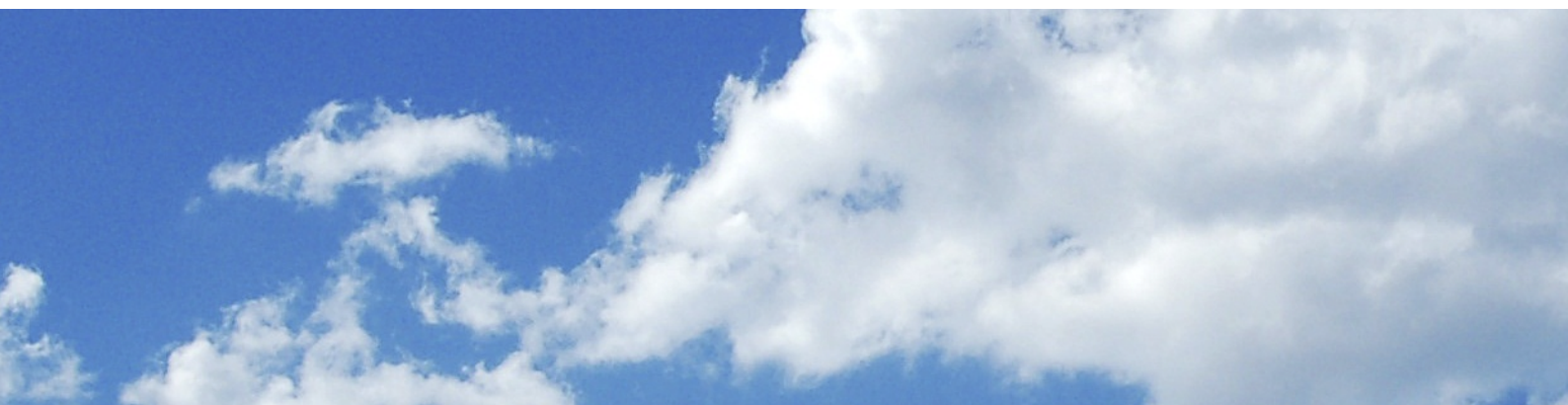


INDRA'S TECHNOLOGY ASSETS: A KEY ELEMENT IN AN END-TO-END CLOUD STRATEGY





White Paper

Indra's Technology Assets: A Key Element in an End-to-End Cloud Strategy

Sponsored by Indra

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IDC OPINION

Cloud is a reality: it has reached a critical mass in terms of market size, and the consistently high growth rate and the widespread penetration across all sectors, regions and company sizes prove that this technology model has come to stay.

Cloud enables a business transformation, driven by the emergence of a set of intelligent solutions integrating cloud with Big Data, mobility and social business. This combination constitutes what IDC calls the third platform, and is creating a new era of innovation and business opportunities.

Technology is moving from the periphery of the company to the core. This shift is changing the mission of the IT department, from a supporting function to a leading role in the transformation process in the organisation. The IT operational model is also changing, from a project-based approach to a service oriented model, basen on the creation of a catalogue of services, and the management of the whole lifecycle, aiming at a self-provision by the user when possible. For this transition to be a success, a close collaboration between the IT department and the business units will be necessary.

This process requires a cloud strategy, which will be different depending on the organisation, and will have to encompass the technological as well as business aspects. This will translate in the creation of a cloud roadmap, which will guide the organisation along the different stages of maturity. This coordinated approach will ensure maximum efficiency and profitability of the cloud based processes.

Indra is aware of this profound transformation taking place, and positions itself as an end-to-end service provider, helping organizations build a cloud strategy. Indra solutions cover the whole implementation cycle, from the definition of the most adequate roadmap for the company and the creation of a reference architecture to maximize performance and minimize TCO, to the service management and optimisation for continuous improvement, and the creation of new services.

Indra solutions are based on its own infrastructure (*Indra Flex IT*) and cover also PaaS and SaaS, allowing maximum control of the service by the user. This approach makes possible the integration of the customer along with third party architecture, enabling the creation of a homogeneous and simplified technological ecosystem, providing the agility and flexibility that businesses require.

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THE CLOUD, THE ENABLER OF TRANSFORMATION

Current Situation

IDC estimates that Cloud services will reach a market volume of \$1 billion worldwide in 2014, growing at a rate of 25% from 2013. These figures prove that the cloud is already an established reality. Its adoption keeps gaining traction at two levels: new entrants, as well as existing users seeking deeper or broader implementations.

