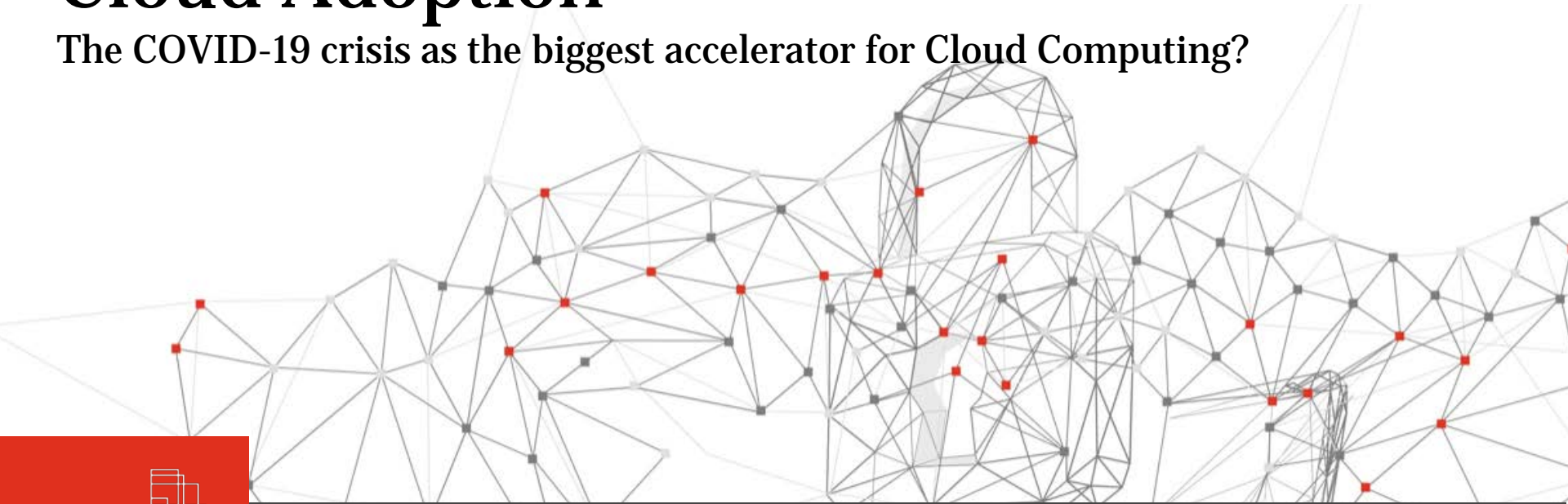# COVID-19

Cloud Adoption

The COVID-19 crisis as the biggest accelerator for Cloud Computing?

Topics we will cover today

1. **Situation and risks**
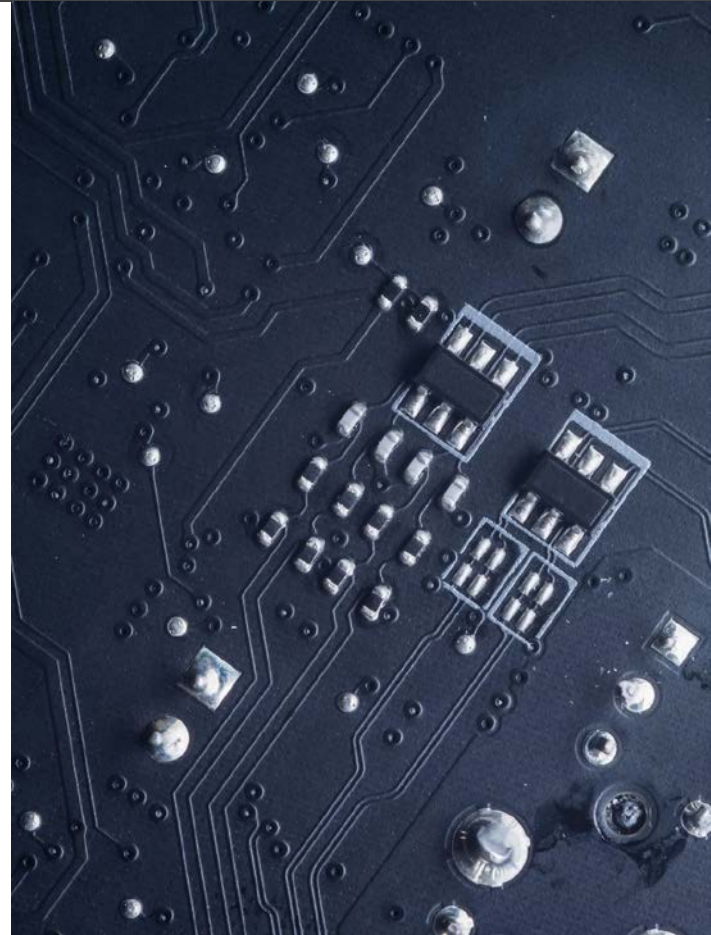
   a. COVID-19 crisis and the Cloud

