

The Role of Business Analysis Techniques in e-Learning Process Development

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Agenda

- What is Business Analysis (BA)
- Linking BA with e-learning
- BA Methodologies and techniques
- Applying BA to e-Learning
- Conclusions

About Temida

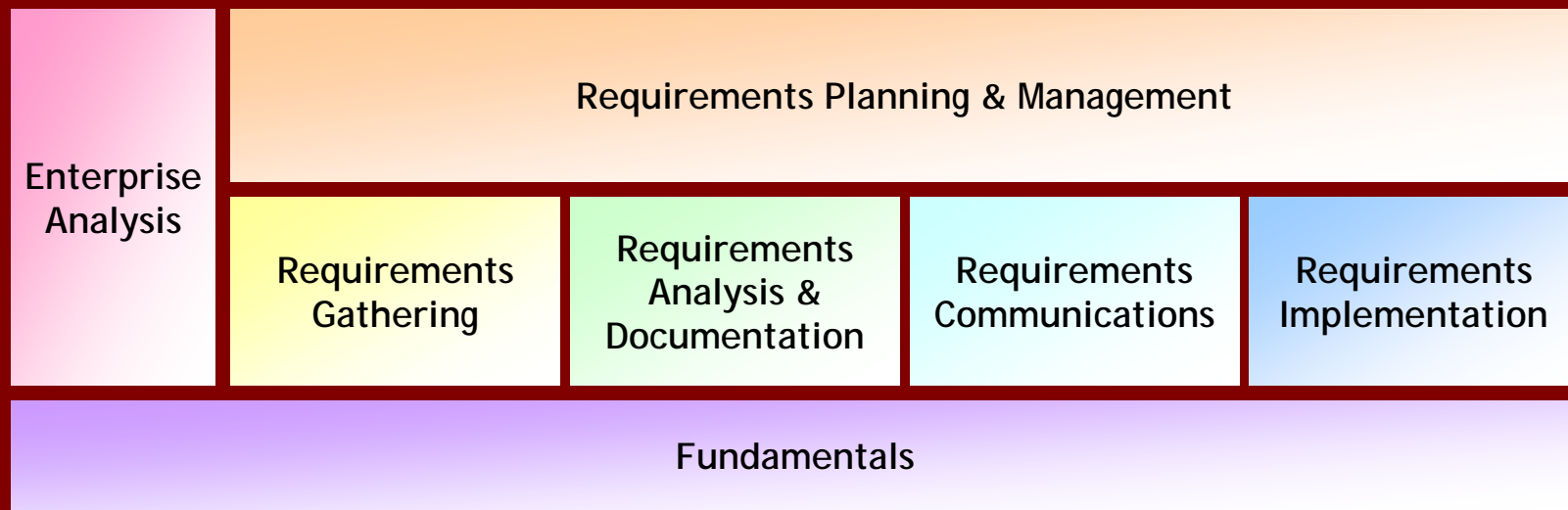
- Consulting
 - Web Technologies
 - Business Process
 - e-Business
 - Business Analysis
- Application development
 - Web services
 - SOA
 - Interoperability

What is Business Analysis (BA)

- *Definition 1:* BA refers to the **methodology** employed by an organization to **enhance its business** and **make optimized decisions** by the **use of statistical techniques** i.e. collecting data, assembling and analyzing it to better their products, services, marketing etc. (ComputerWorld)
- *Definition 2:* **BA** refers to the **skills, technologies**, applications and **practices** for **continuous iterative exploration** and investigation of past business performance to gain insight **and drive business.** (Wikipedia)
- *Definition 3:* **BA** is **set of tasks and techniques** used to **work as a liaison among stakeholders** in order to **understand the structure, policies, and operations of an organization** and to **recommend solutions that enable the organization to achieve its goals.** (BABOK)

