

DIGITAL TRANSFORMATION IN IP

Cloud-Based IP Management

For IP Departments and Law Firms

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Digitalization in IPM



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Let's start our walk through digital transformation

1.

Digital
Transformation
in IP Management

2.

Cloud-based IP
Management

3.

Vision 2030

1.1

The “What” and the „How“

While our **purpose** and **goal** stays the same („**what**“), the steps we need to take and the processes we need to follow will **fundamentally change** in **digital transformation** („**how**“)



1.2

A look at **today's** intellectual property process

Inventor



Patent Assessor



Patent Attorney



To gain an understanding in **established workflows** we will look into three exemplary roles in intellectual property in a simplified process

1.2

Inventors perspective

Inventor



*“I have an idea,
I better write it
down”*

*“My sketch is
looking good, better
scan it, or just take
a picture!”*

*“Well, I emailed it, I
still got a lot of other
things to do, I am sure
it will work out...”*

Patent Assessor



*“\$%& where is
my pen?!”*

*“As far as I remember I
have to email it to
somebody, not sure who
the right person is?!”*

Inventors should mostly do, what they do best: invent.

Is this a reality today?

1.2

Patent Assessors perspective

Patent Assessor



“I just received an email from an inventor. Interesting idea, but he left out a lot of information.”

“Our product management needs to be involved, they just hired a new guy, who has no clue about patents. Less than ideal, as this is REALLY time critical”

Patent Attorney



“I will have to get back to him and email him all the questions I have...”

“Phew, sometimes I think I do more explaining than assessing. At least I think I have all the data to hand over now!”

Patent Assessors need all relevant information to assess new inventions as quickly and conveniently as possible.

Is this a reality today?

1.2

Patent Attorneys perspective

Patent Attorney



“I just had a meeting with the inventor. Nice guy. I just wish he would be a bit more structured...”

“Well, this is all I got so far, I will structure it and prepare the application.”

“GREAT! Now the file is with the paralegal and the client has questions. No chance to answer those now...”

Patent Office



“The Patent Assessor told me this is time critical. Several other companies are working on similar ideas....”

“Sent it to the paralegal. I hope he will be quick with this one and lets me know when he is ready.”

Patent Attorneys should focus on creating and submitting the file.

Is this a reality today?

