A Guide to Datacenter Transformation:
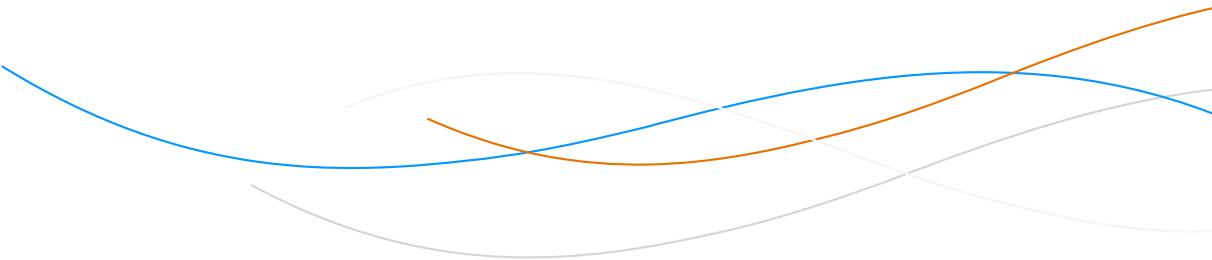
Why Business Leaders Need
The Cloud After All

A Guide to Datacenter Transformation:
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Make no mistake about it, the ascendance of the cloud is enabling remarkable business transformations, new initiatives and improved results for enterprise. But, underneath it all, there is one inescapable fact: business leaders don't begin crafting strategy with the thought, "the cloud will be integral in addressing our challenges."

In fact, business leaders don't start their problem-solving quest with the belief that the cloud is going to be the end-all-be-all to address their needs. Put another way, decision makers aren't looking for the latest and greatest in technology, such as the cloud, rather, they're looking for results. These leaders want to lower risk, decrease cost, address complexity and, above all, achieve greater flexibility to both respond to challenges and drive innovation. Experience shows that technology looking for a problem to solve is very likely going to fail to produce outstanding outcomes, and the same is true for the cloud.

This isn't to say that the growth of the cloud is not having an impact on nearly every facet of today's enterprise; it is. However, it is vitally important to understand that there is more to the cloud than just technology. The power and promise of the cloud can only be realized when its adoption and use is driven by business needs and goals. One specific area where this is apparent is in the enterprise datacenter, where it is possible to fully realize all of the benefits of cloud.

In this white paper, we focus on the datacenter to take a look at the real story of how cloud adoption is making it possible to truly transform business. In addition to highlighting the myriad ways in which performance can be improved, we also take a look at some of the challenges that are sure to surface as well as whether or not a datacenter transformation that maximizes the use of cloud is the right course of action for your organization. And we begin the conversation with the possibility of datacenter transformation at low or no upfront cost. Read on to find out more.

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Datacenter Investment is Booming

Even in the face of disruptions arising from the COVID-19 pandemic, investment in datacenters has soared. In the first three quarters of 2020, total datacenter deals rose by nearly 14% from 2019, while the value of those deals increased an eye-popping 290%, from $3.5 billion to $10.2 billion, according to 451 Research [1]. With so much uncertainty in the air, what is driving this incredible surge in demand?

The answer is simple: the future of the enterprise will be driven by the cloud in all its forms and investment is flowing in that direction. Even in a climate where global demand will be disrupted or delayed through 2021 and beyond, investment dollars are surging at a rapid clip into building datacenters.

From the perspective of end customers, this news couldn't come at a better time. And it contains a kernel that seems almost too good to be true: it is currently possible to take advantage of the migration to the cloud while simultaneously capturing financial gains. Your company can make a strategic exit from expensive and inflexible corporate datacenters and, at the same time, get cash back that will fund your efforts to evolve, improve, and grow your business.

To address this complex situation it takes vision, commitment and conviction. Fortunately, Atos and Maven Wave are forging a path to the future of the cloud with the **Atos OneCloud** initiative, and datacenter migration sits squarely at the heart of this effort. We are ideally situated to not only show you the best route forward but also help you at each stage along the way to the desired destination with a custom cloud plan.

Clearly, the basic economics of a move to the cloud make sense, but what about all the other factors? In the balance of this white paper, we take a look at the elements that are at play as the cloud replaces the corporate datacenter, going beyond the dollars and cents to explore the mechanics of transformation, some of the potential pitfalls, and key elements that need to be addressed.

