

Building a Cloud Strategy to Enable Digital Transformation

ESSENTIAL CONSIDERATIONS & COMPONENTS OF CLOUD STRATEGY & EXECUTION

Continuous disruptive business innovation is the new norm in today's commerce. With the proliferation of social, mobile, and big data ecosystems, there's no denying that substantial change has descended on every industry and more will come. As watch manufactures battle Apple and hotels compete with Airbnb, incumbent leaders across the globe will face the same competitive threats.

The primary reason for this disruptive change and intense business environment is new technologies -- specifically Cloud, Analytics, Digital experience, and Security (CADS). With these solutions, upstarts and incumbents alike have new and low cost ways to reach customers, unencumbered by borders, and sophisticated techniques to analyze their buying behaviors.

Within CADS, cloud is the foundational technology and the first step in any digital transformation. To regain competitive advantage, speed time-to-market, and improve profitability, it's no longer enough to add cloud to the mix of IT solutions. Rather, it's necessary to think and act cloud first -- as did Quicken Loans with its Rocket Mortgage app and NantHealth with its CLINICS healthcare provider delivery model.

Achieving a cloud first mentality, however, requires a comprehensive strategy and execution plan that spans all business units and IT organizations. Cloud must be more than an architecture or enabler of a single entity or offering. Instead, it should be an end-to-end business and technical foundation for the entire company, tied to business and IT objectives. As such, it must be created by a cross-company effort to enable innovative offerings and measurable business outcomes.

In summary, the cloud journey requires strong strategy and execution blueprints. But are you and your leaders ready to deliver these guiding documents? This Point of View paper presents Trianz' perspective on the required approach to successful cloud strategy and business transformation.



“Every established enterprise faces a scenario of high risk, uncertainty, and time compression. Companies that embrace these changes will be surrounded by opportunity, while those protecting the status quo will struggle enormously.”¹

- IDC



¹<https://www.trianz.com/downloads/pdf/trianz-idc-spotlight.pdf>

KEY CONSIDERATIONS OF CLOUD STRATEGY

Given the importance and breath of a cloud strategy, there are many critical considerations when formulating this document. A cloud strategy is so fundamental to business success and digital transformation that it must be executed properly the first time. Below is a list of key considerations which should be thoroughly discussed by the effort's leadership before crafting the new document.

CROSS-FUNCTIONAL, COMPANYWIDE PARTICIPATION

It's difficult to underestimate this need for broad participation. Yet many IT groups have unsuccessfully built cloud solutions with the expectation that business teams will migrate their workloads when instructed. On the contrary, cloud strategy cannot be created in isolation of other groups and must include the following teams – business units, IT applications, IT infrastructure, information security, and application build and release, also known as DevOps. Irrefutably, defining a cloud strategy in a silo and then passing it off to the next team will not achieve success.

BEST-OF-BREED AND HYBRID ARCHITECTURES

Cloud service providers have matured over the years, differentiated their offerings, and developed distinct competencies. Unique value can be derived from cross-industry cloud leaders such as AWS, Azure, Google, and IBM, as well as

specialized industry offerings like GE's Predix IOT and Shenzhen Securities' financial clouds. Furthermore, new open standards have enabled cloud interoperability and distributed access to data. As a result, it's important to embrace a best-of-breed environment of IaaS, PaaS, and SaaS providers, and remain cloud agnostic. And importantly, specific workloads may be better suited to private clouds which necessitates an integrated and hybrid architecture.

IT AS A SERVICE BROKER

The emergence of sophisticated cloud providers has changed the role of IT organizations from "merely delivering technology, to brokering services from multiple external and internal sources³," states CIO.com's Jaikumar Vijayan. Therefore, traditional notions of IT need to be reconsidered with more emphasis placed on integration and alignment of multiple technologies versus establishing what is underneath each cloud. In fact, many tasks previously performed by IT can now be offloaded to cloud providers. And new tasks for IT include review and selection of cloud APIs and micro-services.

