IT4IT and Digital Transformation
by Richard Moore

Why we all work for a software company, and putting the Open Group's IT4IT initiative into context.

Introduction

Sorry if this is news to you, but you work for a software company. And so do I. Whichever sector our organization is engaged in, its ability to expand and compete will increasingly become reliant on the talent, discipline and capability of its software teams. In the API economy, our adaptability and deftness to sustain growth in a turbulent environment will come to depend a great deal on the quality and timeliness of the software our IT functions create.

"The business environment, at every Tier level, just keeps getting more complex," says Alan Simmonds[1]. "The IT function **is** business nowadays, in the sense that if you were to remove IT from any business, then you will be left with very little."

There is a common imperative for every organization to leverage cloud, Big Data, social and mobile technologies today. This supports the notion that any **business** transformation is largely an **IT** transformation.

In this article I want to discuss the consequences of this for EA, and especially for IT governance. I want to show how moves to the "3rd Platform", and to software methodologies such as DevOps, Agile, Lean and Kanban have left a space that it is essential for IT governance to fill, and how the Open Group's IT4IT initiative is doing just that.

The 3rd Platform and Digital Transformation (DX)

The 3rd Platform is a coin termed by analysts[2] to encapsulate an information landscape that features Big Data, cloud, social and mobile technologies, as well as other accelerators such as cognitive computing and the Internet of Things. To place it into historical context, the 1st Platform represents the age of the mainframe, while the 2nd Platform describes the client/server environment.

The competitive advantages found in leveraging the 3rd Platform have been, and continue to be, profound. Think Uber. Think Airbnb. The scale and speed at which these companies have been built, and indeed their whole business model, could not have been feasible in the 2nd Platform world.

Figure 1: The 3rd Platform and Digital Transformation

It is the 3rd Platform that provides the context for Digital Transformation (DX). DX is the process of leveraging Big Data, mobile, cloud and social technologies to escalate operational efficiency and business competitiveness. DX also attempts to give the business the agility to respond to (or even drive and take advantage of) the modern disruptiveness innate in 21st century business.

DX is likely to consume the discussion in every boardroom over the next several years. Adoption of 3rd Platform technologies has been dramatic and rapid.

It is likely that, for the foreseeable future, every EA professional you meet will be grappling in their own way with the impact of the 3rd Platform on operations, processes, decision-making and customer interactions.

It goes without saying, then, that an organisation's ability to manage its digital transformation is going to be absolutely critical in the coming years.

To quote the analysts at IDC…

"Organisations' entire futures will depend on their ability to build systems to exploit these new technologies, through in-house development and creative use of external services to build advantage."[3]

IDC also give some numbers. They predict that the scale-up of digital business strategies will drive more than half of organisations' IT spending within the next 24 months, rising to 60% by 2020[3].

The 3rd Platform and Software Development

Businesses operating at scale in the 3rd Platform world will primarily be driven by code. The code will add value and drive competitive advantage. The responsiveness and discipline of an organisation's coding function will go a long way to making or breaking the business. This is what I mean by us all working for a software company. The line between the code your company creates and the product it sells will become increasingly blurred.

Understandably, software development methodologies are becoming more reactive and nimble at the same time as the 3rd Platform expands. Older methods of development are proving incapable of functioning quickly enough and efficiently enough in this environment. Industry responses include Agile, DevOps, Lean and Kanban. Switching to these models is fast becoming an imperative for any enterprise looking to compete at scale.

By 2018, IDC predicts that organisations pursuing DX will more than double the size of their developer resources, focusing those developers almost entirely on DX initiatives[3].

