IT-sourcing strategy - why, when and what?

A case story from a Danish University College (UCN):

- The drivers
- The process
- The outcome
- The current state of the project
- Questions

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UCN in a nutshell:

University College of Northern Denmark awards:

- Professional Bachelor Degrees
- AP Degrees
- Ongoing and Further Education: From day seminars tailored for specific organisations and professionals to Diplomas at the BA-level.
- More than 40 programmes and career opportunities.
- 18 fully English-taught programmes in a flexible 4+3 semester system

The numbers:

- Apx. 10.000 FTE / 15.000 Users on 6 campusses. Apx. 1.000+ Employees

Why an it-sourcing strategy? - Internal drivers:

1. Find possible solutions to a **increasing number of challenges** and threats re. it-operations, it-services and business development.

2. Potentially establish a **new foundation for development**
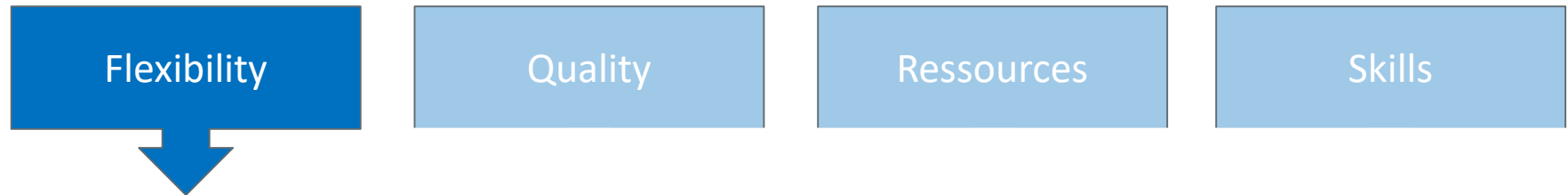
The strategy should address these **four themes**:

Flexibility	Quality	Ressources	Skills

Why an it-sourcing strategy? - Internal drivers:

| Flexibility	Quality	Ressources	Skills

Current challenges:

- Increasingly difficult to (re) focus it on new business needs: The basic and critical "commodity" operation **drags attention away** from the business perspective.
- **Split personality** in it-management..
- **Internal "vendor" lock in**: Financial and technical flexibility is limited. E.g. exploring new models of service delivery.

Opportunities:

- Can sourcing support **more focus on the development** of the business through projects and services?
- Can we **Increase the speed** of projects and realization of projects?

Why an it-sourcing strategy? - Internal drivers:

Flexibility	Quality	Ressources	Skills
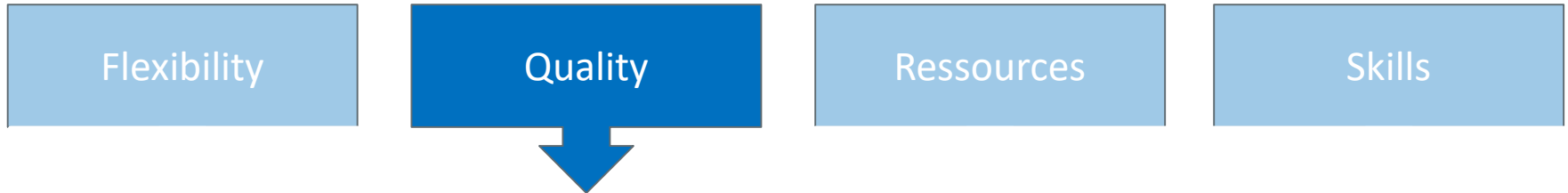
Current challenges

- **Decreasing satisfaction** among users re. stability and quality (Annual surveys)

- **Increasing demands** for reliability, security and transparency in operations.

- **Speed and "Just-in-time"** as quality: Increasingly difficult to assist in projects and building new services.

Opportunities:

- **Increase user satisfaction** on "commodity" services. (Network, Wireless, system availability)

- **Gain access** to a higher level of security and IT process maturity (indirectly)

- **Deliver** new versions and new services **faster**

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Why an it-sourcing strategy? - Internal drivers:

| Flexibility	Quality	Ressources	Skills

Challengenes (1):

- **Economic flexibility is limited** due to large long-term investments in networks and in-house datacenter (CAPEX)
- **Lack of transparency** in the costs of individual services (The price of our Wireless?, The costs of a specific service?)
- **Increasing costs** for maintaining the necessary skills to run a professional data center and IT infrastructure.

Opportunities:

- Can we **move costs** from CAPEX and basic operation to development & projects?

Why an it-sourcing strategy? - Internal drivers:

Flexibility	Quality	Ressources	Skills
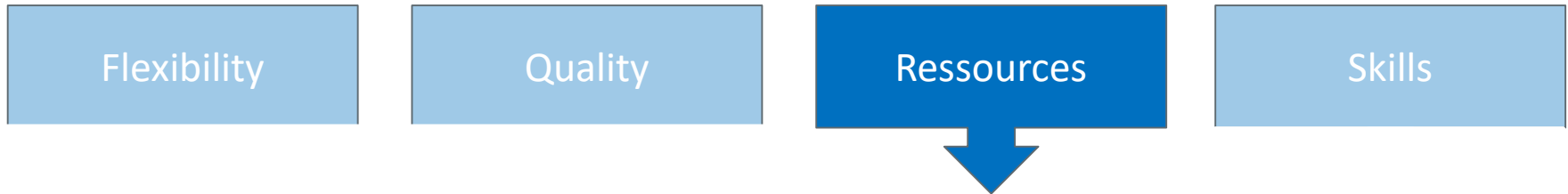
Challengenes (2):

- **High vulnerability:** *All* core activities concerning UCN Infrastructure and Data Center are handled by 1-2 homegrown specialists.

- **# of servers** that run in-house decreases due to a shift in software vendor strategy = Price per. server in-house expects to increase beyond market price.

Opportunities:

- **Reduce vulnerability**

- Buy (some of) the necessary **critical mass** from a vendor instead of creating in-house.

- **Saving costs ?** That is not a specific goal. In contrary : It is expected that operations costs will increase through the transition – but evens out in year 2.

