



“CONSUMING” VS “PURCHASING” OR “LEASING”: SHIFTING TO “NETWORK ON DEMAND” CONSUMPTION-BASED DELIVERY MODEL

POSITION PAPER

Edition 02 August 2016

Alcatel-Lucent Enterprise - Consuming Vs Purchasing or Leasing; Shifting to “Network On Demand” consumption-based delivery model offer, Ed. 02
Page 1 of 26

ALE proprietary and confidential. Copyright © 2016. All rights reserved.

*This document was created for information purposes only; therefore, it has no contractual value.
For contractual terms, please refer to the Distributorship Agreement with ALE.*

ABSTRACT

All your business owners have to manage two main financial lines that measure their effectiveness to drive business:

- The business results line (top line): they measure the results of their actions to develop their business, maintain their existing customers' installed base while developing new business threads.
- The investments line (cost): they manage carefully their expenses to optimize them while ensuring that money engaged has a real impact on their business results line.

When investments concern Network Infrastructure (LAN/Wi-Fi) evolution, there is generally a need of alignment with your CIO team, even sometimes with your CTO team.

Then, for any major investment, as a Network Infrastructure evolution, your CFO approval is mandatory. Gartner and Financial Executives Research Foundation (FERF), the research affiliate of Financial Executives International (FEI), claim for a couple of years that "The CFO is increasingly becoming a top technology investment decision maker – if not the leading decision maker – in many organizations".

This is the actual "balancing act" equation faced by all business owners when investments concern Network Infrastructure evolutions.



Picture 1: the balancing act

The bottom line is always the focal point of your company and traditionally for technology investments, some CFOs preferred CAPEX over OPEX because they take advantage of amortization and depreciation of those investments over an extended period of time.

They are costs that can be planned for in advance, but the comfort of having spending certainty is dependent on the accuracy of the estimation of future needs. Although the actual spend for approved projects is "predictable," what was planned is not necessarily aligned with what is needed by the day to day business of that investment. In light of the rapid advancement of technology, Network Infrastructure needs are becoming **less predictable**.

Today, technology options and how they're delivered are simple. What once required dedicated skilled employees and loads of time (costs) can be fulfilled remotely by dedicated MSPs that specialize in a certain area and charge a consumption fee for its service.

Organizations have more options because they can afford the latest and greatest technology without having to find a large upfront to pay for it. Instead, they can focus on their core competencies and transition many

of their CAPEX investments to OPEX spending, freeing up cash for those investments and other projects that drive revenue and growth.

Cloud computing has revolutionizing how companies are consuming IT resources. With the main Cloud models ITaaS, IaaS, SaaS, PaaS etc., it's now very simple to consume almost anything 'as-a-service'.

You can decide now for your company for your IT to:

- Own equipment and Operate In-House or
- Lease equipment and Operate In-House or
- Lease equipment and Outsource maintenance and operations in managed service model with MSP, so "as-a-service" or
- Consume equipment and Outsource maintenance and operations in managed service model with MSP, so "as-a-service",

This is also the case for Network Infrastructure LAN/Wi-Fi, your company can shift from a traditional "Purchasing" CAPEX model/"Subscribing" OPEX model to a "Consuming" OPEX model "as-as-service", so in a "Consume and Outsource" model.

This white paper highlights the value of this shift for your Network Infrastructure and presents the benefits of the ALE International "Network-On-Demand" (NOD) offer:

- Offering an efficient network that simplifies infrastructure deployment, management, and troubleshooting,
- Serving at effective cost an elastic capacity,
- Providing as a highly resilient that supports the key business applications with minimal downtime
- Being operated & maintained thru a Cloud Managed Services Provider (MSP) that being invoiced in a "consumption-based" service delivery model.

EXECUTIVE SUMMARY

The approach with a Network as-a-Service (NaaS) “consumption-based” OPEX pricing model is basic, MSPs quantify the volume of user ports (LAN/Wi-Fi) that they deliver, and charge end-customers according to their exact use.

As a main OPEX pricing model, “consumption-based” pricing competes also with “subscription-based” pricing. A “subscription-based” pricing model means that end-customers subscribe for a delivered services on a daily, monthly or annual basis (.e.g. newspapers, magazines mobile phone subscriptions). All of these pricing models will be evident in service-level agreements that help to define how MSPs offer their services in term of quality to end-customers thru a Service Level Agreement (SLA).

In “subscription-based” model, customers are not charged per use, but per unit of time as designated by their subscription to services. In other words, within the time frame of their subscription for a flat rate independently if the service is used or not but.

For some of “subscription-based” vendors, when end-customer consumption is exceeding an upper limit, this rate is drastically increased following sometime exponential pricing evolution. This is not the case for or “Consumption-based” model where invoices is bounded linearly to end-customer consumption.

When does it make sense for your company to “Consume” Vs to “Buy”?

OPEX helps maintain a lean balance sheet, something particularly important for companies when they’re just starting out or when they have day to day fluctuant business, seasonal business.

Paying monthly for a subscription is a great way to keep costs down and improve cash flow, for instance when a small business gets a large contract with a short timeframe, and they need additional technology in order to fulfill that contract. If they can consume that technology, it’s much quicker to have access to it.

When more and more applications and devices

What is ITC market doing? - 2016 and Beyond:

83%

of the 22M smart
eyewear devices
shipped in 2019
will go to
enterprise use
cases

50%

Ethernet ports will
be purchases will
be “On-demand”
by 2017



80%

IT Infrastructure
will be Pay-per-
use by 2020



50%

Of companies plan
to move
exclusively to
BYOD for
smartphones in
2017

An IT Managed Services Provider (MSP) delivering and managing your Network infrastructure in “consumption-based” model is completely changing the economic equation compared to some other financial models.

Let’s avoid the classic error as it is not about converting fixed costs of equipment (CAPEX) into variable costs (OPEX). By the way, considering only variable costs for equipment does not necessarily drive global cost reduction.

