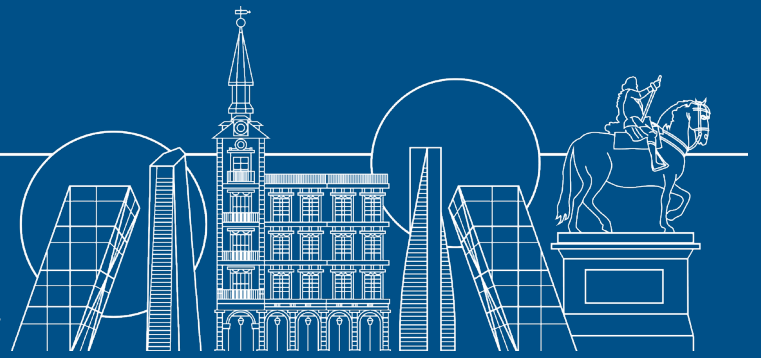
FICPI 22nd Open Forum
Madrid
25-28 September 2024



THIS SESSION IS POWERED BY KANGXIN

KANGXIN

Official Sponsor of FICPI in 2024

Advocating for your IP

STRENGTHENING THE PRACTICE OF THE INDEPENDENT IP ATTORNEY

www.ficpi.org

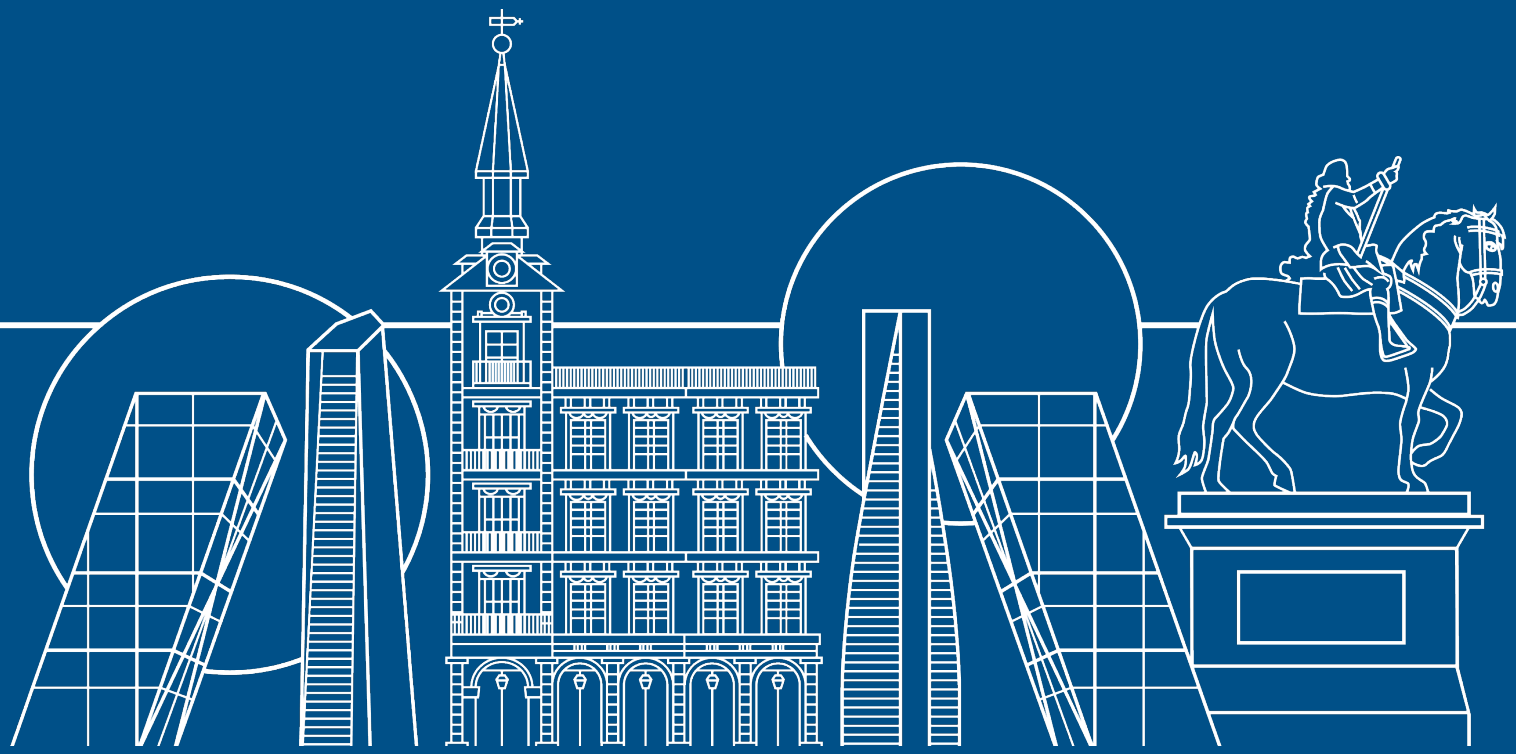
innovation

FICPI

FICPI 22nd Open Forum

Madrid

25-28 September 2024



AI & IP: An arranged marriage? Decoding a relationship not so intellectual

STRENGTHENING THE PRACTICE OF THE INDEPENDENT IP ATTORNEY