Why an it-sourcing strategy? - Internal drivers:

Flexibility	Quality	Ressources	Skills

Addressing challenges:

High vulnerability: Our investments in high-end skills was at risk:
..of being headhunted,
..of being unavailable (when sick, on vacation, when attending courses)
..of being under-utilized.

**Costly and time-consuming:** Increasing demand for advanced knowledge re. critical it-operations.

Oppertunities

- Get (indirect) access to highly specialized skills without the risks.
- Re-vitalize the "System-administrator" role to a new era of a "multi-vendor" and hybrid setup.

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Why an it-sourcing strategy? - External drivers:

- Observe **global trend**: The global number of server rooms and small data centers decreases (And the big get bigger ..) (Source: Gartner tech forecasting 2014)

- **Costs on IaaS and PaaS** services falls steadily (Source: Zangenberg Analytics, Denmark)

- **Critical mass** for professional it-operation increases. (In terms of financial power, sufficient expertise and staffing).

- Software vendors shifts to **SaaS first strategy** :
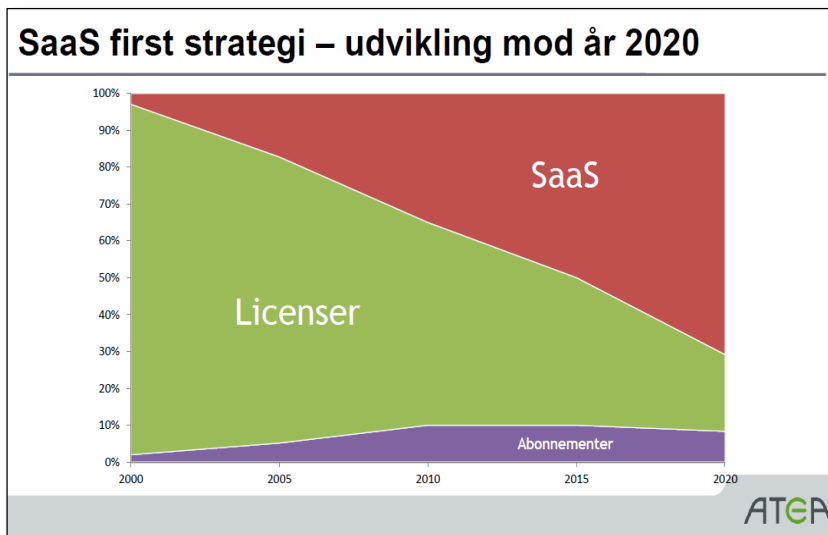
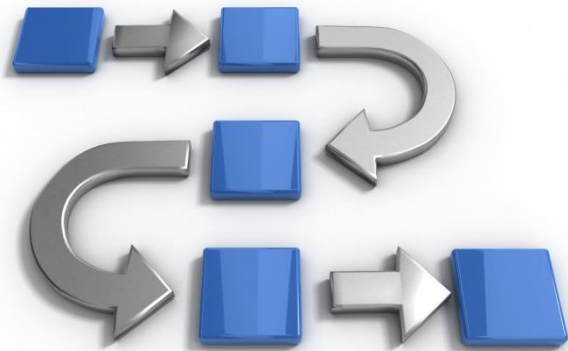# **HOW to** create an it-sourcing strategy?

The actual proces in UCN :

Time (2015)	Activity
Months prior to startup	**Observing** performance, capability and risks re. it-operation
February:	**Startup** (Inform employees, obtain top management support, onboarding external consultants)
February – April:	**Analysis** (Gathering data and interviews)
May:	Negogiate **conclusions and building** of the strategy
June-August	**Adoption and initiation** of strategy
September 2016-December 2017	**Execution** of strategy

HOW to create an it-sourcing strategy?

Method:

1. Break down the overall IT services into smaller and manageable parts that could be analyzed independently.
2. Analysis of it-operation **expenditures** (price per server etc..)
3. Brief assessment and evaluation of the **it-organization** and it´s capabilities
4. **Interviewing** it-operation staff
5. **Compare** results with best-practice and sourcing market reports

HOW to create an it-sourcing strategy?

Method:

- Devoteam´s it-operating model was used to break down the overall IT services into smaller and manageable parts that could be analyzed independently:

Example of a specific service:

3. RD PARTY	3. RD PARTY	UCN	**Application**
3. RD PARTY	3. RD PARTY	UCN	**Platform**
UCN	UCN	UCN	**Infrastructure**
Design	**Build**	**Run**	

HOW to create an it-sourcing strategy?

Tip #1: Using a external consultant firm:
- **PRO:** Neutral partner supports objectivity and adds market research and best practice know-how.
- **CONS:** Forced to reduce AS-IS complexity (due to price) and thereby masks potential risks and barriers re. outsourcing.

