

Maximize Business Value by Leveraging Next generation Cloud-transformation Technologies on AWS



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Table of Contents

Introduction ————	03
Real World issues in the Cloud Ecosystem ————————————————————————————————————	04
MSPs as Harbingers of Change	10
Aspire Systems' Cloud Capabilities ————————————————————————————————————	13
Conclusion ————	16
About the Authors	17

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Introduction

The demand for increased flexibility and agility is propelling enterprises to look beyond traditional infrastructure and move toward a more flexible cloud-based model. While Infrastructure-as-a-Service (IaaS) remains popular among enterprises, demand for other As-a-Service models is also on the rise. For example, preference for applications, based on Software-as-a-Service (SaaS) is pushing traditional software vendors/ providers to move their packaged applications to the cloud. Digital workplace services that offer mobile workplace solutions, with a highly secure work-from-home environment, represent another example. Furthermore, with the COVID-19 pandemic leading to a shortage of IT personnel for support, enterprises are leveraging cloud capabilities to check, maintain, and monitor their applications and data remotely and efficiently.

Cloud computing, also known as Internet-based computing, has been around for several decades. The origin of cloud technology can be traced to the 1950s, and, since then, it has transformed from an elementary form of virtualization to what we are accustomed to in today's cloud environment. In 2006, AWS launched its Elastic Compute Cloud (EC2) service, allowing organizations and individuals to rent virtual computers through which they could access their own programs and applications – thus began the era of modern cloud computing. Over the past decade or so, cloud computing has evolved from something that service providers have advised companies to adopt, to becoming the very lifeblood for most modern enterprises. Enterprises are increasingly getting accustomed to the pay-as-you-go cloud billing model and are now seeing IT purchases as a day-to-day expense, and not as a one-time investment they will be stuck with for the foreseeable future.

While the impact of the pandemic has been felt across industries, some have been harder hit than others. Also, traditional enterprises that preferred on-premises infrastructure have faced multiple challenges, leading to significant disruption in client services. The dynamic and uncertain business environment has created the need for scalability, implementation speed and improved governance to address risk and compliance requirements. This has led to a shift toward interconnected, integrated, and managed multicloud systems. In this scenario, firms with a mature cloud strategy that included a mix of on-premises, private, and public cloud computing assets were well positioned to withstand the wave of disruption with zero outages or service disruptions. Workloads on the cloud also helped these organizations deliver the computing power needed, both to handle a remote workforce, and to run a high volume of critical data transactions, securely and seamlessly.

In the face of this disruption, hyperscalers such as AWS have played a critical role in helping enterprises, particularly small and medium-sized enterprises (SMEs), navigate the challenges. AWS offered free credits, for a specific duration, to SMEs that could not afford to pay their cloud bills. For a few, they also put payment plans in place or offered discounts for using their cloud services.

Real World issues in the Cloud Ecosystem

The slow and steady ICT convergence of the last three decades has become less futuristic and more of a reality/necessity in the last decade. The last two years created entirely new opportunities. Nearing the end of 2021, nearly two years after the onset of the global pandemic, which acted as a catalyst for cloud migration; there is a need for new and secure ways of collaborative workplace solutions.

The current generation of workforce has become acclimated to the accompanying cultural change needed for the implementation of these systems – the consequent success of the changes necessary to bring work into the 21st century. The push to fully adopt cloud computing for business has not only revolutionized work but also opened the doors for new business models, leveraging data. A large number of work processes in the cloud suggests a more adaptable, digital, and innovative business, that provides for remote work and touchless IT. The rising costs of raw materials has hit hardware costs; the natural response has been to leverage available resources more effectively. Also, apart from spurring further development and implementation of green data centers, it has led to a more efficient use of data, with flexibility in allocating resources. The consequent need for more adaptable systems has led to a new standard: going cloud native. The service provider community has also developed more efficient ways of using current resources, by reusing, buying in bulk, or using cloud resources by rightsizing.