www.ficpi.org

innovation

Introduction

Louis-Pierre Gravelle
Dipchand LLP, Canada

innovation

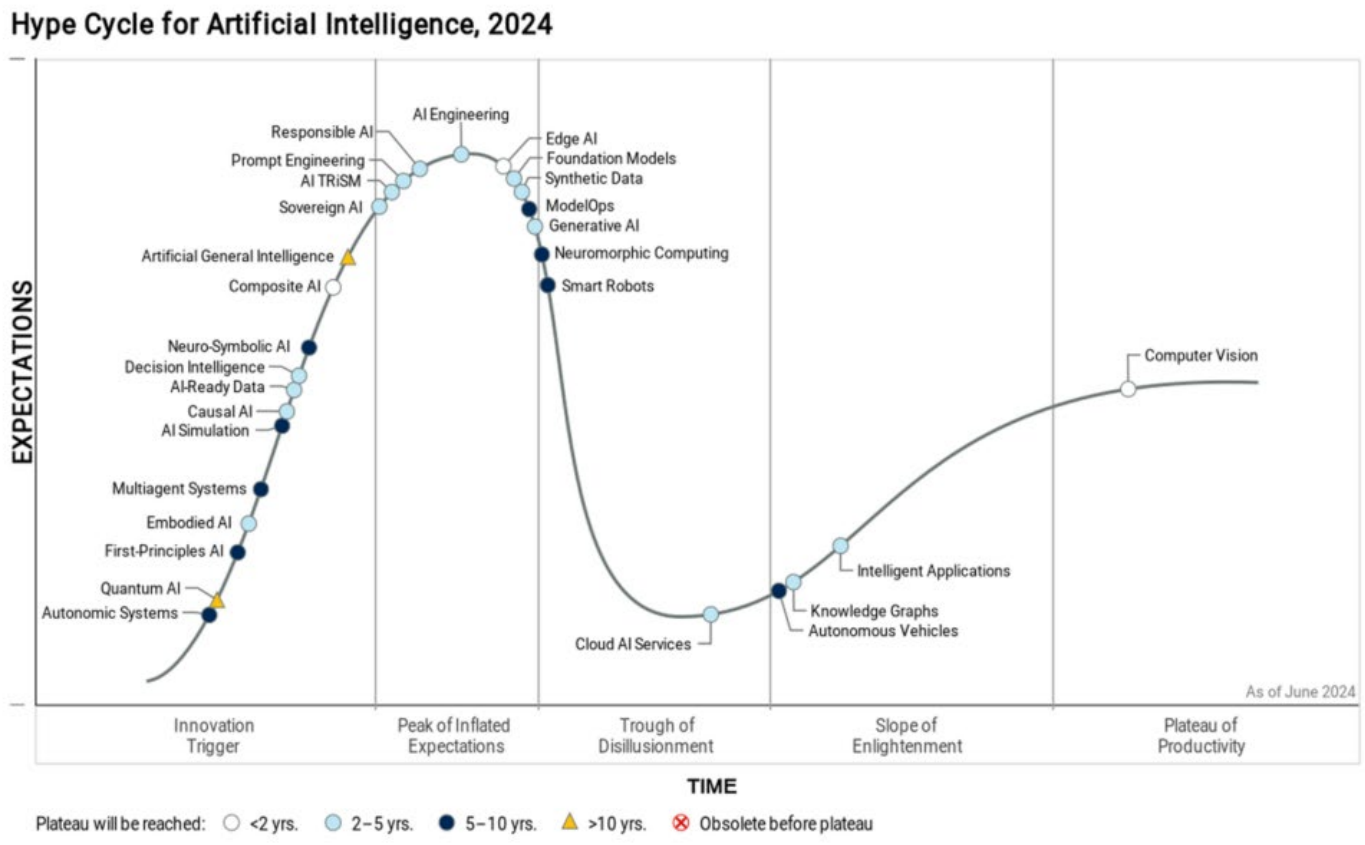
Louis-Pierre Gravelle
Canada

Sonia Montserrat
Canada

Vikrant Rana
India

Luna Zhang
P.R. China

Figure 1: Hype Cycle for Artificial Intelligence, 2024



What needs to be done?

Sonia Montserrat
VIDEN Analytics, Canada

innovation

Videns Analytics

AI&IP : An arranged marriage?

Sonia Montserrat, Data Science Director
sonia.montserrat@vidensanalytics.com
www.vidensanalytics.com