The IT4IT Reference Architecture

We can now start to see how IT4IT is part of the changing environment we're discussing. In Figure 2, I have tried to show how developments in IT Governance, Technology and Development Methodology have transformed over time. Until late 2015, and the release of the IT4IT Reference Architecture, the technology advance to the 3rd Platform, and the methodology advances with DevOps, Agile, etc., left a space for some important work to be done in the area of IT governance.
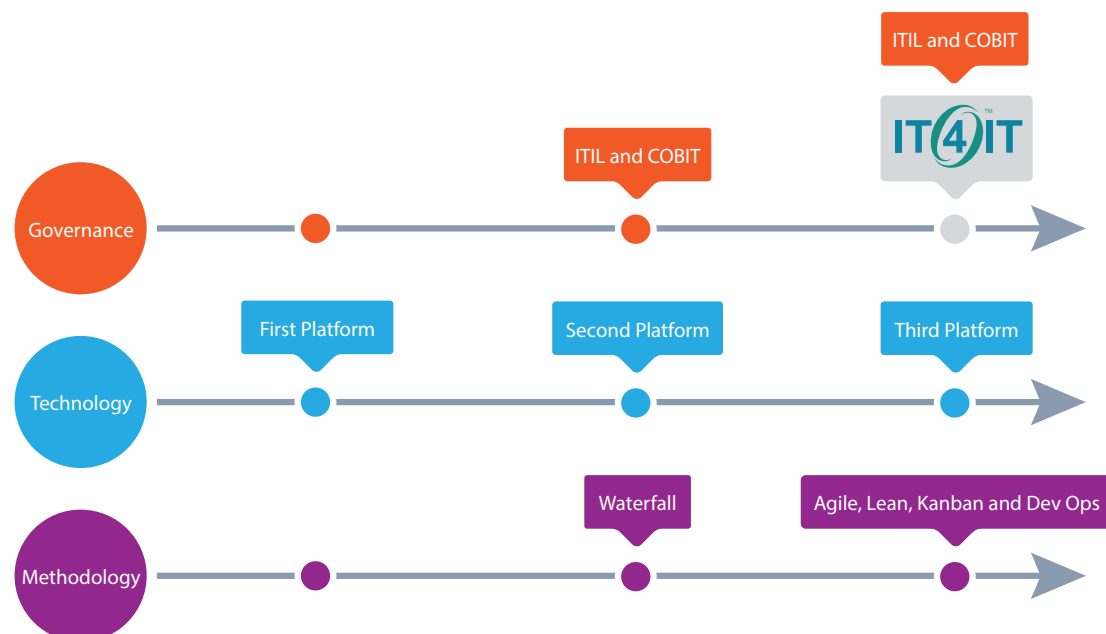

Figure 2: Putting IT4IT into context. IT Technology, Development Methodology transformations over time.

Let's pause here for a moment and recognise that until the IT4IT initiative, the IT function within a business, unlike HR or Finance (for example) **had no prescriptive reference architecture**. And it was driving up cost. The important work done with standards such as COBIT and ITIL has contributed in a great way with process modeling, but has stopped short of offering anything prescriptive. This is where we start placing the Open Group's IT4IT initiative into context. **IT4IT is a prescriptive reference architecture for managing the business of IT.** It doesn't replace ITIL, COBIT or other frameworks and standards, but is complementary to them.

IT4IT allows the IT function to operate as a business in its own right. It recognises IT as a production-oriented business. A manufacturer of code. Consider this in the light of the software development function making or breaking a business, and the line between product and code becoming blurred.

It uses the Value Chain concept (that revolutionised manufacturing) to create the IT Value Chain, and is supported by a three-level reference architecture.
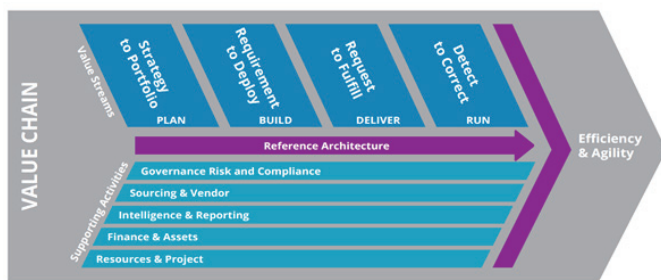

Figure 3: The IT4IT Standard.

It is deliberately outside the scope of this article to get into the details of IT4IT. There are some excellent introductions and training courses being written, and the Standard can be downloaded from the Open Group here www.opengroup.org/IT4IT/overview.

Just remember that you work for a software company now.

1   Alan Simmonds video commentary in Good e-Learning's IT4IT Level One Foundation online training course

2   IDC

3   "Accelerating Digital Business with IT4IT" Carnelly & Thomson, IDC Jan 2016. Sponsored by Orbus Software.