



Planning and managing your journey to the cloud

Cloud and digital business are changing the business world as we know it, offering tremendous potential for mastering markets. Despite the difference in their purposes—cloud is a deployment option, digital business a business model option (no, not “option” but “imperative”)—these two trends are intricately connected. A company’s ability to deploy on the cloud will greatly affect its success with digital business initiatives. And a company’s choice of business and operating models in the creation of its digital business identity will determine what and how it deploys to the cloud. Many companies see and approach them as separate, parallel strategies—as we will see later in this paper—yet inevitably the two will converge.

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A transformation planning and management platform that supports an enterprise's implementation of both strategies—separate as well as a combined strategy—is essential for success. This paper describes how IT planning and portfolio management supports the transformation to the cloud for digital business, focusing on common issues when considering cloud.

As-is: Implementation of cloud strategies independent of the digital business strategy

Trends have their own beginnings as to when they first appear on the scene and their own life cycles—moving through phases of “hype” until reaching the “plateau of productivity”—as a leading analyst firm likes to call it—or “crossing the chasm” and making it to “Main Street” as described by Geoffrey Moore¹. With cloud, ever since Salesforce® broke through into the enterprise software market two decades ago, both business and IT executives have understood the potential of the cloud (see Figure 1). Vendors and system integrators were quick to respond with a plethora of solutions and marketing campaigns, which resulted in a market full of hype, smoke and mirrors.

Challenges such as outsourcing of mission-critical data, security and integration were sometimes ignored or even used as an excuse for doing nothing. However, 20 years later, the market is maturing, and more and more companies are articulating cloud strategies. Strategists, IT planners and enterprise architects are challenged both to formulate such strategies and to deal with the real planning and implementation issues behind them.

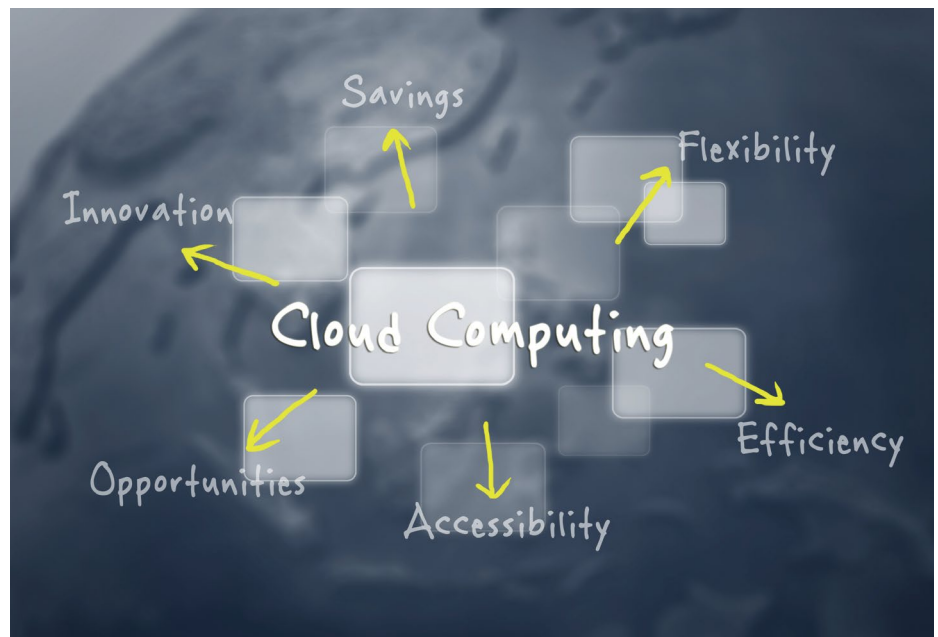


Figure 1: Cloud computing promises many benefits.

Let's look at one typical strategy: Move 25 percent of business applications to the cloud. Of course your organization may have a variation on this but the principle remains the same. The aim of this strategy is to speed up cloud adoption in order to reap the benefits earlier. To achieve this, management chooses to monitor a specific KPI—the percentage of business applications in the cloud. This is a blunt tool that does not address the issue of where it makes sense to use cloud applications (for example, for digital business initiatives), nor does it guarantee that the benefits will be realized (because benefits such as cost reduction are not being assessed). However, as such blunt tools can be effective in initiating change, organizations like to adopt them and hope that the outcomes achieved will be the right ones. So for now let's ignore any concerns about this type of target and focus on the “now what?” question that you—if you are an IT planner or architect—will inevitably ask. The goal has been set. What can you do to achieve it?