Indeed, the shift to NaaS model for network equipment is a strategic evolution to understand and consider as it will have a positive impact at different levels of your company.

With a MSP for managing the Network Infrastructure in “NOD” “consumption-based” model, your company benefits from:

- Unified and secure LAN/Wi-Fi managed service with its automated, “out-of-the box” cloud managed tools.
- Different cost savings such as:
 - Having minimal upfront IT investment,
 - Saving Salary/Staff time as technical support is delivered thru MSP experts.
 - Reducing network downtime and loss of end-users productivity as network is managed by high skilled MSP experts.
 - Paying only for the capacity needed when needed whether a one-off, a seasonal shot or a more long-term and structural evolution,
 - Tax advantages due to the OPEX model
- A state-of-the-art reliable Network Infrastructure with the latest technology to ensure the business continuity for critical applications & services such as e-commerce, voice/video, messaging, business intelligence etc. Software of Equipment is regularly upgraded and patched for bug or security fixing. When obsolete, Network Infrastructure is refreshed by the MSP and you have the guarantee of up-to-date hardware.
- An elastic Network Infrastructure (scalability) to match the frequent changes in networking and technology expenses with business needs considering that usage of wired and wireless devices as well as IoT (Internet of Things) is booming as ITC analysts is predicting (IDC, Gartner group analysts).
- A true answer to cost containment trend due to the economic reality, in other word, an adjustment variable when your company is facing financial difficulties. With “Consumption-based” model, business is charged for the daily use of network that is especially interesting for some vertical markets where network usage is not necessarily flat :
 - Schools with limited network activity on weekends and holidays would not be charged for parts of the network not being used (**50% time during the year that students are actually in school**)
 - Hotel rooms as well as clinic & hospital rooms that is charged based on occupancy. (**71% of occupancy rate for EU Hotels (1)**)
 - Areas of stadium facilities which are typically occupied part of the week would only be charged during usage periods
 - Transportation with seasonal shots would be charged in proportion

(1) ECM-MKG European Destinations Observatory report* 2015, Souce:

<http://www.hotelnewsresource.com/article86826.html>

Summary

Abstract	3
Executive summary	5
When does it make sense for your company to “Consume” Vs to “Buy”?	5
What is ITC market doing? - 2016 and Beyond:	5
How NaaS drives costs savings?	9
1. <i>Control your IT infrastructure costs</i>	9
Benefit from the economies of scale	9
Consume means that you don’t pay when you don’t use and you control what you use.....	9
Predict your support & maintenance costs, get a contractual IT Service Level Agreement (SLA)	9
Rapid capacity elasticity	10
Switch to outcome based investments	10
2. <i>Control your IT labor costs</i>	10
Focus IT staff hiring costs	10
Save on IT staff’s training costs	11
No need for experts on “none business strategic” compliancy and security tasks.....	11
3. <i>Other savings</i>	11
Accounting cost savings: limit your assets’ management	12
Procurement cost savings	12
Second source or new source qualification cost savings	12
Get rid of recycling costs.....	12
Power consumption effectiveness to lower your energy bill	12
Lower your upfront technology costs.....	12
What does it mean to have a state-of-art reliable and flexible network infrastructure?	13
1. <i>Adapted network evolution strategy and flexible capacity</i>	13
Network implementation strategy	13
Flexible network capacity.....	13
2. <i>Highly qualified experts</i>	14
Trained and qualified does not mean experienced	14
A broader base of skills	14
A staff augmentation flexibility	14
3. <i>Controlled architecture for maximized performance and improved reliability</i>	14
4. <i>Regular software updates</i>	15
5. <i>Monitoring to deliver proactive network management</i>	15
6. <i>Updated equipment and technologies supporting your business</i>	15
7. <i>Latest compliancy & security rules</i>	15
Compliancy	15
Security & Privacy	16
How Managed Services increase your company’s competitiveness?	16
1. <i>Quickly adapt to evolving business needs</i>	16
2. <i>Ability to innovate</i>	17
3. <i>Put the focus on your company core business assets</i>	17
What is ALE Network-On-Demand solution?	18
1. <i>NOD offer description</i>	18
2. <i>Estimated cost benefit analysis</i>	18
Methodology.....	18
1920 user ports and 5 years subscription, hypothetical example	18

Estimated cost benefit analysis (Cumulative), hypothetical example (1920 Standard user ports)	22
Conclusion	22
Annex 1 - Acronyms.....	25
Annex 2 - Bibliography	25

HOW NaaS DRIVES COSTS SAVINGS?

A NaaS “consumption-based” offer delivered by a Managed Services Provider (MSP) means much more than simply converting your Network infrastructure investments from CAPEX to OPEX financial models. It is about a global lowering upfront costs as well as service costs to focus your investment on your core business thanks to:

1. The control of your Network infrastructure costs
2. The control of your Network labor costs
3. Some other cost savings in different areas
 - Finance cost savings
 - Procurement cost savings
 - Second source or new source qualification cost savings
 - Recycling cost savings
 - Power consumption cost savings

1. Control your Network Infrastructure costs

Outsourcing converts fixed IT costs into variable costs and allows a business to manage the IT budget effectively. It enables a business to pay only for what it uses, what it consumes, when it needs it.

Benefit from the economies of scale

A first immediate benefit of outsourcing your network infrastructure to a Managed Services Provider (MSP) is to benefit from the best possible prices that this MSP will be able to get from its suppliers thanks to a volume effect. Indeed, suppliers’ specific relationships and wholesale purchasing allow Managed Services Providers to deliver the best possible value for money to its individual customers.

Another benefit from the volume effect is to provide, as part of the delivered services, operations, administration and maintenance tooling to automate and secure different tasks, which will be expensive to finance for your company.

Consume means that you don’t pay when you don’t use and you control what you use.