September 2024

videns

AGENDA

- Presentation

AI: Potential vs performance

AI Use cases in the legal industry

Analytical maturity and the impact on AI

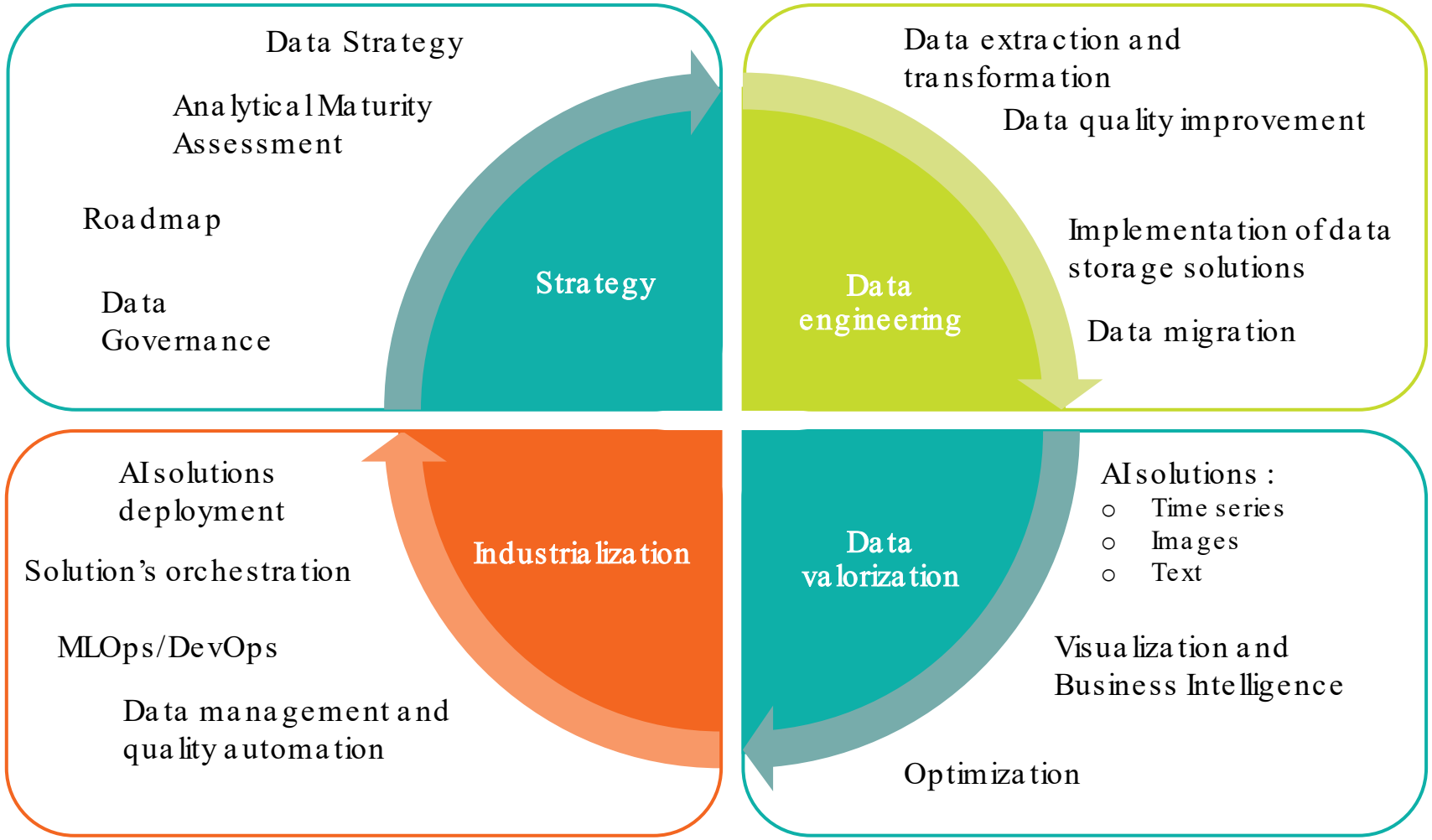
videns

Who We Are

At Videns Analytics, we contribute to the evolution of organizations through the use of data and artificial intelligence. We use our passion, talent and experience to implement efficient and sustainable processes, in harmony with the people and values of organizations, for a more humane society

What We Do

videns



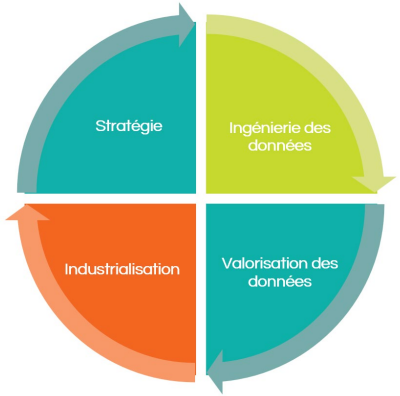
The Videns Difference

We develop **cutting-edge solutions in AI.**

Thanks to our partnership with **MILA**, we can engage some of the most renowned researchers in the world.

We are a partner to **several large organizations in Quebec and France**.

We are recognized for our relevance in the **financial, insurance, and industrial sectors.**



We integrate **AI at the core of a broader data value strategy**.

Data engineering, business intelligence, statistics... this is also our **core expertise**.