¹ “Crossing the Chasm: Marketing and Selling Technology Products to Mainstream Customers,” Geoffrey Moore

The adage that “you can’t manage what you can’t measure” is as true as ever and for this reason KPIs are central to management reporting and performance measurement. But are you in a position to measure the percentage of business applications in the cloud? It’s easy, isn’t it? The number in the cloud divided by the total number of applications multiplied by 100. Unfortunately, the reality in many IT departments is that the number of business applications is just not known. Maybe you don’t have an inventory of applications, or if you do, it’s often not accurate. Typically, there are multiple Excel® sheets with different notations, data renewal cycles and owners (see Figure 2). Exasperating this problem is that with the arrival of the cloud, business departments have increasingly been circumventing IT and acquiring applications from vendors directly. This is a serious problem that not only undermines IT governance, thus exposing the company to unknown risk. It also means that there are applications out there that are not known to IT and so are not being counted.

Attaining a reliable inventory of applications is not an impossible task, but it is also not trivial. Traditionally this has been done by a small group of architects or strategists. If you are part of a large organization you may have several hundred, if not thousands of applications, in which case each architect would be responsible for maintaining information on many applications. To successfully maintain the application inventory, including information on whether it is in the cloud or not, you need an approach that includes the many people involved in the life-cycle management of the many applications. They need to maintain the information on those business applications as part of the processes they execute daily, and they will be performing role-specific tasks and will want role-specific reports.

So what kind of data do you need in the inventory in order to manage the cloud strategy for your applications? First, you need to document whether the application is in the cloud or not. This should, however, not just be a binary yes-no attribute. There are different types of cloud deployments—SaaS, PaaS, IaaS and, of course, hybrid—each with their own advantages and disadvantages (see Figure 3). To eventually tie your cloud strategy to your digital business strategy, the inventory should also include KPIs that reflect the goals behind the 25 percent strategy—the significance of the application to the digital business strategy or an indicator of the elasticity requirements for each application. By doing this, an instrument becomes available to facilitate reaching the overarching goals of the digital business strategy and not just the 25 percent target.

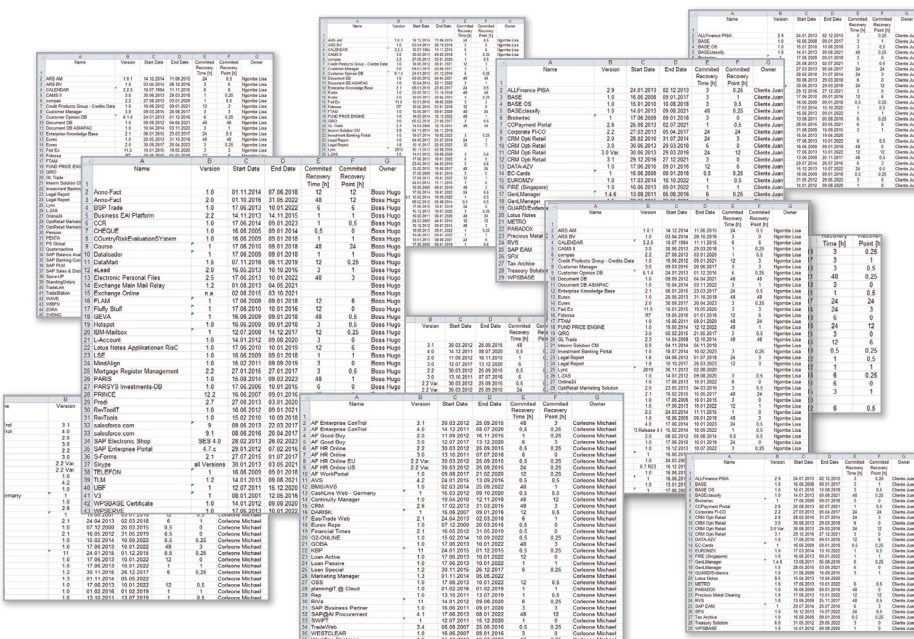


Figure 2: Many enterprises document their applications using many disparate spreadsheets. This prohibits a clear overview and undermines any attempt to govern the application portfolio.

