Using Technology to keep Businesses Agile post-Brexit

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New Technology and Agile apply irrespective of Brexit

But if you didn’t fully implement these in your business beforehand, there are additional benefits from doing so now.

This presentation is based on my agile experience over the past 3 years…
Is your company Agile, or Not?

We can move quickly and easily by the division of tasks into short phases of work with frequent reassessment and adaptation of plans. 

Or

We see investment in wide-sweeping technology change as a substantial risk.

If it’s not broke, why fix it?

We have staff who “know how things are done” and we’re not willing to change that.

amazon

NETFLIX
This presentation focuses on the role of Computing in Business Agility
What we did…

We took the systems, data and processes in a £10bn monolithic industry and decomposed, partitioned and cloned them into 30+ microservices to disrupt it.

And we decomposed the company into three to deliver it by splitting out development to teams we created in different countries.
Becoming more agile

• Although the path to agility depends to some extent on the starting point, it isn’t possible to become agile with a big bang. Refactoring a monolith bit by bit is usually the only practical way.

• To become an agile company, some challenges have to be dealt with:
  – misalignment between agile ways of working and the daily requirements of people’s jobs
  – lack of collaboration across business units
  – employee resistance

• To convert IT systems to agile, similar challenges arise:
  – misalignment of agile design with current system functionality
  – lack of data transparency
  – process flow resistance within systems

• So where did we start?
Defining business vision in microservices

- The rise of microservices has led to a big boost in agility in many business sectors
- The process of redefining a system into microservices, where separate services interact with each other in a well-defined way, means that not only is the required computer code separated from everything else, but also its business planning and vision has a natural home.
- By redefining business units in terms of microservices mirrored in IT systems, the ability to envision and implement change quickly driven by expertise groups fully focussed on their specialist area becomes ingrained in the organisation.
- Drawing those two approaches together can create an Agile Organisation.

- We had a team in the UK, one in South Africa and one in Serbia. Each had their specialist areas and microservices that they were responsible for.
Deconstructing the vision

Microservice architecture structures an application as a set of loosely coupled services.

It simplifies testing and enables components to deployed independently.

The organisation is structured as a collection of autonomous teams, each of which is responsible for one or more services.
Integrating microservices and business

- Consumers: developers, partners, suppliers, IT dept., customers, other stakeholders
- Domains: customers, products, orders, payments, vendors, ...
- Two-way open access: microservices
- Logical business data and processes: microservices
- Silos of IT apps, data, and systems

Enterprise data and content

IT applications: ERP, CRM, HCM, LOB apps

Secure end-to-end access

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Integrating microservices and business enables companies to take advantage of Brexit

- Each time a change is required, each microservice team can work in parallel to deliver it.
- Shortcut the UK skills gap by placing teams in different countries.
- Get closer to customers by putting a UX team in their locality.
A microservice approach means that location has less impact

- Sometimes relevant IT skills take time to assemble in the UK and can be expensive
- Teams in other countries are a viable alternative and spread business load and risk.
  - We created one team in Cape Town, South Africa
  - And bought into ‘Team as a Service’ in Novi Sad, Serbia
- A microservice architecture enables diverse teams to work together productively and quickly so that location is less of an issue as long as there is cultural fit.
  - Communication is key and video walls to virtualise and join offices help.
  - Exchanging staff between locations for a few weeks or even months greatly enhances employee perceptions of your company too.
Adopting a microservice structure in business and IT is an attractive route forward. Brexit could be the initiator, but it you don’t do it, your competitors probably have already.

- A microservice approach to business reduces the blocking often inadvertently created by internal IT departments, because with microservice teams, IT staff report to the business, leaving the CIO to manage standards, tools and environment.
- Each time a change is required, each microservice team can immediately change priority to deliver it, if the business priority is there.
- Shortcut the UK skills gap by placing teams in different countries – for instance get closer to customers by putting a UX team in their locality.
- We used our South Africa team for process-based microservices and our Serbia team for mathematics-based microservices.