Facilitating Enterprise Transformation Through Legitimacy –
An Institutional Perspective

Stephen Aier
Simon Weiss

Facilitating Enterprise Transformation Through Legitimacy – An Institutional Perspective

Stephan Aier

University of St.Gallen, Institute of Information Management, CH-9000 St.Gallen,
E-Mail: stephan.aier@unisg.ch

Simon Weiss

University of St.Gallen, Institute of Information Management, CH-9000 St.Gallen,
E-Mail: simon.weiss@unisg.ch

Abstract

Much research has been conducted in order to design sophisticated enterprise transformation (ET) methods, for instance in terms of enterprise architecture management. However, only little attention has been paid to the factors that, to some extent independent of a method's sophistication, exert pressure on a transformation approach's desirability, appropriateness, and acceptance. Grounded in institutional theory, this paper structures and exemplifies design factors that should be obeyed in order to build and anchor an effective ET approach in an intra-organizational context. Specifically we found the factor of legitimacy to be crucial for successful ET. Strategies for gaining legitimacy are discussed accordingly. Overall, this paper's institutional perspective contributes to better understand and design ET approaches.

1 Introduction

Organizations are constantly exposed to changes of their environment. The classics of change are rise and fall of technologies, (global) markets, business models or entire organizations in mergers & acquisitions. In order to cope with this change, organizations need to develop capabilities to regularly transform themselves [23]. Enterprise architecture management (EAM) – although not being the only one – can be considered as such a capability since it provides the necessary transparency of an organization in a "business-to-IT" perspectives and guides an organisation's transformation [25]. One of the problems of EAM, however, is that it often has only little impact outside IT departments where it usually has been founded [1].

Analyses of EAM literature show that much research has been conducted in order to design sophisticated EAM methods and models to support enterprise transformation (ET) [4]. However, only little attention has been paid to the factors that exert pressure on a transformation approach's desirability, appropriateness, and acceptance – in short, its legitimacy. In order to better understand this task and to propose directions for development in practice and

research, we investigate one possible theoretical foundation of EAM as an ET approach. Such a theoretical foundation would be beneficial for effective design science research aiming at developing EAM methods and models [7; 26].

Grounded on the framework of institutional theory, we constitute that ET approaches do not only have to be methodically sound, but, in order to be disseminated and applied successfully across an organization, they also need to be perceived as legitimate from an organization's regulative, normative and cultural-cognitive point of view [20]. Based on previous work on institutional theory, the paper at hand relates institutional factors to ET and proposes measures to gain legitimacy for ET with respect to each factor. Our research question therefore is: *Which design factors should be obeyed from an institutional theory perspective in order to build and anchor an effective enterprise transformation approach in organizations.*

In line with this research question, the remainder of this paper is structured as follows. Section two will introduce the essence of institutional theory and legitimacy, as well as related work. Section three will derive our framework analysing EAM/ET approaches and section four will discuss the framework's application and the resulting implications. The paper ends with a short conclusion.

2   Conceptual Foundations

2.1   Institutional theory

What are institutions, and what are they as opposed to organizations, within which we intend to apply the concept of institutional pressures? Scott defines institutions as "social structures that have attained a high degree of resilience" [20], that is, they embody the more durable social structures, made up of multifaceted elements such as material resources, symbols, structures, rules, norms, routines and social activities. These elements are usually maintained over long periods of time without further justification or elaboration. As such, they may both increase stability and effectiveness, but also hinder for example critical reflection and the detection of more efficient ways of organizing [27]. In an organizational context, Selznick's influential work [21] is generally regarded as the initiator of an extensive amount of research leading to the wide body of knowledge institutional theory constitutes today. Particularly much research has been conducted identifying how institutional frames influence and restrain organizational behaviour and decision-making. In this respect, institutions are often considered the rules of the game whereas organizations are considered the players [15].