A Financial Perspective on Datacenter Transformation: How to "Fund the Hump"

In most cases, the first hurdle to overcome in making the switch from on-premises to cloud is cost. When it comes to technology, nothing can be done for free, and switching from one tech platform to another is very often the most expensive endeavor of all. So, while no IT Manager would choose on-prem over cloud if they could start from scratch, these same IT Managers are faced with the reality that switching from their existing platform, the one that they're currently operating with, to the cloud is going to be an expensive and complicated proposition.

Fortunately, Atos and Maven Wave stand ready to help shoulder the burden. With decades of experience in managing datacenters at scale, Atos and Maven Wave have the institutional knowledge of dealing with even the most complicated of environments and operating requirements. Coupled with the superior technology and financial muscle of the cloud, an option emerges that is far more attractive than going it alone.

[1] https://www.datacenterknowledge.com/business/investment-bankers-expect-pandemic-fuel-long-term-data-center-boom

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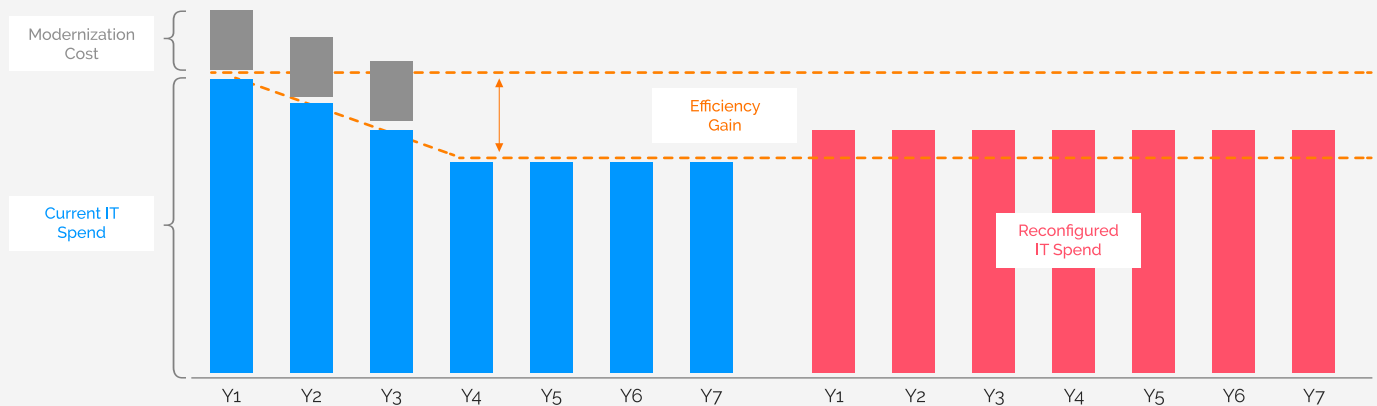## Why Business Leaders Need the Cloud After All

Funding the Hump: Two Approaches

Going it Alone	Partnering for Success
Datacenter take out driven by modernization can produce substantial efficiencies over time, but can be often prohibitive due to the upfront cost.	A contractual agreement to fund mondernization out of future efficiency gains plus aportion of the datacenter sale proceeds to bring down IT spend.

By partnering for success to "fund the hump", upfront costs are shifted, freeing up critical capital to be deployed to other areas of the enterprise that can then generate immediate gains in ROI. Don't miss that point: you could see returns upfront and, at the same time, become more agile as an enterprise. In this win-win scenario, your capabilities increase, and you accrue all of the benefits that come with new technology.

However, that's not to say that your partner is offering to front the bill for free. Notice in the chart on the right above that your IT spend is reduced below current levels in the beginning, but in later years it will be at a higher level than it would have been if you undertook the transformation effort solely on your own. That's because your partner is taking on risk and providing upfront capital with an eye on generating recurring revenue for many years in the future. In short, you've got to give something in order to get something. In this case, it's the very best kind of "give to get" because you are receiving immediate benefits and shedding risk. At the same time, you are working with partners that are both experts in the field and firmly committed to making sure that you grow and prosper. This is clearly a recipe for success.

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Anatomy of a Transformation Effort: a Winning Game Plan

In truth, many enterprises are making the transition from on-premises datacenters to a future model that is a rationalized blend of public cloud and existing infrastructure. It's not always easy, but it's being done.