With a consumption based offer for your network, you lower your costs when you don’t use it. For instance, for a seasonal low peak period or for week-ends your Network Infrastructure is underutilized, so you paid your IT infrastructure even it’s not used.

With a consumption based offer, your costs are strictly bounded to your usages and your company is saving money. For the NOD offer, ALE regulates invoices based on predefined Minimum Daily Service Consumption and Maximum Daily Service consumption that limit the rate whatever the real consumption is. This regulation transforms the unpredictable invoices to predictable invoices with best and worst cases.

Predict your support & maintenance costs, get a contractual IT Service Level Agreement (SLA)

Another benefit of engaging with an MSP for your network also means flexibility and predictable investment on support and maintenance with a known price linked to a contractual service level agreement (SLA) with your MSP.

A complex network needs high trained IT people to maintain the network, manage the network and answer to support calls / support cases for decreasing Time-To-Resolution. This cost is simply the tip of the check compared to the total cost of downtime.

While badly designing, performing and managing your IT could end up with exponential extra costs, associated to repair, redesign and even the consequence of downtime on your business.

When your network goes down, then it's highly likely that end-user is not working and that's costing your company a lot of money in lost productivity as network availability is directly attributable to a company's revenue.

In a nutshell, IT Managed services means that you pay only for the capacity that you need at the moment and you can easily scale, with a proportional impact on your costs and budget, as your IT requirements change. In addition, a contractual SLA is also an insurance for business continuity by minimizing network issues and, even, downtime.

Rapid capacity elasticity

As a result, when there is a need for an extra IT capacity associated to a specific new business or a seasonal peak, your company benefits from the elasticity of the consumption-based offer to increase/decrease immediately your Network Infrastructure capacity. If ever the change is more structural, such as a new branch office to open, you know exactly the cost for this expansion.

Because of the setup of services, provisioning can be seamless for end-users. This is a very essential aspect of consumption-based. In a sense, allocating and de-allocating resources appear to be infinite or automatically available. That's much different from older systems, where the limits were immediately visible to end-users.

Thanks to an accurate monitoring of your network infrastructure, your MSP can even anticipate, report and manage a network capacity planning expansion which your IT staff wouldn't have detected.

Switch to outcome based investments

Beyond the predictability, Managed Services also facilitates the way to invest on developing your IT infrastructure because you are not tied up with upfront CAPEX investment.

Pay as you consume also means invest as you need when you need. You can easily scale your infrastructure with an easier and quicker budget engagement process as the short-term spending is far below an upfront budget investment. This is what is called an outcome based investments: new costs are tied up with additional revenues generation.

According to Gartner, each year, maintenance costs represent about 15% to 25% of total enterprise IT costs.

2. Control your IT labor costs

Hiring and managing staff is always an important expense to manage for a company.

According to IT analysts, an IT platform completely operated by an in-house IT staff needs around 70% of the IT budget, which doesn't leave much capital for innovation, expansion or new tool sets. While IT staff is surely a key asset of the company, it is strategic to ensure that the IT experts are focused on projects which are critical to develop the business of the company rather than spending their time to "keep the light on".

Focus IT staff hiring costs

Network in-house management needs IT experts for the design, the configuration, updates and upgrades but also help desk management. It means costs related to HR.

As a company, you have to recruit people, which goes with recruitment fees. You have to maintain your staff, such as re-recruit people to replace the ones leaving for a new opportunity, whether internal or external. When staff leave, it can cost organizations as much as twice an employee's salary to appoint a replacement as a result of lost productivity and recruitment costs.

You have to manage your staff, do performance reviews, consider salary increase and manage holiday periods which could drive to extra-resources needs. Extra resources might also be needed depending on the evolutions that are expected from your networks as new expertise might be mandatory.

“Every time a business replaces a salaried employee, it costs 6 to 9 months’ salary on average.”
Study from SHRM - Society for Human Resource Management

IT Managed Services go with a complete set of IT experts to take care of the operations of your network and ensure help desk support with a contractual SLA for solving issues faced by your users at the contractual price. The managed services model also comes with all of the skills access and flexibility of a staff augmentation model. This lets you focus your IT experts on defining the requirements to ensure the proper execution of your core business projects.

When a “24x7x365” In-House support is needed, for **1 full-time IT expert** your company needs to hire up to **6 IT experts** for covering all business periods (days, nights, week-ends, training, sick leave periods & holidays).

Save on IT staff’s training costs

Hiring IT people to manage your day-to-day IT tasks requires training them on your specific infrastructure. The costs associated with technical certification, whatever the initial costs or the costs to maintain the specialization across time, are often quite expensive.

Trained and qualified doesn’t equal experienced. Few problems are new for leading IT service companies, which see related problems multiple times. An in-house IT employee leads an isolated existence no matter how much they train.

When considering a network evolution, to replace part of your network or to consider an extension of your network, this drives your company to immediate extra-costs. On the one side, if you want to open this evolution to the competition, you will have extra-costs into training your IT staff on new type of equipment. On the other side, if you don’t want to invest on training your staff on new equipment or hiring new experts -knowing that temporary employees don’t always live up to your expectations-, you remain tied up with a single provider which means paying higher price as the evolution is not opened to the competition.

An IT Managed Services provider offer you all, including help desk services, network management and operations certified experts. You can save on training budget or put it toward core business strategic projects.

No need for experts on “none business strategic” compliancy and security tasks

As a company, with an in-house IT staff, you need to dedicate time of experts to follow-up with latest network regulation and security trends. It is generally not a top priority task for the in-house IT expert who is in charge of it, which could drive to “outlaw” or “network at risk” situations, meaning from fines to network down or, even, strategic data theft.

An MSP will follow-up carefully, at a global level, with dedicated experts, at any regulatory or security evolutions, as part of the contractual engagement which is in place with your company. It will plan and manage all necessary infrastructure changes bound to any evolution which is mandatory to take into account.

