White Paper
Defining a Social Architecture within the Enterprise Architecture Context

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Organizations have a significant interest in the adoption of social technologies (e.g. Twitter, Facebook, Yammer) for creating an effective social enterprise. Before adopting any social technology, enterprises need to understand and design their social architecture. Social enterprise requires establishing the technology independent social architecture, as a part of the overall enterprise architecture that can be supported through the continuous strategic adoption of social technologies. Social architecture refers to the social structure, behaviour, culture, knowledge and opinions of communities of people (e.g. communities of volunteers, communities of practice).

The social architecture domain, along with other well-established enterprise architecture domains (business, information systems architecture etc.), is important for architecting and establishing an effective social enterprise. However, the existing mainstream enterprise architecture frameworks need to be extended for developing situation specific social architecture. The Gill Framework provides the needed support for developing the social architecture. This framework can be used with available tools for developing social architecture within the overall context of enterprise architecture.

This white paper explains the key components of the social architecture domain that would help the architects, analysts and leaders in understanding its applicability and integration with other enterprise architecture domains. Firstly, it discusses the need for a new social architecture domain. Secondly, it discusses The Gill Framework and

defines the novel social architecture. Finally, it discusses the social architecture components and concludes with a short discussion about how the social architecture can be used within the overall context of enterprise architecture.

Need for a Social Architecture

Social technologies, originated in the context of socialization, have recently become very important in the context of modern business. Throughout history, businesses have demonstrated that they adapt technologies in improving operational efficiencies and growth. This has proven to be correct as most recently business organizations have begun to realize that they need to enhance internal and external collaborations through the adoption of various social technologies such as Twitter, LinkedIn, Yammer and Facebook.

The adoption of a social technology seems to offer several benefits such as wider customer engagement, brand awareness, superior customer experience, enhanced internal and external communications, greater transparency and co-creation by the active involvement of staff and customers. Despite these lucrative benefits, organizations need to proceed with great caution because investment in the social technologies could be a waste of real value. Organizations require developing social architecture, as a part of their overall enterprise architecture, when considering the adoption of a specific social technology. However, existing well-known enterprise architecture frameworks need to be extended for developing social architecture. For instance, TOGAF 9.1 is one of the well-known and most comprehensive architecture frameworks that provides the complete architecture development method and guidelines for developing and managing the traditional business, information system and technology domain architectures. Although TOGAF 9.1 is a comprehensive EA framework, it needs to provide support for developing and managing the emerging social architecture domain (see *Figure 1*).
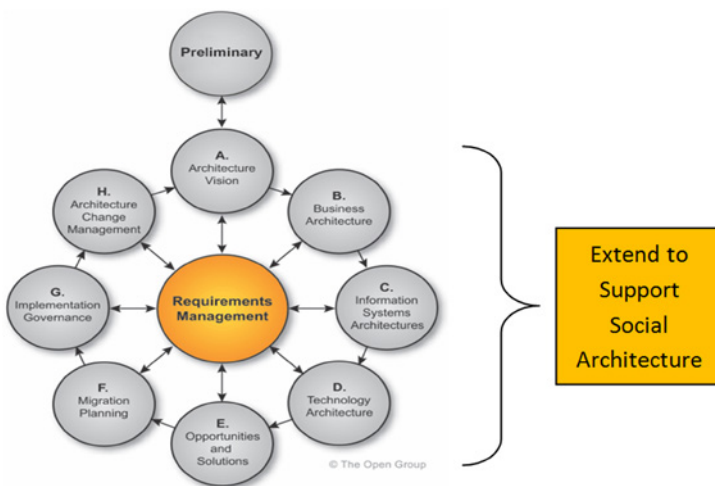

Figure 1: The Open Group Architecture Framework (TOGAF 9.1 2011)

