Cloud Strategies for Generating Successful Business Outcomes

Yes, except now, or soon, your applications running in your data center may be running in the cloud; you will be using some form of cloud architecture to ensure that services are delivered most efficiently and cost effectively.

In the near future, we will be designing applications to drive business outcomes, letting the "cloud" do the rest. In today's world of considerable disruption and change, leaders in the industry are telling us we must transform our roles so that we can develop success for our business, and become an enabler of delivering business value.

Rather than continuing to be the curator of legacy systems, why not show value by making strategic decisions in furthering the business initiatives as we continue to be responsive to change!

This whitepaper offers an overview of today's next focus in IT: delivering business value, and determining the best ways to take advantage of cloud services. Areas of concentration, plus **OUR OFFER** to you:

1. Key Take-Away's
2. Understanding What Success Looks Like
3. Focusing on Business Outcomes
4. Develop Strategies by Utilizing Tactical Decisions
5. ROADMAP YOUR Cloud Journey: Datacenter as a Service
6. Guidelines When Moving to the Cloud

It's about focusing on business outcomes, not infrastructure, to force us to create value to our business and increase revenue, while we continue to manage costs and mitigate risk. Taking a "service first" view means rather than thinking about the infrastructure, we are delivering success to the business, by provisioning the most effective cloud services to transform from an infrastructure organization to a services organization.

Most importantly, you will need to make the right choices in determining how to best execute to manage your business most efficiently. Always utilize a trusted provider to satisfy your legacy commitments while supporting more agile and revenue producing applications. Call on us today to begin your journey!

"Our goal is helping you achieve ongoing success. We are proud of our reputation in good standing within the industry, and that we have never lost a client due to poor service or high costs, while we consistently earn 100% client satisfaction."

John Kamen, CEO

1. Key Take-Away's

- By 2024, only 25% of all workloads will be on premise.
- Today, it seems that enterprises need more than IT can deliver, and they need it faster!
- In order to control how you can drive business value, one needs to integrate many different types of cloud services and develop a service mentality with trusted partners.
- It's not about "my datacenter" – it's about delivering compute resources to the business units the best way possible.
- The focus should be on what we do with our applications, not what we do with our infrastructure.
- A solid cloud strategy must include a decision matrix so you can determine where applications should go.
- Developing a cloud governance strategy will help you determine what can and can't be put into the cloud – developing a broader view is about formulating the appropriate placement of workloads. You still have to support traditional workloads, but you also have to drive business value with new applications.
- Utilize a practical two-step process:
- Determine best ways to renovate by becoming more efficient and cost effective in 'keeping the wheels on the bus' for all business critical applications,
- Enable experimentation to achieve revenue producing results for your business applications
- Determine different speeds for different applications
- There is a huge need to take what you have today and standardize, and only provide customization as needed.
- The goal is to reduce costs and increase IT efficiency, but the business only sees this is terms of the IT budget.
- Fully managed services can be the first step for engaging a Service Provider to move legacy workloads off premise, taking advantage of reduced costs to fund new revenue generating projects.
- Build customized outsourcing relationships upon standardized managed services offerings.

"We deal with alot of vendors, but there are only a fewwe consider true partners, and Blue Hill is one of them."
CIO, Insurance

2. Understanding What Success Looks Like

Use Cases for Insurance, Higher Education, and Government

Three separate IT organizations from the insurance, higher education, and local government sectors were faced with the same challenges in running their critical workloads: they had to continue to support legacy applications cost effectively while mitigating the risk of losing skilled technical expertise due to retirement.

They each began their journey by considering the most risk adverse solution, since they had never used the cloud or outsourced any IT services before. Plus, they needed to contain or reduce costs.

Some unique characteristics of each:

- **Insurance:** Founded 100 years ago; Ranked in the top 100 US property and casualty insurance groups of 1,000 in the USA; Employing 1000 people and selling to more than 900 independent agencies in 11 states.
    - Flexibility – scale down costs as requirements lessened
    - Cost - Eliminate capital expenses and reduce monthly expenses
    - Risk – Ensure critical applications are maintained and supported as key technical support staff retire
    - Business Value – Increase their applications throughput, enhance their business continuity requirements, redeploy staff to create mode-2 applications
- **Higher Education:** Prestigious ivy league university with 25,000+ students; 10+ graduate and professional schools, including law, medicine, nursing, dentistry, veterinary, business.
    - Flexibility – Act as an extension of their IT department
    - Cost – Only use those service offerings required, reduce overall expenses
    - Risk - Ensure critical applications are maintained with the same or better service levels.
    - Business Value - Redeploy staff to create mode-2 applications