3. Other savings

Accounting cost savings: limit your assets' management

Capital expenditures refer to major investments in assets that will be used over a long time period of time. They have to be reported in the company books' balance sheet. They need to be depreciated over the time of the assets (typically 3 years), this means that their value in the books is decreased every period based on accounting rules. Capitalizing costs inappropriately can lead investors to believe that a company's profit margins are higher than they really are.

On the other side, managed services are considered operational expenditures (OPEX). So, they are systematically deducted in the current tax year.

Procurement cost savings

With an in-house IT staff, you will have to properly size your procurement team as you might need to source from different providers for your network infrastructure and software solutions.

When engaging with an MSP, the MSP will be your unique interface to engage on a contractual level of services and this MSP will manage the interactions with the various sourcing providers for servers, switches, virtualization software...

Second source or new source qualification cost savings

Managing your own infrastructure is also managing product end-of-life, product changes or evolution linked to new regulations. It could also be your procurement department which put some pressure on your IT team to qualify a second power supply source to drive cost down. All of the qualification procedures that go along with these actions can be costly, or, at least, time-consuming for some of your key IT experts.

With an MSP, you get rid of any qualification cost. You define with your MSP the contractual level of services which you want to put in place for your network infrastructure and your MSP will be in charge of all the qualification process, whatever the reason to change an equipment. This will be a cost saving for your company in term of money as well as in term of time of your IT experts.

Get rid of recycling costs

When owning your infrastructure, you need to support the costs of an external company to collect old equipment, whatever broken out of date ones. These costs can sometimes be higher than expected depending on the size, the weight of these equipment but also the materials which they are made of. With IT Managed Services, all equipment's replacement or renewal is included in the service contract. All the costs associated with the recycling are also managed by the IT Managed Services provider.

Power consumption effectiveness to lower your energy bill

With an internal IT staff, few IT member will ever get time to evaluate properly the power consumption of the network infrastructure and try to challenge it.

A network infrastructure managed by a MSP, the high trained MSP IT staff will refer to experienced based reference cases so reference architectures.

Energy consumption effectiveness will be a permanent challenge that can be included in the Service Level Agreement with the business partner.

This will enable to engage on the most relevant solution, taking into account the power consumption criteria and drive additional energy cost savings.

Lower your upfront technology costs

Investment resources are always limited and must be carefully managed.

Cash based investments and loans investments should be considered more for company's core business activities while activities which are not deeply bound to a company core business activity should be managed through OPEX investments.

Managing the company's network through an IT Managed Services Provider with a consumption based offer gives to your company the opportunity to move its network away from a CAPEX asset and transfer it to an OPEX.

Therefore, the costs are fully bound to the usage, to the consumption of the Network. In addition, it enables to size the IT team in charge of the network, leveraging the managed services provider's IT experts, so focus your human resources where you need them most.

With a Managed Services adaptive consumption model, your company pays only for services used. Managed Services provider's expertise and contractual level of service ensure that your company's network meets business needs with a Total Cost of Services (TCS) lower than the initial Total Cost of Ownership (TCO).

WHAT DOES IT MEAN TO HAVE A STATE-OF-ART RELIABLE AND FLEXIBLE NETWORK INFRASTRUCTURE?

A state-of-the-art network is about resiliency, security, efficiency but also flexibility to adapt rapidly to evolving business needs, ensuring business continuity.

A state-of-the-art reliable and flexible network stands for:

1. An adapted network evolution strategy and flexible capacity
2. Highly qualified experts
3. A controlled architecture for maximized performance and improved reliability
4. Regular software updates
5. Monitoring for proactive maintenance
6. Updated equipment supporting latest technologies
7. Latest compliancy & security rules implementation thanks to dedicated expertise

1. Adapted network evolution strategy and flexible capacity

Network implementation strategy

As mentioned earlier, a Network Infrastructure completely operated by an in-house staff needs around 70% of the IT budget, which doesn't leave much capital for innovation, expansion or new tool sets... so barely no time for a network evolution strategy plan. People will be focused on the day to day and planning will be limited to short term "issues fixing" evolutions. Being stuck with a "none evolving" network in a fast-changing competitive environment can create serious problems for your business.

An MSP will work with your company to develop and plan your Network evolution strategy. Based on its experience with similar customers' profiles from his installed base, MSP will be able to support your company to rapidly engage on the right evolution plan.

This will enable your company to have a clear network evolution roadmap, allowing budgets to be set and ensuring a future proof environment for a better capacity to develop your business.

Flexible network capacity

Your network surely needs to manage traffic peaks. Each business faces some seasonal extra-activities or end-of-quarter activity frenzies.

If your company manages it with the in-house IT staff, this company will have to consider purchasing large amounts of spare network equipment which may only be used during a very limited period of time over the year. Indeed, the total network capacity deployed will have to be designed to absorb part of occasional traffic peaks.

Your MSP will assist you with your network capacity planning to ensure that you always benefit from the right capacity that you need. Then, thanks to a network consumption based offer, you will automatically benefit from an elastic infrastructure architecture, up or down, on demand and you will pay only for what the company consumes.

2. Highly qualified experts

Trained and qualified does not mean experienced

Your in-house IT staff can surely be trained and certified on new technologies but your people will hardly be able to solve rapidly issues as they first need to gain experience.

Few problems are new for MSPs, which see related problems multiple times so they can fix them very quickly.

MSPs ensure that their IT staff remain up to date and certified on all technologies and rapidly gain experience across various projects, whatever people being assigned for design, implementation or support (help desk).

A broader base of skills

As opposed to an in-house IT staff with a focused experience and knowledge on existing equipment, MSP organizations have the capability of delivering a broader base of skills, solutions and knowledge to meet evolving requirements.

They generally share a common experiences database and they can refer to specialists in various areas. This also enables your company to benefit from some highly specific expertise required for specific projects, which your company would have difficulties to invest on as an internal effort.

