Enterprise Architecture Compliance Evaluation

AISA Project

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Research Questions

➢ What are the aspects of EA compliance?

➢ What are the meaning and goals of EA compliance evaluation?

➢ What are benefits of EA compliance evaluation?

➢ How can EA compliance evaluation be carried out?

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Research Process

➢ A literature review and analysis
  ▪ Scientific articles
  ▪ Organizations' public EA compliance method descriptions (mostly US Government sources)
  ▪ Standards (such as TOGAF)

➢ Focus group interview of seven practitioners from five companies to validate and discuss the literature review results

Concept of Compliance

➢ Various definitions exist

➢ Compliance seems to be a multifaceted concept: it may indicate conformance of an object's (e.g. a product, process, service etc.) characteristics' (e.g. documentation and models) with at least one or more of the following:
  ▪ business requirements
  ▪ organization's internal plans, policies, and standards
  ▪ organization's internal practices (e.g. project procedures and guidelines)
  ▪ standards
  ▪ regulations and laws, and
  ▪ partners' practices and policies

EA Compliance
– an Initial Definition

➢ An affirmative indication or judgment that individual <u>projects and investments</u> will meet or have met the Enterprise Architecture related requirements, i.e. <u>comply with the relevant specifications</u>, such as established or approved enterprise architecture descriptions, policies, compliance criteria, and business objectives

Goals of EA Compliance Evaluation

1. Directing a project or investment to comply with EA – the proactive approach

2. Assuring the compliance between the impacts of investment or project and EA – the reactive approach

3. Ensuring the usability and appropriateness of EA policies, EA frameworks, EA descriptions, business objectives etc.

EA Compliance Evaluation

- EA compliance evaluation was discussed in terms of
  - More precise evaluation targets of compliance: what is evaluated, which objects are compared with each other?
  - Evaluators: who does the evaluation?
  - Levels of compliance: what is the "amount" of compliance?
  - Timing of evaluation: when the evaluation is done? and
  - Evaluation practices: how the evaluation can be carried out?
- Especially, evaluation targets and evaluators suggested by literature were considered to give too narrow a view
- → A broader view was outlined
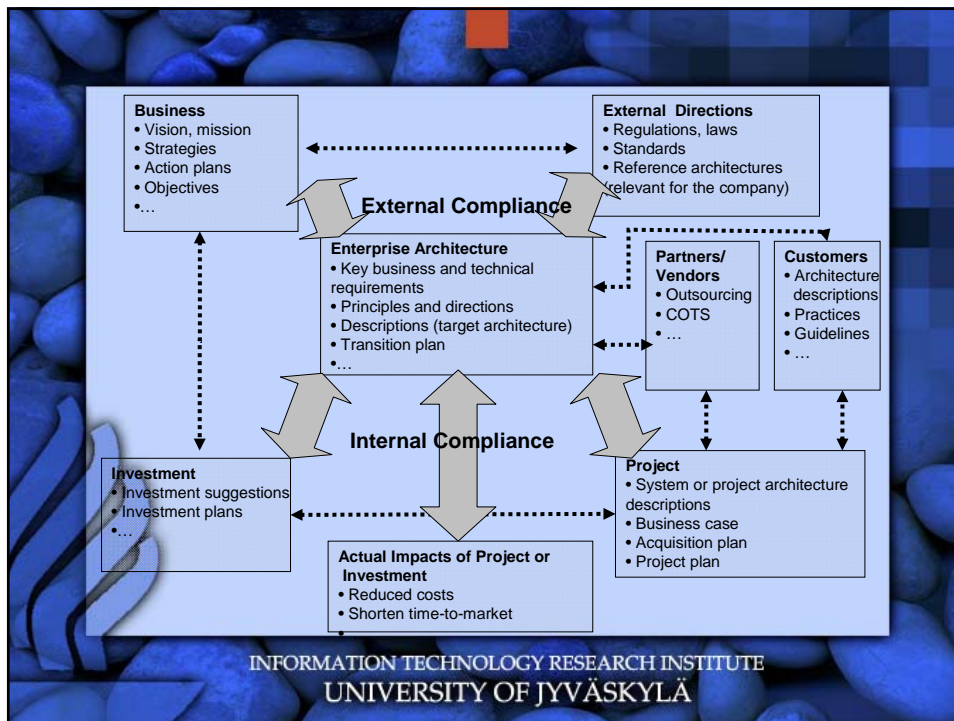
Internal and External EA Compliance