- **County Government:** Midwest County government with considerable acclaim nationwide as an IT leader

    - Flexibility – Act as an extension of their IT department, add additional services as necessary
    - Cost – Reduce overall expenses; eliminate capital expenses
    - Risk – Ensure specific critical legacy support for Mainframe VSE systems
    - Business Value – Guarantee SLAs while planning modernization efforts; position Blue Hill in Government-2-Government to reduce time to market

> ***"We are thrilled to be partnering with Blue Hill, who has helped us achieve substantial savings while ensuring that critical systems operate seamlessly."***
>
> CIO, Oakland County, Michigan

3. Focusing on Business Outcomes

Business outcomes defined:

- Retail – how do I improve the customer experience?
- Customer Service – how do I improve the quality of resolution, turning a dissatisfied customer into a happy customer?
- Retail Banking – how do I make a positive experience at the ATM, while providing security, accuracy and convenience to enhance the customer's interaction?
- Healthcare – how do I deliver the right data more quickly, seamlessly and securely, so that patient care is improved while costs are maintained?
- Education – how do I make the student's experience one of convenience?
- Government – how do I make access to critical public information easily accessible to better serve our citizens?
- Manufacturing – how do I operate most cost effectively and integrate seamlessly with the business?

What can you do to make your business more successful?

Consider these four specific strategies:

1. Align IT initiatives to drive business value, increase revenues, decrease costs, and manage risk.

    - The technology ought to drive business value, in becoming faster and more agile Proactively identify opportunities to deliver value
    - Deliver stability in managing critical legacy applications; but also look to explore and disrupt, focusing on flexibility and speed, in developing new business driven applications; that are unproven and may fail, but if they succeed, they can bring real value.

2. Manage spend and reduce costs with a proven Service Provider, and invest these savings into new

applications that drive business revenue

- Optimize to contain costs, to shift dollars to invest and grow new revenue producing opportunities, thereby demonstrating IT value
- Create the need is to facilitate, not impede, the flow of technology

3. Increase influence with the business units through demonstrating successful leadership and innovation

- Communicate success by telling the IT value story from the perspective of the beneficiary, explaining how the business has grown through IT innovation
- Earn a "seat at the table" by delivering successful projects on time and on budget

4. Develop Strategies by Utilizing Tactical Decisions

Data center managers too often develop strategies based on current technologies and physical infrastructure, rather than what's right for the business over the long term. By linking tactical decisions with strategic objectives, an agile data center and cloud strategy can evolve.

At its core, the data center and the IT operations team are in place to do contradictory functions - they are expected to enable the business to respond quickly to changing markets and business demands by implementing technologies as quickly as possible, and are also required to protect that same business by keeping critical applications available 100% of the time, and ensuring that updates to those applications and the underlying infrastructure are introduced in a safe, controlled, fault-resilient manner. This dual mode of operations is not an option, but a requirement.

IT is also expected to deal with constant demands from very diverse parts of the business for growth in network bandwidth, application types, and new technologies and services (both internal and cloud-based). At the same time, they must keep the "lights on," supporting a myriad of older applications and legacy infrastructure. The underlying theme is that these expectations often overlay a constrained IT budget with little room to fund innovation.

With all these issues continually being asked of IT and the data center, the development of a clearly defined strategy often falls by the wayside. The overall strategy develops as a series of tactical steppingstones, implemented as a reaction to the highest priority business demand (or IT crisis) of the moment. Even those enterprises that take the time to map out a data center strategy find that just developing a strategy does not guarantee its success, and in fact, most five-year plans rarely get past the first year because of rapidly changing market, business and technology drivers. While strategies get rethought, IT continues to do what it's always done — keep the lights on, react to the business, keep systems running, minimize costs.

Many organizations today are building hybrid strategies by understanding how the cascade effects of tactical actions can impact longer-term ideas.

Facilities and Space Planning

As older data centers near capacity in space, power or cooling, you must decide what solution is best for

the business. The traditional model was always to build another site, but it may take years for the project to complete...

One alternative is to begin using managed hosting or colocation space as a growth strategy.