The fact that it's not easy highlights the first prerequisite for embarking on the transformation journey: commitment. Such efforts are not well served by case studies, select committees or Proof of Concepts: in order to truly begin, it is essential that management be all-in for success. It's not a question of blind faith, however, it's a question of conviction.

Once conviction and commitment are established, a road map and game plan can be built. After an evaluation period that runs between four and eight weeks, the program begins and some benefits will arrive almost immediately. The process may seem fast, but that shouldn't be a surprise: we have skin in the game, and the sooner we can start to produce positive results, the better it is for us and our clients.

The underlying transformation effort is rooted in the "Six R's" framework. All aspects of the environment and all of the processes that run within it are evaluated based upon the "Six R's" and the resulting game plan places each facet of the operation in one of these six buckets:

1. Retire

No longer of use or necessity so get rid of it

2. Retain

Items that can't be discarded but are also both of limited present and future value, such that is not worth touching them until they can be retired

3. Rehost

A simple "lift and shift" from the current platform to the cloud

4. Replatform

A step further, in this case referred to as "move and improve"

5. Refactor

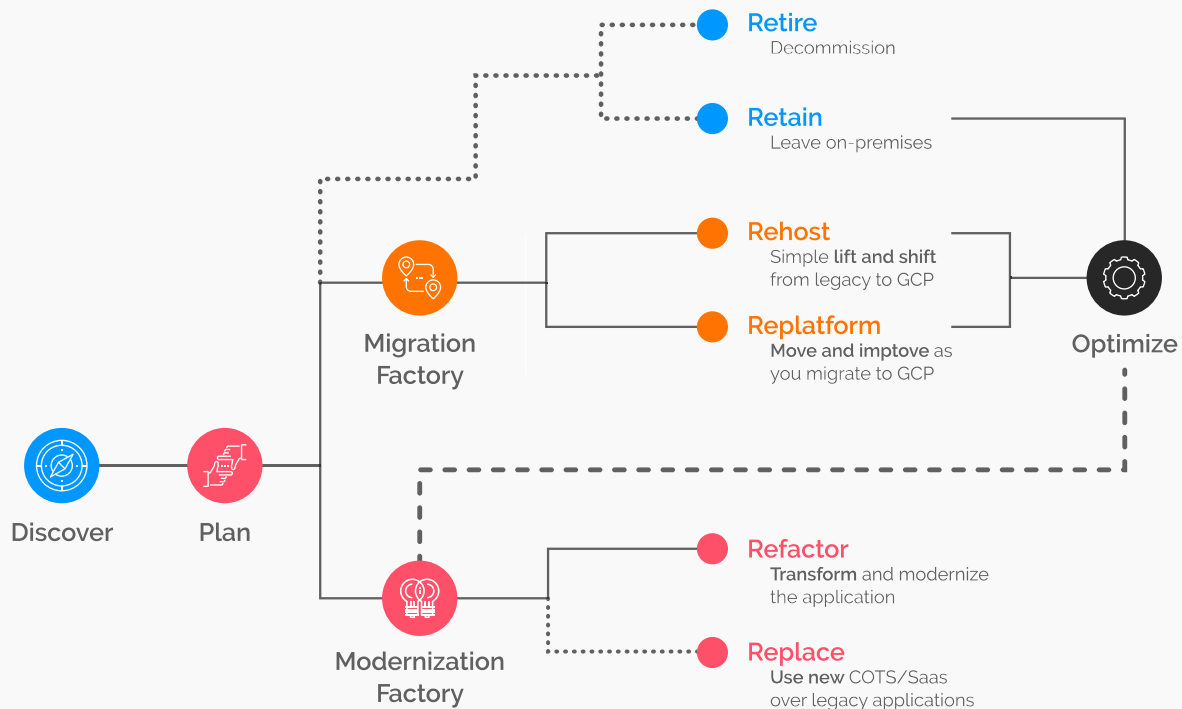More work is needed to transform and modernize to better meet business needs or capture opportunities

6. Replace

Out with the old, in with the new, using COTS or SaaS solutions whenever possible

