AGENTS OF TRANSFORMATION

Nicolas Matelot

DevOps Manager
Groupe La Poste

Agents of Transformation

A new breed of technologists to shape our future

To better understand the current environment in which technologists are operating, AppDynamics has undertaken comprehensive research to uncover the aspirations, challenges, and priorities for technologists today, from board-level directors and CIOs to senior and mid-level IT management.

All research was conducted by Insight Avenue in March and April 2018.

This comprised of:

- Interviews with 1,000 IT professionals in organizations with a turnover of at least $500m

- Interviews conducted across five markets : US, UK, France, Germany, and Australia, and throughout a range of industries, including IT, financial services, retail, public sector, manufacturing and automotive, and media and communications

Foreword by David Wadhwani

CEO, AppDynamics

> It is technologists who will shape our future existence, by creating and maintaining an advanced technology ecosystem that supports our evolving needs and aspirations. Our ability to adapt and prosper will come down to the skills, knowledge, ambition, and beliefs of the people in our industry.

Over the next three decades, the world we live in will change in ways we can't even begin to imagine. Advances in computing power, automation, and AI will transform everything — the way we work, rest, and play. We'll see improvements in communications, transport, and medicine that will allow people all over the world to live easier, safer, healthier lives.

But these changes will also present challenges, particularly where technological innovation outpaces our ability to harness it and adapt to change.

In this, our latest research study, we set out to identify the characteristics and environments that technologists need to drive effective and sustainable change for their organizations. And so emerged the Agents of Transformation, the elite few already primed and equipped to be digital business leaders — and four further typologies of technologists, all with the appetite and desire to have a positive impact on their organizations and the world itself.

At AppDynamics, we're proud to be working with many of the world's most innovative companies, and supporting the most skilled, visionary, and ambitious technologists around. We are committed to helping our customers become Agents of Transformation. We provide them with the real-time visibility and insight they need across all of their applications and the technology stack, to make informed decisions that drive business performance and better consumer experiences.

Becoming an Agent of Transformation will change the trajectory of your business and your career. AppDynamics is here to support you at every stage of your journey.

The transformation timebomb

As technologists, we must all recognise our crucial role in ensuring that our organizations, and the wider community, are able to understand and keep pace with rapid technological advancements.

However, it's one thing acknowledging the need for change but quite another to actually effect it. Transformation is only achieved when you have the right people, with the right skills and character attributes, working in an environment which fosters and encourages innovation, through leadership, culture, and technology.

Unfortunately, the current reality within many IT departments is that neither the context, nor the right personal characteristics are in place to deliver innovation.

Concerns within the IT department

Two thirds of technoloists (67%) believe that technology innovation is outpacing society's ability to harness it and adapt to change

Only 22% of technologists are very optimistic that their organization is ready for the rapid pace of technological advancement

Only 27% are very confident about their own personal readiness for digital transformation

We are facing a Transformation Timebomb, where too many IT departments and the people within them — the very people that we are counting on to deliver innovation and transformation — find themselves without the necessary support, skills, confidence, and tools to fulfil their potential.

Outdated tech and culture are blocking innovation:

56% More than half of technologists (56%) say there is a surplus of outdated technology and skills within their IT department

85% 85% do not have access to the software and tools they need to turn data into real-time, context-specific insight

49% Nearly half (49%) do not have access to the data they need to achieve innovation goals

60% 60% of technologists say too much of their time is spent keeping existing software and systems up and running

55% 55% of respondents say their organization does not encourage technology professionals to embrace the creative, future-looking side of technology

26% Only a quarter (26%) of IT directors and managers feel their full potential is being achieved in their current role

54% IT leaders estimate that only half (54%) of their day-to-day activity is having a positive impact on the business or driving innovation

# The need for cultural change and tools for transformation

Whilst digital transformation is an increasingly important strategic priority for business leaders [1], many organizations simply aren't doing enough to create an environment in which technologists can drive innovation. Organizational structures and cultures are limiting the potential success of business change programmes.