For organizations that have an existing data center that already supports the reliability and availability levels the business requires, offloading nonessential workloads to a secondary colocation site can free up critical space in the production data center to allow continued growth.

For organizations where the existing production data center is not up to availability standards, or where the facility is not adequate to support critical workloads, offloading high-impact workloads to an offsite provider might be the ideal solution.

Newer colocation facilities are almost always built to support high levels of availability, and could readily be used for critical workloads, freeing up floor space in the former data center for test and development, noncritical growth or even for restructuring a DR strategy based on both sites.

With either solution, the aggregate growth in floor space funded is significantly less than the “build new” option.

Private and Public Cloud Migrations

Many IT organizations are being asked to support both private and public cloud services to their business but are struggling with implementation. One technique used successfully is to develop the infrastructure for a private cloud as part of a controlled migration to a colocation provider. Once the infrastructure is in place, a phased migration toward private cloud services can begin.

With an adequate network in place, end customers should not care where the environment is running, as long as service levels, compliance and security issues are managed. This allows development and growth within the private cloud, with little impact on the older data center.

Additionally, many colocation providers today offer variations on cloud services to help jump-start the process. Using these services in a phased approach can help organizations successfully manage the migration toward a hybrid compute environment.

Growth and Overprovisioning

Unplanned or rapid business growth is a major issue for many data centers, as they grapple with introducing new equipment in an already crowded environment, or as they determine how many resources need to be provisioned for new applications. Provisioning servers, storage and networking based on business or developer expectations has historically been IT’s baseline for planning, but it is often difficult to predict how fast resources will be consumed, or to reallocate compute capabilities to other projects once they have been assigned.

An alternative to the do-it-yourself model has emerged with cloud service providers (both public and private). By utilizing the automation and elasticity of cloud services, new applications can be provisioned rapidly in a standardized way; and if that application experiences rapid growth, the elastic nature of cloud providers allows for managed growth of the needed resources without the fear of overprovisioning.

If market expectations did not evolve as rapidly as expected, you avoid the problem of unnecessary capital expense for unused equipment. This has the additional benefit of freeing up floor space for production or critical applications. For environments with severe space or power issues, this can be used as a capital deferral project - essentially, moving noncritical or cloud-enabled applications elsewhere, freeing up facilities resources, thus deferring the need to build out or retrofit the primary data center.

IT Service Continuity
In today's digital economy, many businesses are realizing that service reliability (or continuity) has a direct impact on organizational reputation, customer satisfaction and customer retention.

If a website or service becomes unavailable, IT traditionally had failover or disaster recovery plans in place, but these often required implementing a specific process, incurring sometimes significant downtime. In the world of Web commerce, last impressions last forever. IT organizations are therefore looking to design data center strategies around providing service continuity - or continuous services - regardless of what happens. Historically, this meant building a fully redundant data center with no single points of failure, but as numerous natural disasters have proven over the past few years, if the roads are shut down, the fuel trucks cannot deliver to those data centers, and internal redundancies become irrelevant.

In addition, the cost of building out and managing a fully redundant data center is not an affordable proposition; the implementation of a "many site" strategy may be a far more economical approach.

These examples of solving tactical issues offer guidance that IT is dealing with every day. The solutions, when implemented in alternative sites, become the beginnings of a hybrid IT strategy — one focused on using the right resources, in the right location, for the right reasons. IT becomes more agile and more flexible, and existing on- premises data centers can reduce IT footprint, freeing up space for growth. By judiciously using providers in conjunction with your legacy environment, a scalable, sustainable and cost- effective IT strategy can evolve.

Technology providers that promote everything they do as equally cloud-based are creating a mismatch between expectations of cloud success and the reality of what their offerings will deliver.

5. Roadmap Your Cloud Journey: Datacenter as a Service

CIOs must become providers of outcomes in driving business value, and must logically determine what service to invest in, when to implement and with which provider. The goal is to become the provider of outcomes, not just the IT infrastructure. As data center services continue to evolve, using 'cloud as-a-service' providers is becoming more and more necessary.

The reality is that IT management continues to struggle with conflicting priorities — keeping critical systems running while embracing the cloud computing model to enable the business in providing a faster, more agile set of services. Often, the most confusing aspect of this situation is understanding what "the cloud" is, and which of the myriad variations are appropriate for a business unit to adopt.