"Cloud Factory" Methodology to Modernize Applications

6R approach drives speed to value

Retire
Decommission

Retain
Leave on-premises

Rehost
Simple **lift and shift**
from legacy to GCP

Replatform
Move and imptove as
you migrate to GCP

**Migration
Factory**

Optimize

Discover   **Plan**

**Modernization
Factory**

Refactor
Transform and modernize
the application

Replace
Use new COTS/Saas
over legacy applications

Utilizing a "Six Rs" approach is useful, but it doesn't cover the whole picture. It is critical to take a step back and view the opportunity in totality. Businesses have generally evolved over time into a tangled mass of data, applications and processes the defy easy and isolated solutions. The goal isn't to try and untangle the mess - that would lead to a "boil the ocean" approach that likely ends in frustration. Instead, taking a 10,000 foot view of the enterprise as an organism with interconnected parts that possess relative worth and usefulness to fuel an effort that balances risk and reward. Crafting a plan in this way leads to a roadmap that stages activities in a sequence that maximizes returns and minimizes risks.
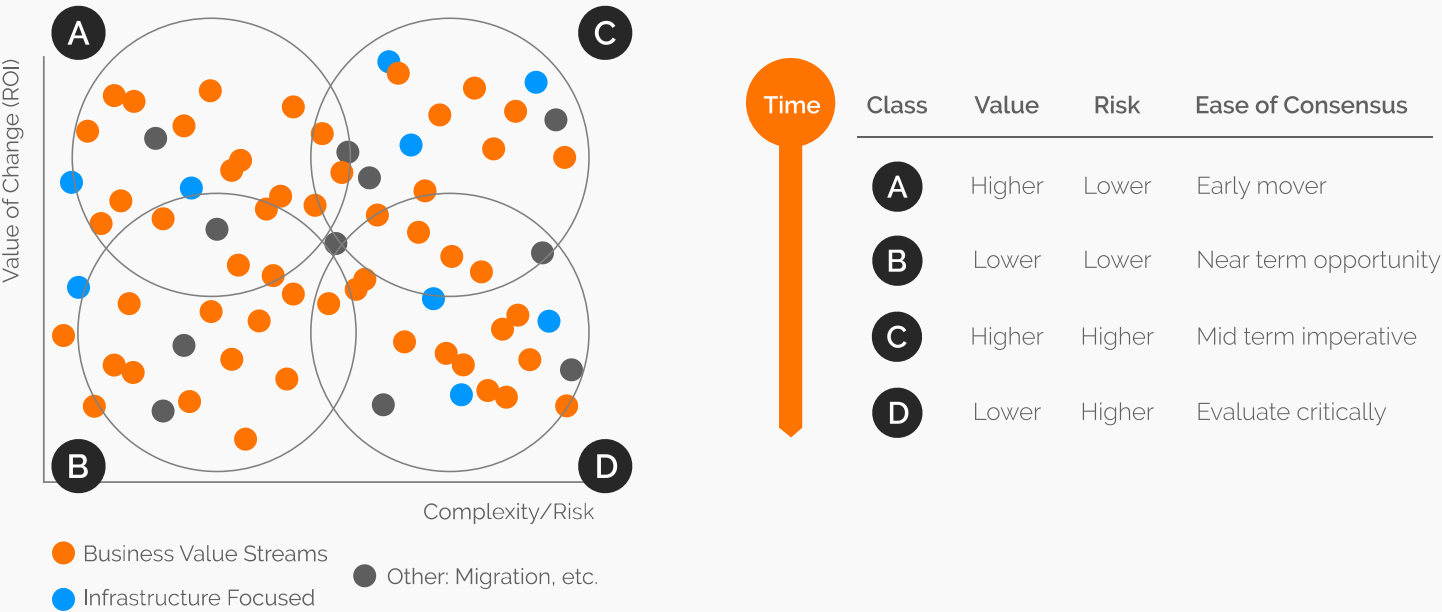
Some things will prove to be high value and low risk, which you should tackle first. At the other end of the spectrum, there are some functions that carry little value and deeply embedded risk. These ticking bombs lying somewhere deep inside your business will always be better to leave be.

Now, with a plan in hand, the journey begins.

Prioritizing Business Value Streams Optimizes NPV of Modernization Program

Transformation plan driven by value, risk, and organizational consensus

Value of Change (ROI)

Complexity/Risk

- Business Value Streams
- Infrastructure Focused
- Other: Migration, etc.