➢ **Internal compliance**
  ▪ compliance between investments – as well as the projects that implement the investments – and EA and its policies and guidelines
  ▪ compliance between the impacts of the investments and projects and EA in order to ensure that expected results and affects have actually been achieved

➢ **External compliance**
  ▪ compliance between the EA and the business objectives or strategies of the organization
    • are the EA guidelines, framework, target state, and so forth, in line with the business requirements
  ▪ conformance with the laws and regulations the organization needs to obey
  ▪ organization's ability, with the help of its EA, to react to the changing environment of the organization

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Possible EA Compliance Evaluation Targets

➢ **Business**; including e.g. vision, mission, strategies, and plans of actions.

➢ **Investment** that is needed to fulfill the business vision and mission.

➢ **Project**; the tool to implement the investment.

➢ **Enterprise Architecture**; a holistic view to the entire enterprise or organization aiming at better business-IT alignment.

➢ **External Directions**; including e.g. regulations, standards, or reference architectures that need to be taken into consideration in the business operations or IT development.

➢ **Partners**; they may provide their own procedures, guidelines or constraints in out-sourcing engagements or when an organization purchases COTS products.

➢ **Customers**; in some cases the organization's customer's EA, practices or guidelines need also to be taken into consideration when evaluating EA compliance.

➢ **Actual Impacts of the Project or Investment** indicating whether and how long a step, a transition, has been taken towards the target architecture state.

Possible Evaluators of EA Compliance

➢ The possible EA compliance evaluators are those stakeholders (or roles) that have the responsibility in the area of the evaluation targets:
- Business Developer/Process Owner, Business Architect
- EA Team/Enterprise Architect
- Investment representative (e.g. a controller)
- Project representative (e.g. a project manager)
- Representative(s) of Out-sourcing or IT/Service Provider Partner(s)

➢ How about the EA governance board?
- architecture board (e.g. The Open Group 2006) or an EA steering committee (e.g. CIO Council 2001)

Conclusions I

➢ The initial EA compliance definition was regarded as too limited → EA compliance was suggested to consist of external and internal compliance

➢ EA compliance has also a dynamic nature
- The environment of the organization is constantly changing, and so is its architecture
- Compliance – internal or external – can be evaluated to be on an appropriate and acceptable level at the moment, but it does not guarantee that this is the case next week, or next month

➢ Literature gave too limited a view of EA compliance evaluation targets and evaluators → a broader view was suggested

Conclusions II

➢ Examples for EA compliance evaluation practices were presented, but each organization needs to make its own decisions on various issues, such as
  - Audience/stakeholders: Who is interested in the EA compliance evaluation results? Whom the results are presented to?
  - Responsibilities: Who conducts the evaluation?
  - Timing: When the evaluation is conducted (milestones)?
  - Process and practices:
    - How the evaluation is conducted (processes and tasks)?
    - Which project or investment related artifacts are compared to which EA related artifacts?
    - Compliance levels: How many levels of compliance need to be defined? Is there a need to define specific levels of compliance?

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Conclusions III

➢ EA compliance depends on the EA maturity level
  - Both the meaning and content of EA compliance may vary according to the EA maturity level
  - In the lower levels of maturity EA compliance and its evaluation actually equals quality assurance, and especially the impacts of architecture development and architecture work are a focal issue
  - After the architecture work has become a more established process in the organization, the various aspects of EA compliance (internal and external compliance) will become more current

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