*Formerly *Montreal Institute for Learning Algorithm*

AGENDA

Presentation

AI: Potential vs performance

AI Use cases in the legal industry

Analytical maturity and the impact on AI

videns

AI: Potential vs performance

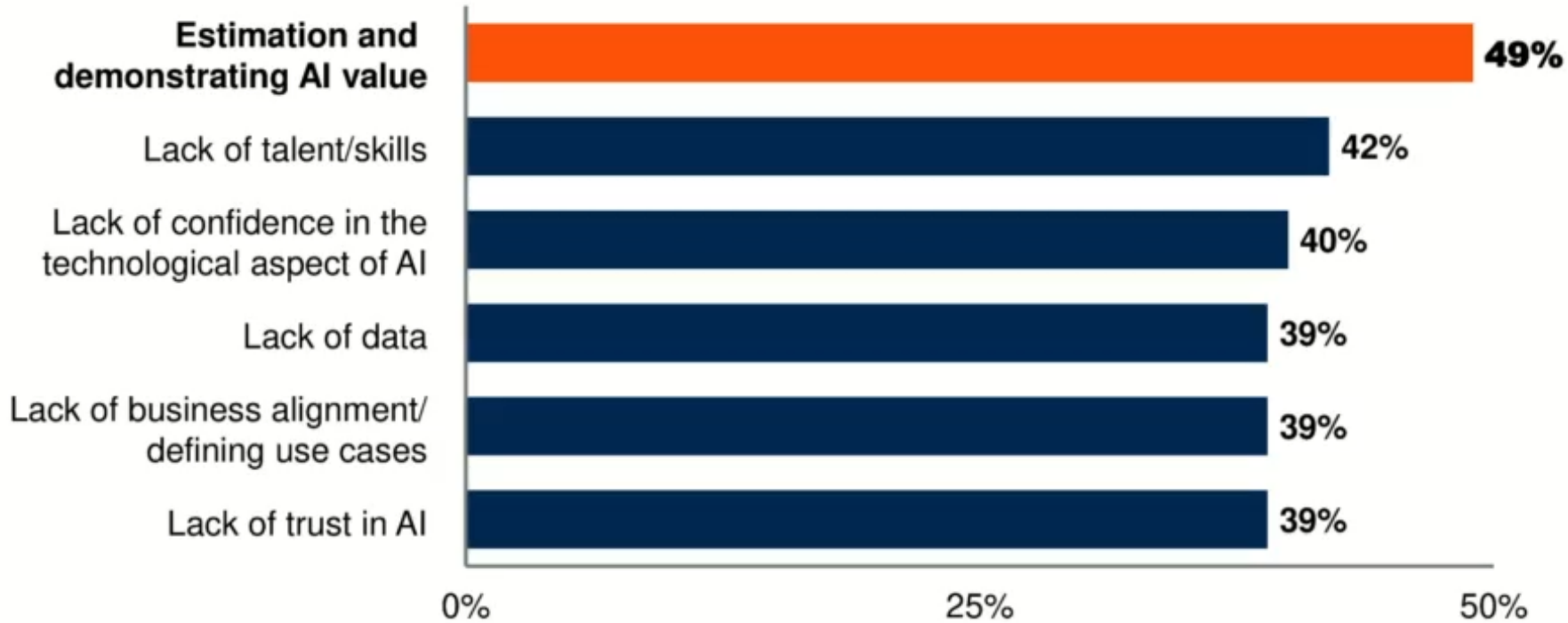
- **97%** recognize its benefits in daily operations
- **96%** of people say that AI is becoming a key tool for their company
- **78%** will use private generative AI solutions
- **61%** face accuracy issues
- **17%** consider their internal solutions excellent in terms of overall performance

Rapport McKinsey, Avril 2024: The economic potential of generative AI: The next productivity frontier