Enterprises now face the fear of the unknown – becoming more dependent on outside resources and ceding dominion over their data. Most of those fears are usually assuaged by using experienced consulting and advisory services. The paradigm shift from buying software, to adopting a licensed model, shows the evolving maturity of enterprises, and also showing increased sensitivity to security issues. With the number of cyberattacks on the rise, enterprises are investing in robust security solutions to secure their data and assets on the cloud.

Originally, industry 4.0 was a trend speeding the digitalization of manufacturing and public infrastructure. However, it has extended its reach into end-consumer lives and is being used to define networking and digitalized machines of any size. Talking to your appliances or to your car are no longer considered a reason for a mental health check but is a sign of having a technology enabled lifestyle. Furthermore, the data collected by IoT can be leveraged to open new business models. This has further aided the shift from paying only once for a finished product to opting for subscription-based payment models – essentially paying for usage and services. Industry 4.0 goes hand in hand with the current automation trend, with the aim of enhancing efficiency and reducing error rates; although security and ethical considerations should have more weight in that discussion. Security and ethical considerations currently seem to be manageable.

Even before the pandemic, IT organizations were under pressure to be more agile and innovative. The cloud ecosystem has enabled enterprises to better upscale or downscale automatically. Enterprises that could not handle the unexpected burst in demand are now able to do so while also saving on costs, making optimal use of resources when not in heavy use. This also facilitates a DevOps culture and allows IT organizations to escalate their concerns without being hindered by departments (finance or procurement) that do not necessarily have the same priorities. Concurrently, enterprises are able to better mitigate risks, and plan for business continuity in the face of a disaster.

For application development, this means leaning on containerization, and adopting cloud-native principles when designing new solutions for customers. Although it may seem that navigating through the developing standards is becoming increasing complex, new tools and platforms are being developed to help manage, and enable access to, monitoring and analyzing the chosen solutions.

Cloud Technology Trends

With the increase in cloud adoption, enterprises are spending significantly in the As-a-Service domain. As per the recent ISG Index[™] call, the first half of 2021 has seen As-a-Service spends accounting for more than 50 percent of all outsourcing spending. The cloud-based As-a-Service market reached a record US\$13.4 Billion in the third quarter of 2021, an increase of 55 percent from the previous year – the highest quarterly growth rate ever. Within this segment, both IaaS and SaaS grew at a record pace, with IaaS up by 57 percent, to a record US\$9.7 Billion, and SaaS up by 53 percent, to a record US\$3.7 Billion.

Following are some of the trends observed by ISG:



Automation has been at the core of every cloud engagement. The service provider community has been investing in and leveraging AI and machine learning technologies for automating their managed infrastructure services. These will allow them to help enterprise clients to gain such significant benefits as efficiency in IT operations, failure prediction, process optimization, anomaly detection, and defect analysis in complex hybrid cloud environments.



Robust Security Measures

Enterprises have struggled with limited workforce mobility, as well as data and asset security issues and have, therefore, borne the brunt of several malware and ransomware attacks. Security management companies have seen a sudden spike in inquiries/demand for endpoint security, identity and access management solutions, intrusion detection systems, and intrusion prevention systems. To address these needs, large service providers and cloud-native, niche start-ups have developed SaaS-based, lightweight platform solutions for securing the entire infrastructure, both on-premises and in the cloud. At the same time, hyperscalers such as AWS have doubled their efforts on improving the security aspects of their offerings. Such initiatives enable users to build applications on the cloud, showing increasing confidence with placing their mission-critical workloads on the public cloud infrastructure.



Rising Investments in Edge Computing

Edge computing has been around for a while and has evolved to complement data center and cloud services. Bringing data collection closer to the network edge for processing can drastically reduce latency and processing time and increase responsiveness. This factor has enabled cloud providers to extend their network reach, improve speed, and provide more powerful processing resources to manage tasks that are too big for IoT devices. The real value that most enterprises will derive from edge computing services, in the long run, will be the use of this platform to hasten the development, adoption, and extension of 5G services, offered by communications service providers, and accrue the benefits of a growing base of locally optimized operational technology (OT)-oriented, customer experience (CX)-oriented SaaS, and digital services.