START NOW

While seemingly contrary to other considerations, it's advisable to begin your move to the cloud immediately, if not already started. This is a journey rather than a point-in-time exercise. Thus, start the move now where you can achieve immediate value while, in parallel, formulate a strategy that integrates longer term goals. Additionally, a balanced strategy with phased



"Too many businesses believe that their digital business strategy is actually a roadmap, or a series of IT projects. Being digital is a capability – in your business it impacts the culture, metrics, organization, skills, and finally – the technology." ²

– Forrester



²http://blogs.forrester.com/tim_sheedy/17-01-09-in_the_digital_world_cios_need_to_help_the_business_move_faster

³<http://www.cio.com/article/2908156/it-strategy/culture-clash-transitioning-it-into-a-service-broker-culture.html>



milestones including short term wins as well as longer horizons, should be recrafted each year to ensure its relevance. In summary, don't wait for the strategy to be fully crafted before the first move. And remain open to modifications.

CADS

Although cloud is the foundational technology for digital business, three others enable full transformation. First, analytics of public cloud and on premise data provide invaluable insights into customer behavior that inform successful offerings. Second, digital experience solutions that embrace mobile and social environments build personalized and powerful customer intimacy. And third, strong security offers essential confidentiality and data protection to every digital enterprise. Together, the CADS foursome is the clear pathway of long term competitive advantage.

GOVERNANCE AND MANAGEABILITY

Access to cloud data from multiple applications, warehouses, endpoints, and users is vital to successful digitization. However, protecting data from theft is paramount. Thus, it's critical to leverage the industry's best guidelines, techniques, and technologies to govern the use of data in the cloud. Equally important is automating IT service management (ITSM) processes within an adequately staffed program office. These protocols and personnel can streamline workflows and institutionalize the cloud into business and IT operations.

FUTURE INNOVATION

Largely due to the transparency of open source communities and fast release cycles, the cloud technology landscape is experiencing rapid and continuous innovation. Thus, when building and refining a cloud strategy, it's imperative to keep an eye on technology trends including but not limited to the Intercloud or cloud of clouds, specialized industry and IOT clouds, cloud based artificial intelligence and machine learning, social software, and DevOps containers.

MEASURE SUCCESS

Lastly, it's critical to insert measurable business outcomes and milestones into a cloud strategy document and periodically track progress against these goals. There's no doubt that cloud adoption and digital transformation is a journey accomplished in well-defined, discrete segments while keeping the long-term goals in mind.

In summary, business and IT executives need to understand these important considerations as well as cloud capabilities in order to create a comprehensive strategy and execution plan. By placing the business needs first, an effective cloud strategy will define the technologies used, not the other way around.

CLOUD STRATEGY AND ROADMAP DEVELOPMENT

Only after these critical considerations have been analyzed in the context of a company's unique business and IT environment, is it time to build the cloud strategy. To do so, it's advisable that leaders of this effort adopt the following steps.



“The Cloud is an enabler of business change and acceleration, not more – but not less. It is about getting the VP of Marketing, Sales, Service, HR, Procurement, Controlling, and... around a single table with IT, and having an educated discussion about what helps the enterprise and the end users best.”⁴

– Forrester

⁴ <http://www.zdnet.com/article/the-7-attributes-of-a-comprehensive-cloud-strategy/>



ESTABLISH STRATEGIC OBJECTIVES

Defining business and technical objectives requires a discovery phase that may include cross-functional questionnaires, interviews, assessments, and workshops to establish baseline goals. In this initial step, the highest-level business goals of the senior leadership team must be included. These initial discovery rounds often identify gaps which necessitates a second round of discovery.

Of critical importance is identifying organizational divides and getting all groups on the same plan, if not physically in the same room. This step often requires breaking down functional, geographical, and even cultural barriers.

FINANCIAL PLANNING

Creating a business case to guide a cloud migration requires measurable cost and benefit goals, each of which map to TCO and ROI estimates. Cloud migration costs can be split into private cloud infrastructure, public cloud service fees, and payroll expense including business analysts, project managers, and cloud operations teams. A TCO calculator can expedite this exercise. Thereafter, business teams' projections of improved revenue, profitability and other benefits from the cloud implementation should guide ROI calculations.