A staff augmentation flexibility

An MSP also provides flexibility for staff augmentation as your company needs evolve. Because the model relies heavily on management and process rigor, clients generally experience an elevated capability themselves.

MSP can bridge a skills gap that would otherwise cost a lot of time and money in training to address in-house, especially for one-off or short-term projects.

It can also provide back-up for project work, holidays or sick leave cover.

3. Controlled architecture for maximized performance and improved reliability

Based on experience, an MSP is also a guarantee for best solution design and implementation at best benchmark cost. MSP solution architects are highly skilled to design business-focused solutions leveraging best practices.

Documentation, processes and tools allow the MSP to maximize the performance and deliver services reliably with fewer but more productive resources.

It also ensures a streamlined maintenance process for a better reliability of your infrastructure.

As an output, your network becomes commoditized and standardized for a better cost control but also maximized performance.

4. Regular software updates

Software updates tend to be left on the back burner by your IT staff until someone has time to do it. In the meantime, your systems are vulnerable and at the mercy of hackers and viruses, and face downtime as your systems grind to a halt.

“Businesses participating in our ICT downtime survey are losing almost \$4 million a year to downtime on average, about half a percent of their total revenue” said Matthias Machowinski, directing analyst for enterprise networks and video at Infonetics Research.

MSPs have documented routine scheduled maintenance to keep your systems patched and continuously up to date. While in-house IT staff are regularly busy with the day-to-day job, MSPs will always put a high priority on executing on the maintenance plan, to achieve the contractual SLA which they have with your company.

5. Monitoring to deliver proactive network management

Indeed, MSPs provide very aggressive contractual SLAs. How can they engage on such performance?

Beyond trained and experience network experts, reliable network designs, right sets of documentation and tools and improved maintenance plan, MSPs also provide you with monitoring which enable them to anticipate and respond to any issue.

Thanks to a multi-customers experience on monitoring, MSPs will anticipate network’s issues and begin the resolution activities before the consequences of the issues reach your users.

This is what is called “proactive network management”. The earlier the problem is detected or even anticipated, the quicker it is solved, before it spirals out of control and drops the performance of your network and even drives to a costly downtime.

All in all, MSPs take the responsibility for everyday support activities and remediate issues before they arise. This minimizes downtime and network issues to protect your business and, more specifically, ensure your business continuity.

6. Updated equipment and technologies supporting your business

First, as part of the proactive maintenance, MSPs will monitor your infrastructure to ensure that no software but also no hardware becomes obsolete. MSPs will drive a continuous innovation and evolution process of your equipment to ensure the best efficiency and reliability of your network, aligned with your business needs.

Then, evolving business could drive to unanticipated network evolution needs. You might need to quickly benefit from new equipment or new technologies implementation to address them. As MSPs enable you to immediately benefit from best trained and experienced IT experts in design and implementation, you will be able to rapidly engage on the best solution to address new business needs.

7. Latest compliancy & security rules

Compliancy

Government regulations can change very quickly and impacts your network infrastructure. If you don’t have specialized experts following carefully these changes, your company can even be legally non-compliant if evolutions are not managed in a proper timeframe.

MSPs assume and manage much of this risk for you, with specific industry knowledge, especially in term of best practices regarding compliance changes.

Security & Privacy

Have you implemented the right security policy across your network? Is your equipment up to date with the latest security patches? Do you properly manage IoT to ensure that there are no security holes in your network's implementation? Do you ensure that your strategic data can't be accessed by unauthorized user? Do you manage guest access in a way that your guests have limited rights and don't put your network at risk? If your company is doing online business, have you implemented PCI security standards and do you work to maintain those standards?

Unfortunately, with an in-house IT staff, security is often under evaluated and under-invested as it needs to heavily invest on dedicated experts to have them regularly trained and participate in dedicated forums.

By outsourcing to an MSP, your company lowers outlays and experiences the benefit from the best expertise on security and vulnerability management. Indeed, MSPs are investing dedicated resources to broaden security knowledge and provide an engaging and reliable service.

This ensures best security initial design for your company network. It also means continuous network evolution, with evolving security rules -access handling, change control- but also security patches or equipment evolution, for your network to remain at the safest level.

This reduces your security risks so that your strategic data keeps being safe from theft or malicious attacks.

HOW MANAGED SERVICES INCREASE YOUR COMPANY'S COMPETITIVENESS?

Managed Services will have immediate positive impacts on your company's competitiveness thanks to:

1. A quick adaptability to evolving business needs
2. The ability to innovate, with reasonable investments
3. The refocus on the company core business assets

1. Quickly adapt to evolving business needs

If your company manages in-house IT services, it will take months for long-time researches, evaluations, scripts developments from scratch, prototyping then implementations to address network evolutions required by new business threads. Therefore, as many of IT evolution projects lead unexperienced staff engaging on new technologies or new equipment, it will drive extra-costs for new resources or new knowledge acquisition for existing resources and, often, extra-costs for unanticipated equipment and developments. At the end, it means delays, sometimes long ones, in implementation so delays in generating new revenues streams for your company.

Research by business consultancy Genpact (*business process and information technology services company*) estimates enterprises waste over £258 billion a year on failed technology transformation projects.

Your MSP, benefiting from a wide range of experts in all areas, benefiting from a wide range of customers with similar profiles or similar needs, will be able to rapidly bring an adapted and engaging answer, in term of definition, development and implementation, to your evolving business needs at a controlled price.

With the on-demand infrastructure model, your MSP has available libraries of scripts, already validated and improved in different customers' environments, including guarantees on security and compliancy. Based on similar projects from other customers, for your MSP, it will just be about fine-tuning some of these scripts

to your company specific needs. This means that it can be deployed much quicker, saving important amounts of time and money.

