

THE 8 BIGGEST CHALLENGES THAT CIOs FACE



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Over the past year, we've look in depth at 8 major challenges that CIOs have to deal with in order to successfully navigate the technology landscape.

With the growing pace of change, there is ever greater demand for better, faster digital transformation, but so many new digital initiatives fail or lose money due to unaddressed core issues.

Over the years of working with hundreds of enterprises and the challenges we have all faced during the pandemic, these 8 have proven themselves to be the biggest roadblocks to successful change.

For those who don't want to delve into 8 lengthy documents, this eBook sums up the 8 challenges.



1 Spiraling Technology Costs and Complexity

Every company is making investments in new and superior technology, but too often these investments can spiral out of control, adding massive cost or making it harder to understand.

Problems

- Need to move applications to the cloud
- “Shadow-IT” spending on technology outside of IT
- Endless growth of application portfolio
- Increase in technical debt

Solutions

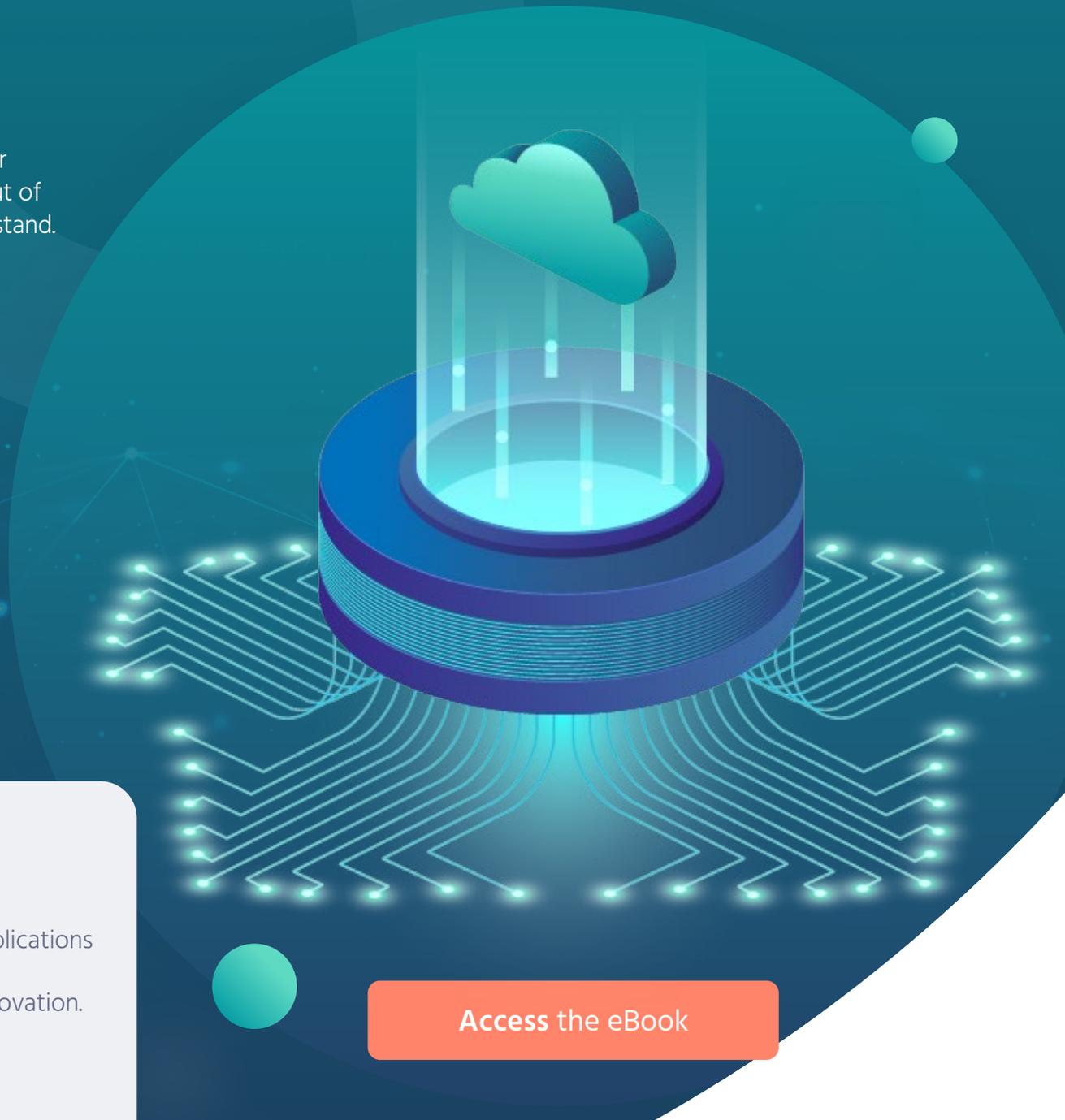
- Application Rationalization to cut unnecessary apps
- Single Source of Truth for IT costs

Stats

The average enterprise pays for **1516** applications

CIOs estimate they actually need fewer than **100** applications

90% of the average IT spend is not supporting innovation.



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2 Disconnected Silos of Enterprise Data

The rapid growth in the amount of data the companies handle has caused large enterprises to generate silos, where data is disconnected from the whole and hidden in parts of the business

Problems

- Relentless growth in data management
- Data-driven decision making becomes impossible if data is hidden
- Data silos lead to organizational silos, killing collaboration

Solutions

- Create a central data repository to act as a single source of truth
- Track relationships across the IT landscape
- Integrate key applications with the repository
- Democratize access to the repository through the cloud

Stats

9/10 IT leaders point to data silos as their biggest obstacle to digital transformation

Data issues cost each business worldwide anywhere between **\$9.7m** and **\$14.2m** yearly

\$10Bn in savings from removing data silos according to US government estimates



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3 The Overwhelming Imperative to Move to the Cloud

More and more applications are moving to the cloud, as businesses take advantage of the flexibility, remote access and maintenance or upgrade benefits. However, the transition to the cloud throws up barriers.