The Gill Framework

The Gill Framework complements and extends the TOGAF 9.1 framework and provides the social architecture domain. This framework (see *Figure 2*) builds on the extensive multi-disciplinary action-design empirical research in the well-known enterprise requirements, strategy,
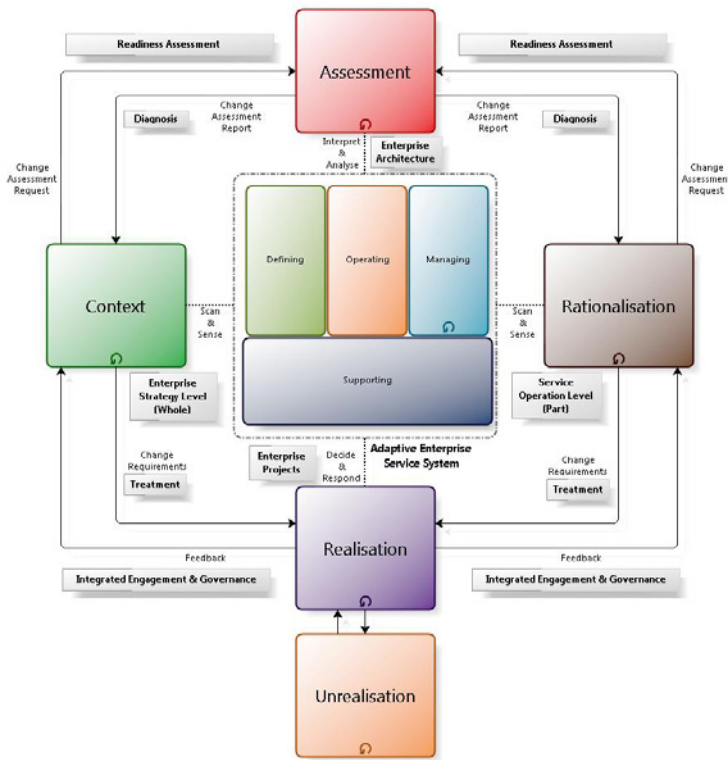
Figure 2: The Gill Framework (Copyright Gill 2012, 13)

architecture, service, and project management disciplines. This framework, along with the existing enterprise architecture frameworks and tools, provides a practical support for developing and managing adaptive or agile enterprise architecture in the modern context. This framework has two main layers: (see *Figure 2*) inner layer and outer layer. The inner layer is developed to assist in defining, operating, managing and supporting the complex enterprise as an adaptive enterprise service system. The defining capability defines the adaptive or agile enterprise architecture capability. The operating capability describes the adaptive enterprise architecture in its operating context in terms of its interaction architecture, factory architecture and facility architecture (see *Figure 3*).

Factory architecture includes human, IT and solution architectures. Human architecture has social architecture domain along with the other two business and information architecture domains. The managing capability is a set of integrated capabilities (e.g. enterprise strategy, architecture, project, service and requirements management) for developing and managing the adaptive enterprise. The supporting capability is a set of integrated capabilities (e.g. enterprise operating model, supply chain, intelligence, asset library, and method engineering) for supporting the other capabilities. The outer layer presents the five adapting capabilities (e.g. context awareness, assessment, rationalization, realization, and un-realization) to guide the continuous adaptation of the adaptive enterprise architecture in response to internal and external changes. The outer layer enables the enterprise architecture adaptation or agility through the assessment and adoption of emerging technologies (e.g. cloud, social) and their impact on the enterprise architecture.