Widely accepted is the perception that institutions are composed of three related albeit distinct pillars, namely a *regulative*, a *normative* and a *cultural-cognitive* pillar Most prominent is the *regulative pillar*, which underscores how institutions constrain and regularize behaviour through explicit activities such as rule-setting, monitoring and sanctioning. The primary mechanism of establishing and controlling behaviour in this conception is coercion [6]: Individuals and organizations complying to respective rules, laws and sanctions do this out of expedience and self-interest, as well as a fear of punishment and a hope for reward, respectively. A classic example of such regulative aspects is the state imposing legal obligations on firms, and the police or other authorities controlling them.

From a *normative perspective*, institutions rest on values and norms which prescribe and evaluate how an individual or an organization should act. Values are conceptions of the

preferred or the desirable, together with the construction of standards to which existing structures or behaviour can be compared and assessed. Norms specify how things should be done, i.e. they define legitimate means for the valued ends. As such, normative systems define general goals (e.g. making profit) but also designate appropriate ways how to pursue or not to pursue them (e.g. rules how to play the game). An important difference to the previously described regulative pillar however is that compliance with these values and norms is not enforced by coercion, but by a code of conduct along with moral and social obligation.

The *cultural-cognitive perspective* represents the major distinguishing feature of neoinstitutionalism and calls attention to the underlying shared conceptions and beliefs that constitute the nature of social reality. While the first two pillars are generally subject to active and conscious debate, cultural-cognitive aspects are seen as the much more embedded words, signs and gestures that shape the meanings a social group attributes to objects and activities.

2.2 Related work

As this paper focuses on the relationship between institutional theory and EAM, the work from Hjort-Madsen stands out as it basically focuses on the same issue. Hjort-Madsen investigates how EA implementation [8] and adoption [9] is dependent upon and shaped by institutional forces, noting that this issue is underrepresented in EA research so far. Looking at public sector organizations by means of case studies, Hjort-Madsen points out that interoperability and IS planning, which can be facilitated through enterprise architecting, is not only a technical issue, but economic, political and contextual factors, i.e. the whole institutional framework, is just as important. Related to different institutional settings, he identifies three adoption patterns (accepters, improvers, transformers) that describe how EA is adopted by agencies, namely from a narrow acceptance of EA guidelines to a tool for active transformation. By considering formerly rather disregarded institutional pressures, the work contributes in understanding and advancing EA as an IS/ET approach. However, the work stays on a more descriptive-explorative level. In contrast to this, we intend to apply a theoretical institutional framework to the EA discipline, outlining influencing factors that lead to certain EA response strategies or, for that matter, adoption patterns.

In a broader IS context, institutional theory has been considered in many facets. [3] and [13] for example argue in general that and how theories, including institutional theory, can contribute to and address issues of information technology and organizational change. In a similar vein, [17] elaborates on the interplay between IT and organizational research, suggesting that transformations cannot be understood without considering their institutional contexts. Also, from a macro perspective, it has been analysed which institutions influence (IT) innovations and how institutional pressures influence the adoption of respective systems (cf. e.g. [12; 24]). Yet another stream of research deals with the processes of institutionalization of IT in organizations, the institutionalization and de-institutionalization processes and the respective forces that drive such endeavours (cf. e.g. [2]). While being far from complete, this brief review shows that an institutional perspective is being considered important in the context of IS and (strategic) management. However, we found that a concrete structuring of institutional factors influencing ET approaches in an intra-organizational context is lacking so far.

3   Analysis Framework

Based on institutional and resource dependence perspectives, Oliver [16] developed a typology of strategic responses to institutional pressures and presented ten institutional factors that affect the occurrence of the alternative response strategies. In this chapter, we apply her framework to the challenges of introducing and running EAM as an ET service. Section 3.1 will first introduce the five response strategies, followed by an elaboration on antecedents to these strategies (section 3.2). Section 4 will then discuss the implications for EAM.

3.1   Strategic responses to enterprise transformation

When setting up an overarching, controlling institution for ET, such as an EAM board, one will most certainly face many different reactions from the various units and subordinates affected. While some may follow almost blindly, others will perceive it all as constraining (as it actually is [5]) and unnecessary evil, thus trying to defy and manipulate respective endeavours. The following response strategies and corresponding tactics based on Oliver represent these reactions [16].