Public cloud transformation engagements have become more meaningful as they have moved away from the traditional lift-and-shift model of migrating enterprise applications to the public cloud, which meant increased costs associated with refactoring or re-architecting workloads. In contrast, by default now, applications are moved to the public cloud in a cloud-native way, by leveraging open-source, cloud-native tools and accelerators that can take full advantage of a public cloud infrastructure. ISG sees a strong demand for transforming legacy applications that involves completely re-architecting or recoding workloads and moving from legacy to web-based applications built using modern full stack technology frameworks that work seamlessly on public cloud infrastructure. Using containerization and Kubernetes clusters create a complex environment because different parts of an application share data with different containers. This requires additional management efforts by Engineering and Ops teams. To handle this complexity, service mesh concepts are being utilized to build an infrastructure layer on top of the application so communication between different parts of an application is flexible, reliable, and fast.



Focus on Reducing Cloud Costs

One of the top enterprise priorities today is controlling, managing, and optimizing cloud expenses. Consequently, there is a major push toward IT cost optimization and IT operational efficiency as many enterprises are finding it difficult to manage the spending of the complex and vast cloud ecosystem, especially in a hybrid environment. This is where service providers are playing an important role – helping large enterprises manage their complex global IT assets, while reducing operating costs. These providers are leveraging their vast experience to manage cloud infrastructure and assets using the proprietary tools and platforms that they have developed over the years.



Increased Flexibility in Doing Business

With the changing nature of IT outsourcing relationships, the expectations of clients are also changing. Enterprises are preferring to engage with providers/vendors that are as flexible as possible. Providers should have the ability to ramp things up and down depending on client needs; hence, they need to be ready to restructure teams within the shortest time frame and be agile enough to quickly deliver result. Furthermore, enterprises appreciate it if offshore developers can easily integrate into their company and feel connected to the in-house team. Enterprises also expect their remote IT specialists to use new technologies to ensure customer satisfaction, leading to business growth.



ISG has observed that hyperscalers are being viewed as key strategic partners for managed cloud services. With large numbers of workload moving to public cloud, system integrators and service providers are strengthening their credentials and partnerships and engaging through strategic partnerships with public cloud infrastructure providers, including AWS, Microsoft Azure, and Google Cloud Platform, with which they are working closely to co-develop cloud offerings, and have joint go-to-market strategies. This approach provides a win-win for all involved parties. Such collaborations bring best-in-class technologies, along with best practices, to develop cloud-based solutions for faster migrations, improved efficiencies in cloud resource management, adoption of next generation technologies, and more.

Strategic Cloud Migration Approach

Studies show that decisions on cloud strategies are still primarily reactive instead of proactive, and that non-IT personnel are extensively involved in the decisions regarding future investments on IT. This is also reflected in the gradual transformation toward cloud by choosing refactoring, rather than rewriting applications, which costs more in the long run. To counter such costly decisions, companies such as Aspire Systems have developed tried-and-tested solutions, that include governance, risk and compliance (GRC) aspects and also can be tailored to the specific needs of a project. By rapidly improving accessibility and usability, CX is measurably improved and can serve as the groundwork for realizing the importance of rewriting monolithic applications and adapting to inevitable future standards. This will give CIOs and CTOs the necessary references to spearhead a reliable strategy and make quick and accurate decisions.

Not all enterprises have the same risk appetite, neither do they have the same maturity in implementing technological advances. Even the various units within a large enterprise have different maturity levels. Therefore, it is imperative for service providers to match the maturity of an enterprise with its risk appetite before helping it with its cloud journey. ISG has identified the following four buyer archetypes for determining enterprises' maturity toward cloud adoption.



Figure 1: Archetypes based on the Maturity of Cloud Adoption

• **Traditional Archetype:** These buyers are slow to accept the relevance of cloud technologies for their computing needs. However, they are open to learning more about cloud computing benefits and are slowly modernizing their legacy application. These clients are generally risk-averse and are mostly focused on cost savings through a full-time employee (FTE)-based/staff augmentation model.

