, outsourcing/procuring of software/IT services would be more cost, time and outcome efficient than doing the development in-house.
- Exception to that would be the cases where:
 - Our organization has already developed a competent team with the appropriate know-how that can cope with the challenges of such a task, or
 - Our organization has a strategy on developing and maintaining such a team of people and invest on building their skills and competences to be able to cope with the challenges of such a task in the near future.
- Otherwise, it would be wiser to follow [Peter Drucker's](#) quote:
"Do what you do best. Outsource the rest"

- In this presentation we dealt with the “make, lease or buy” decision that needs to be made when a need for a service/product is recognized. Specified and budgeted.
- We focused our analysis mainly of software and IT services development, as they are the most common cases where we face this dilemma.
- We mentioned the motivational factors for Software/IT-service outsourcing, compared the features/characteristics of in-house vs outsourcing and identified the respective risk factors for each approach.
- Now that you finished watching it, you should be able to:
 - **LOut5** Debate on “make, lease or buy” options

List of references

- *Mubashir Ali Syed, Aitzaz Haider, Ghulam Samdani and Muhammad Kamran. A Comparative Analysis of In-house and Outsourced Development in Software Industry. International Journal of Computer Applications 141(3): 18-22, May 2016*
(<https://www.ijcaonline.org/archives/volume141/number3/haider-2016-ijca-909578.pdf>)



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