Business Analysis

Knowledge Areas



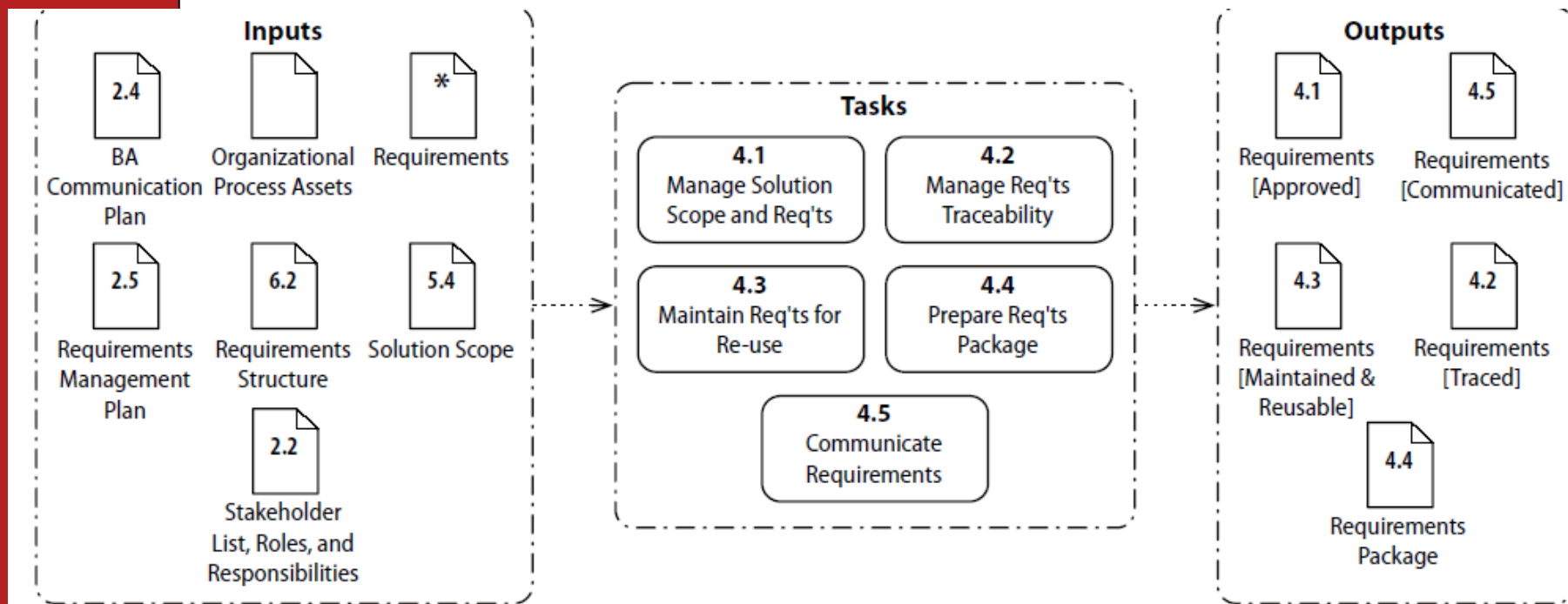
Causes for linking BA with e-Learning

- Similarly to any project, establishing e-Learning model consists of a sequence of steps in the project life cycle.
- Solutions often include a **systems development component**, but may also consist of **process improvement** or **organizational change**.
- Research studies (e-learning materials in Primary School are used on average by only 15% of teachers)*
- Usually these facts are revealed after implementation of e-learning. Three main reasons have been identified:
 - Standardized learning solutions and personalization
 - User interface
 - Evaluation of personalization and adaptation methods

* [Valicon Research Group, Ljubljana, Slovenia, 2010.]

Methodologies and techniques

Requirements management



Requirements management linking e-learning goals and objectives to actual solution

Methodologies and techniques

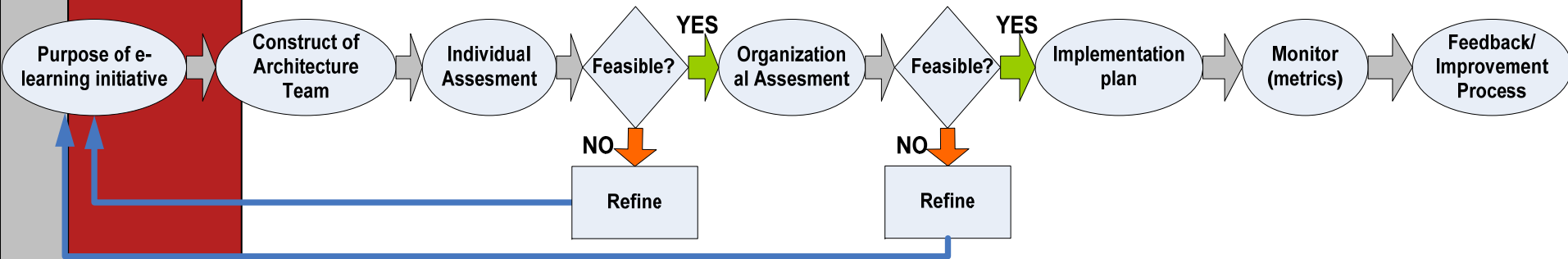
- Requirement management
- Implementation analysis
- Formative experiment
- Econometric modeling
- ...