Acquiesce: Acquiescence is the least resisting form of responding to new requirements. As a matter of fact, all three related tactics (*habit, imitate* and *comply*) basically resemble blind adherence to new propositions, albeit in different ways. *Habit* refers to an adherence based on already taken-for-granted norms and values. If, for example, the process for enterprise modelling is to be institutionalized across the organization, and a division is already doing this long-since, then this division may actually follow that guideline invisibly out of habit. The tactic of *imitation* is consistent with the concept of mimetic isomorphism: A successful entity is more or less consciously imitated or taken advice from. *Compliance* is the most active way of acquiescence in that institutional pressure are reviewed, but compliance is chosen as a result of a range of e.g. self-serving, legal, social, and economic considerations.

Compromise: While still being in the spirit of conforming to and accommodating (new) corporate demands, organizational units following this strategy are more active in promoting their own interests, as compared to the strategy of acquiescence. By employing the tactics of *balancing, pacifying* or *bargaining*, involved stakeholders seek for a reflected and after all satisfactory solution on all hands. *Balancing* refers to the "accommodation of multiple constituent demands" [16] which may oftentimes be desirable: Given for instance the decision to migrate to a unified IS, it may be crucial for success that stakeholders not simply acquiesce, but review current usage practices, and articulate potential conflicts and requirements. *Pacifying* tactics refer to placating and accommodating certain elements. An example would be that a particular business unit gets more time or a different scope for realizing some change programme. At last, *bargaining* is the most active form of negotiating compliance to institutional pressures. In this very realistic scenario, an organizational unit may demand some concession, such as a financial refund, for its support.

Avoid: This strategy aims at circumventing the conditions that make conforming behaviour necessary. This may be achieved by the tactics of *concealing*, *buffering*, or *escaping*. *Concealment* means to disguise nonconformity behind a facade of acquiescence. Employees may for instance omit or cut short a quality checking process for the benefit of productivity gains, and only run the intended process in anticipation of inspections. As opposed to acquiescence, conformity is only apparent and existing on paper, but is not real. *Buffering* refers to an attempt

to reduce the extent of external scrutiny by decoupling technical activities from external contact. From a software development perspective, one may say that the details of implementation are decoupled from the design, whereby only the latter is subject to inspections. However, trying to decouple internal activities from formal structures and external assessment in order to do things differently may incur negative consequences. Lastly, *escaping* is the most dramatic way of avoiding institutional pressures. Here, the necessity of conformity is avoided altogether by e.g. exiting the domain respective pressures exist in. Reviewing the tactics of the avoidance strategy in light of organization-internal ET approaches, buffering and escaping tactics are less practicable although not impossible. For instance, organizational units often try to set up a number of smaller projects in order to escape certain architectural checks bound to project size or for not needing to involve a purchasing department.

Defy: Defiance is a more active as well as unequivocal form of resistance to imposed processes. In contrast to the avoidance strategy, defiance does not try to cover anything up. Three corresponding tactics are *dismissal*, *challenge*, and *attack*. *Dismissal* means to deliberately ignore explicit rules, norms and values. Dismissal is likely to be exercised when internal objectives diverge or conflict dramatically with imposed requirements and when the potential for their enforcement is perceived to be low. This may occur when a business unit is very powerful and/or special within an organization, and is reluctant to follow a guideline concerning the use of a software system, for example. In turn, challenge and attack are more offensive opposing tactics. Compared to dismissal, *challenge* does not only mean to ignore a guideline, but to follow a path that clearly contradicts envisaged rules, norms, and values. Challenging imposed pressures might be particularly feasible, if a showcase demonstrating probity or rationality of the deviant approach is available. *Attack* is more intense and aggressive than challenge in that it tries to assault, denounce or even destroy the pressure exerting entity. Such measures are possible if opinions about the right course of action differ strongly or individuals' rights, privileges or autonomy are in serious jeopardy.

