



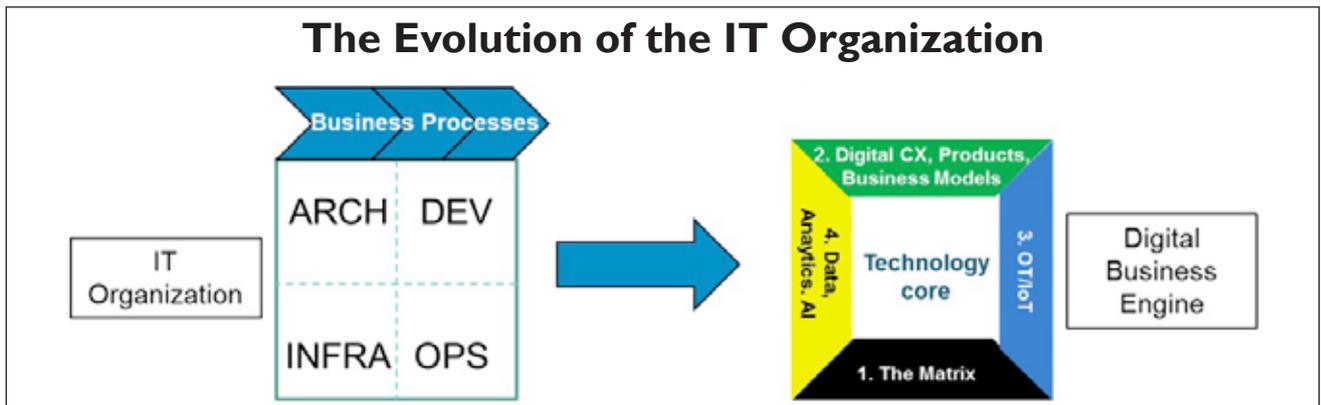
“Hey, IT Department – What Do You Want to Be When You Grow Up?”

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When we look at this increasingly digital 21st century through the lens of the CIO and IT organization, there are lots of detailed questions about technology, architecture and talent, but perhaps we have to start with a bigger, more existential question: “Hey, IT department – what do you want to be when you grow up?”

When we compare IT to other disciplines, like finance or law, it is still a young whippersnapper, a relative adolescent. You may remember the scene in the movie *The Graduate* where Dustin Hoffman’s character, Benjamin Braddock, just graduated from university and thoroughly confused about what to do with his life, is at a party held by his parents. Like Mr McGuire’s advice to Ben (“I just want to say one word to you: Plastics”), the IT organization is getting lots of equally narrow, unhelpful advice – “I just have one word for you: Cloud”, or “I just have one word for you: Blockchain”. Plastics are incredibly important and lucrative, as are cloud and blockchain, but they are not quite a helpful enough answer to the entire existential question for the IT organization.

At LEF, we are using a simple picture to guide our thinking. On the left, there is a simplistic view of a traditional IT organization, bringing together a bunch of largely internal technology capabilities to make our business processes more automated, faster, cheaper, safer and more agile. This is the world of the ERP system.



But as the right-hand side of the figure shows, there are four forces acting on our businesses and government agencies, and their IT organizations, which mean the IT organization needs to evolve around the technology core.

First, there are more and more powerful technology and services available from the outside, delivered in a scalable, high-quality, high-reliability model. We refer to this as the *Matrix*, and it includes everything from basic cloud services (such as IaaS, PaaS and SaaS) to very sophisticated capabilities (like leading edge artificial intelligence and business platforms). Those able to tap into and be an intelligent client of the Matrix are able to leap ahead (think Amazon, which is both a provider and consumer of the Matrix), and may well need less conventional IT services (think Netflix).

Second, there is an increasing opportunity and imperative for the output of the IT department to interface not just with internal processes, but directly with clients. Or more generally, this is about how the organization shows up to the outside world. Simple web-based eCommerce was an early example of this, but now *digital* customer experience (CX), products, services and new business models (like platform business models) are increasingly critical. Expectations here are driven by the consumerization of IT, where more and more sophisticated technology and services are available to the consumer, driving up expectations of digital customer experience. Skills like digital anthropology, to understand and influence that, are more and more important, but still quite scarce.

Third, integrating IT with specialist *operational technology* (OT, such as telecoms networks, factory automation technology, etc.) and instrumenting the physical world (the internet of things, such as wearable devices, smart cities, white goods, etc.) creates lots of technology questions that have not been asked before.