Time

Class	Value	Risk	Ease of Consensus
A	Higher	Lower	Early mover
B	Lower	Lower	Near term opportunity
C	Higher	Higher	Mid term imperative
D	Lower	Higher	Evaluate critically

Big Deal: Dealing with the Human Element

Consider for a minute the relative importance of IT to your business. While a strong and competent IT function is essential to any modern enterprise, ask yourself: is IT a key differentiating factor in what makes your business unique or what makes it thrive? The honest truth is that very few enterprises count on IT as a top factor in differentiating them from their competition. It's no knock on the competent employees that lead these efforts, it's simply a reality check that most IT simply act as table stakes and the functions they perform can logically be shared with or transferred to an outside partner.

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Ask yourself:

Is IT a key differentiating factor in what makes your business unique?

OR

Is it a standard, non-differentiated function?

That's not to say that your internal team doesn't plan an important role in this process. In fact, IT is more important now than ever when planning and executing a datacenter transformation effort. However, an honest assessment and reorientation of thinking is required in order to make sure that the function delivered is distinguished from the value derived. Truth be told, a progressive approach needs IT to help drive value to the end customer by defining and aligning the delivery of IT services with the needs of end customers. IT is still important but only inasmuch as it delivers actual value to the enterprise. If not, it's a commodity that should likely be substituted or, at a minimum enhanced. When planning this process, it's important to choose not just any partner, but the right strategic partner to help guide you and work well with your internal team.

In the end, it's important to recognize that the "transformation" in datacenter transformation extends far beyond the physical confines of the four walls of the datacenter. In this context, a thorough yet sensitive investigation about staffing and the structure of work should be undertaken. And while it's important not to outsource "your heart, your soul, and your spinal cord"[2] it's equally important to make sure that your future workforce isn't constrained by outmoded and impractical structures and practices from the past.

The Hard Part: Common Roadblocks and Hurdles

Make no mistake, datacenter transformation can be a large undertaking and a complicated process. After all, it likely took decades for your business processes and datacenter to reach their current level of maturity and it's not a simple task to transform in one fell swoop. With that in mind, what are the most common obstacles that a datacenter transformation will likely face and how can they best be addressed?

1. Driving while managing

There's an age-old problem of tactical execution getting in the way of strategic vision. The goal is to drive innovation while simultaneously managing operations with the result that managing can sometimes suck up all of the oxygen in the room, making it difficult to execute on longer term goals.

Solution

There is no easy answer to balancing operational requirements with strategic vision, but two things can help in a big way: vocal support from leadership and an action plan that emphasizes small but significant wins on a consistent basis, but especially at the outset of change efforts. The former helps to maintain focus (e.g. "eyes on the prize") while the latter demonstrates success and that leads to team enrollment.

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[2]https://www.fintechfutures.com/2020/10/sibos-2020-jp-morgan-ceo-tells-banks-dont-outsource-your-soul/

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2. Paying for past compromises

Successful industry leaders are invariably dogged by the short cuts and compromises that were made along the way. It's a historical legacy in which not everything was built with the future in mind, making it more difficult to deliver on technology that is essential for future success.

Solution

Technical debt is a fact of life and addressing it can range from "no problem" to "really big deal". It's important to recognize the interplay between cost and impact and adjust efforts accordingly. Start with projects that have relatively high impact that are paired with lower cost and take it from there.

3. We won't get fooled again

Many managers have lived a history of change efforts that over-promise and under-deliver. Who says that this time will be any different?

Solution

No technology solution is a panacea that will solve all ills in-and-of itself. One helpful approach is to stand the question on it's head and start with the problem or opportunity at hand rather than the technology available. Ask: what is it we're trying to achieve and how do these technology solutions address those needs?

4. Old tools for new tasks

There is a traditional reliance on vertical expertise, but the new world of the cloud requires horizontal coordination.

Solution

Everyone is dealing with this issue because new technologies have radically changed the ways in which work is accomplished. The change is so all encompassing that it defies simple, easy answers but a necessary step is to adopt an agile mindset and practices and to be prepared to learn as you go.

5. Wedded to the mainframe

Some systems, like mainframes, are so deeply entrenched in enterprise architecture that it can be akin to performing a heart transplant to shift from on-prem to cloud.

Solution

Change efforts should not be undertaken if there is a high probability that they will kill the patient. In the datacenter, this means that a careful analysis and game plan should be put in place before making changes to the operational architecture of the enterprise. As change efforts progress, it is critical to keep an eye out for unintended and unplanned changes as well.