Quick adaptability to your evolving business needs, by consuming network in a more efficient and flexible way, is surely one of the main business outcome of contracting with a network MSP. By accelerating its decision-making, an MSP will help your company to become a real-time enterprise, with the obvious competitive advantage of responding to changing business conditions and opportunities faster than the competition.

2. Ability to innovate

Outsourcing to an MSP with a network consumption based offer is also the chance to consume the best technologies, the best equipment and the best expertise as you need.

Your company might have never engaged on a valuable technology which could surely help to develop effectively your business because of different showstoppers. First, there is the upfront investment in terms of technology acquisition and experts' ramp-up. Then, there is the risk to jeopardize your complete infrastructure with new un-tested technologies. Finally, you might neither be able to assign the needed IT resources to support a new project nor have the financial ability to hire new IT experts.

So the dramatic consequence is that your company might take a cautious approach to business expansion as it might be concerned about its ability to develop its network infrastructure.

The MSP, by addressing similar needs from different customers, benefits from economies of scale to rapidly acquire expertise on new technologies and products. In addition, your MSP has the resources to start new projects right away.

So, the ability provided by your MSP to consume as you need new technologies becomes a real game changer.

Your company can engage without any upfront investment barrier and with a contractual guaranteed level of services on new technologies to support your business development and get an immediate competitive advantage. That's an immediate ROI of moving to consumption based model for your network infrastructure.

3. Put the focus on your company core business assets

Engaging with an MSP to manage your network infrastructure in the day-to-day is a great option to refocus your IT staff on more business oriented tasks and projects for your company.

Indeed, outsourcing to an MSP also means offloading non-differentiating functions and tasks.

Once your IT staff will have defined the necessary changes of your network to support your projects, they will put their skills and in-house knowledge in business-critical evolutions such as specific business applications evolutions.

The immediate result will be improved productivity and better business!

WHAT IS ALE “NETWORK-ON-DEMAND (NOD)” SOLUTION?

ALE Network-On-Demand offer

1. NOD Offer description
2. Estimated cost benefit analysis

1. NOD offer description

ALE believes that there is a better business model engendering true cost-saving and fewer complexities based on “Network-as-a-Service” OPEX delivery model. ALE is introducing this new cloud managed network LAN/Wi-Fi infrastructure designed and delivered with its business partners.

The new Alcatel-Lucent **“Network on Demand”** service enables businesses to enjoy the latest networking technology on a **pay-per-use** managed service basis.

This new consumption model offers companies an alternative to “In-House-based” CAPEX or “subscription-based” models, enabling them to focus their investment in key business priorities and to link infrastructure operational spending with changes in their business requirements.

2. Estimated cost benefit analysis

Methodology

The methodology is based on gathering for different phases when designing, deploying and running a Network, main activities that generate on end-customer or MSP side workload and costs.

Depending on the internal staffed model or NOD model outsourcing quasi all activities, workload is supported either by MSP or by end-customer, associated costs for end-customer are either in CAPEX (Purchasing) for internal staffed model or OPEX in NOD (Consuming) or Leasing models.

Design phase

This is the phase where IT Solution Architect is designing the network according to end-customer technical needs.

Build/Qualify phase

This is the phase where IT installer/IT administrator are deploying the hardware equipment, configuring users and system settings for having a network up and running in the expected technical conditions. Qualification and certification of the network is included in this phase

Run/Operate phase

This is the phase when the network go live and end-users are using it.

1920 user ports and 5 years subscription, hypothetical example

Let’s take a look at a hypothetical business case with the following characteristics:

- 1920 standard user LAN ports / linear consumption
- 5 years subscription and then equipment being recycled
- In “In-House” & “Purchasing” model, workload and costs are supported by end-customer in CAPEX model.
- In “Outsourced” & “Consuming” model, workload is supported by MSP and costs are supported by end-customer in OPEX model.
- In “Outsourced” & “Leasing”, model, workload is supported by MSP and costs are supported by end-customer in OPEX model.

For each phase here bellow, list of tasks and associated costs considering internally staff model (In-House)

“In-House” & “Purchasing” model

Nonrecurring costs (Year 0) for “In-House” & “Purchasing” model			
Phase	Nonrecurring Expense Item	Amount	Expense Type
Design (Year 0)	Network Design (1Person/Month)	~6000€	Labor cost
	Project Management (0.5Person/Month)	~3000€	Labor cost
Build & Qualify (Year 0)	Hardware Equipment & Software license fees for 1920 standard user ports	~120 000€	CapEx cost
	Product Service Support fees. ~3% of product pricing for 5 Years	~3600€	CapEx cost
	OmniVista 2500 NMS application (for Hardware, Software and Support) fees	~80 000€	CapEx cost
	Routers installation & configuration (1Person/Month)	~6000€	Labor cost
	Project Management (1 Person/Month)	~6000€	Labor cost
	Training	~6000€	Training Fee
Sub-Total		~229 600€	TCO

Recurring costs (Year 1..5) for “In-House” & “Purchasing” model			
Phase	Recurring Expense Item	Amount	Expense Type
Run & Operate (Year 1 to 5)	Welcome Service Desk assistance 24*7*365 SLA. Min 6 people month for the SLA. 0.1 workload / Month	~42000€ / year *0,1*6 = ~25 200€ (per year)	Labor cost
	Technical Support 24*7*365 SLA (Major & Minor Outages, Software Upgrades, Software Patches). Min 6 TS a month for the SLA. 0.25 workload / Month	~60000€ / year *0,25*6 = ~90 000€ (per year)	Labor cost
	Operations, administration (OAM&P). 0.25 workload / Month	~60000€ / year *0,25 = ~15 000€ (per year)	Labor cost
	Training		
Sub-Total		~130 200€ (per year)	TCO

Cumulative costs (Recurring + Non Recurring) (Year 0 to Year 5) for “In-House” & “Purchasing” model		
Total	Cumulative Costs Year 0 (Design, Build & Qualify)	229 600€