videns

Nobody Said It Was Easy: Barriers to AI Adoption

Top barriers to implement AI techniques



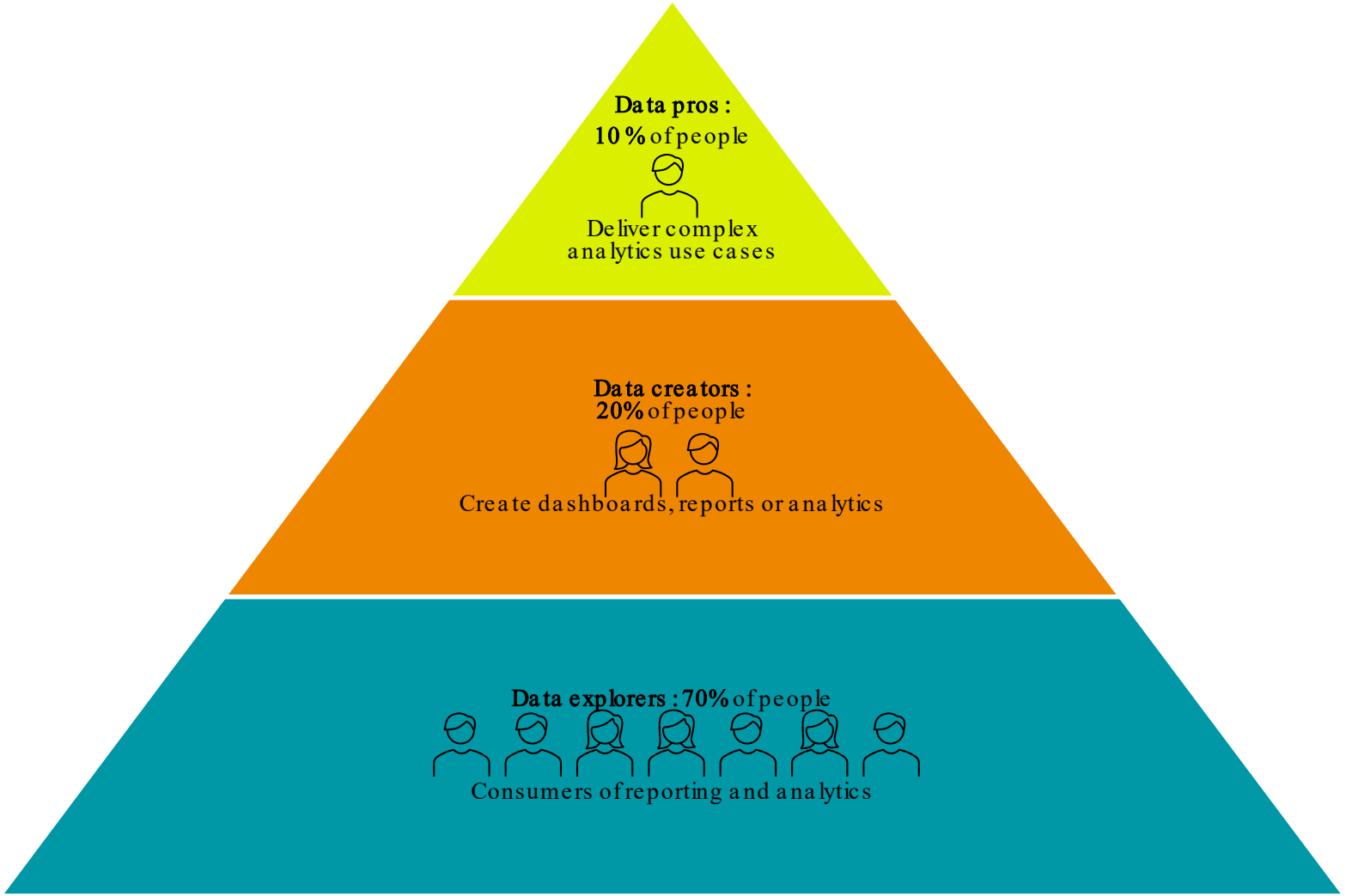
n = 632, leaders highly involved in AI; excludes unsure

Q18: What are or will be the top three barriers to the implementation of AI techniques within your organization?

Source: 2023 Gartner AI in the Enterprise Survey

Gartner

The importance of data literacy



Gartner, 2024, adapted from the Kraft Heinz Company

videns

AGENDA

Presentation

AI: Potential vs performance

AI Use cases in the legal industry

Analytical maturity and the impact on AI

videns

AI definitions

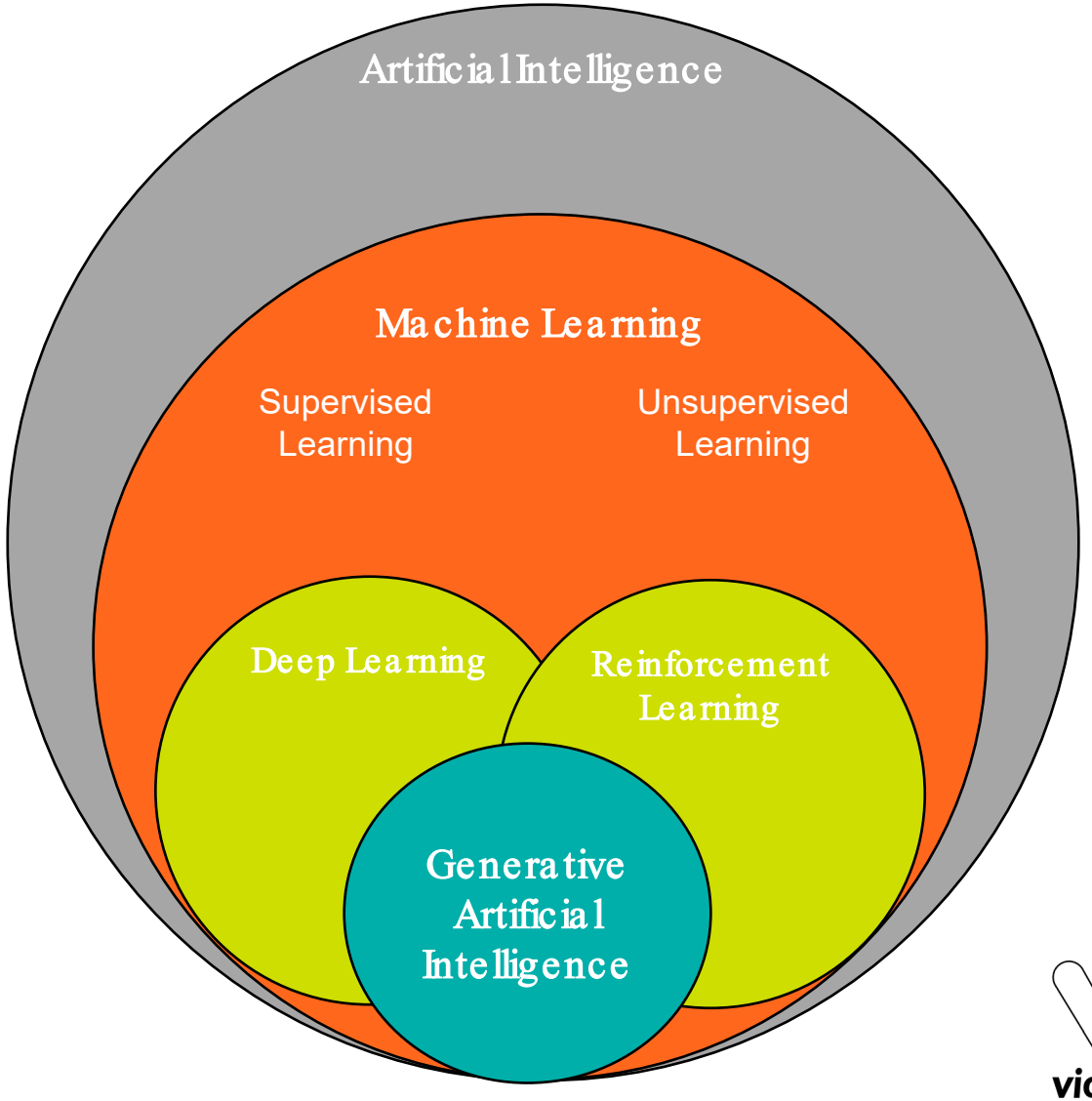
Artificial Intelligence (AI)
Any technique that allows computers to imitate human behavior (or human intelligence).