Tip #2: "IT-sourcing strategy" is interpreted "Full-outsourcing to india" from day 1 in the it-department and thus: **Risks increase immediately**! (realiability, stability)
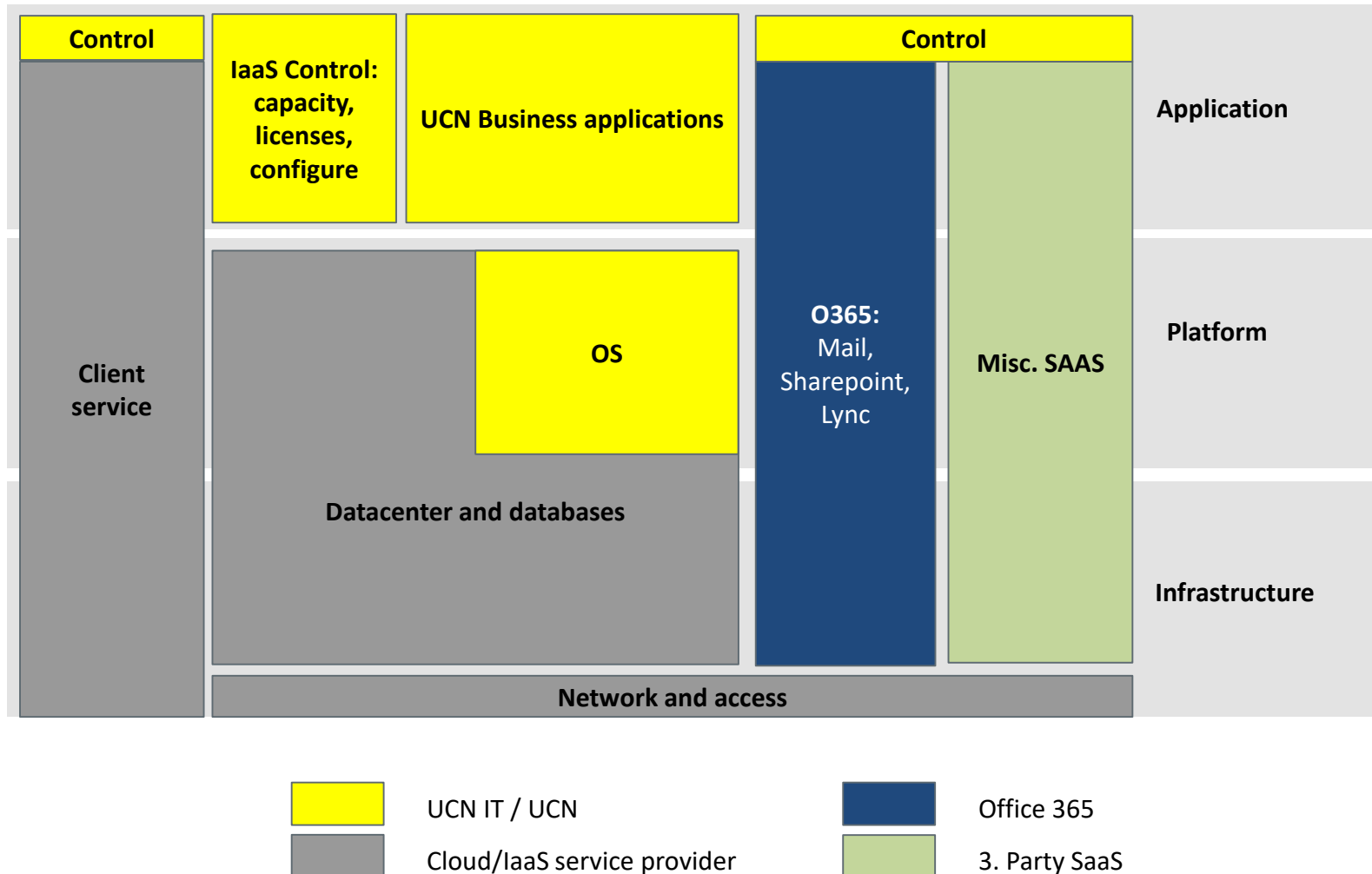
- Create **backup plan** prior the entire process: Seas backup agreements in the market.
- **Visualize future** roles and assignments for it-operation staff.

Tip #3: **Beware of the numbers:** It-operation expenditures is difficult to break down to a price of a specific service. The business case should be seen only as indicative.

It-sourcing strategy - **The result**

Devoteam´s suggested it-operating model after analysis:

				Application
Control	**IaaS Control: capacity, licenses, configure**	**UCN Business applications**	**Control**	
Client service		**OS**	**O365:** Mail, Sharepoint, Lync	**Misc. SAAS**	**Platform**
	Datacenter and databases			**Infrastructure**
	Network and access			

Legend:
- **UCN IT / UCN** (yellow)
- **Office 365** (dark blue)
- **Cloud/IaaS service provider** (grey)
- **3. Party SaaS** (green)

It-sourcing strategy - **The result**
## Datacenter: Move to the right..now.
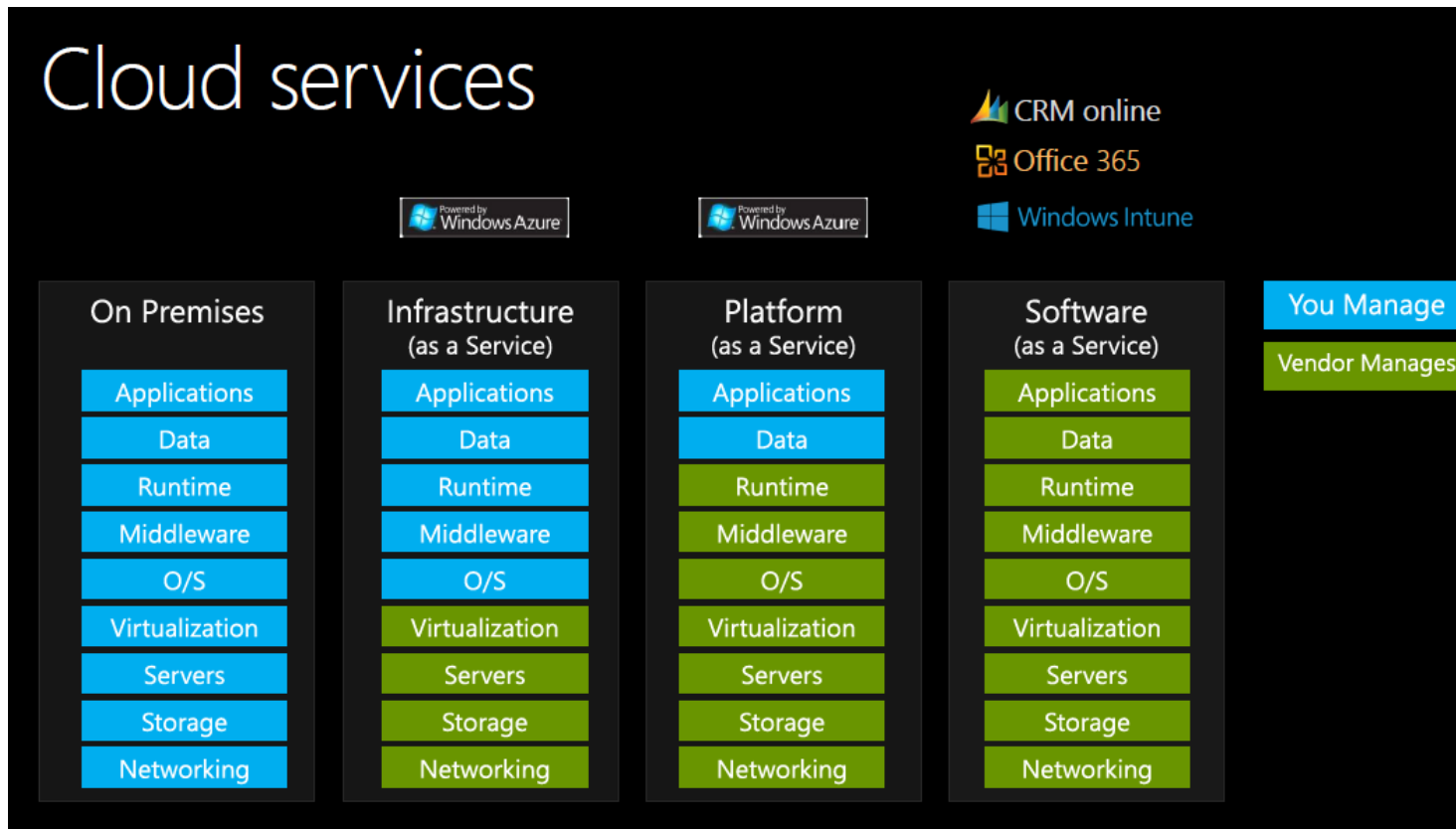
It-sourcing strategy - **The result**