The screenshot shows the ALFABET application inventory interface. At the top, there is a navigation bar with the ALFABET logo and several menu items: HOME, BOOKMARK, CUSTOMER, and HELP. Below the navigation bar, the page title is "Applications by Group". There is a search bar labeled "Select Application Group" with the text "UTS-affected applications" entered. Below the search bar, there are three icons: "Active Analysis", "Configure", and "Export". A message states "10 object(s) has (have) been found." Below this message is a table with the following data:

	ID	Name	Version	Start Date	End Date	Cloud Type
1	APP-2814	BLOOMBERG	6.6.3	21/06/2009	30/06/2021	
2	APP-3246	eBank	1.2	26/05/2013	02/07/2017	SaaS
3	APP-3238	Financial Times	2.1	16/05/2012	31/05/2019	IaaS
4	APP-3239	FX & MM	3.4	05/05/2012	03/06/2019	
5	APP-3242	Position	1.8	08/10/2009	21/02/2018	PaaS
6	APP-3244	Rep	1.0	13/10/2011	13/07/2019	
7	APP-3151	Summit	3.1	27/03/2008	15/01/2021	SaaS
8	APP-3153	SUNGARD TREASURY TRADER	3	14/09/2008	12/12/2020	IaaS
9	APP-3243	Trade*Net	6.0.3	20/01/2011	20/01/2018	IaaS
10	APP-3247	vMarket	2.7	21/11/2010	05/07/2020	PaaS

Figure 3: An application inventory should document which applications are deployed in the cloud.

To be truly effective in cloud strategy planning and execution (whether or not in support of digital business), the inventory also needs to document the context of the application within business and IT, i.e., the relationship between the business application and other objects within the inventory. For example, a business context is needed: Which organizational units use the application and for what purpose they are using it, i.e., which business capabilities does it support? With this information, the impact of moving the application to the cloud can be investigated. On top of this, if you know the purpose of the business application, it will be easier to search for possible SaaS replacements, i.e., SaaS applications that do the same thing. This potentially includes SaaS applications already being used in-house by a different organizational unit. Furthermore, you need to gain an understanding of the technology platform the application runs on. This information facilitates assessment of moving an existing application to a cloud-hosted infrastructure. It also exposes the health of the technology platform which is an indicator of whether an IaaS approach is to be taken or the application be replaced completely.

Here's another typical strategy: the "cloud first" strategy. "Cloud first" aims at investment projects in IT. It mandates that any projects introducing new business applications must consider SaaS as one alternative, and—all things being equal—the projects must choose SaaS solutions over on-premises solutions. With this strategy, the goal is an incremental move from an IT landscape, which is primarily on-premises to one which is in the cloud. So SaaS rules, but what are the rules? What criteria need to be considered when deciding if a new business application can be delivered as a service from the cloud? And in those cases where SaaS just does not make sense, how can you ensure that you get buy-in for the decision and do not reap recrimination?

Let's tackle the second question first. Getting buy-in for any decision can be an uphill task. There are usually winners and losers, and the losers will often keep trying to change the decision or go for their pound of flesh by waiting for things to go wrong and taking the "I told you so" track. The best counter to this is due diligence and transparency. Make sure that decisions are made based on facts and that each stage of the decision-making process is communicated. For "cloud first," this means having a transparent process for the selection of business applications by projects and programs. Indeed, this is an essential element of IT governance, irrespective of whether you are following a "cloud first" strategy or not.

One of the obstacles to overcome is that the various teams who should be working in sync on "cloud first" and business application decisions, such as the PMO, IT strategy and planning, enterprise architects, application managers and infrastructure experts, are often working in silos instead. Having them work with a common application inventory will help bring them together and more can be achieved. They can use an integrated IT portfolio inventory containing not only applications but also the projects impacting them, the technologies used by them, the business capabilities supported by them and the organizations that use them.