"In the CIO's Mind"

The CIO perceives cloud as a source of competitive advantage, offering increased business agility, and enables greater flexibility to escalate the service deployment and delivery, aligning it to the actual needs of the business.

The CIO will need a master plan in the form of a transformation roadmap, including the classification of workloads, a cost-benefit analysis of each individual migration, and a governance system to ensure the company keeps control of the process while providing the necessary quality, safety and response time levels required.

The IT department will need to redefine their ideas, skills and attitudes. They will need to count on security and virtualization experts, as well as enterprise architects among other specialised profiles. However, the biggest challenge will be to gain a deep understanding of the relationship between technology and business. Before carrying out the actual implementation, the CIO has to make sure his department is prepared to make the change from a project-based to a service oriented delivery. This new operating model requires the introduction of mechanisms to manage the services from the demand end and the provider end:

- **Service Demand Management:** Cloud creates the opportunity to identify and co-generating new services proactively along with the business units. But the demand management will require the creation of a service catalogue and the management of their lifecycle, from activation to discontinuation.
- **Service Provider Management:** Although cloud services are transparent to the user, they will still need a support system. Users will look at the IT department for support, regardless of where the application is located, assuming a close relationship between the service provider and the IT department.

Once the IT department has embraced the service oriented model, the role of the CIO will evolve from an "infrastructure technician" to a true service provider, dedicating a significant proportion of the time to identify new opportunities create value for the business.

IMPACT OF THE CLOUD IN BUSINESS

Cloud adoption will have implications for the IT department, making possible a more efficient use of technological resources and presenting a new cost model: -the Total Cost of *Ownership* (TCO) will turn into Total Cost of *Operation*. But cloud will also impact the business positively, providing value through greater agility and enabling innovation.

- **Agility for business:** Cloud services provide business agility, for example accelerating the geographical expansion of the company through the flexible scalability of resources or dealing with seasonal or unplanned variations.

- **Source of innovation:** Cloud reduces the cost of experimenting and trying new services. But, when it is implemented in combination with Big Data, mobility, and social, can point to innovative products and services, learn and incorporate feedback, and transform the relation with customers and also among employees. There is great potential from this combination, and we are just seeing the tip of the iceberg.

In IDC opinion, a key task for a CIO will be to identify combinations of cloud with Big Data, social business and mobility that will lead to innovative solutions differentiating the company from the competition.

THE CLOUD REQUIRES A STRATEGIC VISION

Until now, business have invested in cloud following a predominantly tactical approach, seeking specific solutions to their most immediate problems, in a process generally driven by cost reduction. However, as companies use cloud, implications start to unfold, and they realize that in order to exploit the cloud opportunity in full, a strategic approach becomes necessary. This requires a comprehensive understanding of cloud across three dimensions: people, processes and technology.

People

People most directly involved in the adoption of cloud belong to the IT department and business units. At the present, both groups are disconnected: the business units demand changes, pressured by the need for a greater agility in the marketplace. If the adoption of cloud occurs in a disorganised way, the learning will fade and the benefits will be isolated from the rest of the company.

A strategic approach requires a coordination of resources and expertise, allowing a greater diffusion of the learning acquired, and promoting the collaboration between business units and the IT department from the beginning. In this way, The IT department can acquire knowledge about the business units, which not only serves to align technology with business, but also to enable the joint identification o opportunities.

Processes

An essential milestone for the service oriented approach to TI is the creation of a dynamic, accessible and user- friendly service catalog including self-provision for some services.

To make it possible, some actions need to be taken: The services need to be appropriately defined and classified. They will also have to be standardized in order to achieve economies of scale and ensure use across the organization. For each service, a SLA will need to be defined. The cost of using the service will be charged to the end user department. Therefore, a cost model has to be defined, allocating the cost of the service in relation to the use of technological resources.

Technology

Cloud is delivered in three main levels: platform, infrastructure and application as a service. Each one will have a different rate of adoption. As the technologies evolve, the focus will need to shift from the actual service delivery to a broader perspective that considers the interdependencies between the different deployment models, the ease of adoption, the technological maturity of the solutions and the business risk.

Early stages of cloud adoption have been motivated primarily by tactical needs within organizations. In that respect, SaaS is the most developed model, since it has been embraced by the business units to solve specific requirements. However this tactical approach it lacks a sense of perspective in relation to the global IT infrastructure of the company and the integration with existing systems. A strategic approach is needed, covering a comprehensive analysis of the requirements and the relation with the current situation of the business, in order to determine the best technological solution.