The core of the strategy:

1. **Enable "SaaS first" policy** on all new it-services

2. **Shutdown of on-Premise datacenter -**Move to managed infrastructure

3. **Evaluate and enter market for "Network-as-a-Service"**

4. **Shift to "Print-as-a-Service"**

5. **Hardware delivery "as-a-service" (preparation, shipping etc.)**

Estimated datacenter/cloud costs

Full migration to Cloud
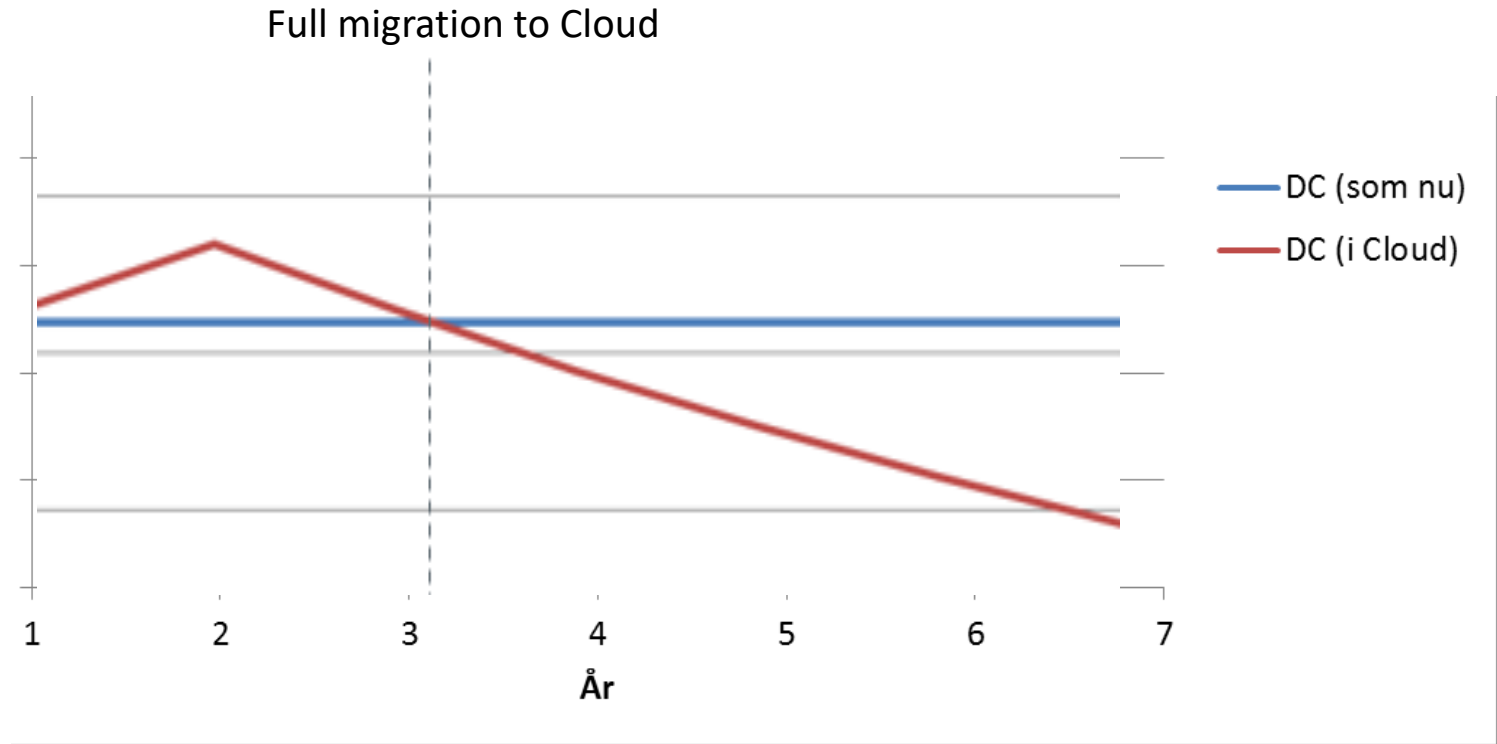
It-sourcing strategy – **Timing (Late 2015)**

- ..Large, necessary **hardware re-investments was closing in** on us: Wireless, firewall and internal datacenter refactoring.

- ..Reducing the current vulnerability of business-critical infrastructure operation would **call for a major step-up in both staffing** and in the quality of our internal processes..

- ..Standard IT services is, in general**, becoming non-differentiating** for UCN. They are seen as *commodity* for users in line with water + electricity. Stability, quality & reliability must therefore be extremely high.
  It is unlikely that UCN on the long run can "beat the market" on delivering these core services..

- ..Begin a **transition in "peace time"** and not from a fast-burning platform

It´s now..

It-sourcing strategy – **Execution**

When to execute?
- As **fast as possible** after adoption: Increased risk from day 1 on a number of parameters: (All projects slow down, stability & reliability in operations, wellbeing of the employees etc.)

Funding?
- **Hit the brake hard** from day 1 on further investments in on-premise operation.
- **Shutdown or change** projects that doesn´t support the new strategy.
- Some employees may quit fast
- Reallocate funds to support sourcing projects.