TECHNOLOGY ROADMAP

Comprehensive cloud roadmaps start with a thorough assessment of existing applications

including which ones to replace, migrate, and extend. Next is a review of existing infrastructure, including servers, storage and network, to determine architectural changes and consolidation. Following this analysis, the technology roadmap should propose a mix of IaaS, PaaS and SaaS. The outcome of these exercises will be a comprehensive blueprint defining the proposed cloud infrastructure, applications, data, and integrations.

As stated above, some workloads are more suited to a private cloud which necessitates a hybrid cloud architecture. According to RightScale's 2016 State of the Cloud Report, 71% of enterprises have hybrid cloud environments today, and 82% have a hybrid cloud strategy.⁵

CLOUD COUNCIL AND EXECUTION ROADMAP

A solid execution roadmap should include the following steps -- staging, security, performance tuning, launch preparation, documentation, and launch. Each of these steps contain many important procedures each of which are critical to success. Given this complexity, a program office and project management team is essential before beginning the journey. And a cloud council or stakeholders across every organization should meet regularly to guide the journey and ensure an adequate focus on change management.

STRATEGIC EXECUTION

Now that the planning is done and blueprints are in place, it's time to implement the full breadth of the strategy. While IDC defines execution as the systematic process of working towards a comprehensively defined end state⁶, it's as much art as science. Of course, diligently following finely crafted plans is essential. Yet, equally so is drawing on independent experts

when tough choices arise. Ultimately, turning strategy into tangible results requires drawing on internal expertise and process as well as borrowing from others when needed.

In summary, crafting a cloud strategy document and execution plan is a challenging task, but much less so when following an established methodology.

Key Component of Cloud Strategy

- Establish business and technical objectives
- A strong business case with TCO and ROI estimates
- Blueprint of proposed cloud infrastructure
 - Program management office
 - Robust execution methodology

⁶<http://www.networkcomputing.com/cloud-infrastructure/8-best-practices-coping-hybrid-clouds/669475234>



WHY TRIANZ

Trianz' cloud practice specializes in brokering organizational alignment and building cloud strategies as well as secure, flexible, and scalable cloud-based solutions that reduce costs, improve productivity, and optimize operations. With deep domain expertise, knowledge of business applications, and experience across multiple platforms, Trianz offers a customized roadmap to cloud adoption with a focus on execution success.

Partnerships with leading cloud technology vendors including AWS, BMC, HP, IBM, Informatica, Microsoft, Oracle, and ServiceNow allow Trianz to

remain cloud agnostic and customize hybrid architectures. Furthermore, Trianz' certified team of consultants use proprietary tools, templates, and workshops to discover, assess, analyze, and recommend strategies and execution plans, irrespective of where an enterprise is on their cloud journey.

Trianz cloud advisory services follow proven frameworks and include the following: Cloud Strategy and Roadmap Development; AWS Cloud Design, Build and Deploy; Private Design, Build and Deploy; Hybrid Cloud Design, Build and Deploy; App Migration; Cloud Manage; Disaster Recovery; and DevOps Services.



“AT&T is a legacy telco which is transforming itself by adopting virtual infrastructure and a software defined networking focus in order to compete in the market and create value for customers in the next five years and beyond.”⁷

– *OpenStack Foundation*



⁶<https://www.trianz.com/downloads/pdf/trianz-idx-spotlight.pdf>

⁷<http://superuser.openstack.org/articles/and-the-superuser-award-goes-to-2d9eca50-c820-40b4-a9e2-8e156179ddce/>

ABOUT TRIANZ

Trianz simplifies digital evolutions through effective strategies and excellence in execution. Collaborating with business and technology leaders, we help formulate and execute operational strategies to achieve intended outcomes by bringing the best of consulting, technology experiences, and execution models. Powered by knowledge, research and perspectives, we serve *Fortune* 1000 and emerging organizations across industries and geographies to transform their business ecosystems and achieve superior performance by leveraging Analytics, Business Apps, Cloud, Infrastructure and Security paradigms.