Manipulate: Through *co-opting*, *influencing* or *controlling* tactics, the manipulation strategy aims at actively altering, re-creating or controlling imposed content or the power exerting institutions. Manipulation is therefore the most active response, which does not take any pressures and expectations as given constraints to be obeyed or defied, but instead regards them as manipulable for the purpose of one's own benefit. *Co-optation* intends to neutralize institutional opposition and enhance legitimacy by means of coalition-building, for example. *Influencing* tactics are directed to generally shape values and performance or assessment criteria. A typical method to this end is to influence other people's opinion and funding decisions through the means of lobbying. *Controlling* tactics, by comparison, represent efforts to exercise direct power and dominance over institutional sources or processes, rather than to influence, shape or neutralize them.
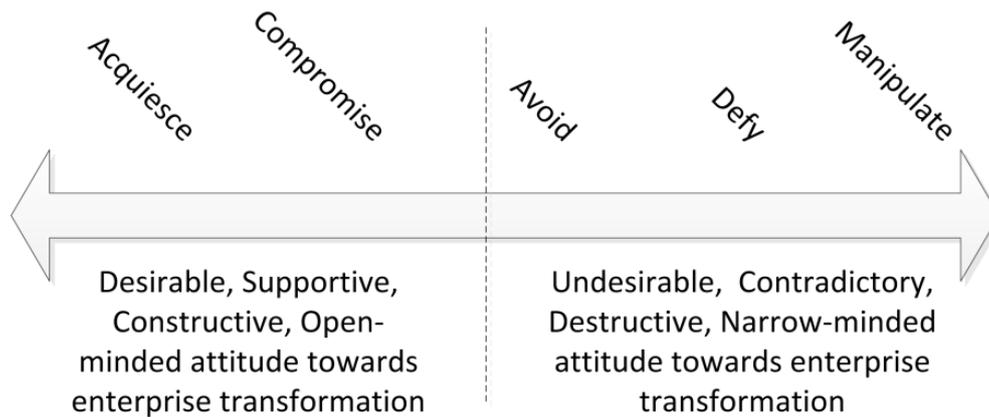
Figure 1:   The continuum of strategic responses to enterprise transformation

Reviewing the described strategies and tactics as a response to an EAM/ET initiative, it is apparent that the latter three strategies are not advantageous in an organization-internal context. In our scenario, establishing ET capabilities in order to make the organization overall more transparent, consolidated, agile, and thus competitive, disturbing reactions like avoidance, defiance and manipulation should generally be avoided. Our proposition accordingly is that any ET approach a) should be cautious about the aforementioned strategies and tactics, and b) will be more successful the more it is able to convince stakeholders of following the strategies of acquiescence and compromise. However, despite our rather managerial perspective throughout this analysis, it is important to note that not only organizational units and divisions are pressured by e.g. an ET project, but also vice versa: The ET endeavour is pressured by existing institutional conditions. This feedback loop should be kept in mind, because hostile reactions to a project may only be the result of a rude dismissal of institutional rules and values by the ET approach in the first place.

3.2   Antecedents to strategic responses

Going one step further raises the question what is the rationale for conformance or resistance to those pressures. Taken from Oliver [16], Table 1 gives an overview of the ten hypothesized dimensions that contribute to the willingness or resistance to conform. The predictive factors are split into five categories resembling the five *W* questions: *Why* are pressures exerted, *who* is exerting them, *what* kind of pressure is exerted, *how* the pressures are imposed, and *where* they do occur. The scale from low to high represents the contribution to the likelihood of choosing a particular strategy given a higher degree of a factor. For instance, the strategy of acquiescence is more likely to occur when the proposed programme promises efficiency gains. The last column reflects our perception of how EAM currently is and prospectively should try to be positioned in order to advance and facilitate ET. In this respect, we can a) observe gaps that call for further improvement and research (e.g. legitimacy), b) find challenges that just come along with EAM and probably won't be completely resolvable (e.g. constraining freedom of decision-making), and c) find dimensions that may influence EAM but cannot be attributed to EAM in a narrower sense (the context dimensions, marked as not applicable). In the following, we will detail each factor's meaning and influence on strategy choice in the light of ET.