   b. Clients in "COVID-19 mode" in "rush transformation"

   c. One step back to see the full picture

2. **Key topics – what our experts are saying**

   a. Make the cloud transformation sustainable

   b. Skill up, Clean up

   c. Compliance and data protection

   d. Opportunities of change emerging from the crisis

3. **Q&A – ask your experts now**

4. **Summary & key take-aways**
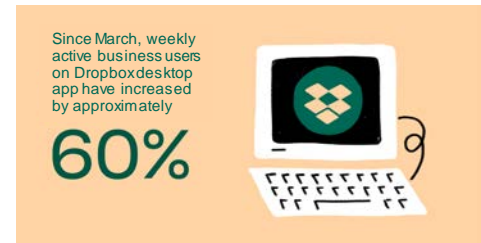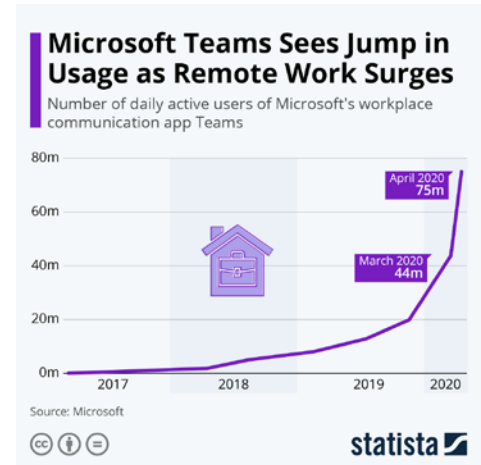
Covid-19 transformed the way businesses collaborate

Organizations massively and rapidly adopted cloud-based collaboration software to enable remote working

In the context of the COVID-19, Cloud solutions brought immediate benefits:

- Instant availability
- Rapid proof-of-concept
- Quick installation and configuration
- Ease of use
- Scalability
- Apparent cost-effectiveness (e.g., limited upfront investment)

However, in the long term, unconsidered cloud adoption presents risks that need to be assessed and mitigated to an acceptable level:

- Uncontrolled use of unapproved services ("shadow IT")
- Security challenges (e.g., data leakages, unauthorized access, dependence on a service provider to ensure adequate internal controls, extreme reliance on secure connectivity to the cloud)
- Privacy and regulatory compliance shortcomings
- Lesser control over availability and quality of service
- Underestimate of the "real cost" of moving to the cloud (e.g., runaway costs from poor planning)

Microsoft Teams Sees Jump in Usage as Remote Work Surges

Number of daily active users of Microsoft's workplace communication app Teams

April 2020
75m

March 2020
44m

80m
60m
40m
20m
0m

2017 2018 2019 2020

Source: Microsoft

statista

Since March, weekly active business users on Dropbox desktop app have increased by approximately

60%

COVID-19 crisis and the Cloud

Client view (examples from our clients)

Capacity Management
Customers where enabled to work from home, but because of inadequate capacity planning (VPN, Internet Access, VDI) part of the company had to work in the morning and part in the afternoon. Mobie devices were purchased and deployed in a rush.