- Managed Services Archetype: These buyers have prior experience in outsourcing a part of their cloud operations and are willing to transfer additional responsibility to service providers. While their focus is mainly on cost reduction, they also consider it important to improve IT productivity by leveraging the expertise of an outsourcing partner. The focus is to increase penetration within organizations with a mid- to long-term vision.
- **Pragmatic Archetype:** These buyers are second- or third-generation outsourcers that have matured in terms of people, processes, and practices. They are looking to engage with multiple service providers in a managed services and professional mode. Here, service providers are required to comply with service level agreements (SLAs) or business level agreements (BLAs,) and stipulated deadlines. These relationships mostly follow a time and materials pricing model so the client can pay for only the time and resources spent on the project.
- Transformational Archetype: These buyers take a strategic view of the entire IT ecosystem. Plans
 are in place to transform the current IT setup to a cloud environment. They are willing to take risks
 to achieve strategic value. Their goals are to have quicker, more closely integrated, and user-friendly
 applications, platforms, and systems in place with a cloud first approach.
- Pioneering Archetype: These buyers are early adopters of next-gen cloud technologies. The focus is
 on using 'born-in-the-cloud' applications to leverage cloud-native capabilities that are used to develop
 applications that are packaged in containers, deployed as microservices and managed on elastic
 infrastructure through Agile DevOps processes, and continuous delivery workflows. They consider
 IT as a change agent and an enabler of growth in revenue and increased profits.

The above five archetypes defined by ISG align perfectly with Aspire's understanding of customer Cloud Transformation maturity levels as depicted in the figure below:

Figure 2: Aspire's Customer Cloud Transformation Maturity Levels



Source: Aspire Systems

The idea of helping an enterprise move to the cloud is not limited to only migrating an application, but also involves changing the mindset of the enterprise and improving their maturity to higher levels. This enables the enterprise to think long term and leverage next-gen cloud technologies to better utilize cloud infrastructure, instead of just carrying out lift and shift of workloads. Aspire helps its clients improve their maturity trajectory and takes them through the cloud transformation journey with better alignment of their goals with the advanced technological landscape.

Benefits versus Expenditure Reasoning for Cloud Migration

While the benefits of cloud are no longer subjects of debate, CTOs and CIOs still need to solve the cost versus benefit conundrum. In the future, enterprises will also need the ability to downscale infrastructure and avoid large capital expenditures and huge bills from cloud providers. When considering investments in the cloud, reduction of costs is a major factor to be considered, depending on the maturity of an enterprise and its cloud journey. Whereas, at the outset of the adoption of cloud there could be a reduction in running costs, once the restrictions are lifted to use cloud resources at will, costs could explode in a short time. In contrast, although the promise of low running costs might lose relevance, by giving into cloud-native standard systems such as containerization, the use of microservices, and closely working with AWS systems can be beneficial to managing workloads more efficiently and effectively. This allows the monitoring and planning of expansions, thus giving back the control over costs to the client, and increasing access to manage their own systems more effectively. Experts at Aspire Systems can offer solutions and implement stringent restrictions to further aid the cloud journey.

Aspire recently helped a large enterprise migrate its Oracle databases to AWS that brought down costs significantly for the client, including lowering operating costs. The engagement included migration of seven databases that were leveraged by seven applications migrated to AWS Aurora. This enabled the client to save Millions of dollars every year.

Addressing Cloud Migration

While migrating any workload to the public cloud environment, an enterprise should have a clear understanding of what it is trying to accomplish, and decide on the most suitable landing zone – It may be public, private, a hybrid cloud, or even on-premises, depending on an organization's goals. When it comes to public cloud, the most popular hyperscalers AWS, Microsoft Azure, and Google Cloud Platform(GCP) have a similar portfolio of basic cloud services, but also bring some differences to the table. Certain workloads run best on certain clouds. For example, AWS is widely used for web/content hosting and analytics, Microsoft Azure for Microsoft products, and GCP for database and DevOps. Among all the hyperscalers, AWS leads in terms of scale of operations and service portfolio. It has the widest and broadest portfolio in the market, along with largest cloud infrastructure, which makes it suitable for enterprises of all sizes. Enterprises also need to consider such factors as the pricing models, robustness of the product ecosystem for dependent applications, relationship with the cloud provider, dependent applications, budgets, and vendor lock-in. In short, it is about choosing the right cloud providers for the enterprise's goals.