	Cumulative Costs Year 1 (Run & Operate)	359 800 €
	Cumulative Costs Year 2 (Run & Operate)	490 000 €
	Cumulative Costs Year 3 (Run & Operate)	620 000 €
	Cumulative Costs Year 4 (Run & Operate)	750 400 €
	Cumulative Costs Year 5 (Run & Operate)	880 600 €

“Outsourced” & “Consuming” model

Nonrecurring costs (Year 0) for "Outsourced" & "Consuming" model (NOD) model			
Phase	Nonrecurring Expense Item	Amount	Expense Type
Design (Year 0)	Network Design (1Person/Month, 1200€ per day)	-36 000€	OpEx cost
	Project Management (0.5Person/Month, 1200€ per day)	-18 000€	OpEx cost
Build & Qualify (Year 0)	Routers installation & configuration (1Person/Month, 1200€ per day)	-6 000€	OpEx cost
	Project Management (1 Person/Month)	-36 000€	OpEx cost
Sub-Total		~108 000€	TCO

Recurring costs (Year 1..5) for "Outsourced" & "Consuming" model (NOD) model			
Phase	Recurring Expense Item	Amount	Expense Type
Run (Year 1 to 5)	User port consumption (Estimate 2€ per port per month) (1920 ports based on average use)	46 080€ (per year)	OpEx cost
Operate (Year 1 to 5)	Managed Services (Estimate 3€(*) per port per month) (1920 ports)	69 120€ (per year)	OpEx cost
Sub-Total		~115 200€ (per year)	TCO

Cumulative costs (Recurring + Non Recurring) for "Outsourced" & "Consuming" model (NOD) model		
Total	Cumulative Costs Year 0 (Design, Build & Qualify)	108 000€

	Cumulative Costs Year 1 (Run & Operate)	223 200€
	Cumulative Costs Year 2 (Run & Operate)	338 400€
	Cumulative Costs Year 3 (Run & Operate)	453 600€
	Cumulative Costs Year 4 (Run & Operate)	568 800€
	Cumulative Costs Year 5 (Run & Operate)	684 000€

“Outsourced” & “Leasing” model

Nonrecurring costs (Year 0) for "Outsourced" & "Leasing" model model			
Phase	Nonrecurring Expense Item	Amount	Expense Type
Design (Year 0)	Network Design (1Person/Month, 1200€ per day)	-36 000€	OpEx cost
	Project Management (0.5Person/Month, 1200€ per day)	-18 000€	OpEx cost
Build & Qualify (Year 0)	Routers installation & configuration (1Person/Month, 1200€ per day)	-6 000€	OpEx cost
	Project Management (1 Person/Month)	-36 000€	OpEx cost
Sub-Total		~108 000€	TCO

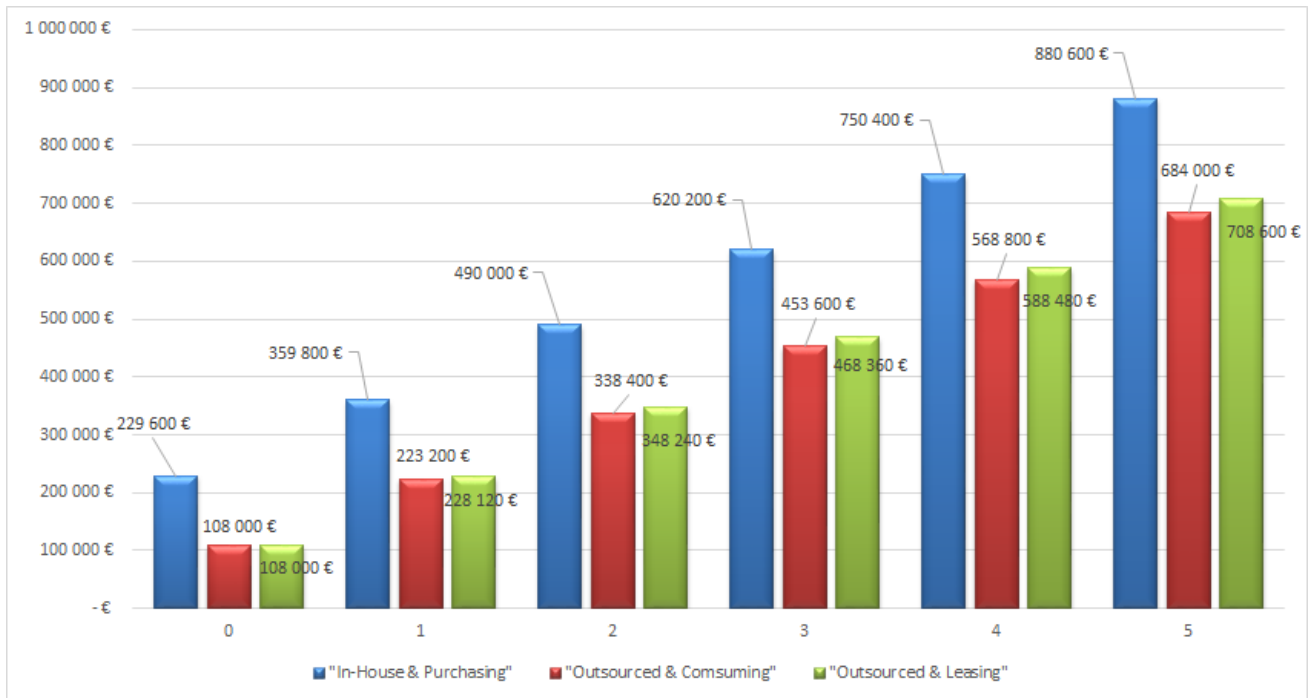
Recurring costs (Year 1..5) for "Outsourced" & "Leasing" model			
Phase	Recurring Expense Item	Amount	Expense Type
Run (Year 1 to 5)	Financial cost of leasing for ~204 000€ and 10% (including insurance) per year each year = 4250€ per month	51 000€ (per year)	OpEx cost
Operate (Year 1 to 5)	Managed Services (Estimate 3€(*) per port per month) (1920 ports)	69 120€ (per year)	
Sub-Total		~120 120€ (per year)	TCO

Cumulative costs (Recurring + Non Recurring) for "Outsourced" & "Leasing" model		
Total	Cumulative Costs Year 0 (Design, Build & Qualify)	108 000€
	Cumulative Costs Year 1 (Run & Operate)	228 120€

	Cumulative Costs Year 2 (Run & Operate)	348 240€
	Cumulative Costs Year 3 (Run & Operate)	468 360€
	Cumulative Costs Year 4 (Run & Operate)	588 480€
	Cumulative Costs Year 5 (Run & Operate)	708 600€

(*) (Exact price depends on service provider pricing of SLA contract).