Communication?
- What to expect NOW
- What to expect in transition
- What to expect in the future

It-sourcing strategy – **Results**

1. Enable "SaaS first" policy on it-services
- Canvas LMS replaces on-premise LMS (Done)
- Move Exchange to Office 365 (Done)
- Move Sharepoint, LYNC etc. to Office 365 (Done)

2. Shutdown of on-Premise datacenter:
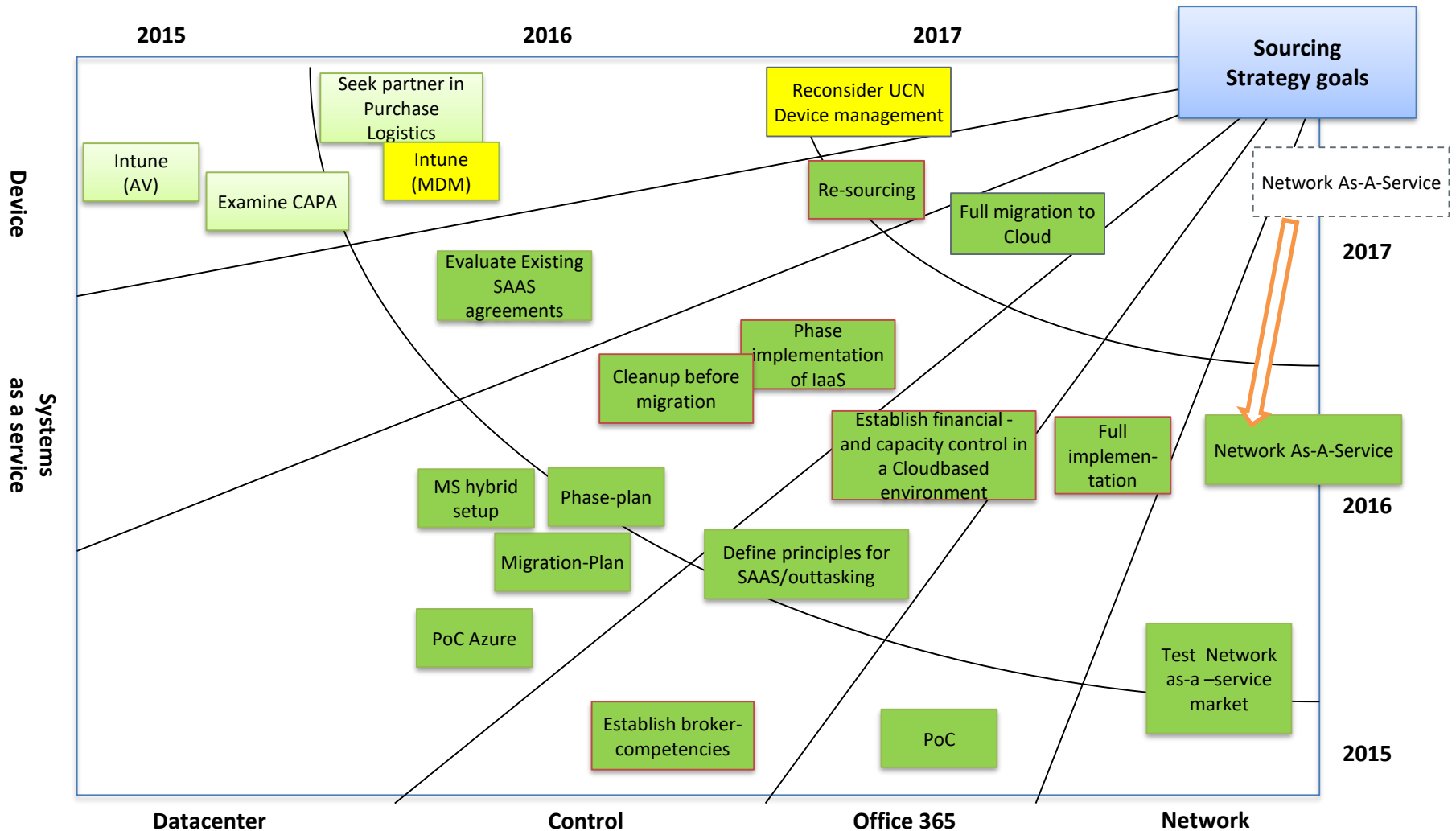- Move 80+ servers to Azure (Done)
- Move to classic ASP on a few selected services (Done)
- Establish Print-as-a-Service (Done)

3. Network as a Service
- Test the market for Network-as-a-Service (Done)
- Network-as-a-Service tender and contract completed (Done)
- Establish Network-as-a-Service (Done)

4. Client preperation and delivery as a Service (Tender currently in the market)

Sourcing strategy – Plan

2015   2016   2017

Sourcing Strategy goals

Network As-A-Service

2017

Device

Seek partner in Purchase Logistics

Reconsider UCN Device management

Intune (AV)

Intune (MDM)

Examine CAPA

Re-sourcing

Full migration to Cloud

Systems as a service

Evaluate Existing SAAS agreements

Phase implementation of IaaS

Cleanup before migration

Establish financial - and capacity control in a Cloudbased environment

Full implemen-tation

Network As-A-Service

2016

MS hybrid setup

Phase-plan

Migration-Plan

Define principles for SAAS/outtasking

PoC Azure

Test Network as-a –service market

Establish broker-competencies

PoC

2015

Datacenter   Control   Office 365   Network

Sourcing strategy – Dismantle On-Prem datacenter

UCN On Prem
200+ Servere

40+

90+

Goodbye

- Clean up mess
- Consolidation
- On-Prem management

SaaS

Office 365

canvas

- Mail / Calendar (O365)
- Office (0365)
- Skype for Business (0365)
- Files (0356)
- Power BI (O365)
- Intranet (Webtop)
- ESDH (Axpoint)
- WORKFLOWS (Nintex)
- LMS (CANVAS)

IaaS

60 +

Azure

- SSO + ADFS + AD Connect
- SQL
- UMS Provisionering
- Non-Saas services
- EDU-Applications