With this inventory the impact of project decisions on the IT landscape will be fully understood and taken into account. Further, if the IT portfolio inventory includes life-cycle and road-mapping capabilities, it will make the different IT road maps transparent and consistent across the different silos.

On top of using an integrated IT portfolio inventory, the selection process for business applications should include stage gate checks to ensure “cloud first” is being considered (see Figure 4). Some examples of the questions that can be included in these checks are:

- Are there SaaS offerings in the market for this business purpose?
- Do the SaaS offerings available cover all required functional requirements?
- Will using the SaaS offering compromise security or change our IT risk profile?
- Is this the right business capability for a SaaS solution?

There are of course many more. The important thing is to ensure that any project that implements a new business application is forced to attest that these questions have been researched and the results are documented.

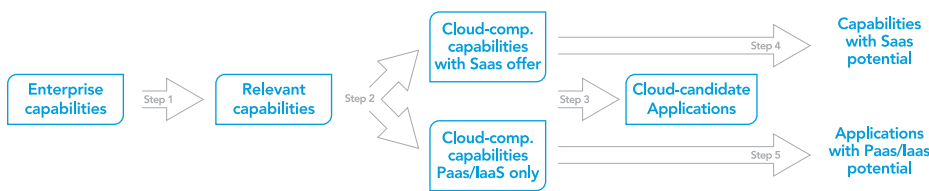


Figure 4: A step-wise approach to assessing cloud potential of applications ensures an efficient and business-oriented selection process.

The last question in our list was: “Is this the right business capability for a SaaS solution?” This is a simple question phrased in 10 words, but in reality it is a complex matter. The thinking behind the question is that some of your business capabilities are more important—or will be more relevant to your digital business strategy—than others (see Figure 5). There are business capabilities, like product design, which, depending on what business you are in, could make a big difference to your success in the market whereas other capabilities, such as provisioning new employees, may be critical but do not help differentiate your organization from the competition. Similarly, there are business capabilities, specifically customer service, which could bring great benefits if digitized. Which business capabilities these are will vary from company to company. But for all companies, a business capability which has to be agile and which is market differentiating is probably not the best fit for a SaaS solution. This is not to say that cloud in and of itself isn’t viable. For a capability that needs to be differentiating a private cloud may be suitable—to be able to, for example, dynamically scale in a cost-effective manner.

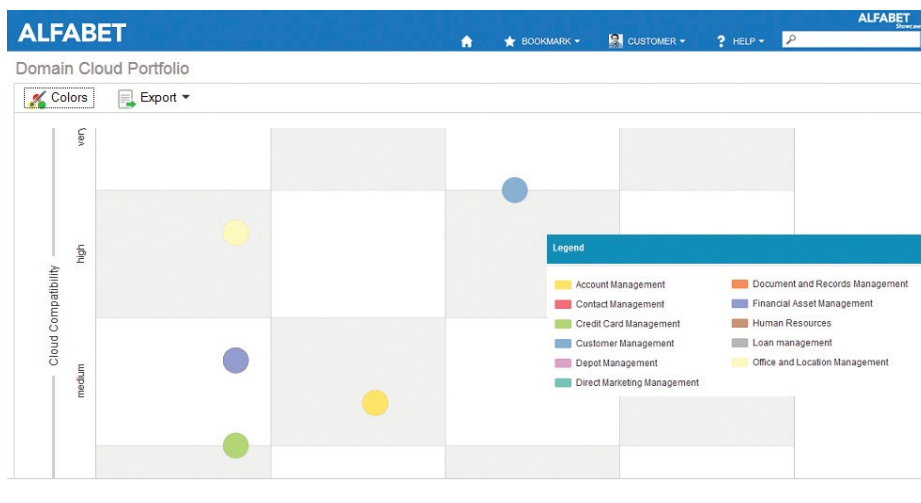


Figure 5: Business capabilities (or “domains”) can be assessed for their suitability for cloud and their cloud compatibility to better understand which applications (supporting the business capabilities) can and should be deployed in the cloud.