The Agents of Transformation study reveals that many IT departments are outdated, reactive, and tactical — ill-equipped to deliver innovation and unable to move at speed. Many IT managers and directors struggle to innovate and deliver on any transformation agenda, hampered by the technology, tools, and data that they have at their disposal. In fact, 86 percent of IT professionals think their organization is lagging behind the most innovative IT teams in terms of skills, qualities and knowledge, and 45 percent see themselves lagging more than five years behind.

The study reveals that unless numbers of Agents of Transformation increase to at least 45%, technologists predict that their organization will risk competitive and final repercussions (33%), difficulties recruiting new talent (35%) and providing positive role models (31%) - as well as damaging customer experience (30%) and making innovation impossible (33%).

With 58% of technologists stating that their work is so reactive that they forget what attracted them to technology in the first place, business leaders need to wake up to the fact that without a highly skilled, motivated, and resourced team of technologists, digital transformation cannot and will not be achieved. They must engage, support, and inspire their best technologists, and create a culture which allows their best IT talent to think big, to experiment and test new solutions, and, on occasion, to fail in order to innovate. They need to ensure that technologists have the software they need to monitor systems and applications in real time, and access to data across the entire IT infrastructure in order to make strategic decisions.

These organizations will be far more likely to be able to recruit, develop, and retain Agents of Transformation to lead their innovation programmes.
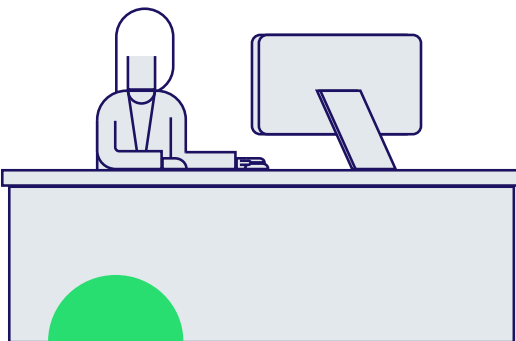
[1] Gartner 2018 CEO and Senior Business Executive Survey

New skills and creative thinking in the IT department

For many, transformation requires a significant shift in thinking, to move from being a reactive, tactical resource within the business to being a strategic and proactive player. Far too many IT managers and directors have spent their careers in siloed IT departments, focused on fixing problems and firefighting simply to keep systems up and running. They haven't been recognized for the important work they do and the results they deliver on a daily basis. This has left many IT workers feeling frustrated, demotivated, and unfulfilled.
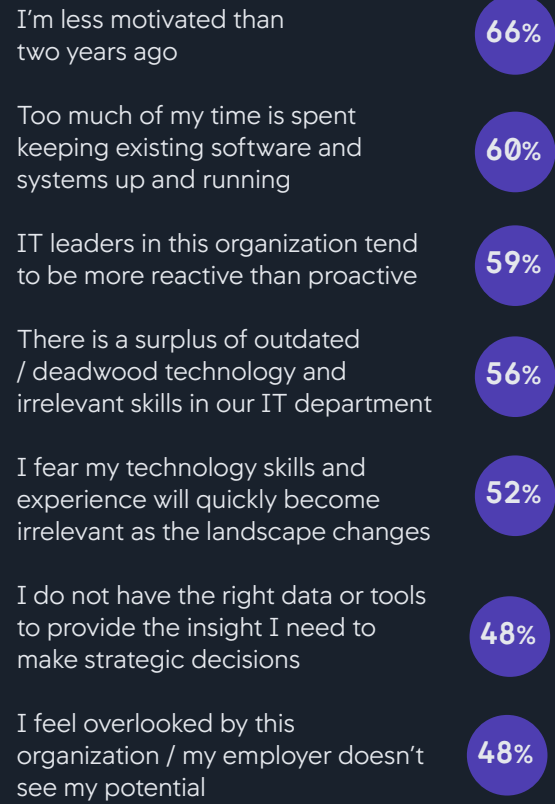
The research reveals that significant numbers of IT directors and managers are worried that they are not personally ready or prepared to deliver innovation. More than half of technologists (52%) fear their technology skills and experience will quickly become irrelevant, and 50% are concerned that peers in other companies are excelling faster.

