

Professional Services: the creation of value in the new world

How to maximise the commercial potential of Industry 4.0

David Key and Stuart Brown

June 2018



Table of Contents

Executive Summary	3
Introduction	4
The technologies and their potential impact	5
Technologies	5
Impact on trust-based operations	6
Impact on knowledge work	6
Maximising the potential	7
Principles	7
Practice	7
Ask the right questions	7
Create a system for modelling and managing the results	8
Model the results	8
Engage staff in the 'how'	8
Build a value-driven operational structure	8
Focus the business on the change	8
Engage staff in continuous improvement	9
How we can help	10
Through our people	10
Through our software	10
Contacts	12



Executive Summary

The professional services sector is about to be disrupted by a new wave of technologies that will revolutionize its conventional business model, change the pecking order of firms, create new niche offerings, cause many firms to close and cut up to 30% of jobs.

The winners will be those firms that take the strategic high ground to create new business models.

The losers will be the ones that adopt a piecemeal approach to the introduction and application of these new technologies.

This paper describes the challenges and opportunities and proposes a mechanism for firms to win.

"This is about thinking strategically. Where are you going to play? How are you going to win? How do you have competitive differentiation? How do you create value for customers? The big questions of strategy are coming to the fore here, too. It's an interesting time for everybody in the C-suite".

Don Tapscott, co Author of Blockchain Revolution and cofounder of the Blockchain Research Institute



Introduction

Despite its predicted growth to almost \$5 trillion by 2020 *, the professional services sector is facing the biggest challenge in its history. The new knowledge-facing technologies of Industry 4.0 are set to fundamentally change the nature of age-old professional work that has been the bedrock of its income model since its inception. These technologies are offering new sources of value to those firms that embrace them and leaving those behind that don't. In the next few years this will profoundly change the professional services landscape and with it the face of the major geographic centres for this work.

"Will AI reduce the need for accountants? I think the answer is probably yes".

Richard Anning, Head of IT, ICAEW

"There is a 94% chance those activities currently performed by accountants and auditors will be automated by 2025". The future of employment: how susceptible are jobs to automation, Carl Benedikt Frey and Michael A. Osborne, University of Oxford

"Lawyers need to do some really fundamental thinking about how these technologies will impact us as a society, and as lawyers,' he says. 'Private practice lawyers are well-placed to get involved because that is where the innovation first lands, as a file on a lawyer's desk". Erik Valgaeren, Former Chair, International Bar Association, Technology Law Committee

As a result, several firms are now exploring the tactical potential for the technologies most relevant to the sector. Whilst this may result in the piecemeal adaptation of current tasks and may create some new efficiencies, in our view, this is the cart leading the horse.

Instead firms should be asking the much bigger questions which will determine their future viability, their competitive advantage and thus their future ranking in the sector.

In this paper, we explore those questions and how professional services firms might thrive in the new world.

^{*} Professional Services Market Global Report 2017: The Business Research Company



The technologies and their potential impact

Technologies

In the past few years, a number of new innovations have led to the development of eight new technologies which are predicted to have major disruptive effects on the global economy. They are: artificial intelligence (AI), robotics, blockchain, nano-materials, 3D printing, quantum computing, the Internet of Things and CRISPR. Collectively this impact is being termed Industry 4.0: the fourth wave of industry.

Of these eight, two have the potential to severely disrupt the professional services sector. They are: blockchain and artificial intelligence. A blockchain is a decentralized ledger which enables trusted transactions to take place with no human intervention. Artificial intelligence is a new form of complex software which develops rudimentary intelligence as it learns from its mistakes interpreting large volumes of data.

"Blockchain is nothing less than the second generation of the Internet. It will change every institution".

Don Tapscott, interviewed by McKinsey, May 2017

Together they can be used to replace many current professional services' income streams and develop an increasing range of entirely new ones.

"Since 2014, capital spending in blockchains has been growing at 59% pa, with venture capital investments in blockchain-related startups growing at a rate of 31% per quarter."

"40% to 50% of the new value from AI platforms will come from services"

"Al will create between \$230bn and \$270bn of value in the professional services sector with up to 35% of that value coming from entirely new, analytics-based business models"

McKinsey Global Institute, Jan 2018



Impact on trust-based operations

Technology: Blockchain

Main effect: Replacement of all trust-based operations and the creation of entirely new forms of

the same.

Affected Professional Service area	Example Effect
Accountancy	Replacement of traditional book-keeping
Legal, Property & Insurance	Automated contract validation
	Automated title and IP validation
	Enhanced IP protection
	IP exchanges
	New, more efficient, payment systems
	Smart contracts
	New forms of identity management
	Electronic record management
Financial Services	Automated cheque clearing
	Digital currency
	Digital wallets
	Peer-to-peer lending
	Banking disintermediation
IT	Replacement of server-based App creation
	New security protocols

Impact on knowledge work

Technology: Artificial Intelligence

Main effect: Replacement of manual knowledge work

Affected Professional Service area	Example Effect
Accountancy	Automated auditing
Legal	Automated contract creation
	Rapid case analysis
	Automated sentencing
	Money-laundering & theft detection systems
All	Digitally-assisted customer service



Maximising the potential

Principles

To really take advantage of these technologies, it is not enough to look at their impact tactically i.e. to assess the potential of each on a piecemeal basis. Whilst that may uncover individual opportunities for the improved efficiency or effectiveness of existing service lines and income streams, it will not enable firms to create new value and thus to build their competitive advantage in this brave new world.