SERVICE ORIENTATION: MANAGING HYBRID ENVIRONMENTS

In the new technological culture, where environments are increasingly interconnected and users demand a higher level of service, cloud solutions represent an opportunity to transform the IT department, into a service delivery entity.

The Cloud is an “evolutive technology”, that is, it does not just cover a temporary need, but represents a new paradigm for the provision of IT services. In this context, the IT department should position itself as a service broker, able to choose the most appropriate technological solution for every business need. This requires assimilating a new concept of ecosystem, where the IT department works in competition with technology providers, while at the same time counting on them to deliver some of the IT services for the business (a co-opetition environment).

One of the main tasks of the department will be to manage the technology providers, which should be recognized as a source of value and knowledge by the rest of the company. This task covers not only the selection of suppliers, but the alignment between the capabilities of the solutions and the company’s service requirements, including the management and operation of the service itself.

To meet specific requirements, certain company data or processes may have to be hosted in a private Cloud, inside or outside the company. Cloud vendors have developed solutions that can make different types of Cloud coexist, public and private, with in-house technologies. This is an example of **hybrid environments**.

A hybrid solution offers the possibility of moving loads based on a set of criteria (scalability, costs, security, etc.) between the different types of cloud and traditional architectures.

EACH COMPANY MUST FIND ITS OWN PATH TO THE CLOUD

There is no single path to the Cloud; each company will find its own way. The allocation of workloads on the public Cloud, private Cloud or a traditional model depends mainly on internal factors pertaining to each company. There are no standard guidelines to be followed.

IDC has identified some possible paths to the cloud:

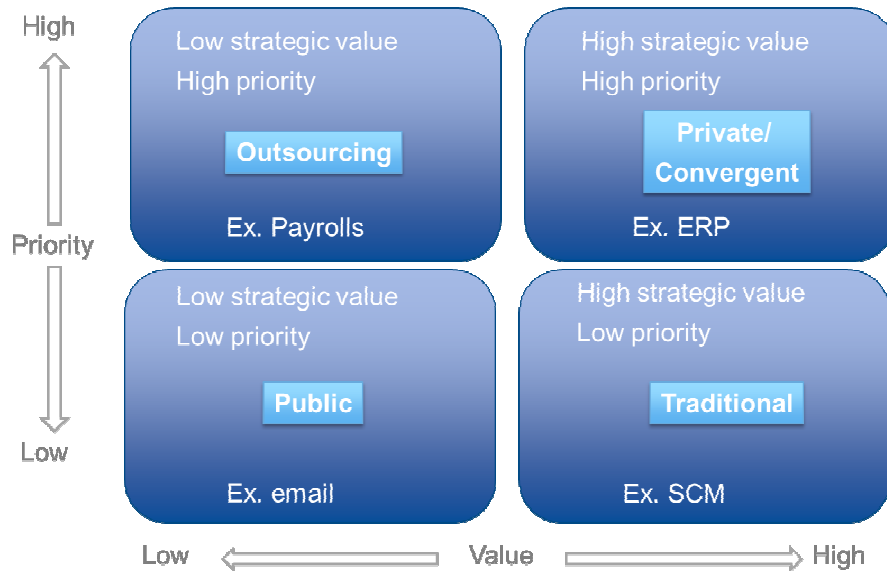
- **Cloud by evolution:** companies follow an evolutionary path, consolidating their data centers, then applying virtualization, incorporating automation tools, orchestrators and, ultimately, self-service portals. It is important to complete each stage properly, before moving to the next one.
- **Cloud by sharing:** due to the growing range of services available, companies have an increasingly wider choice of models that promote infrastructure sharing or pooling to serve the entire company, and even the ecosystem of partners, customers and suppliers (extended company).
- **Coupled with the deployment of Cloud services:** each workload needs to be adapted to the most suitable deployment model (cloud based or not) considering the risk/benefit aspects.

Managing the complexity of hybrid environment that will result is going to become one of the key priorities for IT departments.