Problems

- The costs of moving can easily exceed the gains
- Disruptions from cloud migration can derail “always-on” business
- Companies focus too much on short term gains, ignoring long term costs
- Testing requirements swiftly add up

Solutions

- Use Enterprise Architecture to understand your technology portfolio
- Roadmap cloud migrations
- Cloud governance helps to deliver transparency
- Set Infrastructure spend as a first class metric

Stats

68% of CIOs ranked “migrating to and/or expanding cloud” as the top IT spending driver in 2021

1 hour of cloud downtime costs enterprises from \$1 million to over \$5 million

52% of enterprises identified ‘Understanding App Dependencies’ as the top cloud migration challenge



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4 Guesswork and Delay in Decision Making

Modern businesses move quickly, which puts pressure on making data-driven decisions at pace. However, the complexity of technology and data introduces delays and forces guesses, instead of confident, on-time decisions.

Problems

- Poor data quality and lack of access holds back decisions
- Highly complex enterprises make it impossible to calculate clearly
- Decisions fail to align with long term strategic goals
- Human issues are exacerbated by technology, instead of being helped

Solutions

- Impact Analyses help to understand the impact of changes before they occur
- Enterprise Architecture can manage complexity and deliver a clear picture
- Capability modeling focuses decisions on the areas that matter
- Finding the right mix of human and artificial judgment

Stats

65% of business leaders in 2020 said the decision-making process has grown significantly more complicated

72% of companies have had at least one strategic initiative fail because of delays in decision making

52% of respondents to Gartner identified smarter decisions and investments as a top benefit of outcome-driven Enterprise Architecture



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5 Mounting Technical Debt with an Unclear Roadmap

Technology Infrastructure is rarely a high priority for business leaders, which leads to corners being cut and legacy systems supported beyond their useful life. This causes technical debt to mount and place an increasing burden on firms.

Problems

- Technology leaders prioritize speed too much, at the cost of long term stability
- Budget constraints force difficult decisions which increase tech debt
- Lack of clarity around medium and long term futures for technology investment
- Identifying existing technical debt can be very difficult

Solutions

- Application and Technology Roadmaps provide a path to reduce debt and plan the future
- Cloud solutions can remove the temptation to maintain legacy systems
- Enterprise Architecture delivers current and future states for roadmaps to navigate between
- Rationalizing the application portfolio prevents debt from building up

Stats

Gartner estimate the total global IT debt to be around **\$1trillion**

83% of leaders state that technical debt greatly increases costs

A leading software firm went from **75%** of engineer time spent on tech debt to **25%** through debt management



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6

Lack of Visibility Around Compliance and Security Risks

The interconnected world now means cybersecurity has become the biggest threat to business operations. However, many firms are reactive, and fail to address issues that could help prevent problems, such as visibility of the security landscape.

Problems

- Sprawling technology portfolios expose more vulnerabilities
- Firms lack visibility across the whole organization
- Waste and duplication cause inefficiency in existing risk management
- Failure to maintain oversight over compliance and security issues

Solutions

- Well maintained security architecture offers visibility
- The right security frameworks help security architects apply the right processes
- Make the right information quickly available to security professionals

Stats

The average cost of a malware attack on a company is **\$2.4 million**.

It takes organizations an average of **191 days** to identify data breaches.

50% of large enterprises are spending \$1 million or more annually on security



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7 Enterprise Architecture Disconnected from Business Stakeholders

Enterprise Architecture (EA) can be a powerful method for CIOs looking to solve the other major challenges, but EA teams are often hampered by a lack of communication and collaboration with key stakeholders.

Problems

- Stakeholders struggle to understand the complexities of EA
- EA outputs are often difficult to access
- EA is limited in involvement with many parts of the firm
- Collaboration is difficult in all parts of the business, and EA is no exception

Solutions

- A central repository enables architects to democratize EA
- Modern collaboration tools remove barriers to cooperation and help socialize EA outputs
- EA tools like iServer365 deliver powerful visuals that answer business questions

Stats

Forrester found a **significant increase** in collaboration between EA and business stakeholders from 2020 to 2021

Increased collaboration mainly focuses on business strategists **(73%)**, business intelligence (BI) pros **(71%)**, and line-of-business heads **(63%)**.

80% of digital businesses will take a collaborative approach to EA by 2022, Gartner predicts.



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8 Architects Constrained by Existing Tools

Even if enterprise architecture is well connected with the rest of the business, architects can still struggle to deliver value due to existing tools not meeting their needs. The right tool is needed to unlock the full potential of EA.

Problems

- Hundreds of sources of information imperil the creation of a central repository
- EA data and models can be inaccessible to non-architects, limiting use
- Unattractive or confusing reports prevent high level acceptance
- Inflexible tools that are difficult to modify for unique needs

Solutions

- A modern SaaS EA tool like iServer365 integrates seamlessly with enterprise data sources
- Familiar Microsoft interfaces and cloud access let the entire organization participate in EA
- Widest range of use cases enables every organization to meet their needs
- Attractive and simple visualizations and dashboards answer key business questions



Stats

Establishing EA Tooling is regarded as one of the **6 key functions** of EA by Gartner

One Orbus customer directly tracked **\$8m of savings** through iServer in 2021

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See how iServer365 can solve
your biggest challenges.

Book a demo



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