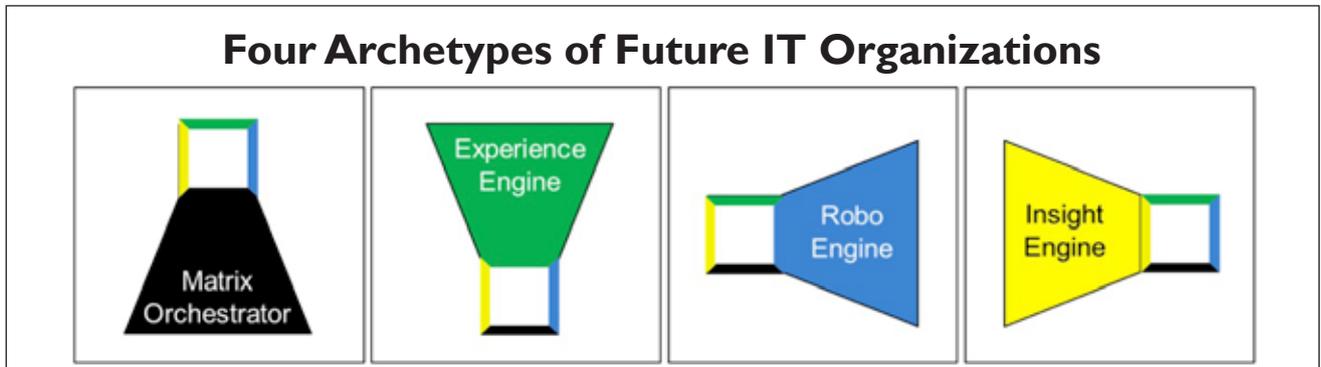
And fourth is the ongoing *big data* story, with continual supply-side technology and algorithmic innovations meaning that many organizations have an awkward gap between the stuff that is available to them and the creation of context-specific insight. This area includes advanced analytics and artificial intelligence.

This picture raises approximately 23 trillion questions, which we will strive to answer over the coming years. LEF’s [Bill Murray](#) and [Glen Robinson](#) are working very hard to answer many of them in our research project *The Future of the IT Organization*, results to be

published later this year, and shared as one of the main sessions at our 21 November [Executive Forum](#), entitled *The Artist Formerly Known As The IT Organization*.

But at a high level, we can think through a simple question: if we believe that much of what the IT organization does today may be consumable from the outside (the Matrix), where should the centre of gravity of the IT organization shift? Specifically, where are the needs in your business? And where are your capability vacuums?

Based on the four forces described above, we suggest you consider one of four archetypes as a potential shift in centre of gravity for your IT organization.



There will still be a need to provide the core IT capabilities of a business, even if they are much more agile and outside-in. This is represented by the white box in each of the four archetypes above. And no IT organization can ignore any of the four forces described earlier, hence there is a bit of each (black, green, yellow, blue) in all of them. But these archetypes suggest a big shift in centre of gravity, in one of four directions:

- 1. The Matrix Orchestrator.** This is an organization that provides capabilities from the Matrix for the rest of the business to consume, helps architect and integrate them to avoid making a mess, and also evangelizes and informs the rest of the business about new Matrix capabilities as they emerge. This is a likely direction for many IT organizations, perhaps even the default.
- 2. The Experience Engine.** Here, the centre of gravity is understanding the customer, the channel and the employee, and making sure that your business creates awesome digital experiences that enhance the stakeholder's life and integrate well with your business. Platform business models and digital anthropology are examples of key capabilities here. Note that though this may seem most applicable in the B2C domain, there is also plenty of need in B2B and government agencies – and in employee experience everywhere.
- 3. The Robo Engine.** The centre of gravity here is turning the business, and the ecosystem it exists in, into an organism full of granular sensors (think streetlamps that sense everything from temperature to likelihood of crime), and controllers (think fleets of drones) that are continually tuning the business to maximize value and minimize risk. Deep skills in IoT and related automation, anti-fragility and context-specific business considerations (like telecoms networks performance, power station resilience, hospital equipment instrumentation, smart city orchestration) need to be built here.
- 4. The Insight Engine.** In this model, the IT organization expands further along the continuum from raw data to intelligence and insight. This can include building human analytics capability, as well as exploiting algorithms and AI from the Matrix, in order to create insight into customers, processes and other domains. (Note that there is also some specific insight needed in the 'Robo' domain.) This shift is most likely in businesses and government agencies that have not traditionally been rich in analytics and AI outside the IT function.

In all four cases, the 'artist formerly known as the IT organization' will almost certainly not work alone in generating experience, automation or insight, but will provide much more than a traditional IT organization would.

And, of course, the real world is more complex than a simple model, and every business will have a mix of the above capabilities in the IT organization, but it is worth using this high-level model to think through the overarching direction-of-travel in your organization. Those who would like to engage with Bill and Glen in a more detailed discussion of the evolution of the IT function would be most welcome to get in touch, and also we hope that many of you will participate in our [Executive Forum](#) in London on 21 November to discuss the results.

About Leading Edge Forum

Leading Edge Forum (LEF) is a global research and thought leadership programme dedicated to helping clients reimagine their organizations and leadership for a tech-driven future. We serve as a strategic touchpoint for CXO teams to provoke and challenge their thinking to help them win in the 21st century.

We believe that as business and IT become inseparable, virtually every aspect of work and the modern firm will need to be reimaged, and this creates exciting new digital opportunities.

Through an annual membership programme of research, events, onsite workshops and advisory services, we support senior leaders in areas such as strategy, organizational change, executive education, talent development and the future of the IT function. Members enjoy personalized access to our global network of thought leaders, clients and leading practitioners.

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