Figure 1 shows a diagram outlining the decision-making process of the technology model for each workload type, based on the analysis value-priority

Figure 1

Model Selection Quadrant for Workloads in an Organization



Source: IDC, 2014

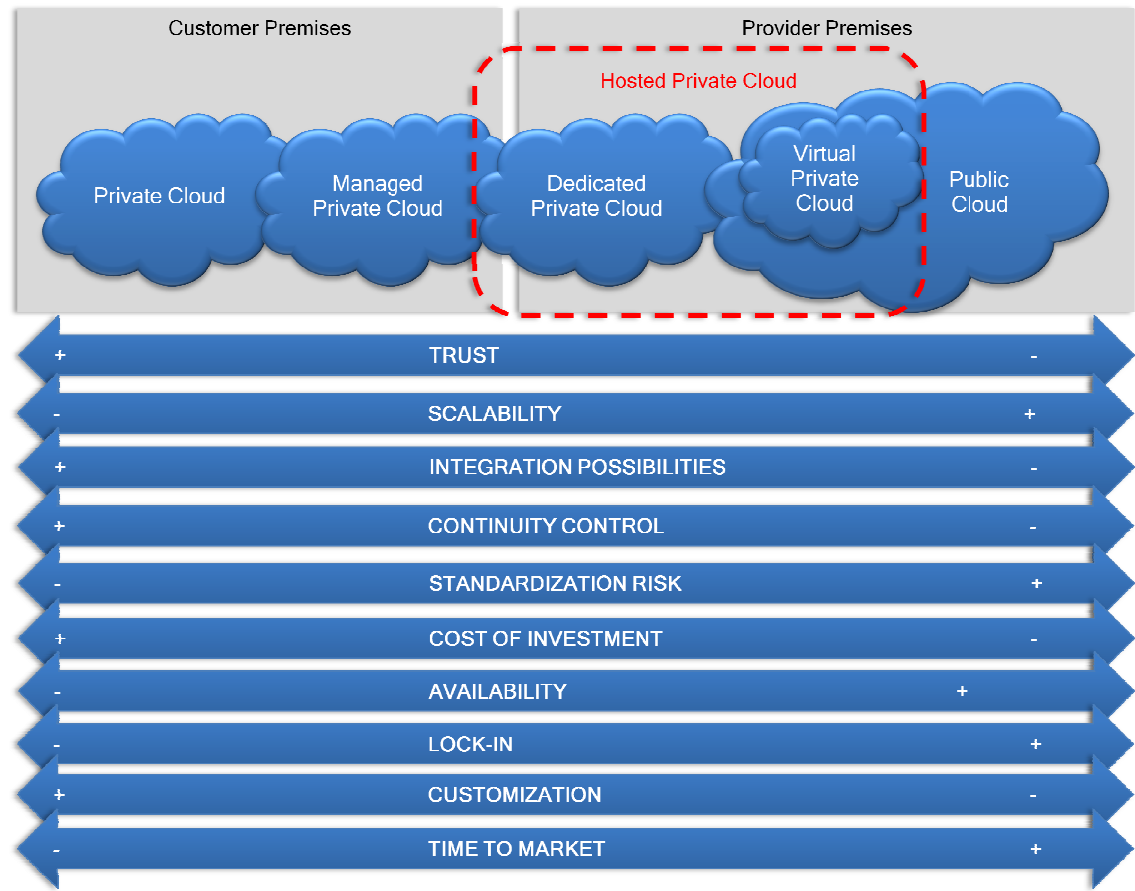
The use of professional consulting and integration services helps companies transition to cloud by choosing the best route available to them, reducing risk and maximizing the return on investment.

Load Selection

Load selection should be carried out on an individual basis. The criteria shown in Figure 2 will be more or less of a priority depending on the particular process associated with a workload in the company. It is convenient to make a detailed evaluation for all of them, prior to the migration process.

FIGURE 2

Decision Criteria for the Load Allocation in the Cloud



Source: IDC, 2014

Additional issues that may appear during the selection of workloads to migrate to cloud are the ease of **movement from one cloud to another**, the ability to **extract data**, the roles associated with **backup and disaster recovery**, the **effective performance** depending on distance (taken as the distance in the network link), service quality and design, the ability to **downscale** if needed, and the **suitability of the pay-per-use model** to each particular situation.

INDRA'S OFFERING

Indra's Cloud service offering is organized around a catalogue of end-to-end solutions. Indra structures its offering from two perspectives: the technology producer - technological architecture - and the technology consumer - service catalogue.

In terms of **technology production**, the aspects covered are IT governance, existing infrastructure optimization through the Cloud and managed Cloud development, together with the BPO services provided by the integrator.

In the case of **technology consumption**, Indra provides multichannel solutions focused on mobility, to offer a full **portfolio of Cloud applications** to its customers, both functional and industry specific, based on its own developments and third-party solutions, presented via a **marketplace**, for an agile

and standardized deployment of enterprise applications within the company, and a **laboratory** for solution design.