That requires a much more strategic approach, whereby firms are able to model, try, test, change, apply and improve entirely new value chains which take advantage of these new technologies. It also requires them to do the same for the underlying operational structures that will support any new business models that may emerge.

The adoption of this new technology will also require those firms to pro-actively engage their remaining staff in the development and best application of the underlying activities and processes that will drive this new structure. Some of those may be automated and some may be manual: but by involving and engaging their employees in their creation, firms will ensure they are embraced by their people and executed to full effect.

Only through this more strategic approach will firms be able to determine their future viability, their competitive advantage and thus their future ranking in the sector.

Practice

Ask the right questions

The key strategic questions every firm should now be asking are as follows:

- 1. How do we optimise our business model to maintain our purpose and maximise the value we provide to our clients?
- 2. How should we best deliver that value and does that change our competitive positioning in any way?
- 3. What role should the new technologies play in that and what role should our people fulfil?
- 4. How should we motivate and retain our key staff when, in the light of these challenges and the increasing media coverage surrounding them, many will be concerned for their jobs?



Create a system for modelling and managing the results

Each of these questions will provide answers that could have a profound effect on the firm going forward and asked in the above order, the results will be sequential. For example, the business model from question 1 will lead to a revised operational structure from question 2 and will create the platform to determine the role of people and technology in question 3.

Given the speed that will be needed to create the most competitive new business models and the agility that will be required to manage them, the best organisations will be operating a single central system for modelling and managing the whole piece.

Model the results

Firms will want to know what their optimum business model might look like and within this, how the new technologies might work alongside their people. All that will require modelling at two levels:

- Value chain to uncover the new sources of value and thus the new business models
 which may be open to the firm, given its core purpose, skills and intellectual property.
- Operational structure to create options for delivering these new sources of value.

Engage staff in the 'how'

The best ideas come from the people who already work in the business. All they need are the right tools, culture and encouragement to innovate and implement them.

Build a value-driven operational structure

Once the options have been thoroughly explored in the modelling and staff discussions, firms will need to build a new operational structure to ensure the new sources of value they have uncovered can be applied to best effect.

In some cases, this may encourage firms to become niche players: possibly focusing on just one application of the new technologies to create an entirely new approach to market. In others, it may be about them optimizing their economies of scale. But given the nature of the new technologies: especially their ability to be rapidly productised, there will be little room for copycat models or overlap. This will be a winner-takes-all market.

Focus the business on the change

Whether they have read about it in the press, have taken a special interest in Industry 4.0 or heard about it from colleagues, there will be few staff who are either unaware or uninterested in its



effects. Given the pessimistic tone of much of the press comment, many will be concerned for their jobs.

It is vital therefore, that firms create a positive culture around the change and a mechanism which will bring and hold their staff together; that will make them feel part of the change and at least partially in control of it, rather than passively being subjected to it.

Engage staff in continuous improvement

A core part of the latter will involve active staff engagement in the continuous improvement of the firm's operations. Given the revolutionary nature of these new technologies, it is likely that new forms of competition will continually emerge and thus perpetually threaten the status quo. To combat this, every firm will need to raise its innovation game to a new level and seek ideas from as many sources as possible. One of the best sources of insight and innovation will be its own staff. Their ongoing engagement in that improvement will be most firms' greatest asset. They will need to find a way to harness that effectively.

"Machine workers can now figure out how to do things... we must develop better ways for human workers to interact".

Julia Shah, MIT EmTech conference June 2018



How we can help

Through our people

At E-Squared we enable firms to fully engage their people with their processes to create new forms of value, satisfy evolving client expectations and increase commercial performance.

The authors of this paper are a good case in point.

Having started out in industry, where he created the world's first sandwich production line, David Key has been working in Professional Services for 33 years. In the mid 90's he created an entirely new form of pensions service which opened up a new and highly lucrative market for its owner, the employee benefit specialist, Sedgwick Noble Lowndes. Around the turn of the millennium he designed the Prudential's new Stakeholder pension and repositioned the company for its first foray into the Small to Medium Enterprise market. In 2003, he founded a business for commercializing intellectual property from university spin-outs and continues that work to this day, as a non-executive director of York Science Park. In 2008 David founded E-Squared to transform the way organizations create and manage value and is leading the company's Professional Services team. He is available to discuss new projects.

Stuart Brown entered the world of Professional Services in 2006 as Director of Business Development at a top 20 firm of accountants, with 350+ people and 16 regional offices. His passion for aligning people and process inspired the firm to embark on a journey of transformational change which enabled it to win major new accounts and lifted the bar for regional firms in the UK. Stuart heads E-Squared's Customer Success team.

Through our software

In the knowledge that the leading professional services firms will wish to act with speed in creating the most competitive new business models and that they will also need to be agile in managing them, E-Squared has created a new system for doing just that. Called Isoma, it offers the best firms a single, central system for modelling and managing the whole piece.

 Value & operational modelling. Enables multiple value, operational and process structures to be easily tried, tested, changed and applied across the firm.



- Collaborative insight creation. Facilitates staff, supplier and client engagement in change.
- Continuous improvement management. Enables top-down and bottom-up improvement across the whole firm.
- Operational unification. Provides a single point of focus for all operations.



Contacts

Name David Key Stuart Brown

PositionManaging DirectorClient Services Manager

Tel. 07812 196876 07983 945759

Email. <u>david.key@esquared.systems</u> <u>stuart.brown@esquared.systems</u>