Over the years, major public cloud providers AWS, Microsoft Azure, and Google Cloud Platform have been focusing on building robust partner ecosystems to effectively sell their products and services. Although all three have been successful in making an impact on the market, AWS is way ahead of the others in this space. As a part of the AWS Partner Network (APN), AWS has built a robust partner ecosystem of thousands of global service providers and independent software vendors (ISVs) that build and sell solutions and

services to its customers. They leverage Amazon's latest technology infrastructure and help enterprise clients move effectively to the cloud. AWS has created tier-based partnerships, and to be part of this, providers need to undergo rigorous training and ensure that the right skillsets are in place to achieve certifications. In addition, AWS also ensures a thorough technical baseline review, including review of technical architecture, product review, and feedback about the solution implemented, from at least 20 clients. AWS offers free e-learning courses through the APN Portal to help partners gain accreditation in particular technical areas. Providers such as Aspire Systems are in a unique position here because they have built a good relationship with AWS and have successfully helped several clients in their cloud journey. Aspire is also one of the few companies across the globe that has two ambassadors within the AWS Partner Ambassador Program, where they possess multiple AWS certifications and in-depth knowledge about AWS products and services to further evangelize AWS and their partner organization to customers.

MSPs as Harbingers of Change

Should an MSP be Leveraged?

For enterprises considering cloud transformation, partnering with service providers is critical as some amount of hand holding will be required to manage the increasingly complex hybrid and multi-cloud infrastructure. They need to adopt strategies that will even change the way employees work in large, complex, and siloed work environments. According to a recent study by ISG, 60 percent of cloud initiatives fail to achieve the desired outcomes. This failure is mainly due to inexperienced IT teams, which may handle some of the complex and increased workload, but will, most likely, feel overwhelmed and fail to foster scaling, forcing an enterprise to assign additional responsibilities to employees who are not on the IT team. This may lead to undesired outcomes, downtime with high costs, and delayed time to market.

As the world adapts to the new way of working, outsourcing cloud management activities to managed service providers (MSPs) has become imperative. MSPs have a vast experience in migration activities, along with the required skills for complex cloud migration engagements. From a cost perspective, one of the clear benefits of managed services is that it reduces labor costs and eliminates the challenges, including costs of hiring and training new IT staff. The availability of skills, on a scalable basis, makes MSPs an attractive proposition. Also, most MSPs offer a hybrid model of onshore and offshore resources, which lowers the average effective rate and widens the resource base for an enterprise to experiment with new technologies.



Also, during its discussions with the service provider community, ISG has noted disparate preferences/motivations between enterprises in Europe and the U.S. The ones in European countries prioritize proximity of data center location, managed services support, and contract flexibility. They are relatively more concerned about data protection laws that mandate keeping data within a boundary. On the other hand, companies based in the U.S. are more mature in terms of experimenting with new technologies and are focused on the portfolio of features offered.

When to Bring in an MSP?

Enterprises are unable to stay on pace with the complexity and multitude of public cloud provider offerings. In this scenario, it is imperative for them to solicit an MSPs guidance, in terms of public cloud consulting and implementation. MSPs with accreditation from hyperscalers, must be given preference. For example, a provider with an advanced consulting partner certification from AWS has the seal of approval from the hyperscaler, which states that it is an experienced AWS consulting partner and that is recognized as an AWS solutions specialist. Similar partner certifications are offered by other hyperscalers. Along with this, an enterprise must also check if a provider has service validation certifications for cloud migration. Aspire Systems, an Advanced AWS Consulting Partner, is capable of helping enterprise clients choose the right cloud provider, because of their extensive experience in migrating applications to the cloud. They leverage their next-gen proprietary tools and platforms to evaluate a client's IT estate and provide them an opinion on which workload should move to which cloud provider and why.

Recently, Aspire assisted one of the top four large financial consulting services firms that had typical monolithic applications for tax planning and compliance, including legacy technology. Aspire leveraged its Accelerator for microservices and other proprietary SaaS platforms to migrate its workloads to a public cloud infrastructure. Around 20 microservices were migrated within a short period of time. Also, end-to-end CI/ CD implementation was carried out, alongside the implementation of a fully automated infrastructure and testing. This enabled the client to develop **new revenue** streams as well as maximize business value by leveraging a next-gen cloud ecosystem.