Machine Learning (ML)
Subsets of AI techniques that use statistical methods to enable machines to improve with experience (i.e., with data) **without being explicitly programmed** for each task.

Deep Learning (DL)
Subsets of ML techniques that use deep neural networks.

Reinforcement Learning (RL)
A machine learning method where an agent learns to make decisions by receiving rewards or punishments for its actions, in order to maximize cumulative rewards.

Generative AI
Generative AI relies on foundational models that can perform multiple operations simultaneously and carry out ready-to-use tasks, such as synthesis, question/answer, classification, etc.



videns

Examples of Generative AI Applications

Text generation

Music generation

Synthetic voice generation (either voices that are more natural or realistic than traditional synthetic voices, or voices that imitate familiar ones)

Image / Video generation

Generation of **realistic avatars**

*Image generated by a generative AI

videns

Two type of AI use cases for the legal industry :

AI for Clerical Tasks

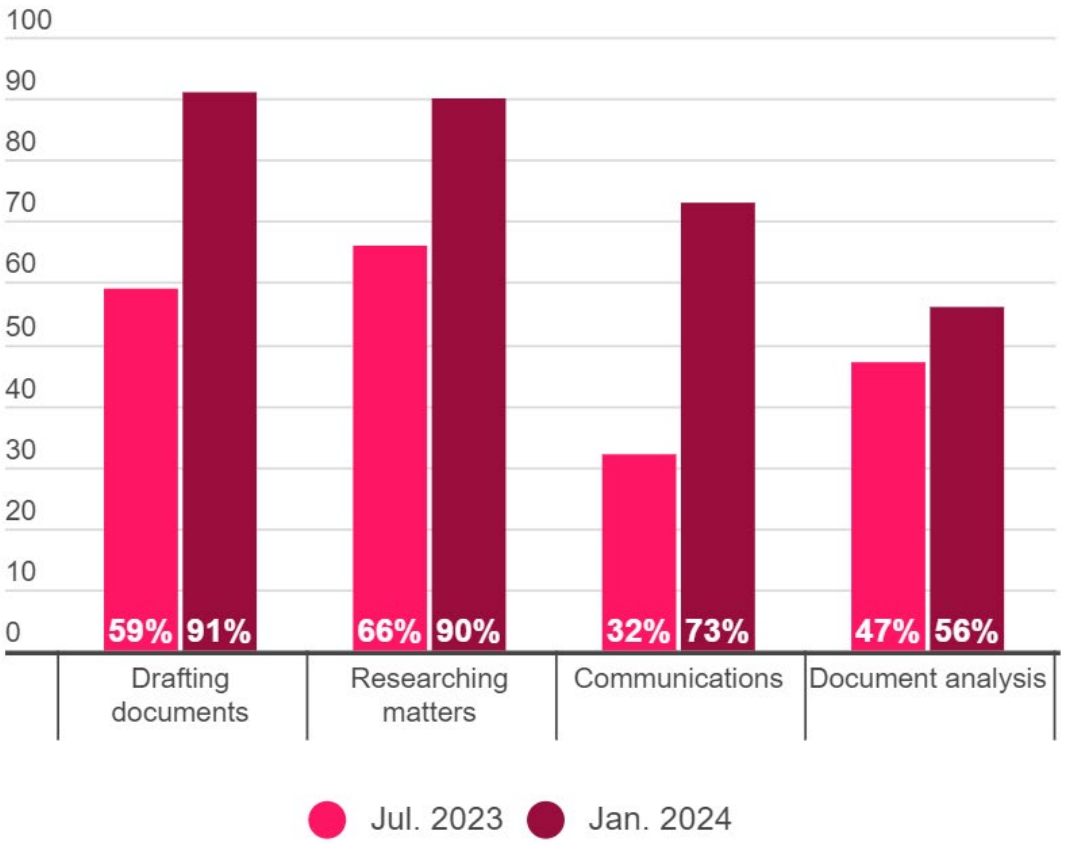
- Documents classification
- Customer account opening
- Automatic invoice processing
- Cash flow forecasting