Estimated cost benefit analysis (Cumulative), hypothetical example (1920 Standard user ports)



CONCLUSION

As you can clearly see in the diagram above, the implementation of an ALE “Network on Demand (Outsourced & Consuming)” offer can have a tremendous financial benefit for your company.

Beyond the obvious transition of your network equipment from a CAPEX investment to OPEX, the engagement with a **Managed Services Provider** with a **consumption based offer** for your network is dramatically changing the IT strategy of your company and is supporting your business strategy.

Indeed, while driving costs down in various departments of your company, the **Managed Services Provider** will offer you the contractual guarantee of an efficient and robust network, orchestrated by the best experts, the relevant tools and a full sets of processes, procedures and tools for its operation, administration and maintenance with a continuously evolving improvements process in place to ensure that your network remains at the edge in terms of reliability, performance and security.

By minimizing the issues and ensuring the best uptime, this ensures the right business continuity for your company and your end-customers.


Thanks to the consumption based model proposed by your **Managed Services Provider**, you will also immediately benefit from an infrastructure capacity evolution adapted to your evolving business needs, whether a one-off or seasonal shot or a more long-term and structural evolution. This means that you will consume your network as you need without minimized upfront investment.


SLA and consumption based model offer to your company business continuity and outcome based investments.

Finally, providing you the ability and the flexibility to rapidly face new IT infrastructure needs, to benefit rapidly from the latest secured technologies and to focus your best experts on your critical business challenges, a **Managed Services Provider with an ALE “Network on Demand” consumption based offer will make your company more competitive.**


About Us

Alcatel-Lucent Enterprise
at-a-glance

Alcatel-Lucent 
Enterprise



2700+
employees

15% 
R&D approx.
15% of budget

830,000+
customers

2900+
resellers

>100
countries

About Our Network references

Hospitality



Healthcare



Transportation



Education



Government



Industry



Let's take a look on ALE Internet web site:

<http://enterprise.alcatel-lucent.com/?communication=PressRelease&page=ALE-delivers-Network-on-Demand-services>

Annex 1 - Acronyms

CAPEX - Capital Expenditures
CFO - Chief Financial Officer
CIO - Chief Information Officer
CTO - Chief Technology Officer
FERF - Financial Executives Research Foundation (FERF)
ICT - Information and Communication Technology
IoT - Internet of Things
IT - Information Technology
ITaaS - IT as-a-Service
MSP(s) - Managed Services Provider(s)
NaaS - Network-as-a Service
OPEX - Operational Expenses
PCI - Payment Card Industry
SHRM - Society for Human Resource Management
SLA - Service Level Agreement
TCO - Total Cost of Ownership
TCS - Total Cost of Services

Annex 2 - Bibliography

<http://www.gartner.com/newsroom/id/2021216>
<https://www.gartner.com/doc/2251215/top-recommendations-reduce-network-equipment>
<https://www.essent.com/News/Blog/The-Top-10-Benefits-of-Outsourcing-IT-through-Managed-Services-284-24.htm>
<http://blog.avanade.com/avanade-insights/managed-services/attaining-the-hidden-roi-of-managed-services-with-two-speed-it/>
<http://www.centred.com/2015/03/03/many-benefits-managed-services/>
<https://www.p2vsystems.com/benefits-of-managed-services-for-your-business-2/>
<https://www.cgi.com/sites/default/files/white-papers/cgi-why-managed-services-why-not-staff-augmentation.pdf>
<http://www.claranet.co.uk/blog/2015-08-25-10-benefits-working-managed-services-provider>
<http://www.csm-corp.com/managed-it-services-support/>
<http://newmindgroup.com/2015/07/16/4-ways-to-increase-roi-with-a-managed-it-services-provider/>
<https://support.rackspace.com/white-paper/getting-on-the-right-side-of-the-capex-vs-opex-divide/>
<http://searchdatacenter.techtarget.com/tip/Find-the-right-data-center-support-for-any-IT-organization>
<http://blog.au.logicalis.com/understanding-capex-vs-opex/>
<http://gevaperry.typepad.com/main/2009/01/accounting-for-clouds-stop-saying-capex-vs-opex.html>
<https://gigaom.com/2008/09/07/the-10-laws-of-cloudonomics/>
<http://www.logicworks.net/blog/2013/10/capex-vs-opex/>
<http://www.cio.com/article/2430099/virtualization/capex-vs-opex--most-people-miss-the-point-about-cloud-economics.html>
<http://www.cio.com/article/2932044/it-organization/tco-is-sooo-1990s-welcome-to-tcs-total-cost-of-services.html>
<https://business.timewarnercable.com/content/dam/business/pdfs/resource-center/white-papers/Managed-Network-Services-The-TCO-Payoff-2014.pdf>
<http://www.emc.com/services/cloud/managed-services.htm>
<http://www.infonetics.com/pr/2014/Cost-Server-Application-Network-Downtime-Survey-Highlights.asp>
<http://www.freshbusinessthinking.com/the-cost-of-failing-to-train-it-staff/>

- END OF DOCUMENT -