ASP

12

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KMD

ATEA

- Print & Scan
- Print Payment & reports
- Navision STAT, LDW
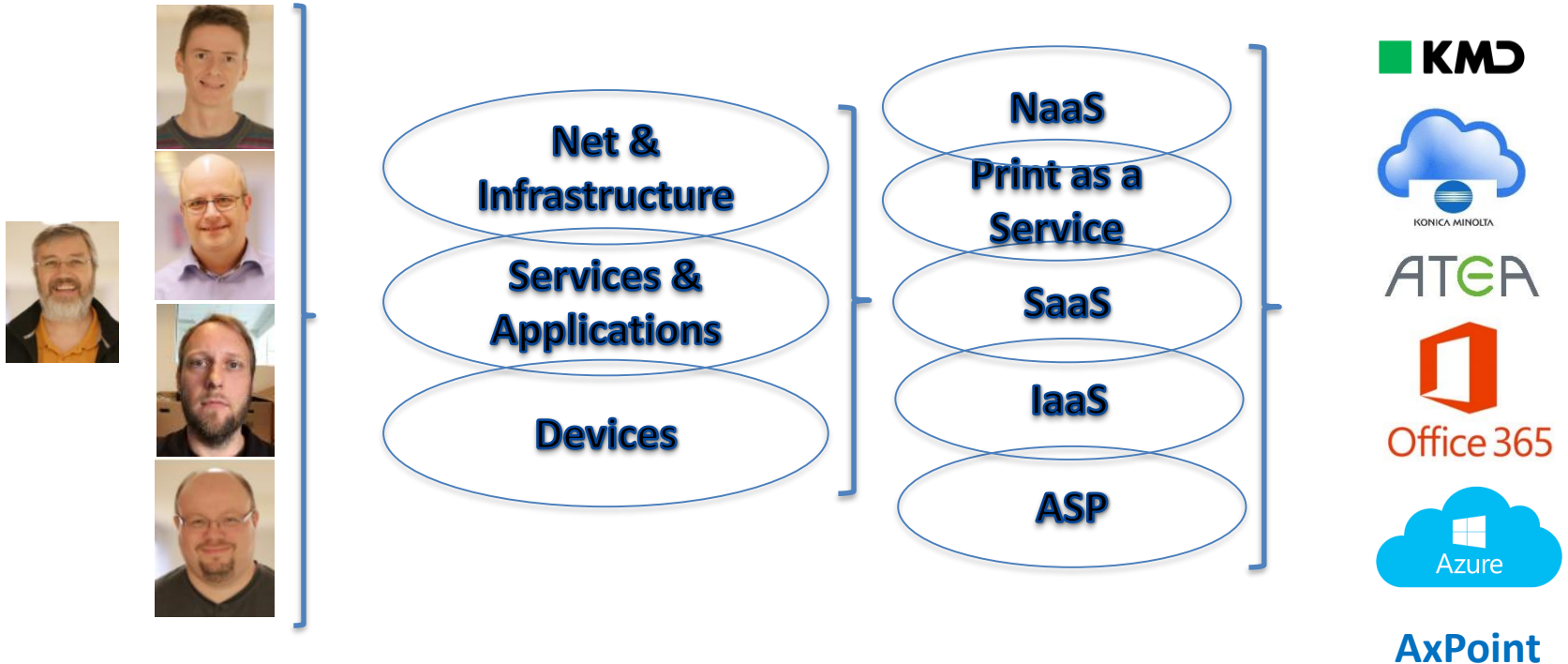- Accobat
- OnLine Backup (BaaS)

Small High-performance organization: Operation, Infrastructure & Client in one team.

(Dream)Team   **Delivers**   **Koncepts**   **Vendors**

Net & Infrastructure	NaaS
Services & Applications	Print as a Service
Devices	SaaS
	IaaS
	ASP

KMD

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Office 365

Azure

AxPoint

(Radical) Sourcing strategy – Key Experiences

Startup considerations:
- Key-employees might leave – Partner/Backuplan is mandatory
- Internal flexibility decreases fast = Loss of capacity re. development (in transition Phase)

Investments, economy and services:
- UCN Cloud Datacenter expenditures is lower than on-premise (Need to hit "sweet-spot" in getting rid of CAPEX expenditures) – Much better SLA and Compliance
- Network-As-A-Service : Neutral expenditures compared to former internal operations, but much better SLA/quality.
- Print-As-A-Service: Slightly cheaper compared to on-prem service. Better SLA

Experiences:
- Organization: Communicate impact re. Current and future services re. SLA, function and capacity– Especially potential loss of local customization, capacity etc..
- Dramatic reduction of stress in department and periodic "fire-extinguish" – More room for projects og "business development"