Network Bandwidth and Design
Most of the employees where forced to work from home, but the network was not designed to split traffic and all the traffic went trough the central infrastructure, resulting in a network overload.

Identity Management
Microsoft Teams was implemented in a rapid approach to enable workers to collaborate. Identities where not synchronized the cloud solution, this results in users having multiple identities or need to login multiple times.

License Management
Customers took advantage of the free licensing offers by the several vendors. No prober long-term cost evaluation was considered (or budgeted)

Rapid adoption of modern workplace
Modern workplace enable the productivity on any devices. Policies, Integration and operational procedures left behind in combination with a lack of monitoring capabilities increased the risk of successful attacks and a security operation not beeing able to detect it.

Data Protection Impact Analysis
We have seen that customers where willing to take more risks and short-cut also on data protection checklists before implementing technologies, this can result in putting data at risk or violating compliance or law.

Attacker view

Spike of phishing attacks
Criminals are creating fake sites related to COVID-19 to entice victims into opening malicious attachments. Trend Micro reported that nearly one million spam messages have linked to COVID-19 since January 2020
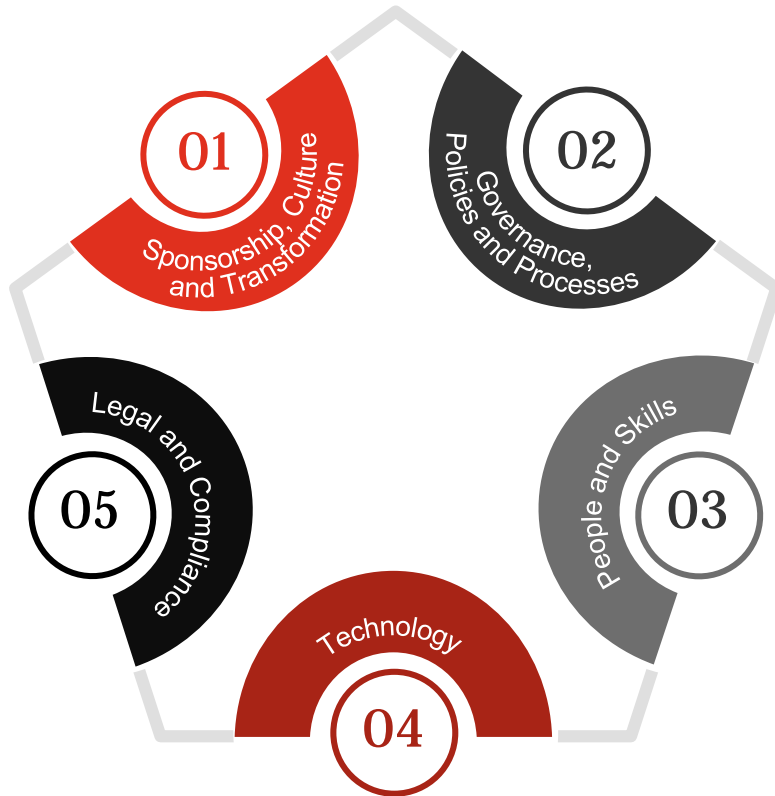
Vulnerabilities of working from home
Threat actors exploiting vulnerabilities of systems, networks and applications implemented as result of the rapid adoption. They are searching for exposure to steal data and make profit or cause disruption.