See the responses
from the research in fig.1

Technologists recognise the need both personally, and for their colleagues, to develop new skills and approaches in order to drive transformation within their businesses. As *Figure 2* on the following page highlights, they are particularly aware of the need to improve their commercial thinking, to ensure that technology is fully aligned to business objectives, and to engage and collaborate more across the organization.

Such self-awareness is a good starting point, but it requires an investment in time which can sometimes be hard to find. Technologists need to take it upon themselves to ensure that they stay up to date with new technology innovation, adopt a more collaborative approach with the wider organization, and adapt to working in an innovation-as-usual environment.

To what extent do the following statements apply to you currently?

I'm less motivated than two years ago — **66%**

Too much of my time is spent keeping existing software and systems up and running — **60%**

IT leaders in this organization tend to be more reactive than proactive — **59%**

There is a surplus of outdated / deadwood technology and irrelevant skills in our IT department — **56%**

I fear my technology skills and experience will quickly become irrelevant as the landscape changes — **52%**

I do not have the right data or tools to provide the insight I need to make strategic decisions — **48%**

I feel overlooked by this organization / my employer doesn't see my potential — **48%**

Percentages represent respondents who selected 'to a great extent' or 'to some extent'

Which three of these are attributes you would personally like to develop?

Focusing on how IT drives and supports the business, being software-savvy and talking in terms of commercial outcomes.
46%

Vision / big thinking, thinking in terms of possibilities and opportunities rather than constraints
44%

Having a collaborative, flexible and supportive style and knowing when to direct and support my team as context changes
44%

Being curious, creative and looking at problems from different perspectives. Not being afraid to experiment or fail.
41%

Being logical, analytical, critical thinker who looks for patterns in data and can find root causes of problems and opportunities in data
39%

Being decisive and persistent, acting confidently and quickly on both information and instinct
34%

Being influential; credible and trustworthy and someone who has a significant positive impact on business.
24%

Figure 2. Research responses

● **% of research participants would like to personally develop**

Technologists cannot simply rely on their employers to provide them with the training, support, and tools they need to play a more strategic, proactive role within the business. They need to get better at communicating what they need to deliver innovation, and be able to put forward a reasoned, persuasive, and, most of all, commercial case to drive change.

Enter the Agents of Transformation

The research points to the emergence of a new breed of technologist that is primed to drive transformation within their organizations and ready to tackle the unprecedented challenges faced by our society.

These Agents of Transformation care deeply about the future role of technology within their organizations and the wider world, and they are excited about the opportunity to play a part in shaping this future. They recognise the importance and urgency of true innovation and can think both technically and creatively to find solutions to problems. They pride themselves on the strategic use of data and insight to drive positive change, reassuring and influencing others along the way.

Agents of Transformation are committed to doing things differently, to making a difference, and to leaving a lasting legacy. They are determining their own destiny and, in doing so, they are shaping our future.

A G E N T S

O

F

T

R

A N S F O R M A T I O N

Michael Makar
Sr. IT Manager
World Bank

The research identifies five typologies of technologist in today's digital business

Agents of Transformation

Making up 9% of all technologists, Agents of Transformation possess all the personal skills and attributes needed to drive innovation, and they operate within organizations that have the right culture, leadership, and tools in place to enable successful digital and business transformation. Agents of Transformation find themselves at the forefront of transformation initiatives, but they never stand still. They recognize the need for constant personal development and learning in order to remain relevant and fulfil their ambitions. To remain competitive over the next ten years, organizations need at least 45 percent of their technologists operating as Agents of Transformation.

