Position Paper for the OOPSLA 2008 Workshop on

Challenges: Agile Values Meet Different Value Systems

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As stated in this workshop's call for position papers, overcoming different value systems is a challenge faced not only in the field of software development. A clash of value systems may also occur in the area of application landscapes. An application landscape[1] consists of an organization's software systems and their interconnections. In my opinion, projects which restructure application landscapes are very reserved when it comes to principles and values known from agile software development methods. To renew or restructure an application landscape often presents a critical risk to an organization. Courage, simplicity and embracing change are not the values and principles typically applied in an environment that is far less flexible than the development of a new software system.
As an example, I would like to share my experience gained in a bank project: A mid-sized German bank (about 2000 employees and a balance sheet total of more than 10 billion Euro) initiated a major overhaul of its application landscape in fall 2006. Host data was outsourced to a vendor that provides data processing services as well as an off-the-shelf solution that replaced dozens of host and client/server applications. This implied, among other things, an upgrade of operating systems and hardware. About 40 applications – ranging from office and communication software to niche products – were not to be replaced and thus had to be ported to the new environment.
Since all the client/server applications were bought-in products, the bank's IT department of about 50 people primarily had maintenance duties before the project started. These duties involved host programming, user support and communication with software vendors. Responsibilities were clearly distributed which minimized the need for communication within the department. For the project, the department was staffed with another 30 people: Staff from other bank departments that handled organizational issues, IT consultants and programmers sent by software vendors to adapt their products. Including representatives of other departments and subsidiaries, the bank's project workforce totaled 300 people.

Having a background in agile software development, I helped to adopt a couple of agile methods that seemed helpful to deal with the risks and communication involved in the project. The reaction shown by the IT staff clearly highlights the differences in values we faced. The following two episodes demonstrate that.
Instead of a big-bang approach for introducing the new infrastructure, an iterative and incremental approach was chosen. Applications were released in the new environment in four blocks, which made it possible to learn and improve the infrastructure and the release processes after each block. I perceived the feedback generated by using an incomplete infrastructure as valuable because it clarified requirements. However, some of the IT staff expressed that the problems that became apparent in this feedback process proved that the approach was immature rather than courageous.
To foster communication, a kind of daily stand-up meeting was introduced in the newly established department café. For several weeks the staff hesitated to embrace this opportunity for direct communication and immediate feedback. Although they had been working in offices next to each other for years, a short, open exchange of problems and ideas was

[1] In literature you will find a number of terms similar to or interchangeable with "application landscape" [1], such as software landscape, systems landscape [2], and application portfolio [3].

something completely new to them. Slowly but steadily the meeting improved and the staff became more confident to give and get feedback.
In conclusion, both methods caused negative reactions at first. Nevertheless, over time they proved to be successful and thus got accepted. However, for most people this was not a sign of a changed value system but a pragmatic approach to finish the project. The IT department's value system was shaped over a decade in which the department did not change in size and hardly any organizational development took place. Together with the fact that the application landscape was evolving very slowly at that time, there was no intrinsic or extrinsic motivation to question one's values. I think that organizational background and the tasks involved in maintaining the application landscape shaped those values.

[1] Hess, Andreas ; Humm, Bernhard ; Voß, Markus ; Engels, Gregor:
Structuring Software Cities - A Multidimensional Approach. In: Proceedings of the 11th IEEE International EDOC Enterprise Computing Conference, IEEE Press, 2007
[2] Laartz, Jürgen ; Sonderegger, Ernst ; Vinckier, Johan: The Paris guide to IT architecture. In: The McKinsey Quarterly, Number 3, 2000.
[3] Keller, Wolfgang: Managing Application Portfolios in Merger Situations. In: Dadam P., Reichert, M. [eds.]: INFORMATIK 2004 - Informatik verbindet, Band 1, Beiträge der 34. Jahrestagung der Gesellschaft für Informatik e.V. (GI), 2004.