One step back to see the full picture – Samples of a cloud journey

01
- Business-, technology- and sourcing strategy aligned
- Business drivers and economic analysis
- Cloud business case, -strategy and -roadmap
- Vendor evaluation and 3rd party management

02
- Governance and policy management
- Risk, compliance and policy management
- Platform definitions
- Operations process definitions
- Hybrid identity and access management

03
- Cultural change
- Awareness, training, education, certification
- Roles, responsibilities, competencies

04
- Infrastructure & application inventory, profiling and strategy
- Cloud target state design, architecture design
- Dependency mappings
- Package and release Management
- Detection and response in hybrid environments

05
- Regulatory requirements collection and definition
- Privacy target state design
- Cloud privacy controls
- Cloud regulatory reporting

Now ist time to take a step back and review your rapid adoption

For a successful cloud adoption we see the following key prerequisites
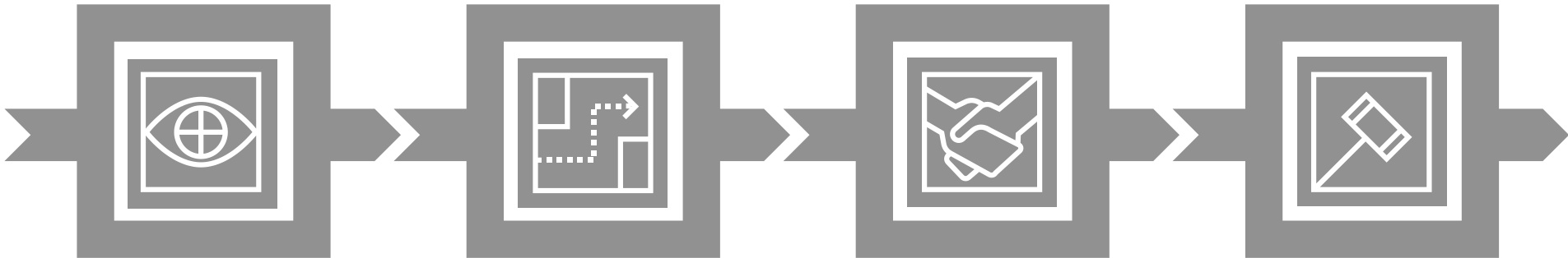
Knowing Why
COVID-19 as trigger

Having a Plan
Rethink your approach
Review:
- Strategy
- Security
- Operating Model
- Organizational Change

Executive Sponsorship
Cloud transformation impacts your business and drives business results
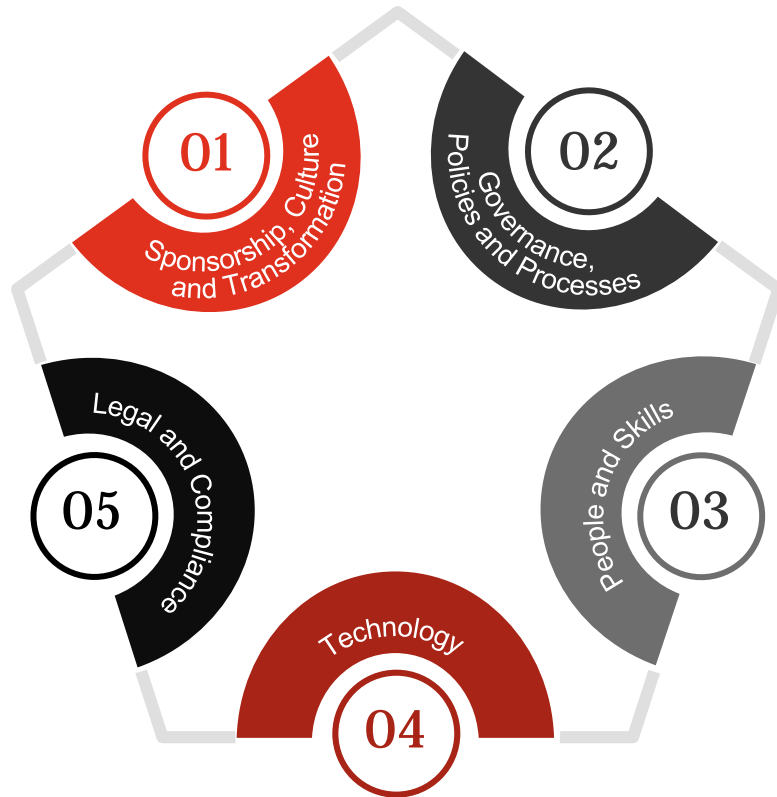Executive sponsorship essential for successful implementation