1.2

The “What“ and the „How“

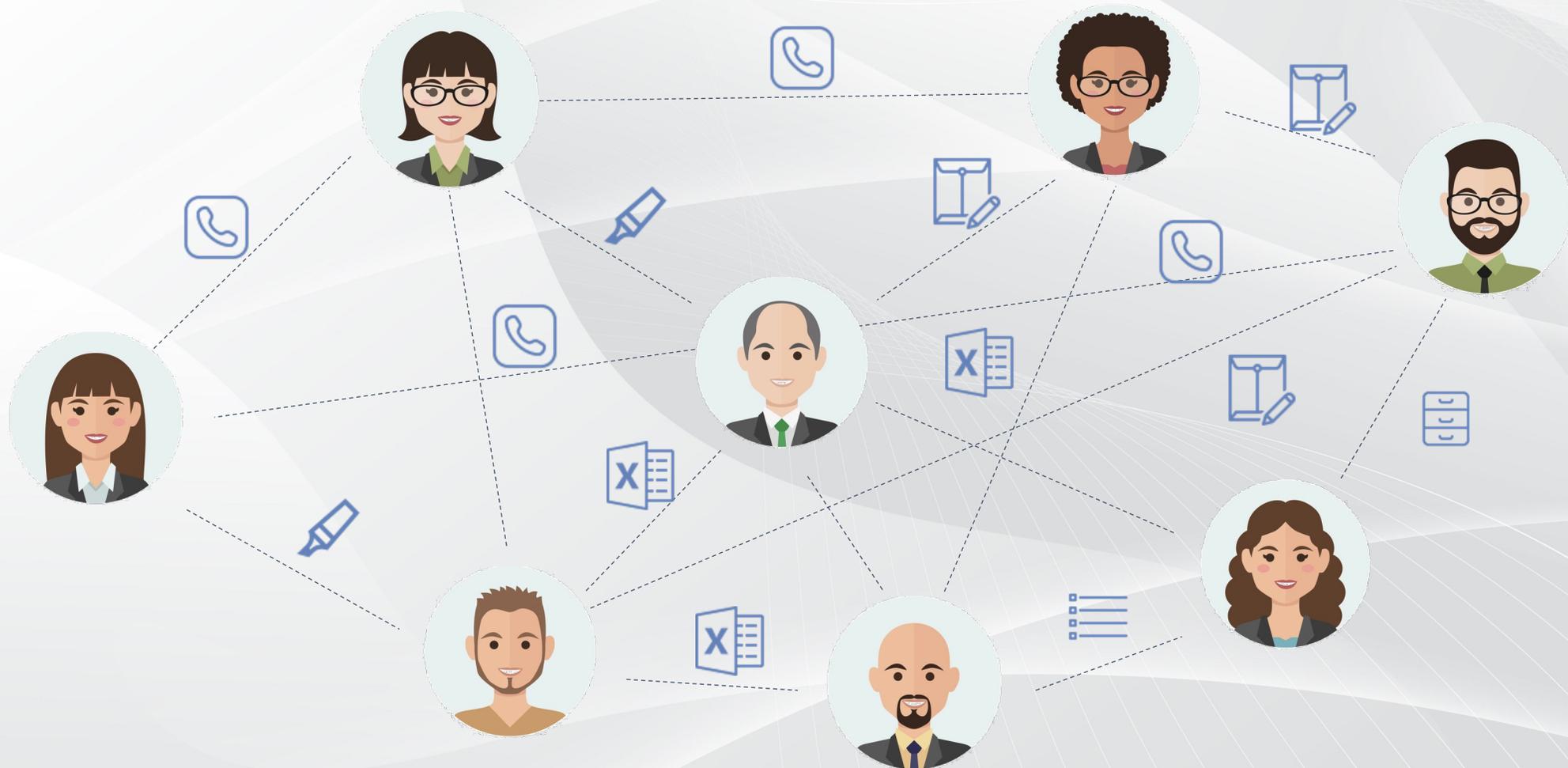
Is today's reality (“how”)

the best it can be?



1.2

Does **today's reality** not more look like this?



1.3

The **digitally transformed** „how“

The goal of Digital Transformation is to enable every person and every role to focus on the „what**“, rather than the „**how**“!**

1.3

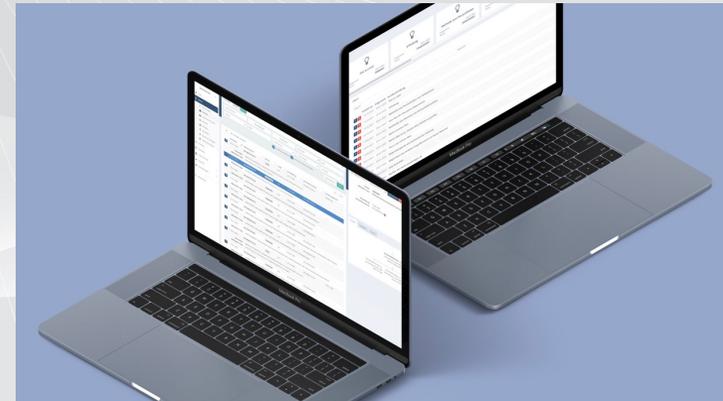
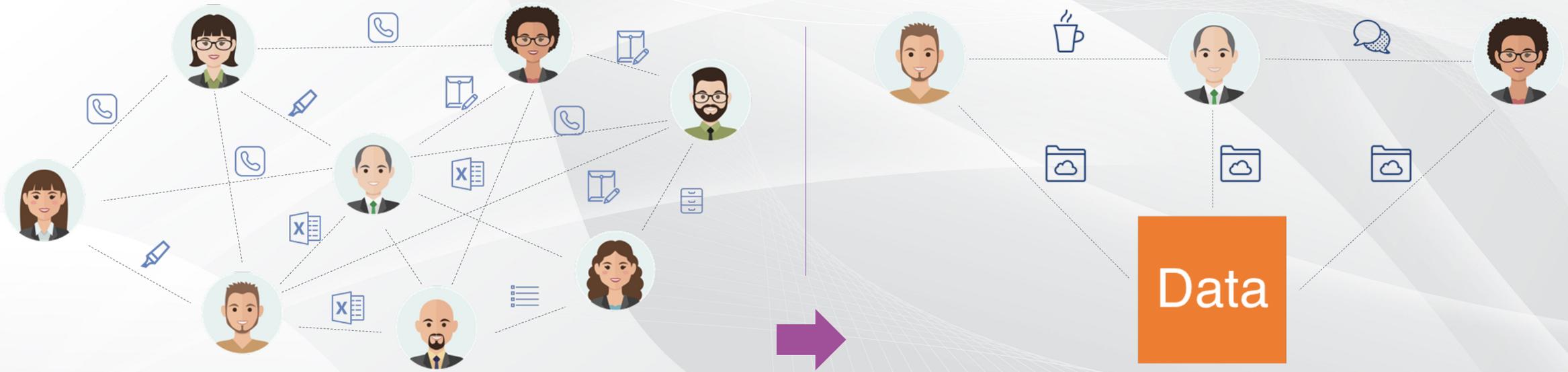
The digitally transformed „how“