You will want to have a high level of control of the business logic of such capabilities and be able to change them at will. IaaS or PaaS may work—but a SaaS solution is likely to be too restricting. Thus, as part of your “cloud first” strategy, you need to have a business capability map and have assessed the business capabilities for aspects such as required agility, market differentiation and business criticality. Surveying the business side of the house for its assessment of capabilities is an important step. Not only does this side of the house have the business perspective, it will get them on board with the chosen IT strategy. Integrated IT portfolio management is an important methodology to achieving these goals, as are supporting tool sets such as Alfabet.

Rounding up, the most important parts of implementing a “cloud first” strategy are:

- A process for the selection of business applications
- Transparency of the IT portfolio
- Knowledge of the business that the application is to support

To-be: Reigning in existing cloud initiatives into the “big picture”

The scenario we’ve discussed is when a cloud strategy has been embarked on independently of a digital business strategy. In order to align the two strategies, the creation of a “big picture” of your future cloud environment based on your strategy is recommended. As many companies are already doing cloud computing, you might want to integrate those current islands in your big picture as well. After completing this, you will benefit from the transparency this has created. It shows you the major hotspots for your cloud transformation as described above (see Figure 6).

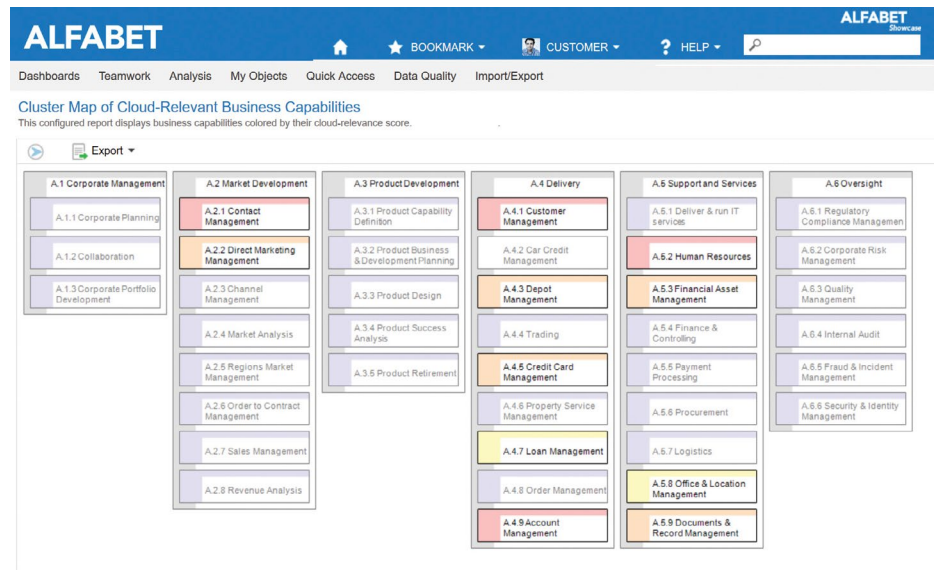


Figure 6: This business capability map uses coloring to denote the cloud-relevance of the business capabilities. According to the threshold number that is defined, colors indicate how high above the threshold—and thus how cloud-relevant—the business capability is. The deeper the reddish color, the higher the cloud-relevance.

Portfolio management tools such as Alfabet can be very effective in evaluating the reasons for and effort of cloud deployments to support digital business. Alfabet provides powerful planning capabilities that enable you to picture the future and plan and communicate all the steps involved in getting there. It ensures collaborative planning facilitated through road mapping, stakeholder-oriented views and reporting as well as the creation of master plans that can be used as strategic blueprints of your future cloud landscape.

For IT to be the core business of every Digital Enterprise and to take advantage of the cloud in deploying IT, integrated IT planning and portfolio management is essential. That is why your IT planning and portfolio management tool needs to be:

- Business-outcome-driven to keep pace with and stay relevant for business
- Collaborative for innovative, effective solutions
- Cloud-savvy and mobile-enabled for flexibility in execution
- Tightly connected to business processes and customer journeys for customer-centricity
- Agile, fast, scalable and responsive for market competitiveness
- Integrative—people, business and physical things—to provide context and signature ready results

Recommended reading

- Fact sheet: [“Alfabet IT Planning and Portfolio Management”](#)
- Fact sheet: [“Alfabet Enterprise Architecture Management”](#)
- White paper: [“Gauging Cloud Potential in an Enterprise Landscape”](#)

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