6. Tech is from Venus, business is from Mars

Too often, the business side will interact with tech until they're able to go away happy…and the tech team is happy that they go away. Coming from radically different starting points, it's far too easy to fail to meet in the middle in ways that produced mutually beneficial outcomes.

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Solution
The simplest way to bridge the tech/business gap is to never let it exist in the first place. This means that all stakeholders are involved and active each and every step along the way so that waterfall-ish handoffs are eliminated. The same applies for cybersecurity, legal and other critical contributors: all must be involved in some form during the whole process.

7. Risk is real
Projects that don't live up to expectation are one thing, those that fail are another. A project that goes off the rails will have real consequences. In health care, for example, it is possible to either improve clinical outcomes or make things worse. There a real consequences for serious errors.

Solution
Risk is rational. It's not just because you're risk-averse that you should be mindful of the potential impacts of change with a keen eye on both and unknown interdependencies. A helpful step at the planning stage is to candidly assess potential projects and tasks on both risk and rewards and then concentrate your early efforts on areas that are relatively low risk but still deliver solid rewards. Lessons learned in these first projects can then be applied as higher risk endeavors are tackled.

8. It's complicated
There are ever-shifting and evolving obligations for areas such as data, platform and software sovereignty. What you do with your data is critically important, all the way down to the realization that the data may not actually be yours to begin with.

Solution
The cold hard truth is the world is far too complicated to expect that your team can be counted on to not only comprehend and manage current requirements but also handle new developments as they crop up. It's important to understand where your competitive advantage lies, deploying assets in those areas while outsourcing non-essential functions everywhere else

9. Who's going to do the work?
A nearly universal problem with new technologies is a lack of qualified, experienced talent to effectively lead transformation efforts. It doesn't make sense to build a spaceship to take your business to outer space if you don't have some astronauts to pilot the ship.

Solution
Having the right personnel to run and manage operations is just as important, if not moreso, than finding the right team to manage the transformation of the datacenter. While it may seem daunting, experience shows that a well-crafted and thoughtfully executed strategic plan affords for ample opportunity to both retrain existing personnel and attract new team members. However, it is important to make these steps with eyes wide open. Take the time to understand the full breadth of change and craft a plan to manage human resources that will meet your future needs.

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Embarking on Your Journey

Datacenter migration is a key element of Atos OneCloud,our initiative that blends cloud advisory consulting, application transformation expertise, prebuilt cloud accelerators, and innovative talents in an end-to-end set of services to help clients securely navigate their cloud journey. Atos OneCloud embodies the emerging understanding that while the future lies in the cloud, the path to achieving that promise and the resulting IT outcomes are distinctly unique for each and every enterprise. Many solutions are likely to include the persistence of some on-prem datacenter assets as well as the utilization of private, hybrid and public cloud options. In short, at the heart of Atos OneCloud is a custom cloud plan to assist you on your journey.

It's no secret that the tech unicorns that have prospered over the past decade have done so in large part because they had the utmost latitude to improvise and iterate on their business plans. They have been able freely shift resources, including datacenters, up or down as needed by using the cloud. In fact, there's a long standing saying that Silicon Valley venture capitalists fund their selected startups with credits on Google Pay and Amazon gift cards, giving them access to resources that can then be used to build winning concepts into successful businesses.

However, an established enterprise doesn't have the luxury of pivoting on a Thursday and executing a new plan by the following Monday. No, decision makers in these instances have to work on building a Tesla while driving 90 miles an hour down the highway in a 1970's Ford Pinto. But that doesn't mean that they can't make use of the same resources that drive innovation and disruption from start ups. By embracing the best of the tools available from the public cloud, incumbents can turn a challenge into an advantage. By leveraging their business acumen, experience and goodwill in tandem with an embrace of the relevant aspects of new technologies they can leave the upstarts in the dust. Of course, the opposite can also be true: failing to take advantage of the opportunities is likely to lead the opposite result. In that light, you'd be crazy not to try and embrace datacenter transformation.

In the end, while it's true that no business leader wants the cloud just for the sake of being in the cloud, it's also abundantly clear that the cloud will be an absolutely essential ingredient if an enterprise expects to grow and thrive. **Contact us to learn how Atos and Maven Wave can make that possibility a reality.**

Contact

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