While we have **our roles** and work towards the **same goal** („**what**“), the „**how**“ depends on how we think about **data** (*the digital file*) and how we **manage it** (*workflows*)!



1.3

The digitally transformed „how“



1.3

The concept of roles, rights and views



1.4 Paradigm shift: how we should think about data

Today, even though many roles work together to achieve one goal (**to protect a unique idea**), we are all working on **isolated data sources**.

Why?

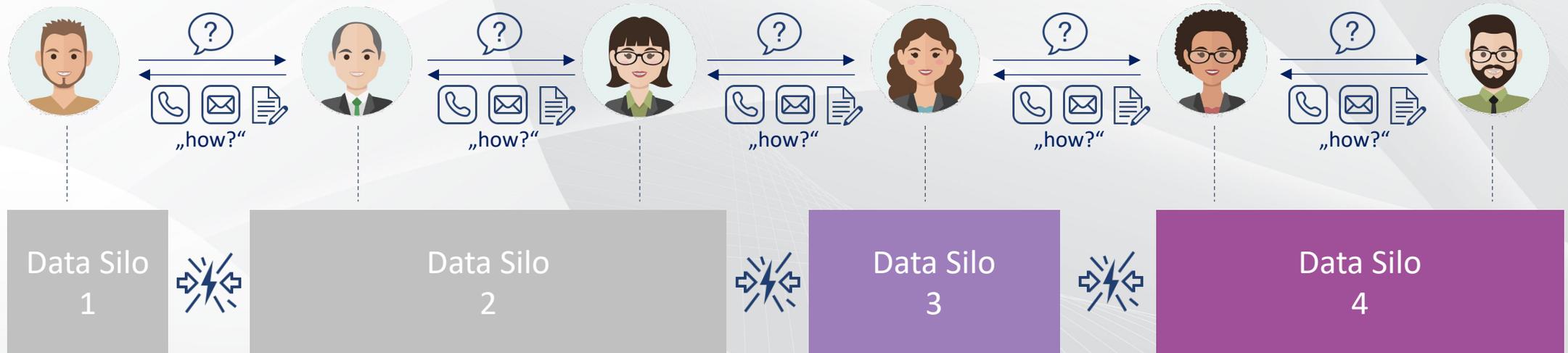
Let's try to find what is the difference between working together and **true collaboration**?