Predictive Factor	Strategic Responses					EAM	
	Acquiesce	Compromise	Avoid	Defy	Manipulate	As-is	To-be
Cause	Why are organizational units pressured to conform to rules or expectations?						
Legitimacy	High	Low	Low	Low	Low	Low-Moderate	High
Efficiency	High	Low	Low	Low	Low	Moderate	High
Constituents	Who is exerting pressures?						
Multiplicity	Low	High	High	High	High	High	High
Dependence	High	High	Moderate	Low	Low	Low-High	High
Content	To what norms and requirements are organizational units pressured to conform?						
Consistency	High	Moderate	Moderate	Low	Low	High	High
Constraint	Low	Moderate	High	High	High	Moderate-High	Moderate-High
Control	How or by what means are the pressures being exerted?						
Coercion	High	Moderate	Moderate	Low	Low	Moderate	Moderate-High
Diffusion	High	High	Moderate	Low	Low	Low-Moderate	High
Context	What is the organizational context within which pressures are being exerted?						
Uncertainty	High	High	High	Low	Low	N/A	N/A
Interconnectedness	High	High	Moderate	Low	Low	N/A	N/A

Table 1:   Predictive factors to strategic responses (Cf. [16])

Cause: Cause intends to answer the question why institutional pressures are exerted at all and why one should conform to them. It refers to the rationale, set of expectations or intended objectives that underlie exerted pressures. The first factor, legitimacy, is basically a double-sided coin: On the one hand, it refers to the amount of social fit or acceptance that an organizational unit can gain through conformance. On the other hand, legitimacy refers to the extent the pressure exerting entity is accepted, i.e. legitimated, within the organization. The higher legitimacy is the higher is the probability that organizational units choose acquiesce or at least compromise procedures. The second factor, efficiency, is related to economic accountability and rationalization. The higher the perceived efficiency of the ET processes, as well as the subsequently expected efficiency gains for each business unit are, the higher is again the probability for conforming strategies. According to our observations in research and industry projects, EAM is oftentimes especially lacking legitimacy. It seems to be difficult for EAM promoters to legitimate their approach across the organization – that is for instance, why architectural consultancy can also help business functions, and why some EA effort will eventually pay off for everyone. As we will outline later, the concept of legitimacy might be key, and improvements in this dimension seem to be a good starting point to overcome the issues EAM is having.

Constituents: Stakeholders within an organization often confront multiple (conflicting) interests and pressures. Constituents like HR, purchase, marketing, production, IT and others all exert pressures on each other with respect to requirements, releases, project portfolios and business development. A big challenge of EAM is to coordinate and line up with all these pressures. It is therefore hypothesized that a higher multiplicity of constituents results in a higher probability for resistant strategies, because, after all, not all particular interests and exceptions can be

addressed in an ET or consolidation programme. However, as Table 1 indicates, a decent, compromising path is also conceivable – for instance through skilful conflict resolution and uncertainty reduction. The likelihood of resistance to ET pressures is also predictable from a dependence perspective, hypothesizing that resistance is less likely if stakeholders depend on the pressure exerting party, or, for that matter, if both sides depend upon each other. Such dependence may be based on mutual business benefits, skills, resources, information exchange, financial resources, reputation, etc.

Content: Content, is about the *what* of obliged processes. The two important predicting factors are consistency and constraint, i.e. the consistency of pressures with current goals, rules, norms and values, and the loss of decision-making discretion that the pressures impose. If exerted pressures are in support of already stipulated goals and practices, the likelihood to choose a rather conforming strategy increases. With respect to constraints, the correlation is the other way round – the more new regulations and processes constrain organizational units in their autonomy of decision, the more resistance has to be expected. However, in an attempt to consolidate IT systems or improve the efficiency of projects through programme or architecture management, a constraining of decision-making discretion is usually inevitable [5; 10]. In consequence, this dimension has to be mediated and outweighed by good arguments in other dimensions like legitimacy, efficiency and consistency.