In Cloud: Overview

In Cloud is the umbrella under which the whole of Indra's Cloud services are offered. For the delivery of Cloud platform services, Indra has its own architecture, called *iDynamics Cloud*, incorporating a *PaaS* platform for the development and production of new *SaaS* applications, called *G@PaaS*. This *PaaS* platform provides the applications deployed on it with multitenant capabilities and auto-scaling on demand. Finally, *Indra Flex IT* is Indra services and infrastructure hybrid cloud, which has integration capabilities for the customer as well third party infrastructure.

Incloud has the components required to evolve applications and data to marketplaces in which, in addition to the e-commerce functionality, there is a complete backend solution providing a complete visibility over the transactions carried out by the end user. Indra already has a solution portfolio specializing in mobility, the Smart and Analytics solutions, which can provide the marketplace with content.

On this bases, Indra aims at providing the client IT infrastructure with flexibility and scalability, reducing the effort required to deploy and maintain applications, including service self-provisioning, the decoupling of infrastructure and operating system, interoperability and multi-tenancy (multiple instances of an application on a single deployment). Additionally, Indra brings to the market a broad range of services design to help Corporate IT departments become cloud service brokers.

Indra's approach is to help clients in their journey to cloud, navigating through the different maturity stages, in order to develop an architecture for IT services aligned with business needs. Indra's strength lies in the combination of all these elements. For instance, the Smart Platform offers analytics, integration, Internet of Things, mobility, geolocation, social business and cloud.

Stages of the Journey: Preparing for cloud

Indra has developed a four stage transition model to cloud, aiming at ensuring excellence and customer productivity. This model assesses the current client processes and resources, and creates an implementation route covering each successive stage: planning, transformation, operation and optimization.

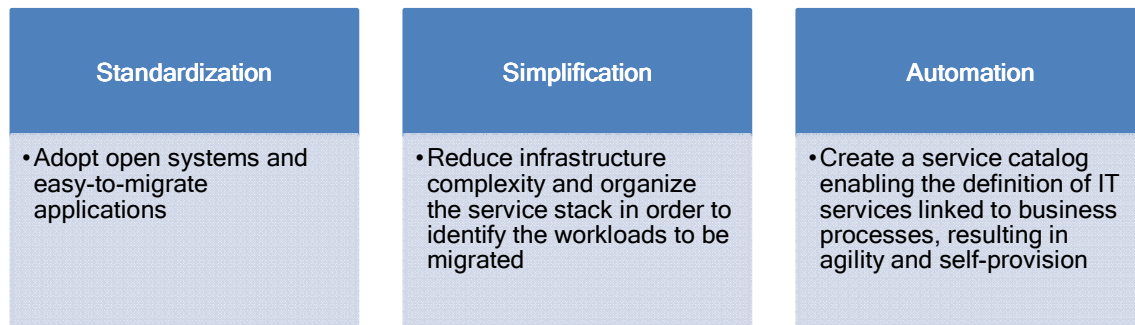
To that end, Indra presents a methodology called *OpTImiza Cloud*, applying the best practices in the market. This is offered along with the expertise of Indra's Business Consulting unit as well as other technical units, in order to provide insightful knowledge to make strategic decisions.

Planning Stage

The objective of this stage is to analyze the business impact of the cloud solution, and to establish a roadmap covering the evolution of the technology as well as the service deployed. At this point, the client has not adopted the cloud yet, or is experimenting with it. The three elements to be covered in this stage are shown below:

FIGURE 3

Key Aspects in the Transition to Cloud



Source: IDC, 2014

Indra helps the client understand their current architecture and determine way to standardize, simplify and automate processes and systems, creating an optimal roadmap to cloud.

Transformation Stage

In this phase the actual migration plan is established. At this point the company decides what infrastructure and what technological model are best suited for the service, following several criteria including performance optimization, TCO (reuse of existing components to the possible extent), migration potential and consistency with the application ecosystem.

Operation Stage

The third phase is the actual service operation, which requires defining the service levels to ensure business continuity (SLAs), as well as specifying roles and processes. The objective is to achieve maximum efficiency through a thorough service definition. This provides greater transparency in IT asset and cost accounting. This also allows the cost assessment service customization when needed.

Indra provides monitoring and control tools for cloud services, available for the client as well as third party cloud, combined with the expertise of its team of consultants, to help define and update the client's cloud strategy.