1.4

Working together vs true collaboration

Working together



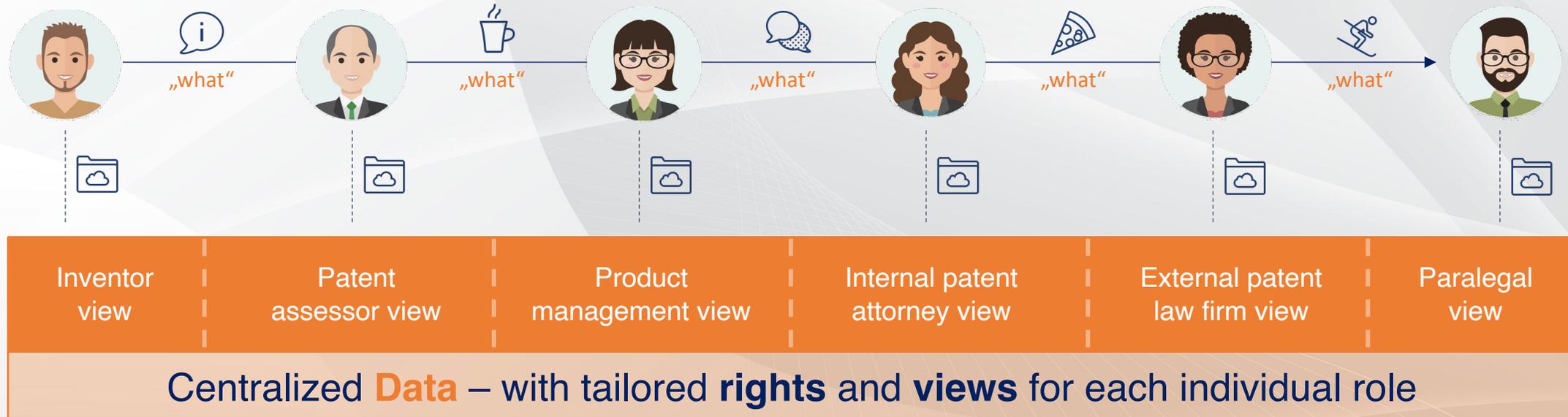
In today's way of working together, data is constantly picked up, changed, sent, received, saved, printed, scanned.

Is this really more efficient or even more secure than **sharing data**?

1.4

Working together vs true collaboration

True collaboration



While there is always just ONE set of data, secured and protected via rights & roles concepts

1.5

How data can **change its state**, but stays the **same**



A unique **set of data** changes its **state** and **form**, by applying workflows and data changes, also by applying different views and rules to it, but **the data source always stays the same**

2

Why digital transformation and cloud often go together

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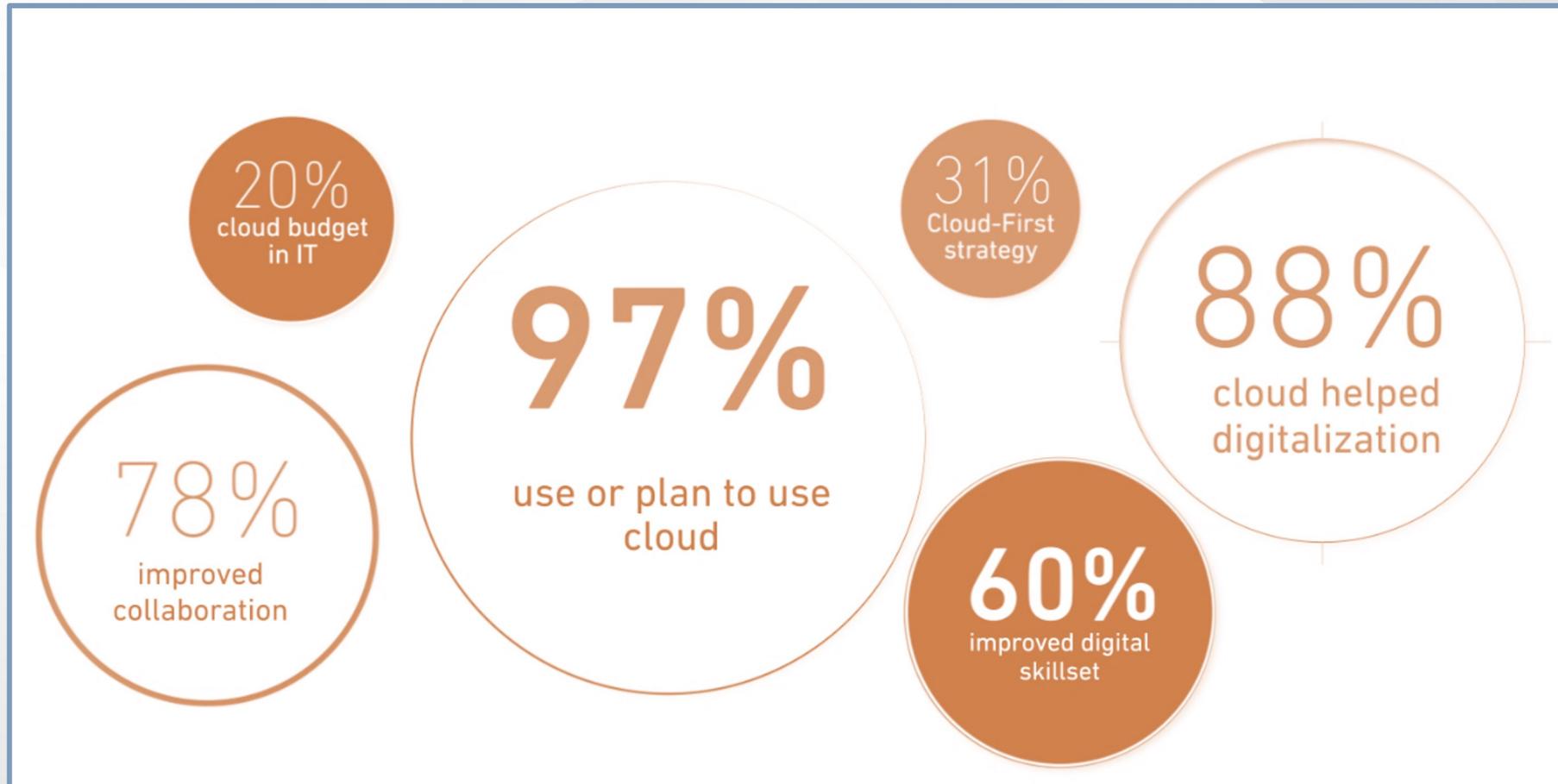
2.1