Generative AI in Legal Practice

- Localisation : Training models using the correct legal corpus, to avoid context errors
- Summarizing interrogations to track specific information
- Reducing the time required for writing
- Research tools to obtain legal answers and generation of easy-to-understand responses

videns

Priorities for legal technology powered by generative AI



Source : Lexis/Nexis survey in the United Kingdom in January 2024
https://www.lexisnexis.co.uk/insights/lawyers-cross-into-the-new-era-of-generative-ai/index.html

videns

Challenges to implement AI projects in the legal industry

- *What are the biggest hurdles to adoption of generative AI powered solutions in your firm ?*

  - **57%** Concerns over hallucinations
  - **55%** Concerns over security
  - **55%** Current technology is not trustworthy enough

Source : Lexis/Nexis Generative AI Survey January 2024

videns

The art of *Prompting* with Generative AI

The *prompt* is used to provide the right level of information to the generative AI tool in order to improve the chances of satisfactory responses.

How to proceed:

You need to be precise. For example:

- **Role**: Perspective to adopt
- **Context**: Detail the problem
- **Task**: What you want the AI to generate
- **Format**: How to present the information

videns

The phenomenon of hallucination

Hallucination phenomenon: the model gives erroneous information without showing the slightest doubt.

This phenomenon is explained by the way the models are trained: **predicting the most probable token (word) in a sequence of text.**

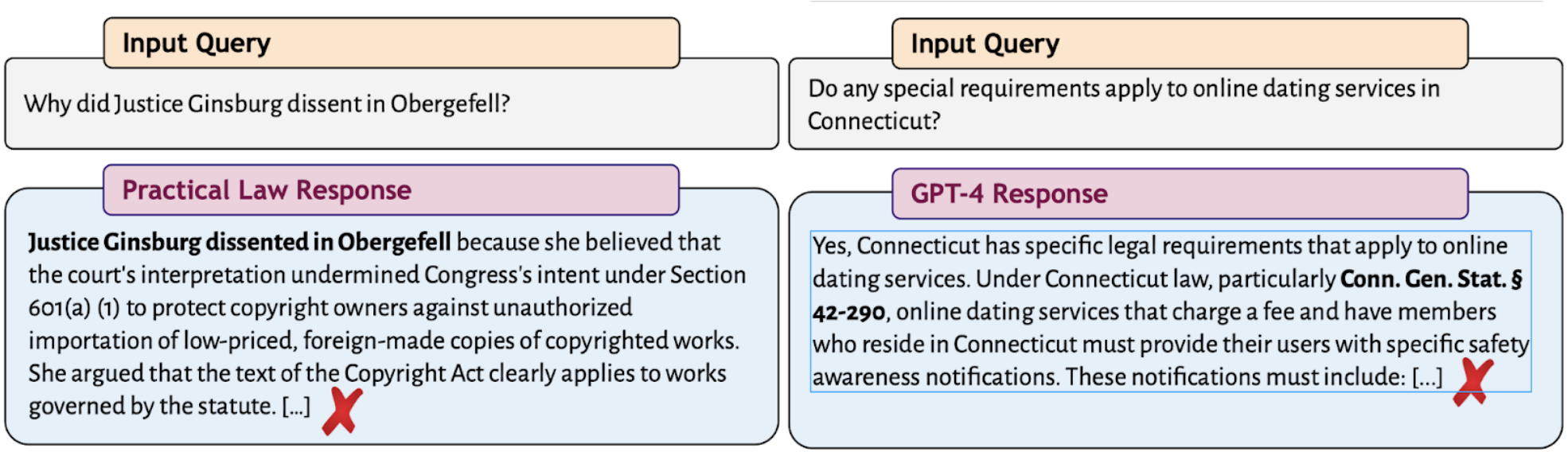
This occurs preferentially when approaching a domain for which **training data is not abundant**.

Progress has been made, but it is still an important issue.

Models should be used with supervision!

videns

The phenomenon of hallucination



The system fails to correct the user's mistaken premise—in reality, Justice Ginsburg joined the Court's landmark decision legalizing same-sex marriage—and instead provides additional false information about the case.

Example of a hallucinated response from GPT-4, which generates a statutory provision that has not been codified.

https://hai.stanford.edu/news/ai-trial-legal-models-hallucinate-1-out-6-or-more-benchmarking-queries

videns

Examples of a prompt in the legal field

- **Contract Analysis:** "Based on the attached contract, identify any clauses that could potentially lead to a breach of confidentiality."
- **Legal Risk Assessment:** "Review the attached document and highlight any legal risks related to employment law."
- **Case Law Comparison:** "Compare the attached case ruling with recent similar cases in commercial law. Provide a summary of the differences in judgments."
- **Regulatory Compliance:** "Analyze the attached policy document and determine if it complies with current data protection regulations like GDPR or CCPA."

LLMs can be used to access information that wasn't necessarily 'memorized' during training and leverage their comprehension ability to summarize this information.