Optimization Stage

During the last phase, where the service is operational, process improvement and innovation is carried out on a continuous basis, and the customization and industrialization requirements are balanced. Synergies across the whole IT infrastructure are created and business value is quantified. At this point, the IT department becomes a driver of innovation in the organization, and technology assets acquire significant relevance. This can result in the generation of new services.

Workload Selection

The key decisions to be taken in a cloud strategy include which workloads to migrate, what cloud infrastructure is best suited for each service and the definition of SLAs to meet business needs. These decisions are individual to each company. Indra has created the **Cloud Thermometer** to help the client decide which loads should be in the cloud, and what architecture is best.

Indra considers that the technological transformation of an organization minimize any business disruption and create maximum value from existing assets. Indra presents three possible routes, shown below in Figure 4.

FIGURE 4

Three routes to move Applications to the Cloud

Adopt	Migrate	Redo
<ul style="list-style-type: none">• If there are alternative tools offering additional functionalities or price/performance advantages, it is possible to integrate them in the new structure. This option offers cost and speed advantages	<ul style="list-style-type: none">• In the case of legacy solutions, Indra offers tools to evolve systems from the base software, eliminating the need to reprogram the application. For example, a Java development in the 90's can become multitenant and scalable by substituting its current container for Indra's	<ul style="list-style-type: none">• Host-based or discontinued proprietary systems have to be re-developed. Although there are translation tools for this type of applications, the amount of programming hours is too high, and it results in low quality and performance. Indra proposes an analysis of the solution, followed by a full redesign, preserving the complete functionality with maximum performance in the new platform

Source: IDC, 2014

In addition to the technological analysis in relation to the infrastructure, Indra carries out a TCO analysis of the new Cloud solution to determine which option is the most appropriate for each workload. Therefore, the project objectives are focused on business parameters and not just on technology.

In Cloud: End-to-End Offer

Indra's cloud value proposition encompasses the complete migration process to the Cloud, from production to consumption.

From the **technology consumer** (user) point of view, Indra provides a comprehensive application catalog, which can be accessed through a marketplace, and is accompanied by a lab (Labs) in order to testing and develop new customer applications or services. More than two thousand companies in the industrial, automotive, logistics, retail, energy, telecommunications and public sectors trust Indra for cloud solutions, with over twenty-five million transactions annually.

IDC highlights the following solutions offered by Indra:

- **Direct Sales:** This solution accelerates the contract signature process, by acquiring data through mobile devices equipped with a camera. It allows documents to be scanned and contracts to be signed on the device using a electronic signature, reducing processing times by up to 90%.
- **IsoCloud:** Cloud application managing environmental and quality management systems for companies across all sectors, which are ISO 9001 or ISO 14001 certified, or in the certification process.
- **Analytic Lab:** Intelligence services under a KPO model (Knowledge Process Outsourcing), offering customers the best analytical and predictive capabilities in order to optimize and grow the business without investing in technology or human capital. It is appropriate for

advanced customer segmentation, campaign management and micro-marketing campaigns, database enrichment with external public data, market research studies, recommendation algorithms, incentive policies, adjusted pricing models, sales and distribution network optimization, social networking observatories and social-media-based model optimization.

- **B2B Connect:** This solution facilitates the exchange of information between companies, business process integration and collaboration between an organization and its stakeholders: customers, suppliers, banks, distributors and other stakeholders, by automating logistic processes, EDI, supply chain and electronic billing.
- **Smart Agent:** Natural language interface, along with an inference engine based on expert systems and the use of heterogeneous knowledge sources to infer and process new knowledge through the information obtained from the user and different sources on a particular context. This application is currently in Labs.
- **NetPlus:** Payment gateway solution developed by Indra operating card payment operations (credit, debit, private, virtual...), bank accounts and loyalty programs, deployed across a wide variety of devices and transactional operations, and complying with the most stringent safety standards, PCI-DS and Secure Electronic Commerce (3D-Secure).

From the point of view of the **technology producer** (the infrastructure), Indra provides three Cloud management solutions:

- **Desktop as a Service (DaaS)** Desktop provision from a centralized virtualized infrastructure enabling unified control and management of multiple desktops and applications, in addition to setting their features. The *DaaS* solution reduces TCO, extending PC life, accelerating deployment and promoting independent device management.
- **Infrastructure Management as a Service (IMaaS):** Global technology management service based on *Indra Flex IT*, Indra's hybrid and managed cloud. In this management model, Indra provides end-to-end server management, from the underlying infrastructure to the middleware and application operation, as opposed to the simple provision of infrastructure provided by traditional IaaS models. In addition, Indra can manage customer and third-party infrastructure.
- **Application Management as a Service (AMaaS):** Dynamic application consisting of a set of integrated tools covering the development and service management life cycle. It includes service control and monitoring, ticketing-as-a-service tools, maintenance and parameterization of customer and third-party SaaS solutions.