What is Cloud software?



2.1

Why is **Cloud** the new mainstream?



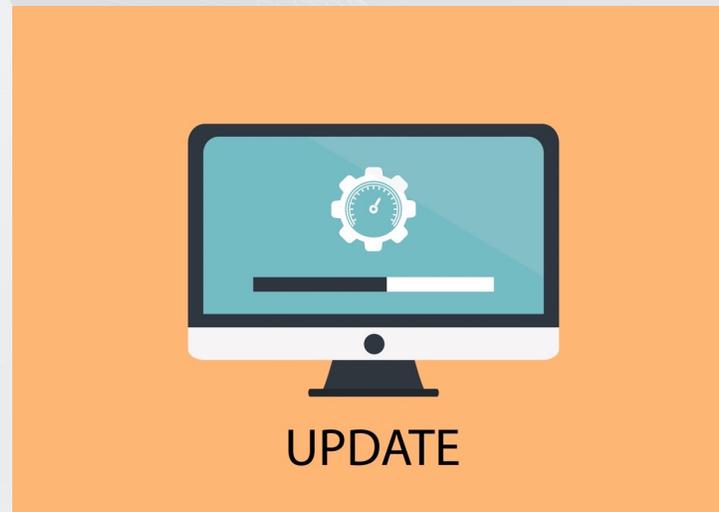
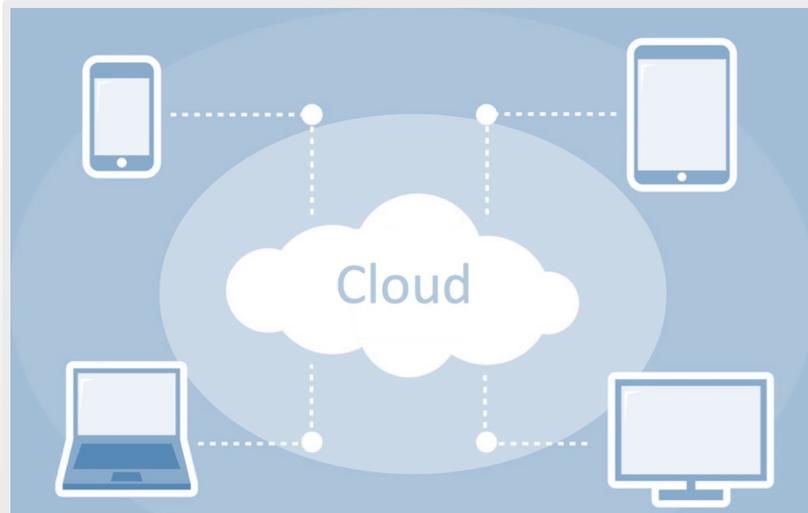
2.1

Why is **Cloud** the new mainstream?