How to Leverage an MSP

When selecting an MSP, enterprises should look for a few key qualities. It is advisable to check if an MSP offers flexibility in service models as well as delivery, has a large pool of cloud resources, has a strategic partnership with cloud providers, has robust SLAs, supports 24/7 model, or through multiple time zones. Some of the factors to be considered could be backup and recovery strategy, established escalation path, and reliability of the single point of contact. In addition, enterprises need to carry out a thorough cost analysis before engaging with any provider. The analysis should provide an estimation of how much will be saved if the tasks are outsourced, what expenses should be considered, and it will facilitate the move from a capital expense to an operating expense model. However, cost reduction should not be the only goal. At times, customer experience enhancements can lead to higher costs. Enterprises need to prioritize their goals and make decisions accordingly.

Any migration initiative begins with the CTO's intention to change to a new and improved system from an outdated system, assessment of the challenges of the current system, and definite plans on the implementation of the new system, to finally end up migrating workloads to the cloud. Generally, migration activities are determined through the 6R model – Rehost, Replatform, Repurchase, Refactor, Retire, and Retain as explained in the illustration below:



Figure 3: Six Common Strategies for Migration - "The 6 Rs"

When an enterprise concludes that legacy applications are no longer on par with business needs, the option of repurchasing is a time and cost-effective option. Decommissioning and investing in a licensing change, from on-premises license to cloud is, surprisingly, a smaller effort than rehosting, lift and shift, which is next in line, in terms of effort. A service provider, such as Aspire Systems, offers mature tools that can carry out these projects with little effort. Replatforming is a compromise – one can call it lift, fix a few bits, and then shift. The approach seems to be cost effective and is affordable, but often does not help tackle all the challenges. This is where refactoring finds relevance: it can be imagined as a re-architecting program and is the most expensive approach, especially considering that most projects usually try rehosting or replatforming first, then engaging through strategic partnerships with public cloud infra-structure providers, including AWS, Microsoft Azure, and Google Cloud Platform, with which they are working closely to co-develop cloud offerings, and have joint go-to-market strategies. This approach provides a win-win for all involved parties.

In reality, a number of solutions are used, in combination, to break up monolithic structures. Based on the application assessment undertaken by the MSP, a workload is moved to the cloud by leveraging a mix of the 6Rs, as well as an enterprise's requirements, in terms of budget and urgency of moving to the cloud.

Aspire Systems' Cloud Capabilities

Aspire's expertise lies in helping clients with their cloud journey, especially the clients in the banking and financial services, retail, wholesale, and automotive industries. It works closely with AWS to offer cloud Replatforming services to its clients. It also has a feedback mechanism for its clients, that is looped back to AWS. Aspire has extensively participated in the AWS program. Two of Aspire's cloud consultants are AWS ambassadors, the highest recognition given by AWS. There are less than 250 AWS ambassadors globally.

For any cloud transformation engagement, Aspire's sweetspot has been to migrate any workload through either refactoring or re-architecting, instead of the standard lift and shift. The company leverages containerization and microservices technology in almost all its cloud transformation engagements. Aspire has a strong engineering background and brings its vast experience into re-architecting workloads in order to migrate to the cloud. This enables it to take full benefits of the cloud ecosystem. Aspire has expertise with the following AWS services, microservices standards and design patterns:



Figure 4: AWS Services



Figure 5: Microservices Standards on Cloud

Aspire has considerable experience in multiple cloud-native technologies, and, to date, has released more than 500 microservices on AWS, Azure, & Google Cloud. It has helped several clients save millions of dollars in operational and licensing costs. From a DevOps perspective, the company has been able to achieve more than 90 percent stability while deploying the applications.

Remote working has proven to not only be as effective as working in office premises, but also saves on real estate space, ensures less commuting, and improves employee flexibility. Aspire Systems has the capability to design service offerings with goals such as reduction of administrative work, improved reliability and security, and increased flexibility and scalability. This is further aided by extensive training programs for internal IT, equipping them with the skills needed to maintain new systems.