Control: Control refers to the enforcement and distribution mechanism of imposed pressures. On the one hand, this may happen through coercion: If nonconformity leads to highly punitive consequences, for instance due to a violation of legal requirements, the probability of acquiescence increases, whereas in less coercive situations, stakeholders can be expected to seek compromises for their conformance. In contrast to coercion, diffusion refers to a voluntary adoption of and adaption to practices. An organizational entity might be particularly convinced to acquiesce (or mime) an institutional behaviour voluntarily, if the behaviour in question is already broadly diffused across other organizational units, or when it can be observed to work elsewhere.

Context: The institutional context, i.e. an organizational unit's environment or network is also likely to be a determinant of strategic response – not least because organizational units are highly interconnected through processes and jointly used IT. Environmental uncertainty can be defined as "the degree to which future states of the world cannot be anticipated and accurately predicted." [19] From an institutional and resource dependence perspective, it is argued that in turbulent and uncertain times, an organization will exert greater effort to re-establish the illusion or reality of control and stability over future organizational outcomes [16]. In consequence, affected entities a) are more willing to comply with demands imposed upon them by super ordinate constituents, and b) tend to mimic other similarly pressured stakeholders. Both phenomena may thus increase the likelihood of choosing a more conforming strategy. The factor of interconnectedness is related to the observation that interconnectedness facilitates the voluntary diffusion of norms, values, and shared information. That is because interconnected environments provide relational channels through which institutional norms and values can be diffused and coordinated. However, this may in consequence mean that it is crucial to achieve "quick wins", i.e. positive initial outcomes when pursuing bigger, transformational projects.

4   Discussion and Implications

In the previous sections we argue that institutional theory and, based thereon, in particular the strategies, tactics and antecedents are well applicable to an intra-organizational ET context. Indeed, a discourse of institutional pressures and a structuring of responses and their preceding dimensions did in most parts not take place as part of the EAM discipline. As outlined in the call for papers, this paper's introduction and by others, EAM only in the rarest cases unfolded action beyond the IT domain and was still less often anchored outside of IT. We hypothesize that a major reason for this is EAM's lack of legitimacy in the organization. Legitimacy can be defined as "a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions," [22] whereby the system is in our case a private-sector organization. EAM, despite its reasonable and often successful concept, failed to gain legitimacy by other organizational units. One could observe that in case of doubt, business functions tend to apply dismissing, concealing, buffering or at least strong bargaining tactics in response to EAM propositions, thinking that some IT-based department cannot and/or should not help to solve business' problems. However, IT and business have over time strongly grown in terms of complexity and interrelatedness so that orchestrated and joint efforts are necessary to keep day-to-day operations as well as transformations manageable. Based on Suchman's [22] work on management of legitimacy, which is likewise grounded in strategic and institutional approaches, the legitimacy issue will be discussed in the following, as it appears to be the most critical factor out of the ones discussed above. Other factors that can be influenced by an EAM department shall only be discussed briefly.

As said before, legitimacy is a perception that some organizational action is desirable, proper, or appropriate. This in turn leads to continuity or persistence because audiences supply resources more willingly [18]. Besides more continuous acting, legitimacy at the same time affects how people understand things, that is, what meaning they attribute to respective organizational activities. From this perspective, legitimate activities are not only perceived as more worthy, but also as more meaningful, more predictable, and more trustworthy, leading to a credible collective rationale explaining what the organization is doing and why [11]. In other words, if activities lack acceptable legitimated accounts, they are more vulnerable to claims that they are negligent, irrational or unnecessary [14].

Based on these findings, Suchman [22] depicts three distinct, but not necessary mutually exclusive clusters of strategies for gaining legitimacy, namely *conform*, *select*, and *manipulate*. We constitute that developing a situational legitimacy-gaining strategy combining aspects from all three clusters may significantly increase the probability of successfully implementing ET approaches. Applied to our context, the three legitimacy-gaining types of strategies can be described as follows.

Conform to environment seeks legitimacy by following to the dictates of pre-existing audiences within the organization. The strategy comprises to signal allegiance to the cultural order, to only pose few challenges to established institutional logics, and by doing so, taking advantage of being a cultural "insider" and asking "What would make this organization more desirable, proper, or appropriate to us?" Thus, taking a step back and being conformant to the environment may boost the chances of introducing new, organization-transforming ideas as opposed to approaches stating (too) directly how things should be done better. It therefore is advisable to implement this strategy when imposing new guidelines and processes.