It-sourcing strategy – **Facing new Challenges !**

More services and services "from the cloud":
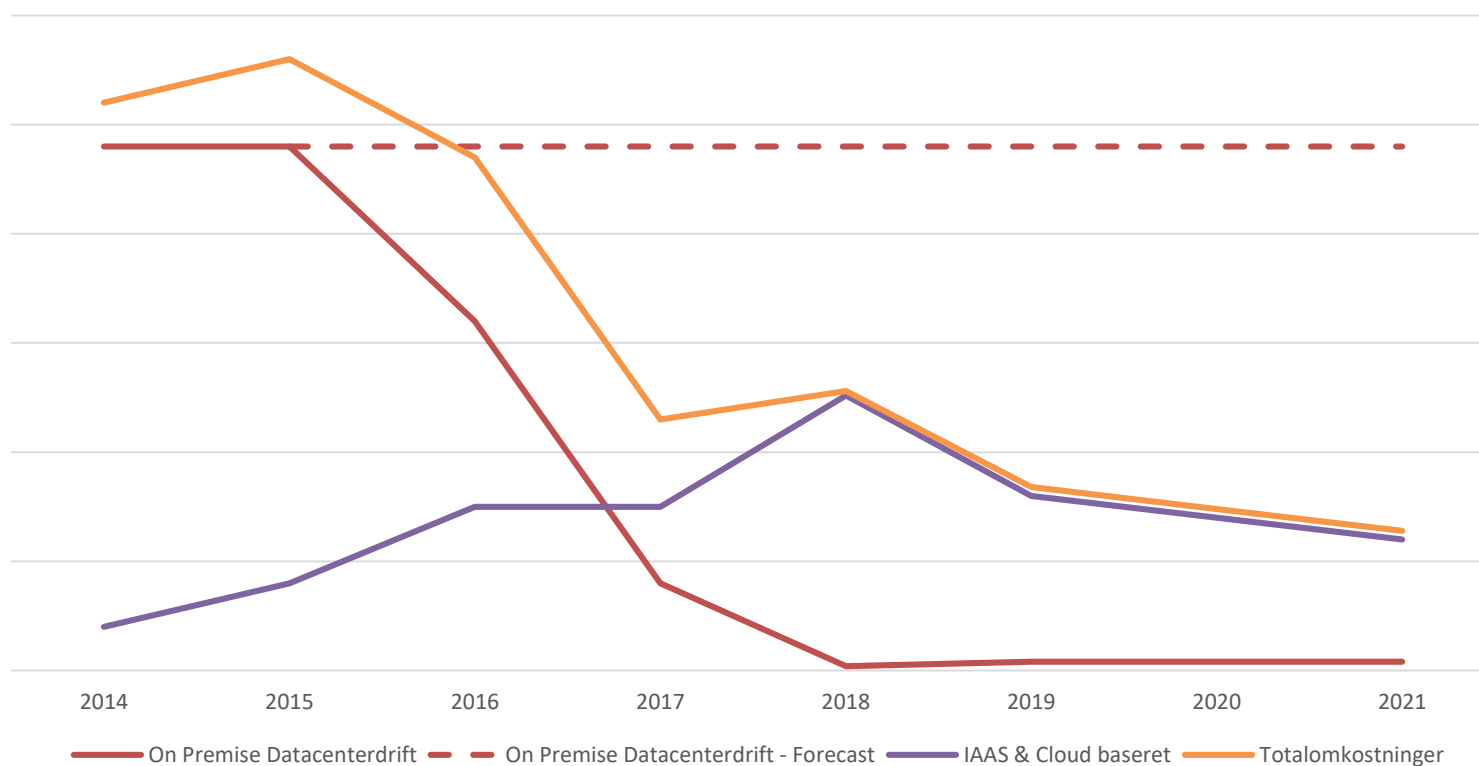

NEW FEATURE ALERT

- Much **faster succession** of applications, features and services: Puts pressure on support, governance and planning – and average users.
- Uncontrolled release of potential **"disruptive features"** through SaaS services.
- **More "Mobile first"** will be available to users: Accelerate demands for more..
- **Less flexibility** and customization of future it-services: "Standard" and "Good-enough" rules.

Economy & resources:

- More utility computing and "pay-per-view" services could mean new challenges in controlling and forecasting operating costs.
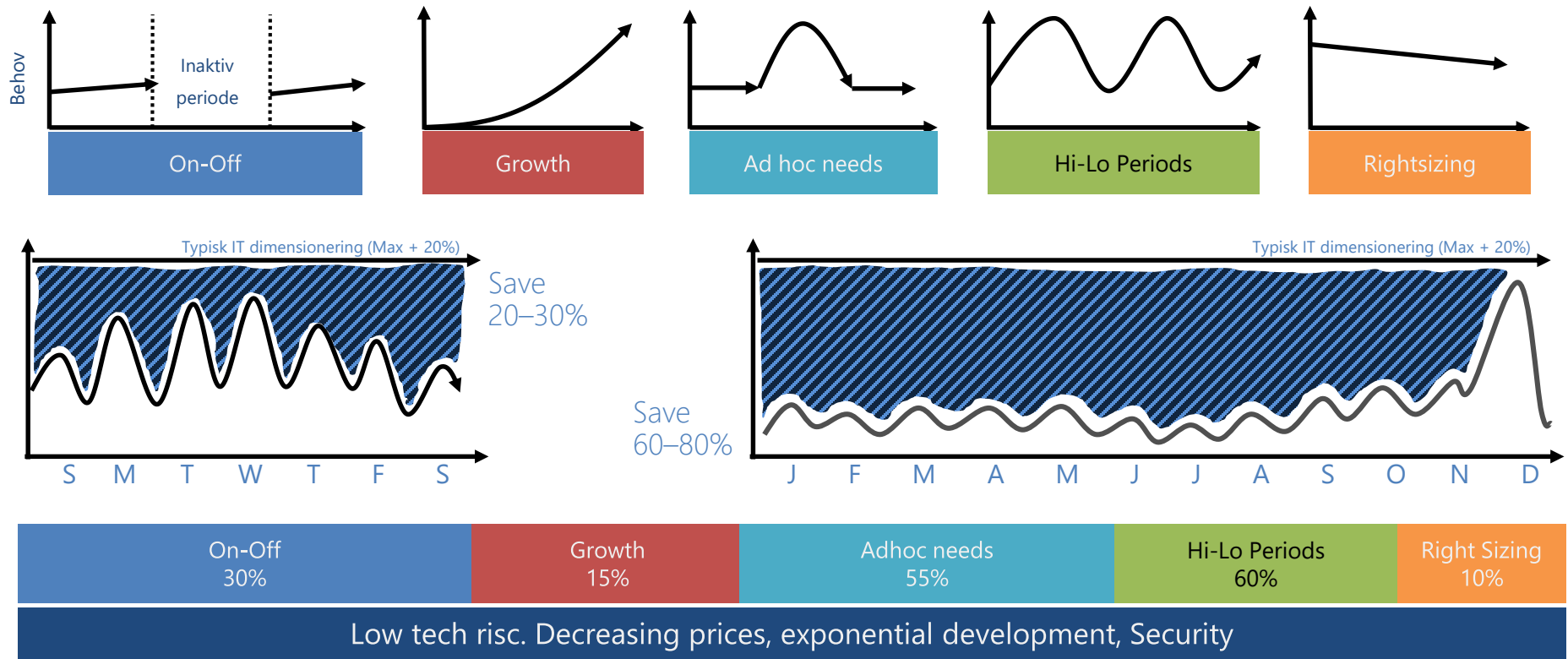

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Sourcing of Datacenter – Actual cost development

Capacity based cost-management – Smarter IT

| On-Off 30% | Growth 15% | Adhoc needs 55% | Hi-Lo Periods 60% | Right Sizing 10% |

Low tech risc. Decreasing prices, exponential development, Security

Timengo

What´s next?

