Blockchain: key questions for your business

Blockchain is an exciting new technology with **huge potential to disrupt** and improve numerous industries. Its potential benefits include **reduced costs**, elimination of **data duplication**, **increased transaction speed** and greater **resilience**.

Given its potential breadth of impact, your approach to blockchain should encompass both your **business and technology strategies**.

With such a **rapid pace of change** around blockchain, now is the time to start asking these key questions:



Risk of disruption

Will blockchain disrupt my business and should we adjust our business strategy?

Purpose and suitability

Is the purpose of the business application clearly understood and is blockchain the right technology?

Resilience

How do we ensure the technology is resilient, scalable, secure and recoverable?

Market

Are we considering the impact blockchain technologies could have on the market we operate in?

Improving internal operations

Are there opportunities for blockchain technologies to reduce cost or improve customer service?

Co-operation

Do we need to co-operate with others in order to fully realise the benefits that blockchain can bring?

Governance

How will it be governed and administered? Who will control identity, roles and rights?

Technology planning

Are we taking blockchain into account in our 3-5 year technology plans to avoid regret spend?



Your blockchain strategy should cover 3 important aspects for success:

Key

questions

- Avoiding regret spend
 - Go-live assurance
- Legacy system integration

Planning for blockchain, or living with regret

Momentum continues to gather at an increasing pace for blockchain initiatives. However, alongside the growing excitement, we need to remember the critical importance of "keeping the lights on" in the BAU environment. No matter how fast the new technology comes to market, many firms will be living with their vast legacy technology environment for years to come. A key question for CIO's therefore is: **how to plan for the future whilst managing today**?

Deciding when to act

That blockchain will have a transformative affect on many industries is widely becoming seen as inevitable. The only question is **when?**

More cautious CIOs may conclude that they should postpone investment in blockchain until initiatives in this area are well understood. However, every week we are seeing a new wave of ideas and investments. Waiting for a stable state may **risk missing out on vital opportunities** and competitive advantage.

So what actions can the CIO/CTO take?

Develop a disruption radar: Understand the areas where blockchain initiatives are currently most focussed and making most rapid progress.

Identify missed opportunities: Across the business consider other areas of high potential that have so far been ignored. This helps to look forward beyond the current radar and identify "the next big thing".

Categorise adoption complexity: Adoption complexity will be one of the primary drivers for the timeline. The numbers of parties that need to cooperate and the ability to align their interests will play a much larger role than technical considerations.

Map the current environment: Mapping the current technology landscape to the three considerations above identifies those applications that are most likely to be impacted in the short to medium term.

Develop architectural options: Developing architectural options that segregate internally and externally focused functionality will help to "minimise regret through design". To achieve this, technology teams from the traditional legacy business and the developers and architects that are working on blockchain need to work hand in hand.

None of the above is easy, however putting in the effort now and applying these considerations to the IT budget cycles that will determine spend in 2017 and beyond is the only way to avoid creating a significant growth in "regret spend" – that is investment in systems that needs to be reworked to respond to blockchain driven market changes

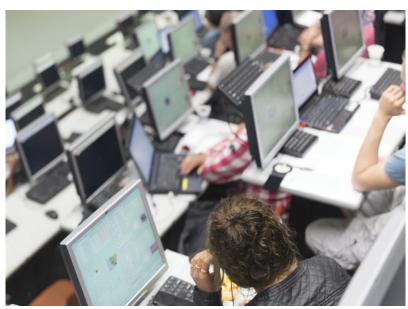
Blockchain go-live assurance

Most of the senior FS leaders responding to PwC's FinTech Global Report 2016 **recognised the importance of blockchain technology**, however only

17%

of them said they are very or extremely familiar with it.

With any new technology, lack of familiarity and understanding will slow down initial adoption. However, concerns around the risks of blockchain technology need not feed in to this if you plan your implementation and go-live assurance in the right way.





Identifying and mitigating risks

By testing and iterating how blockchain technology will be used in your company through agile development, proof of concepts and pilots, you can identify and remove or mitigate risks throughout the technology development process.



Stress-testing the technology

Alongside functionality tests, ensure your team stress tests your blockchain technology and the systems its integrates with or operates alongside to an appropriate degree to ensure your are confident in its resilience.



Recovery arrangements

Plan for the unexpected by making sure you have a recovery plan in place in case of any potential errors. An appropriate recovery plan will flex to scale, get you back up and running quickly, and minimise disruption.



Thinking outside the technology

No technology stands alone. Ensure that you have thought about the relevant tax, regulatory and legal issues. You will be able to tackle some of these in advance, but most will change over time as the technology, its uses and its users develop. However, you can still plan for this by getting the right expert advice and factoring in an appropriate degree of flexibility into your technology and business choices.



Skills transfer and training

For many of your staff, the front end they work with day to day may not feel any different. But for those working with the back end additional training may be needed. Now is also the time to think about medium to long term plans for upskilling, and continuity and skills handover. Factor in the time for this change to happen to minimise any human risks.

Integrating blockchain with your legacy systems

As blockchain has the *potential to improve key processes* like transactions and data-sharing in many businesses, an obvious question for CIOs and CTOs is *how it will impact on your legacy systems*.

Legacy systems are critical to running the business today, so you need to consider blockchain solutions in the wider context of your overall business technology and processes to ensure the most smooth and successful integration of new technologies with your existing technology.



Understand the overall business impact:

- Consider how it will affect the wider business
- Define business processes (both internal and between actors
- Amend or create new support policies, governance and controls

Assess how blockchain will interact with the legacy environment:

- Blockchain may become a component of existing systems
- It may replace some or all of the current system
- It may become a separate system which will sit alongside current systems

Choosing blockchain technologies:

It is important that when making choices about blockchain technology you consider how it will integrate with the current architecture, and make the appropriate product selections and designs in accordance with this

Blockchain implementation and integration

Implementing blockchain technologies is just part of a transformation change journey:

- · Think about the implementation in phases, as you would any other technology
- Consider how it could affect your business both today and tomorrow

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