CONSIDERING INDRA: MANAGED CLOUD SERVICES PROVIDER

Supplier Selection Criteria: Indra as a Reference Provider

When planning a move to the cloud, the choice of the provider to lead this transformation can have important implications for the outcome of the process. The IT manager should especially take into account **reliability, quality, capacity and cost structure** in order to achieve:

- **Flexibility** to adapt loads to the specific needs of the company at any time, in relation to capacity and cloud model (public or private).
- **Agility** in change management, service provision and architecture operation.
- Management of **hybrid** environments, where services coexist in the public cloud, private cloud and legacy systems.

- Real **Integration** in the third platform pillars: Cloud, mobility, social business and Big Data / analytics.
- Monitoring and ticketing tools to verify SLA compliance.

Trust

In IDC opinion, it is essential that the provider has a thorough understanding of the customer and can assess their needs. It is important that the provider brings expertise in problem resolution, integration capabilities and operation of hybrid environments, as well as has the capabilities to integrate the four pillars of the third platform: Cloud, mobility, social business and Big Data. In this respect, Indra covers all sectors and geographic locations.

An issue related to trust is **transparency**. Indra provides a project monitoring methodology that includes governance models, reporting tools and SLA-based infrastructure management. It provides a KPI definition, increasing transparency and facilitating audits. Indra starts the technological assessment by evaluating the application and workload map, in order to assess the suitability of cloud, according to a number of criteria, in particular the ability to deliver the results identified during the consultancy stage.

Quality

Supplier quality can be measured by certain parameters. In Cloud solutions, the most important ones are the technological and human assets available to the customer to meet the project needs, the quality of service measured in accordance with the SLA, formal certifications and recognition in the marketplace.

Indra offers their managed, hybrid Cloud infrastructure. It allows the integration of their own solutions with third-party solutions, while keeping a single infrastructure management team, and preserving the interoperability between heterogeneous platforms and services. In terms of certification, Indra holds ISO 20001 and ISO 27001 IT quality management and security certificates, among others.

Capacity

Cloud is an enabler for growth and internationalization of the business, thanks to the flexibility, scalability and accessibility it provides. However, businesses should also check the supplier capability to provide knowledge, support, management and monitoring tools at the scale required by a global business. Indra is present in the five continents and has infrastructure and resources in most Latin American countries.

Regarding the ability to lead a migration project to the Cloud, Indra provides the Decalogue of key activities detailed in Figure 5.

FIGURE 5

Decalogue of Key Tasks for a Cloud Project, according to Indra

Service standardization	•Review business processes to identify problems that can be solved using cloud
Execution Commitment	•Engage all stakeholders, including cross-functional department areas
Process Review	•Review the IT infrastructure, especially local bandwidth availability
Risk Management	•Define responsibilities in data protection and develop a risk management plan, in agreement with the Security Department
Budget and Forecast	•Present possible use scenarios with outlining external and internal costs in detail
Business and Development Plan	•Create a project operational plan, agreed by all stakeholders
Cloud Market Study	•Forecast future cloud growth, and take into account the IT department strategic plan
Supplier Assessment and Selection	•Choose the suppliers meeting the risk information and service management requirements
Dashboards	•Monitor system performance and service levels and inform managers regularly
Contingency Plan	•Build, test and update a contingency plan offering operational guarantees in case of incidences

Source: IDC, adapted from Indra, 2014

Cost Structure

Cost structure is a relevant factor when choosing a provider. Although the operation of the cloud model assumes a pay-per-use system, the provider may structure it in different ways. For Indra, IaaS and PaaS are billed on a per day basis, and by use of resources (core), with no minimum contract commitment, while SaaS services are billed per units consumed (documents, transactions, tickets, etc.). The DaaS service has a variable cost depending on the user desktop and is billed monthly, based on usage. In the case of MaaS, pay per use is based on service level, regardless on the underlying use of physical infrastructure.

Additionally, it is advisable to determine a priori the upfront implementation costs, to estimate as accurately as possible the expected labor and infrastructure efficiencies, in order to determine the project TCO.