Working from anywhere, with every device, easy and responsive interfaces

No worry about updates, always the newest features

Automatic (daily) backups, highest security standards



2.1

And what is SaaS?

As we learned, **centralizing data** is the true **power of the cloud**.

While simply moving **files** into the cloud might improve their **accessibility on different devices**, but without a shared roles & rights concept, they become unmanageable. This is why we need to **centralize** and **move the whole workflow, the whole software into the cloud**, and make it a **service**

(Software as a Service, or SaaS)

2.2

Frequently asked questions associated with Cloud

Change (is there no going back?)

Moving data to the cloud, is no different than migrating it from one software to another. **Reliable cloud providers guarantee data export**, should customers decide to move on.

Data security?

It might feel, as data is safest in the personal office, but in fact most data is not encrypted and IT standards in law firms or companies are not always tailored to protect intellectual property. **Specialized cloud providers take care of highest encryption standards with custom security concepts.**

Expenses?

The key factor is scalability. While a single software license might seem less expensive, costs skyrocket as soon as more users are needed, more roles should be included in the workflow and therefore additional staff in IT rollout & support becomes necessary. **Cloud software allows to add (and remove) users and roles with a simple click.**

Losing control & one-fits-all solution?

Some companies prefer to host their solution on-site (private cloud or on-premise). Nevertheless with this there will still be all the maintenance efforts to keep their own systems up and running. Latest developments show that public cloud providers even offer **considerable options to customization** for individual customer needs.

2.3

Hands-on benefits of **Cloud** software



Centralizing data saves time and increases quality

In IP **unique information** is saved and **used again and again** by **different stake holders** (patent attorneys, industries, IP offices, translator services, search personnel, etc.). Errors when transferring data from one to the other will be obsolete as no transfer is happening any longer.



Digitized workflows using centralized data spares one from delays when it hurts the most

Traditional on-premise software installations are **inflexible** in terms of scalability and location. In a fast-moving environment a **digitized workflow** can make the difference in the **time-critical IP world**.



Compared to PCs and software applications on various locations cloud is always accessible

Even if the **most of the IP people** strive to **be the fastest and most accurate worker**, the dependency of PC installations and of traditional software are keeping those users from really being **transparent, service-oriented and fast**.

2.3

Conclusion: Benefits of **Cloud** software



Cloud is cost effective

Instead of a massive one-off financial investment into servers, operating systems, software and licenses cloud software is rolled out as a full solution package on a competitive monthly cost basis.



Cloud is scalable

Traditional on-premise software installations are inflexible in terms of scalability and location. Cloud software can be rolled out to additional users anywhere on the planet within seconds.