Select among the environment is a more active approach in that an environment is selected, which provides legitimacy without demanding too many changes in return. This strategy might be necessary, if the intended change is hardly compatible with conformance to the environment, if the organization is overall too big to be handled at once, or if some business units simply exert too much resistance. Based on business functions' needs or more subtle criteria like personal trust and relationships, constituents have to be identified and attracted who value the sort of proposed change. If introduced processes, norms and values turn out to be fruitful and first lessons have been learned, this may provide additional legitimacy and lead to a (automatic) diffusion across further parts of the organization.

Manipulate environment strategy components may be necessary when generally much easier conformance or selection approaches do not suffice, because, for instance, innovators depart substantially from prior practice. In such cases, pre-emptive intervention is necessary in order to prepare relevant constituents and develop bases of support specifically tailored to the innovators' distinctive needs. Manipulative elements to do this include advertising, strategic communication, accumulation of a record of technical success, demonstration events providing validation for procedures, structures and personnel, continuous articulation of stories which illustrate the innovation's reality, lobbying, and scientific research.

In order to *conform* ET approaches to an environment outside IT departments, it may be necessary to avoid the connotation of *management* as in EAM since another management practice besides top management is a potentially conflicting force. Therefore ET approaches should be positioned as a management support service that as its foremost goal integrates existing information of an organization in order to provider decision support for management. *Selecting* among the environment has two directions; first, ET approaches should support the most urgent transformation needs that they can actually support. Second, ET approaches should find allies in related disciplines like EAM, project portfolio management, requirements engineering or strategic planning. By aligning with these allies the multiplicity of (conflicting) interests and pressures may also be reduced. Finally the *manipulate* environment strategy should be implemented as an advertisement for top management support – in the direction of the supported stakeholders as well as the affected stakeholders.

Coming to other factors, the gain of efficiency can also be influenced directly. On the one hand, the EAM department should be ambitious to be equipped with sound tools, methods and processes to provide lean and convincing support services. On the other hand, potential efficiency gains should be sufficiently communicated through adequate channels and means. A reduction of multiplicity may be achieved by allying with related disciplines, such as strategic planning or project portfolio management. As long as no cannibalization or a loss of power occurs, these allies should complement and support each other for their own benefit. Power through dependence can only be asserted, when the EAM department is already mature and anchored within the organization. Initially, this factor may only be influenced indirectly, for instance by gaining management support, i.e. by getting legitimated to do or enforce certain things. With respect to consistency, EAM should provide stakeholder-oriented services and emphasize shared goals and values, such as faster (project) support and TCO-reduction. Constraining design freedom is necessary. It is the lever to achieve the ET goals. As such, there will always be resistances, but we have also observed surprising support, namely when business units were requesting a more strict formulation and application of EA principles so as to reduce uncertainty. The EAM department should listen up to such requests and develop support for

constraining measures out of it. Control through coercion is a difficult issue. We could observe that too much coercion exerted by some EA-ivory-tower leads to counter-productive frustration at the stakeholders' part, even if the coercion is legitimated (e.g. by higher management). As such, one should try to reach control through diffusion by promoting the carrot (services, necessities, advantages) while making clear to have the stick up one's sleeve, intending not to use it unless necessary. The context can be least influenced. However, companies react differently towards ET approaches in times of crises or uncertainty. One may either cut the budget for something like EAM and invest in areas like sales and marketing, or one may use such times to invest in ET and take a clean sweep. The latter might be a sustainable chance for EAM and the enterprise as a whole.

5 Conclusion

In the paper at hand we have (1) investigated design factors that should be obeyed in order to build and anchor an effective enterprise transformation approach in organizations. Our findings are theoretically grounded in institutional theory. Specifically we found legitimacy to be a crucial factor for making ET approaches successful and we have analysed strategies for gaining legitimacy.