XaaS is the new norm: The times when systems could be implemented by a few individuals with the expertise, then managed in-house, have changed. The fast-evolving nature of technology has triggered the growth of the tech services industry. Enterprises of all sizes feel the need to move to the next stage of IT evolution to deal with complex problems that need to be specifically addressed. By creating adaptable solutions, that take GRC into account while planning, and are not just geared to troubleshooting. Vendors that offer Anything-as-a-Service (XaaS) are considered valuable by enterprises embarking on their cloud journey.

The idea of XaaS is a strategic blueprint for addressing complex IT issues, while, at the same time, allows the flexibility for business efficiency. XaaS is also redefining many of the basic goals of modernization, allowing enterprises to set up functions as horizontal services, instead of silos, available across organizational boundaries. This means that suitable application programming interfaces (APIs) can be used by several departments in a company for interaction. For example, businesses can use a customer service module that enables a sales team to track a client's past interactions with the company. This same module can also be used by the IT department to manage service calls, and by the purchasing department to manage preferred vendors. XaaS is very well suited to the small and medium-sized enterprise (SME) segment, which has a higher growth potential. It allows SMEs to optimize ROI, enhance the agility of company systems, control downtimes, introduce efficient solutions, improve productivity, and discover how the latest cloud solutions can help their business be more innovative.



Aspire offers several solutions for different use cases, where it leverages its platforms for various requirements. Some of the prominent solutions are listed below:



Figure 6: Aspire's Robust Frameworks and Solution Accelerators

- IMAGYN (Aspire Libraries for Ingest, Compute, Insight and Analysis) solution helps users to develop proofs of concept, validate technology options and run feasibility analysis for various use cases, using analytics that leverage big data and cloud technologies for migration activities.
- AURAS is an integration solution accelerator that connects data, applications, and systems across a hybrid IT landscape, and helps to accelerate business agility. Its AURUS Cloud solution addresses the challenges while integrating data and applications from different sources, and offers a unified cloud based scalable, reliable, and manageable solution that accelerates enterprise connectivity.
- PRIOS is a robust framework for phygital (physical + digital) retail and is an in-store omnichannel solution that has globally helped several large enterprises to, improve their retail store customer experience.
- **Techcello** is a Microservices bases Multi-Tenant SaaS accelerator that helps product companies manage their product suite, tenant accounts and licenses. With services like Identity and Access Management, Event Mesh, Workflow Management, and Microservices Dependency Management, this solution is available as a plug-in model.

- AFTA (Aspire Framework for Test Automation) is a selenium based Hypertesting framework, built to offer intrusive testing in the shortest possible time. It is powered by AI and machine learning components that allow project teams to manage multiple automation components under a single framework and conduct effective functional testing, by leveraging functional automation tools for non-functional testing as well, adding more power to Agile- and DevOps-driven environments.
- ACIA is a ready to use digital solution for insurance firms that automates core business functions to
 offer superior digital experiences. This solution comprises common business components, an intuitive
 user interface framework to develop intelligent digital experiences, and can help to reduce operating
 costs by one-third.
- DevOps Portal is a tool for provisioning managing the environments, and the CI/CD, in a hybrid-cloud set up.

Conclusion

As the world gets accustomed to a cloud ecosystem, cloud-native migration will become the norm. Service providers are working in collaboration with the opensource world and are leveraging cloud-native tools and accelerators that can take full advantage of a public cloud infrastructure. Aspire Systems is one such organization that believes in delivering endto-end value for its customers through strategic partnerships with cloud technology providers, enabling the needed agility to ensure sustained growth. Its partnership with AWS has been rapidly evolving, including a joint go-to-market strategy. This has led to a more sustainable approach to investments on cloud infrastructure, thereby increasing business value rapidly and exponentially.

Aspire Systems' cloud migration services have delivered end-to-end cloud strategies and architected and implemented solid cloud foundations for several enterprise clients across industries. These engagements have helped these organizations overcome key challenges and achieve predictable cost structures, improved the use of modern technologies, enabled innovation and increased productivity, thus maximizing business value.

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