As-a-service offerings are proliferating rapidly. Early in the cloud era, there was software as a service (SaaS), and then infrastructure as a service (IaaS), followed by platform as a service (PaaS). Now, however, there are dozens of choices, from unified communications as a service (UCaaS), to business process as a service (BPaaS) and disaster recovery as a service (DRaaS).

Some of these services are true cloud offerings that support self-service provisioning, quicker time to market, elasticity of usage and metering; that are shared across many users; and that are accessible using standard Internet technologies.

Others are more traditional and offer fixed licensed services by the user or the enterprise, versus rented services (for example, usage-based). The longer-term solution should not be an overall generic cloud strategy, but rather a strategy based on individual use cases developed at the application or service level.

Service Offerings

In creating a data center as a service (DCaaS) model, the role of IT and the data center is to deliver the right service, at the right pace, from the right provider, at the right price. IT therefore becomes a broker of services.

Making key short-term decisions in embracing DCaaS can lead to a long-term strategy that incorporates the best of 'as a service' and the cloud without compromising IT's overall goals to both protect and enable the business. In this manner, IT can enable the use of cloud services across the business, in such a way that underlying IT service and support does not get compromised.

To create a strategy of outcomes, leaders focus on exploiting the benefits of those 'as-a-Service' providers that offer specific business outcomes. These providers can be viewed from the perspective of performance, service levels, ease of use, pricing and manageability. Moving a service to the cloud should be based on business outcomes rather than technologies.

6. Guidelines When Moving to the Cloud

1. **Focus on an application/service with the least risk first.** Unless your staff is well-versed in dealing with cloud-based applications, vendors and support, the initial foray into using as-a-service offerings should be low-key, with minimal risk, and with a focus on ease of migration, performance monitoring, support structures and staff training. As time goes on and your staff gets comfortable with the new structure, additional services can be added to support specific business problems, from the current vendor or from others.

    - Choosing a Service Provider with flexible offerings will help you ease into these services as this new Service Provider experience proves its capabilities.

2. **Prove the value of new services and their cost effectiveness.** When internal IT begins to use 'as-a-Service' providers as an alternative to traditional steady-state on- premises applications, the value focus shifts toward operating costs. Before migrating to an 'as-a-Service' provider, IT should have a clear understanding of what the current and upcoming operational costs are for that particular service if left unchanged. Communicating the impact of a new service from an operational cost perspective is an effective means for IT to educate business leaders on what value IT continues to bring to the business.

    - A reputable Service Provider will be able to help compare current costs to the new cost model, to ensure all budget elements are considered so that a true analysis can be provided, through the entire length of the engagement.

If implemented appropriately, the use of 'as-a-Service' providers by IT for select services can create an extremely flexible IT service portfolio that will be responsive to business needs.

Costs can be reduced, and capital costs can be deferred to offload some workloads from a traditional data center, thus freeing up needed space and facilities resources for other workloads. Data center strategies that are truly effective will focus on the applications and services being delivered, not on the infrastructure or technology being used.

Staff training and staff incentives will then change to adapt to the new realities. As services are delivered to the business via an external Service Provider, the IT skill set will morph from a strictly vertical-technology focus to one of end-to-end understanding and support.

This represents a huge cultural shift for many IT organizations and will force a move away from the firefighter structure to one of delivering additional values which can ultimately generate new business revenues.

In conclusion, IT remains responsible for that end-user experience, and will need the appropriate delivery systems and tools to actively monitor and manage any process, anywhere, at any time.

Our Offer to You

Schedule an appointment today to speak directly with our Chief Technology Officer, who will take the time to understand your environment, for both infrastructure and applications support, to include:

- Hardware and software commitments
- Network and security requirements
- Staffing and support
- Disaster Recovery and Business Continuity
- Risks associated with current operating practices
- Contractual obligations
- Business goals
- Timing

> ***"Our cultures matched, and our trust in Blue Hill's services has increased over time."***
> VP, IT, Manufacturing

Our Commitment to You

For commercial and government clients invested in business-critical Mainframe systems who need to reduce and find more predictability in operating costs needed to maintain their environments, while also de-risking the realities of retiring workforce, Blue Hill Data Services® offers proven mainframe stewardship and modernization via personalized solutions and action plans designed to impact short-term needs and build more transparency into long-term planning.

For our clients, this means greater flexibility in both contracts and solutions, service levels that are equal-to-or-better-than what they currently have, and significantly increased confidence that their mainframe environments are cost-optimized and operationally healthy for as long as they need them to be.