Social Architecture

Drawing on the ISO/IEC 42010 architecture definition, a social architecture can be defined as the "fundamental concepts or properties of a social system in its environment embodied in its elements, relationships, and in the principles of its design and evolution". Social architecture refers to the social structure, behaviour, culture, knowledge and opinions of communities of people (e.g. communities of practice beyond the boundary of a single organization) that influence the desired behaviours within and outside the operating environment of an
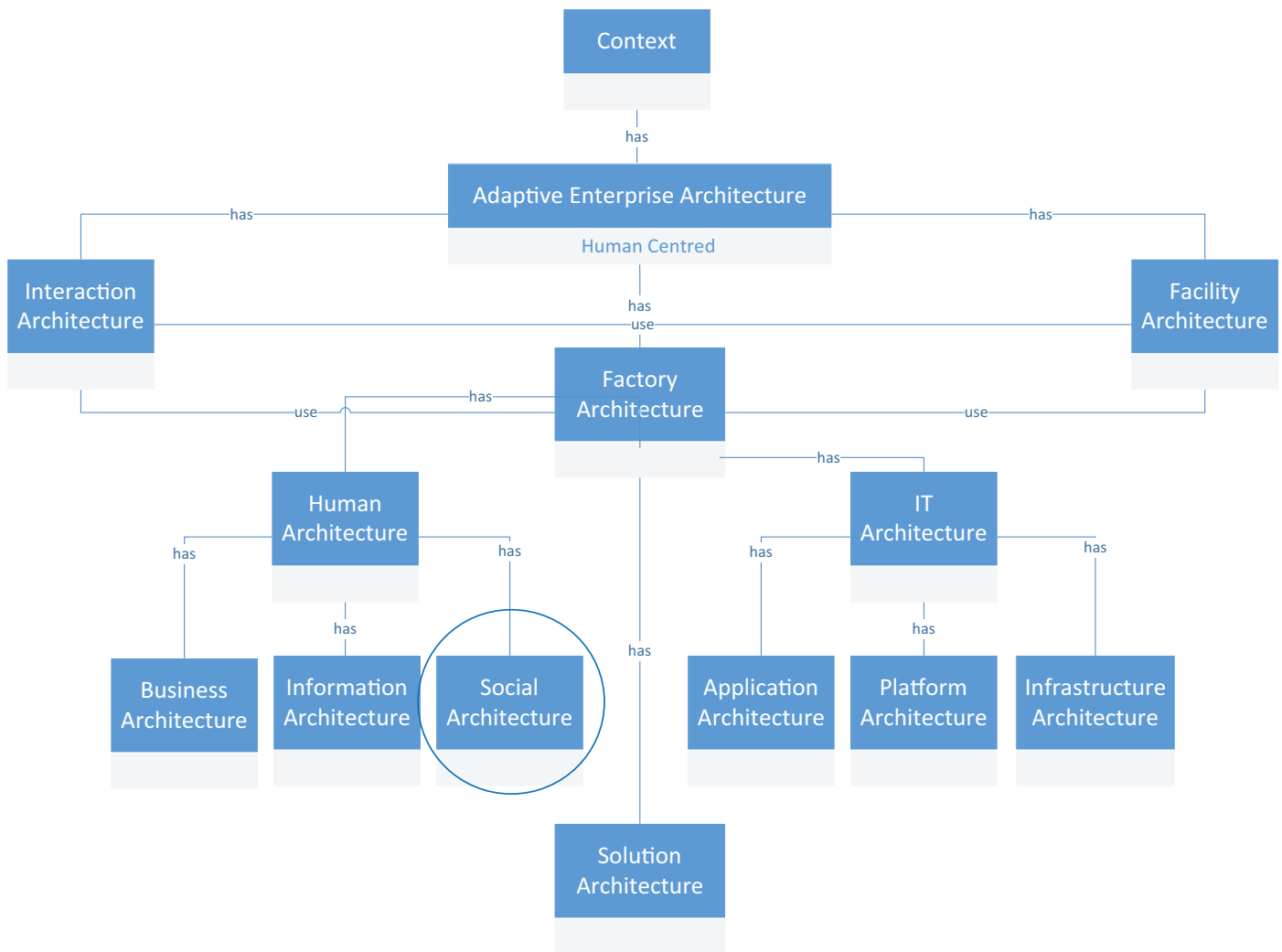
Figure 3: The Gill Framework – Domain Architectures (Copyright Gill 2012, 13)

enterprise. Social architecture is all about "social communities", which plays an important role in the ongoing smooth operations, improvement, growth and transformation of an enterprise. Social architecture has the following key elements: social strategy, social policy, social principles, social organization or community of people, social value stream, social capability, social process, social service, and social event. Additional elements can be added if required.

Social strategy, as a part of an overall enterprise strategy, refers to the social goals and objectives that are realized by the social architecture. Social strategy is also augmented with social principles and policy that guide the social architecture. Social principles describe the fundamental beliefs and values that impact the development, operation, improvement, growth and transformation of a social architecture.

Social organization of people, as a part of a formal organization structure, refers to the internal and external social structure or community of people (e.g. communities of practice) beyond the boundary of one business unit or organization.

Social value stream, as a part of a formal value stream, refers to social organization capabilities (end-to-end social interactions) that create value

from both organization and customer perspectives. Social capability, as a part of a formal business capability, describes what the social enterprise does. The examples of social capabilities are: crowd sourcing of information and crowd funding. Social capability is realized by social processes, which consume or produce social services. Social services are recurring social activities. Social events trigger the social process execution. The examples of social events are: initiate a monthly lunch meeting, customer appreciation and feedback day.

The above mentioned elements and their relationships provide the social technology independent description of the social architecture within overall context of enterprise architecture. An organization specific social architecture can be developed using these elements, which can be then supported by an appropriate social technology (e.g. Yammer, Chatter, Facebook) for a particular situation.

Conclusion

There is an increasing awareness among business organizations about the critical role of social technologies for timely and effective business communication and interactions. However, before jumping on the bandwagon of social technologies, it is important for an organization to understand and develop a technology independent social architecture that needs to be supported through the adoption of social technologies. This white paper described the social architecture elements from The Gill Framework, which can be used as a guideline for developing an organization specific social architecture by using the available enterprise architecture frameworks and tools. In my next white paper, I will discuss the facility architecture from The Gill Framework.

Resources

The Open Group. (2011) TOGAF Version 9.1 - The Open Group Architecture Framework.

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