Applying BA to e-Learning process

- The emphasis should be on **evolution not revolution**
- Teachers should be well motivated for the use of e-learning materials
 - immediately engaged in a process of developing e-learning model
 - not ignore detailed requirement analysis to obtain key information from teachers

Applying BA to e-Learning process

e-Learning implementation continuum



Applying BA to e-Learning process

Readiness for e-Learning

In order to do the individual assessment, a few specific areas should be explored:

- **Individual alliances** (how well the teachers feel they are a team)
- **Individual alignment** (the teachers must first understand what the initiative is and how they can contribute to the success)
- **Communication assessment** (is the opportunity to get feedback)

Applying BA to e-Learning process

Standardization

- GUI, usability test, Learning Technology System Architecture (LTSA)
- Accessible, interoperable, reusable, and affordable through the application of technical specifications and guidelines
- Reuse of Web-based learning content across multiple environments, products and technological platforms

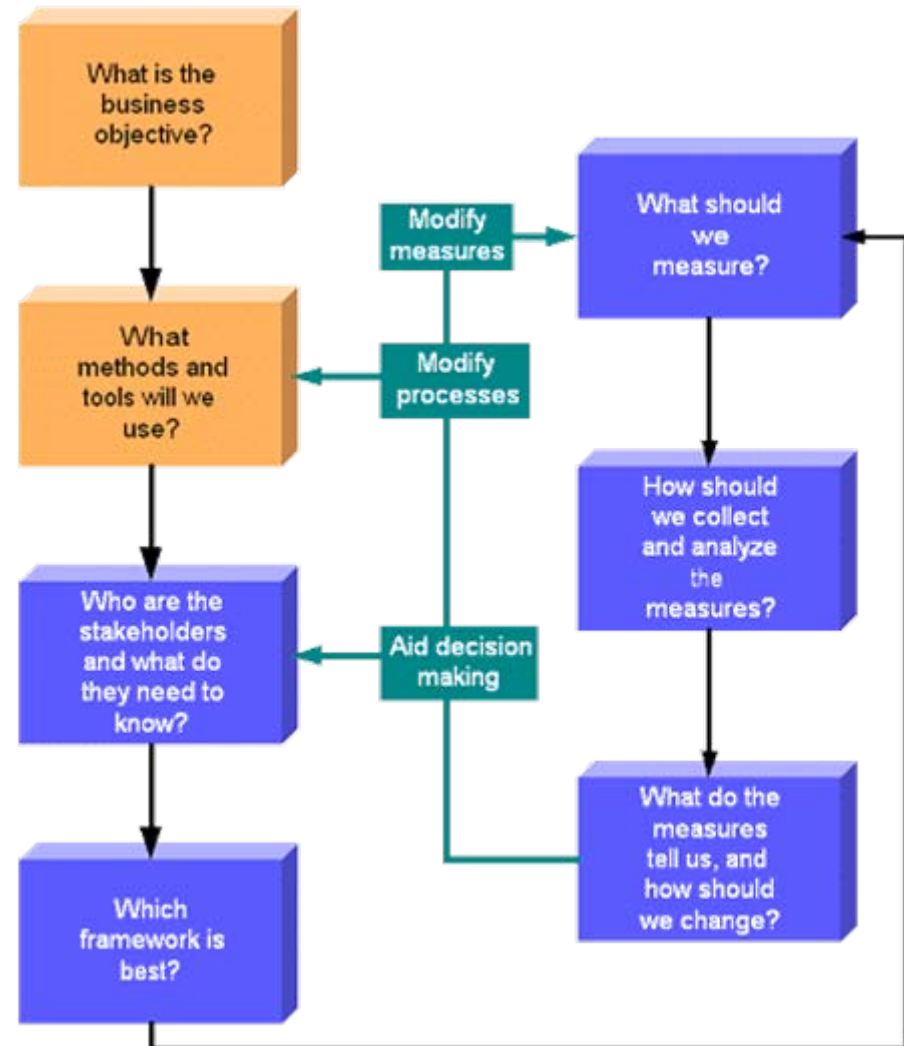
BA bridges the gap between stakeholders and development team!

Applying BA to e-Learning process

System measures

- Counts, estimates, surveys
- Interviews, workshops
- Structured programs, flows tracking technique

Collected measures should be analyzed within the framework of our e-Learning program!



Applying BA to e-Learning process

Performance measures

- **Outcome:** Measure the change in resource costs (funds, time, personnel) used in a process over time. Include surveys of user attitudes and practices. Have these values changed since the e-learning initiative started?
- **Output:** Conduct a survey to find out how useful people find e-learning. Was it valuable? How do people have used the available courses? How do they suggest improving the system?
- **System:** How many times have the e-learning materials been accessed? Is the site easy to navigate? How frequently the courses are updated?

Conclusions

- **Motivation is to raise the level of usability and performance of e-learning.**
- **E-learning effectiveness requires decentralizing responsibility.**
- **Objectives of the initiative should be aligned with the strategic goals.**
- **Should collect and prioritize new ideas.**



Thank you

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