Legal & Compliance
Common understanding on:
- Opportunities
- Laws
- Regulations
- Restrictions

Key priorities to consider

01 Sponsorship, Culture and Transformation

02 Governance, Policies and Processes

03 People and Skills

04 Technology

05 Legal and Compliance

What you can do

Review your approach – review your adoption approach using those key priorities:

1. **Upskilling** – Upskill your workforce in remote working and new working styles

2. **Develop a new culture** – which is driven by trust and results, you can't control the time when your employees are at home

3. **Compliance** – to sustainably use the power of the cloud, you need to ensure security, resilience and compliance

EMPOWER AND TRAIN
YOUR EMPLOYEES

TRANSFORM
YOUR ORGANISATION

OPTIMIZE
YOUR OPERATIONS

TRANSFORM
YOUR PRODUCTS

Ask us anything - Q&A

Instructions

In this Q&A, **you** as the audience can get involved, so please submit your questions for the Experts via the **questions box** on your **left hand side**

Summary & key take-aways

What you should keep in mind

1. **Make the transformation sustainable**
   Reflect – Adopt – Integrate – Fix – Improve

2. **Train people, close the knowledge gap**
   Awareness – Educate – Skills – Certificate

3. **Ensure security, regulatory compliance and data protection**
   Manage Risk: Financial – Operational - Legal

➢ Despite all the potential we see, the value we created, the chances we see: To sustainably use the power of the cloud, we need to ensure security, resilience and compliance!

Cloud and Security: "What I need to do and what I should do.."

COMPLIANT Meets a specific standard at point in time (e.g. not negligent)

SECURE Lowers business risk to acceptable level by disrupting attacker return on investment (ROI)

SECURE

COMPLIANT

LEVEL OF ACCEPTABLE RISK
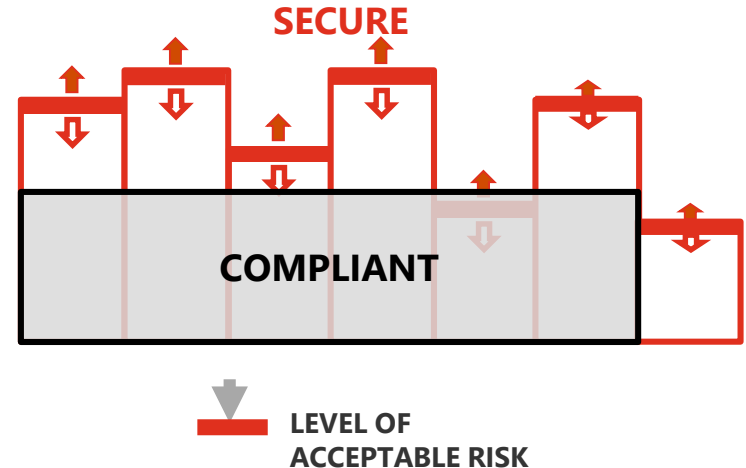
Thank you!

One Point of Contact:

Via <u>our crisis helpline</u> and PwC Switzerland website (<u>EN</u> I <u>DE</u> I <u>FR</u>)

Your experts:

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Cybersecurity and Privacy
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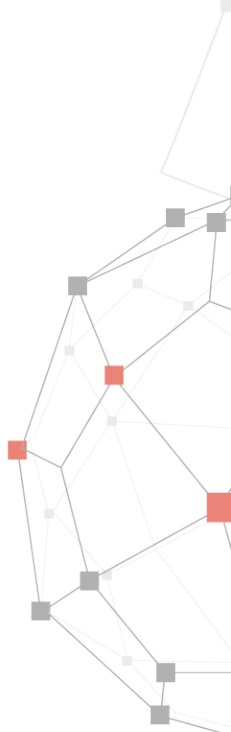Cybersecurity and Privacy
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Thank you!

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