UCN On Prem
200+ Servere

40+

SaaS

- Mail / Calendar (O365)
- Office (0365)
- Skype for Business (0365)
- Files (0356)
- Power BI (O365)
- Intranet (Webtop)
- ESDH (Axpoint)
- WORKFLOWS (Nintex)
- LMS

90+

Goodbye

- Clean up mess
- Consolidation
- On-Prem management

60 +

IaaS

Azure

- SSO + ADFS + AD Connect
- SQL
- UMS Provisionering
- Non-Saas services
- EDU-Applications

12

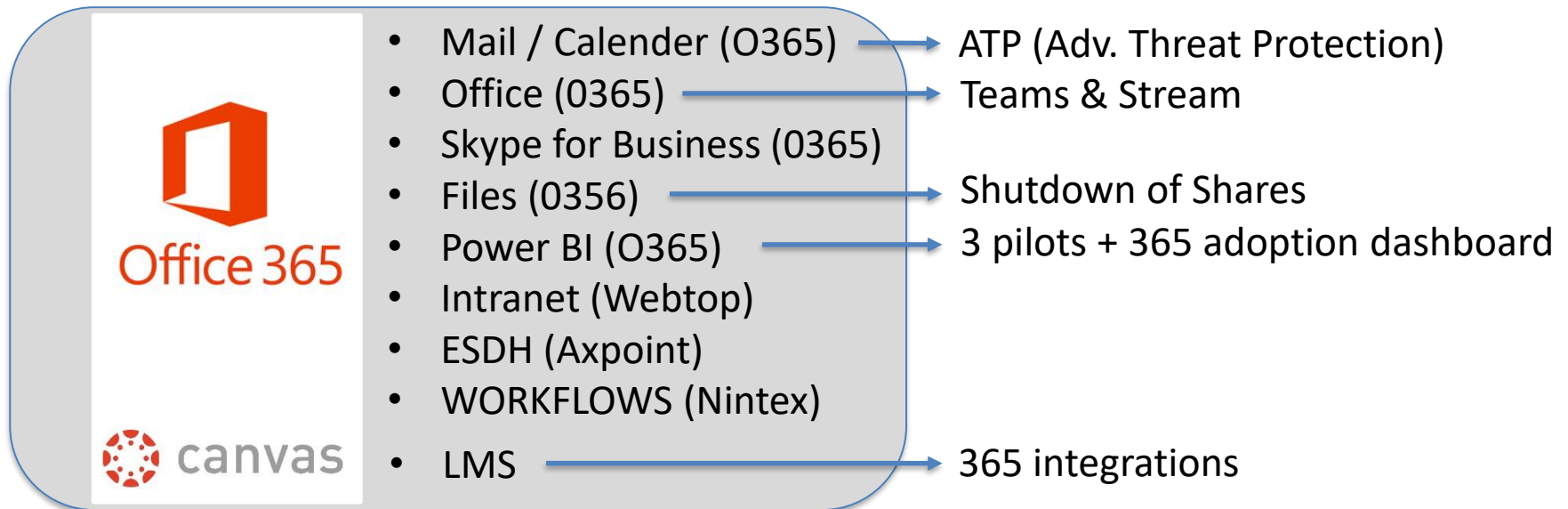## ASP

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- Print & Scan
- Print Payment & reports
- Navision STAT, LDW
- Accobat
- OnLine Backup (BaaS)

Office 365 / SaaS – New challenges

1. Adoption – Adoption - Adoption
2. Address accelerated feature deployment features..
3. Projects:

Office 365 / **canvas**	• Mail / Calender (O365) → ATP (Adv. Threat Protection)
	• Office (0365) → Teams & Stream
	• Skype for Business (0365)
	• Files (0356) → Shutdown of Shares
	• Power BI (O365) → 3 pilots + 365 adoption dashboard
	• Intranet (Webtop)
	• ESDH (Axpoint)
	• WORKFLOWS (Nintex)
	• LMS → 365 integrations

What´s next?

UCN On Prem
200+ Servere

40+ →

90+ ↓

Goodbye

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12 →

SaaS

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IaaS

- SSO + ADFS + AD Connect
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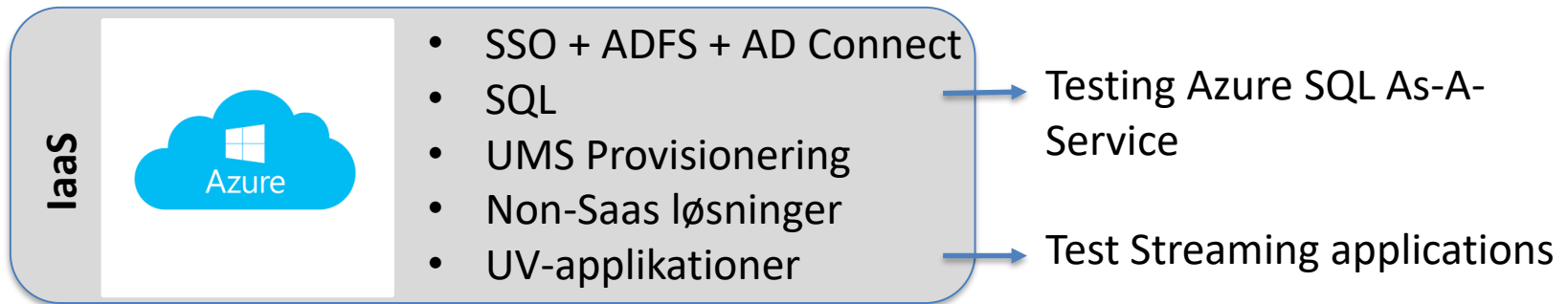- UMS Provisionering
- Non-Saas services
- EDU-Applications

ASP

- Print & Scan
- Print Payment & reports
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- OnLine Backup (BaaS)

Azure – What´s next?

1. Continue capacity optimization in Azure.
2. Test EMS (Enterprise Mobility Suite)
3. GDPR Compliance project via Azure Advanced Protection
4. Projects:

IaaS

- SSO + ADFS + AD Connect
- SQL
- UMS Provisionering
- Non-Saas løsninger
- UV-applikationer

Testing Azure SQL As-A-Service

Test Streaming applications

Thank You for listening!

Questions or comments?