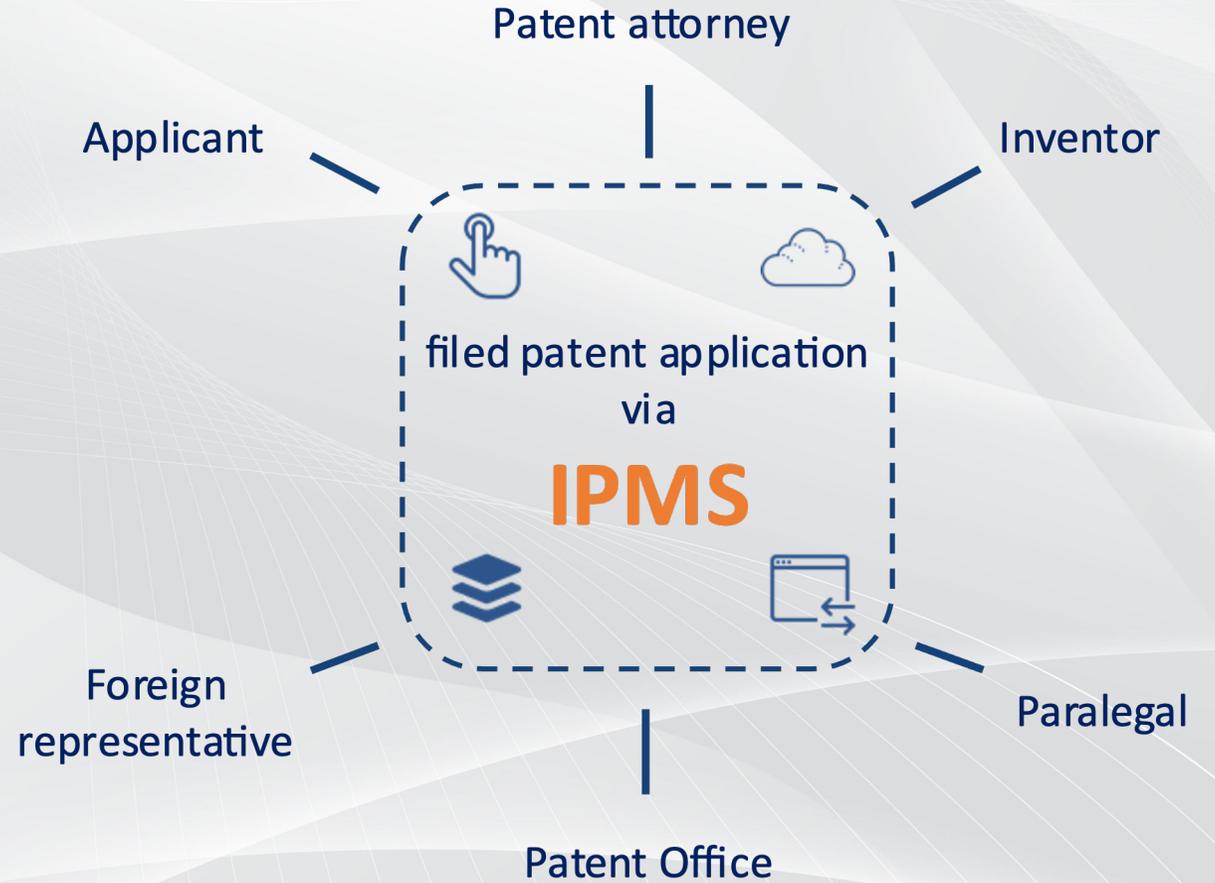
Cloud is ready to use and maintenance free

Cloud software is as accessible as any website but secure as an inhouse service. No local software installation is needed, users can start working instantly. No IT resources are required inhouse, no IT roadmaps are touched.

Resilience, Security, Scalability and **Agility** are key decision making factors for IT rollouts in the cloud.

2.3

Hands-on benefits of Cloud software



2.4

Technical decision factors to evaluate Cloud software



Out-of-the box?

A cloud application should be available via a conventional **browser** on any PC and mobile devices with a dynamic, modern, and responsive user interface. **No local software installation** whatsoever should be necessary.



Top security standards?

Amongst many security standards you should follow general **guidelines**: two-factor-authentication, strong password requirements, role-based access, principle of least privilege. End-to-end encryption. Encryption at rest (data storage) to name a few. **See also German Federal Office for Information Security (BSI).**



Top data safety & privacy standards?

Ensure full **GDPR / DSGVO compliance and data safety**. A Data Protection Officer (DPO). Inhouse data protection and GDPR awareness trainings. 24/7 monitoring and logging of all incidents. Daily backups (for business continuity). **Disaster recovery plan**. Full system redundancy with hot swap to secondary systems.



Future-proof and 3rd party integrations (APIs)?

Ensure, if possible that regular updates of both security-relevant components as well as roll-out of new and improved features are company policy. As well as a future-proof system design preparing the use of worldwide **open data exchange protocols and interfaces**.

2.4 Soft decision factors to evaluate software partners



Solution-Mindset?

Workflows, software environments and requirements are rarely identical. Most IP departments or law firms will run into trouble with a one-fits-all software solution. Software providers need to provide either **a level of customization or individual solution design.**



Flexible IP, cloud & usability experts?

