

## The Seven Golden Rules for Industrialized IU Services

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As the current economic climate exacerbates the need for lower cost and more flexibility, new IT service models have emerged after years of development to help address this problem. Organizations must learn about these new, just-in-time options.

### Key Findings

- Midsized businesses, independent business units of large organizations and Type A (aggressive) enterprises should start evaluating industrialized infrastructure utility (IU) offerings.
- Organizations already engaged in infrastructure outsourcing should discuss new offerings with their providers to take advantage of these new technology options.
- Large organizations should always compare different sourcing options (internal delivery, traditional outsourcing and IU) when evaluating their sourcing decisions and strategy.
- Clients should make themselves ready before acquiring a utility solution. This means adapting their sourcing strategy, method of vendor selection, contract negotiation strategy and governance model.

### Recommendations

- The IU is an emerging alternative delivery and acquisition model for infrastructure management services. Clients need to be aware and understand this emerging offering to leverage its value for their enterprises. Critical areas to be investigated include pricing mechanism and demand management, architectural specifications and limits, contract terms and conditions, security, compliance, auditing, and risk management.

## ANALYSIS

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The increased urgency for IT efficiency improvement, capital expense (capex) avoidance and cost containment is fueling the trend to consider leveraging industrialized services. Gartner defines industrialization of IT services as "the standardization of IT services through predesigned and preconfigured solutions that are highly automated and repeatable, scalable, and reliable, and meet the needs of many organizations."

While in the long term, the industrialization of IT services for new applications and business models will possibly evolve over cloud-based architecture and approaches, the short to midterm opportunity appears to mainly be in two areas: software as a service (service at the business application layer) and IUs (infrastructural services below the business application level) .

This note concentrates on IUs, that are "managed infrastructure services" — a category of services that is sometime also referred to using terms such as complex hosting, application hosting, IT outsourcing, data center outsourcing and data center management services. This note also focuses on the attributes of IU services, as confirmed by research on a specific offering: the infrastructure utility for SAP (see the Case Studies in Recommended Reading).

To qualify for the term "industrialized service" at the infrastructure level, a managed infrastructure service should present seven main critical elements:

1. **Service-Outcome Focused:** The articulation of the service feature is based on service levels and IT outcomes (availability, response time, performance versus price, and clear and predefined operational processes), rather than technology and its capabilities. The articulation of the overall value of the solution focuses on the business outcome (for example, lower and predictable cost, flexibility, ease of purchase, quality, less technical pains on technical management, and more focus on the application/process layer). The primary target of the solution is "business managers of IT" or "process/application managers," not deeply technology-oriented staff. While technical staff can and must inspect/audit architecture, technologies, tools, operational processes and security aspects, buying and leveraging these services doesn't necessarily require broad technical expertise; it's more of a business-oriented decision.
2. **Ready to Use:** Providers must have invested in actual infrastructures and data centers they usually own, and engineered the end-to-end service solutions for consumption by multiple clients. Assets and services are bundled together, enabling clients to easily hook up to this existing service. Contract negotiation, evaluation of the migration's in/out activities and actual migration project are still required, while being much shorter than with customized services and traditional outsourcing. Adding new clients/users should be a highly automated activity and should require hours-to-day timing (when the additional workload is marginal compared to the service provider scale). Even when hardware procurement and scale-up of physical configurations are required, time should be measured in days to weeks (not months).
3. **Usage-Based:** Clients get charged by the vendors in a usage-based pricing model, "per U per month," in which "U" can be a user, a unit of resources, or a unit of business transaction (for example, per user, per gigabyte or per transaction). Baseline mechanisms or similar terms and conditions (such as committed resources or maximum flexibility) are used to limit the risk exposure of the service provider.
4. **Scalable, Flexible:** The solution offers the client scalability and volume flexibility: the ability to increase or decrease volume or add/remove service features. Delivering flexibility as part of an economically viable usage-based business model requires assets

to be at least partially shared and virtualized, and this in turn requires an automated management and lean operations, the next two characteristics.

5. **Virtualized, Shared:** The infrastructure is virtualized to remove the link between applications and physical resources. The single client's applications or instances are managed in virtualized instances dedicated to the single client (therefore providing insulation of client workload). Physical resources may or may not be shared across different applications, instances or clients. Even if not all the assets are virtualized and shared (for example, physical servers can be committed and dedicated to a single client for security purposes, or a group of blades with virtual input/output can provide useful logical consolidation), other cost elements are actually leveraged (such as racks, networks, cable, physical locations, procedures and staff) to help control and reduce costs.
6. **Automated, Lean:** The management of such an industrialized service will be based increasingly on tools and automated tasks. Automation starts from the initial design of the environment and then proceeds through measures (enabled by the management tools), refinement of the operational processes and an increase of automated tasks. This process sets a maturation path for these services. The automation enables further increase of service levels, reactivity and flexibility, as well as further cost reduction and optimization of resources (see "Gartner Introduces the Infrastructure Utility Maturity Model").
7. **Standardized:** Automated management and a lean operational environment require the enforcement of a high level of standardization of the environment — on a platform level (technology implementation), as well as on the management processes (service management and change management), the outcomes (service level and service reports), and the commercial aspects of the relationship (terms and conditions, pricings models, and units).

Not all of today's utility services available in the market fulfill all these characteristics, nor are today's IUs fully developed; the most advanced being at Level 3 of the Gartner Infrastructure Maturity Model (IUMM; "Gartner Introduces the Infrastructure Utility Maturity Model").

However, the industrial IUs available today are beginning to deliver on the promises of industrialized IT services against traditional in-house or traditional outsourced services by providing good-quality service; fast ramp-up; and predefined, flexible price. These services usually appear much less expensive than previous approaches for client organizations that aren't both large and efficient.

Therefore, significant additional value is expected from these new approaches, as long as competition increases on that basis and automation and lean management practices fully deploy the value of industrialized managed infrastructure services.

## RECOMMENDED READING

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"Q&A on IT Services Industrialization"

"Keiper: Adopting an Infrastructure Utility for Flexibility and Efficiency"

"Case Study: Areva Gains IT Flexibility Through an Infrastructure Utility"

"Oxea Shows How Infrastructure Utility Can Deliver Speed and Efficiency"

"Case Study: How IT Utilities Support Rio Tinto's IT Dynamics and Company Moves"

"Gartner on Outsourcing, 2007 to 2008: Utility Delivery Models"

"IT Infrastructure Utility Services Reach 5% of Data Center Outsourcing Revenue"

"Gartner Introduces the Infrastructure Utility Maturity Model"

"IT Industrialization: Redefine Your IT Portfolio in Service Components"

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