Indra Response to Model Inhibitors

The main inhibitor for the adoption of the Cloud model is **security**, although the sensitivity depends on the specific sector, the most sensitive being the financial, legal and public sectors. The *Indra Flex IT* model has obtained a number of security certificates which provide accreditation of the information security across all its centers, and secure access through virtual private networks and dual firewalls for access to the private cloud. All security levels related to the *Indra Flex IT* infrastructure are audited by a qualified cyber-security team.

Indra offers an integration of the customer assets, ensuring the information is auditable at all times. Additionally, it allows hybrid environments, where the most sensitive loads can be located on the customer premises. One of Indra's strengths as an integrator of IT solutions is the availability of tools and applications for system integration.

Other inhibitors are **performance** and **availability**. These two aspects are linked to the quality of service and they can hinder the adoption of Cloud models. Business continuity needs to be guaranteed when a given load is migrated to the Cloud. Nevertheless, this challenge can turn into an opportunity in the case of organizations that cannot afford the deployment of their own infrastructure to guarantee business processes continuity, but can obtain it by the cloud providers, thanks to the economies of scale.

Indra presents a flexible and customizable SLA frame, and offers an initial concept test, to enable the customer to define a SLA that will minimize the project TCO. This, along with a set of control and monitoring tools to verify compliance, and the fact that there is no minimum contract commitments, provides the customer with transparency and flexibility to adopt a "Cloud first" strategy in the organisation.

INDRA'S OPPORTUNITY IN THE MARKET

In IDC opinion, Indra is well positioned to capture the opportunity that appears in the transition from a tactical to a strategic approach to the Cloud, as the organizations will need to make some decisions:

- **Adopt a default cloud strategy** ("Cloud first") for new projects, will evolving the legacy architecture. The cloud strategy is driven by business needs, where there is a greater demand for experimentation and agility. In this context, the cloud should be considered as the first option. Indra is well positioned to help companies in their "Cloud first" strategy, based on their capabilities to integrate new services into the existing technological platform, as well as to manage the hybrid environments that eventually result from cloud implementations.
- **Change the operating model of the IT department, focusing on service delivery.** This means that the IT department will need to reorganize around two levels: on the one hand, service generation, and on the other hand, service delivery, separating the service layer from the underlying technology. Indra is well positioned to help the IT department in this transformation. As a proof, Indra's offering presents a clear distinction between service production and service consumption.
- **Define a long-term Cloud strategy**, meeting business needs and evolving in line with the business. Indra has the capabilities to assess the business needs, as well as to determine the most appropriate deployment model and in the end operate the service, avoiding possible misalignments between strategy definition and execution.
- **Implement global and centralized infrastructure management policy** that favors synergies, avoiding duplication and allowing better governance and risk management. The fact that Indra is positioned as an end-to-end supplier provides them with a better understanding of the impact of the solutions (for instance, the existing architecture). Furthermore, as Indra has built its own infrastructure, they can offer a simplified and uniform technological environment, preventing the complexities associated to a growing use of the cloud.
- **Accelerate the construction of applications and services based on the third platform**, which will allow the use of services and technology assets deployed in the Cloud. Indra offers an integrated platform with its own technological assets, such as GPaaS, iCloudBroker, SOFIA and other open-source solutions and integration with third-party solutions for configuring third platform solutions and Smart technologies. This provides autonomy and

the ability to carry out a complete project, including consulting, migration, support and the development of proprietary solutions, improving time-to-market through the private, hybrid or public cloud, thus ensuring a high level of control in implementation and service customization.

CONCLUSIONS

Cloud services enable business transformation, driven by the emergence of a set of intelligent industry solutions that are part of what IDC calls the “third platform”. In this context, businesses will have to develop a cloud strategy, covering all the technological and business aspects in the long term, and building a roadmap to the Cloud.

Indra, aware of this profound transformation in the marketplace, has positioned itself as a provider of end-to-end services, helping customers implement a cloud strategy in their organizations, offering its own technology assets including infrastructure, platforms and applications. They allow maximum control of the service, and have the capability to integrate the customer or third-party infrastructure, achieving a uniform and simplified technological ecosystem favoring the agility and flexibility that businesses require.

About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications and consumer technology markets. IDC helps IT professionals, business executives and the investor community make decisions based on facts regarding technology purchases and business strategy. Over 1,000 IDC analysts provide global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries worldwide. For over 48 years, IDC has provided strategic information to help its clients achieve their key business objectives. IDC is a subsidiary of IDG, the world leading media, technology, research and events company.

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