Digital Pioneers
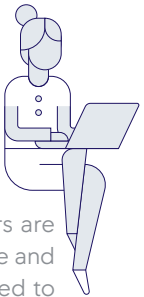
Accounting for 25% of all technologists, Digital Pioneers are Agents of Transformation "in waiting". They have a positive and ambitious mindset and possess many of the skills required to drive change, but do not have quite the right level of confidence in their abilities to lead genuine transformation within their businesses. Whilst for the most part Digital Pioneers work within forward-thinking organizations that are open to innovation, they can sometimes be hampered by not having the right structures and processes in place, or not having access to the tools and insight they require to deliver results.

Untapped Heroes
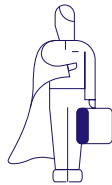
15% of all technologists fall within the Untapped Hero typology —individuals who are typically task-driven and focused on the day-to-day operational running of IT systems. Untapped Heroes lack confidence in their own skills and readiness to drive innovation and see a need to become more outcome-oriented and decisive. Typically they work in organizations which have a strong culture for innovation and a high level of data and insight available to inform strategic decisions. This means that with the right support and training, and by pushing themselves to overcome their personal fear of failure, to be courageous, Untapped Heroes can move towards becoming more strategic operators.

Frustrated Innovators

Making up 25% of the IT workforce, Frustrated Innovators have the mindset, skills and hunger to drive transformation but are held back by the environment in which they operate. They want to become more strategic, outcome-oriented players within their organizations, but they lack the real-time data and insight they need to achieve their ambitions — and are thwarted by rigid structures and cultural barriers. As a result, they can be demotivated and pessimistic about the future. It's important that Frustrated Innovators develop the communication and leadership skills they need to create cultural change and clear a path for innovation.

Disillusioned Dreamers
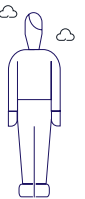
The largest group within the IT department, Disillusioned Dreamers account for 26% of all technologists. These individuals are least aware about the likely impact of technological advancements on their organizations and their own careers over the coming years. They typically feel unfulfilled within their roles and have little support or opportunity to take on more creative work. However, this group does see the need for greater numbers of Agents of Transformation within their organizations, and are open to becoming more innovative themselves, through training and mentoring, and by having more access to data and insight.

Technologists are ready for the challenge

73% 73% of IT directors and managers believe that technology advances will present more opportunities and benefits to society than challenges and threats

71% 71% of technologists reported that they care deeply about how technology is changing our world

69% 69% want to make a difference to the world and leave a lasting legacy through their work

76% 76% believe that rapid technological advances over the coming years will present them with greater opportunities to develop their careers and skills

71% 71% of IT directors and managers see the urgency of true innovation within their organizations

73% 73% of IT directors and managers believe that having access to accurate, contextual data is essential to making the right decisions and to delivering improvements

96% 96% of technologists identified at least one factor that excites them about becoming an Agent of Transformation

Transformation as a personal journey

Evidently, whilst a small proportion of technologists are already driving successful transformation within their organizations, for others there are significant hurdles, both professional and personal, to overcome.

But they are ready for the challenge.

In the same way that digital transformation represents an ongoing journey for organizations —something that takes time to achieve and involves trying new things (and sometimes failing) —it's a journey of discovery for technologists, too.

Wherever they are in their career, whatever their ambition, and whichever typology best describes their current status, it's important that technologists take ownership of their careers, deliver reliable applications and systems, and use readily available data to inform their decisions, helping them to be better every day.

As technologists, we all have a responsibility to demand more of ourselves and of our organizations, to stay ahead of technological advances, and to ensure that everything we do is ultimately focused around driving positive, sustainable change.

And for the Agents of Transformation, we have a duty to do all that we can to provide them with the space, support, leadership and tools to allow them to optimize, to innovate, and, ultimately, to shape a better future for us all.

appdynamics.com/agentsoftransformation $\longrightarrow$