We also (2) found institutional theory to provide a valuable foundation for analysing and designing ET approaches. Both research streams, however, need to be further detailed and empirically grounded in the future.

6 Literature

[1] Aier S et al. (2011): Understanding Enterprise Architecture Management Design – An Empirical Analysis. In: Proceedings of the 10th International Conference on Wirtschaftsinformatik WI 2.011, Zurich.

[2] Baptista JJ (2009): Institutionalisation as a process of interplay between technology and its organisational context of use. Journal Of Information Technology 24(4):305-319.

[3] Boudreau M-C; Robey D (1996): Coping with contradictions in business process re-engineering. Information Technology & People 9(4):40-57.

[4] Buckl S; Schweda CM (2011): On the State-of-the-Art in Enterprise Architecture Management Literature, Forschungsbericht, Chair for Software Engineering of Business Information Systems. Technische Universität München, München.

[5] Dietz JLG (2007): Architecture. Building strategy into design. Academic Service, The Hague.

[6] DiMaggio PJ; Powell WW (1983): The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. American Sociological Review 48(2):147-160.

[7] Gregor S; Jones D (2007): The Anatomy of a Design Theory. Journal Of The Association For Information Systems 8(5):312-335.

[8]   Hjort-Madsen K (2006): Enterprise Architecture Implementation and Management: A Case Study on Interoperability. In: Proceedings of the 39th Annual Hawaii International Conference on System Sciences (HICSS '06), Hawaii.

[9]   Hjort-Madsen K (2007): Institutional patterns of enterprise architecture adoption in government. Transforming Government: People, Process and Policy 1(4):333-349.

[10] Hoogervorst JAP (2009): Enterprise Governance and Enterprise Engineering. Springer, Berlin.

[11] Jepperson RL (1991): Institutions, Institutional Effects, and Institutionalism. In: Powell WW; DiMaggio PJ (Hrsg.) The new institutionalism in organizational analysis. University of Chicago Press, Chicago.

[12] King JL et al. (1994): Institutional Factors in Information Technology Innovation. Information Systems Research 5(2):139-169.

[13] Markus ML; Robey D (1988): Information Technology and Organizational Change - Causal Structure in Theory and Research. Management Science 34(5):583-598.

[14] Meyer JW; Rowan B (1977): Institutionalized Organizations: Formal Structure as Myth and Ceremony. American Journal of Sociology 83(2):340-363.

[15] North DC (1990): Institutions, Institutional Change and Economic Performance. Cambridge University Press, Cambridge.

[16] Oliver C (1991): Strategic Responses to Institutional Processes. Academy Of Management Review 16(1):145-179.

[17] Orlikowski WJ; Barley SR (2001): Technology and Institutions: What Can Research on Information Technology and Research on Organizations Learn From Each Other? MIS Quarterly 25(2):145-165.

[18] Parsons T (1960): Structure and process in modern societies. Free Press, Glencoe.

[19] Pfeffer J; Salancik GR (2003): The External Control of Organizations: A Resource Dependence Perspective. Stanford University Press, Stanford.

[20] Scott WR (2001): Institutions and Organizations. Sage Publications, London.

[21] Selznick P (1948): Foundations of the Theory of Organization. American Sociological Review 13(1):25-35.

[22] Suchman MC (1995): Managing Legitimacy: Strategic and Institutional Approaches. Academy Of Management Review 20(3):571-610.

[23] Teece DJ et al. (1997): Dynamic Capabilities and Strategic Management. Strategic Management Journal 18(7):509-533.

[24] Teo HH et al. (2003): Predicting intention to adopt interorganizational linkages: an institutional perspective. MIS Quarterly 27(1):19-49.

[25] The Open Group (2009): TOGAF Version 9 – The Open Group Architecture Framework (TOGAF). Van Haren, Zaltbommel.

[26] Walls JG et al. (1992): Building an Information System Design Theory for Vigilant EIS. Information Systems Research 3(1):36-59.

[27] Zucker LG (1987): Institutional Theories of Organization. Annual Review of Sociology 13:443-464.