Mastering IP and cloud software is challenging by itself, combining it with a high level of usability (**ease-of-use**) is a masterpiece. Keeping the solution at the same time flexible, customizable and adaptable as well as reliable and secure requires **highly specialized software companies.**



Customer orientation (with local support)?

Do individual customers enjoy top priority when it comes to **support** and **individual adaptations or customizations**? This should only be an option if you exactly know, that your needs are met out-of-the-box, will require no customization and will not change in the future.



Digital Transformation vision and strategy?

To think in “digital dimensions” is crucial for software providers to not only **perfect the status quo** but unrelentingly challenge the **processes and software features to drive digital transformation** in the IP industry and both law firms and clients.

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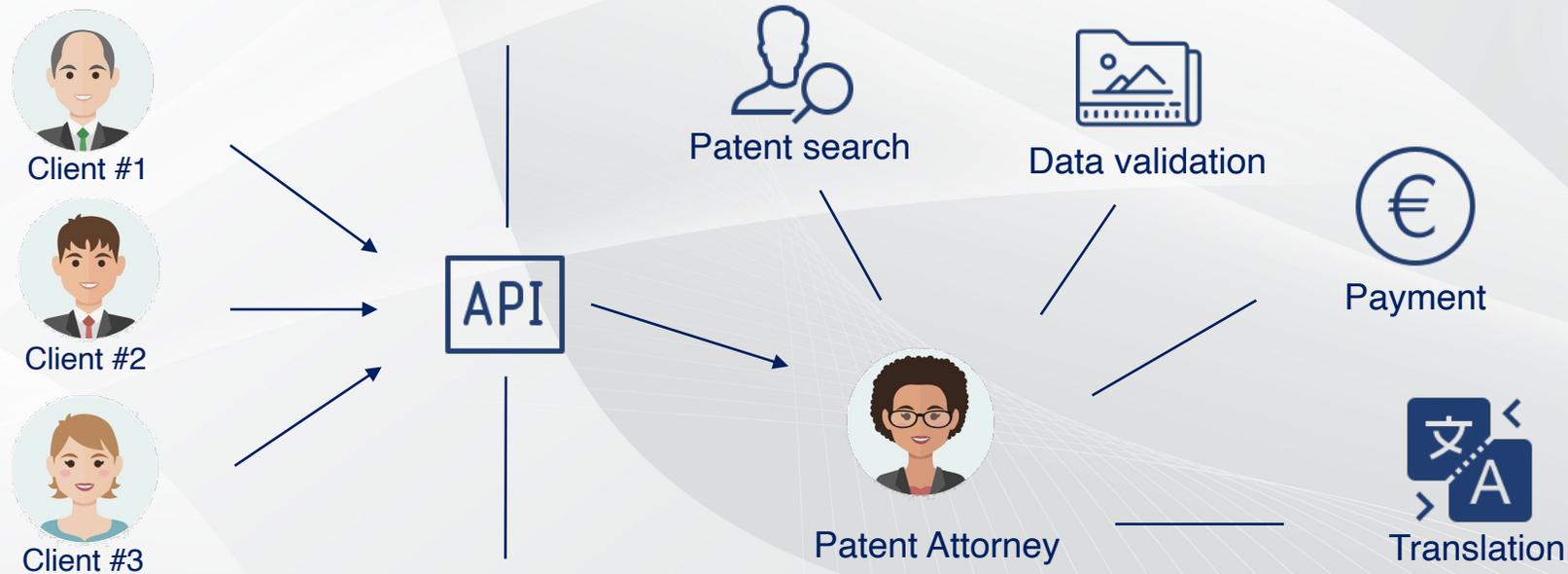
Vision 2030 – Corporate Intellectual Property



The next step following an **end-to-end digitalized internal IP workflow** will be an **ecosystem-like horizontal and vertical integration** of all IP relevant steps and processes via APIs (interfaces)

3

Vision 2030 – Intellectual Property Law Firms



End-to-end digitalized IP Law Firms will become **ambassadors of digital transformation** for their clients, **guiding and leading** them in digital transformation initiatives by providing IP relevant workflows or APIs (interfaces)