These actions are drawn directly from the provided document. If any information is unclear or unavailable, it has been noted accordingly

We can explore certain aspects further to obtain more precise information..

videns

Risks and challenges related to generative AI
Model bias : origin and consequences

Origin of bias :
Training data for generative AI often comes from large corpus accessible on the Internet.
If these sources contain stereotypes or prejudices, the AI will assimilate them.

Consequences of bias :
Biases can negatively impact decision-making or content generation, leading to discrimination or inaccurate preconceptions.

Source : NY Times article on generative AI bias against minorities.

videns

AGENDA

Presentation

AI: Potential vs performance

AI Use cases in the legal industry

Analytical maturity and the impact on AI

videns

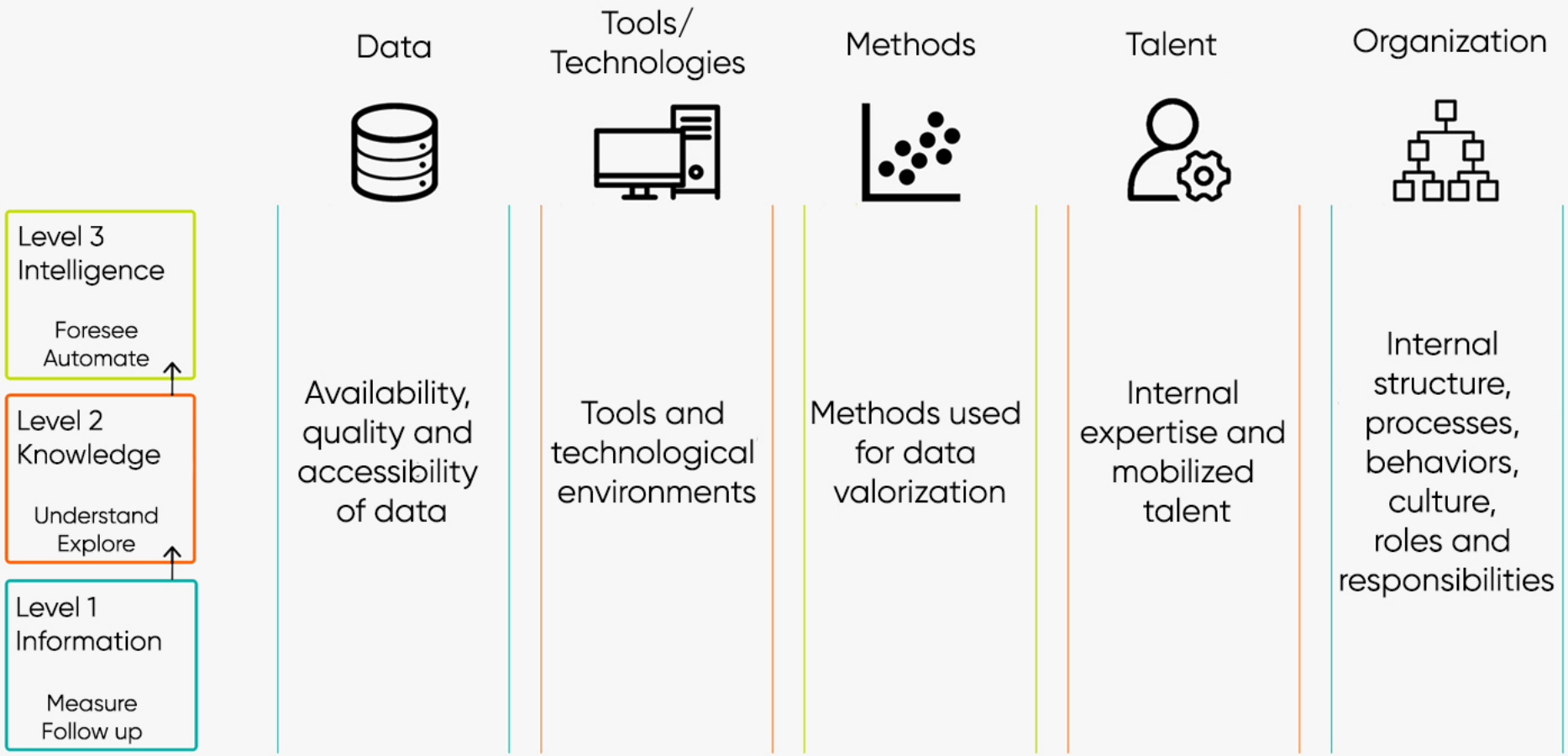
The impact of maturity

- Leaders are able to scale up **44% of the AI use cases** in their portfolios, more than twice the **19% of other companies**. (BCG)
- In the average organization, **51% of AI projects** are in production but **not being delivered at scale**. (S&P)
- **52%** of AI projects on average **never make it into production.** (Gartner)
- **46% of AI projects failed to meet their goals**, but the success rate increases as a company progresses in its AI maturity journey. (LXT)

https://www.bcg.com/publications/2023/scaling-ai-pays-off
https://www.weka.io/resources/analyst-report/2024-global-trends-in-ai/#ai-maturity-and-adoption
https://webinar.gartner.com/588829/agenda/session/1318318?login=ML
https://www.lxt.ai/path-ai-maturity-2023/

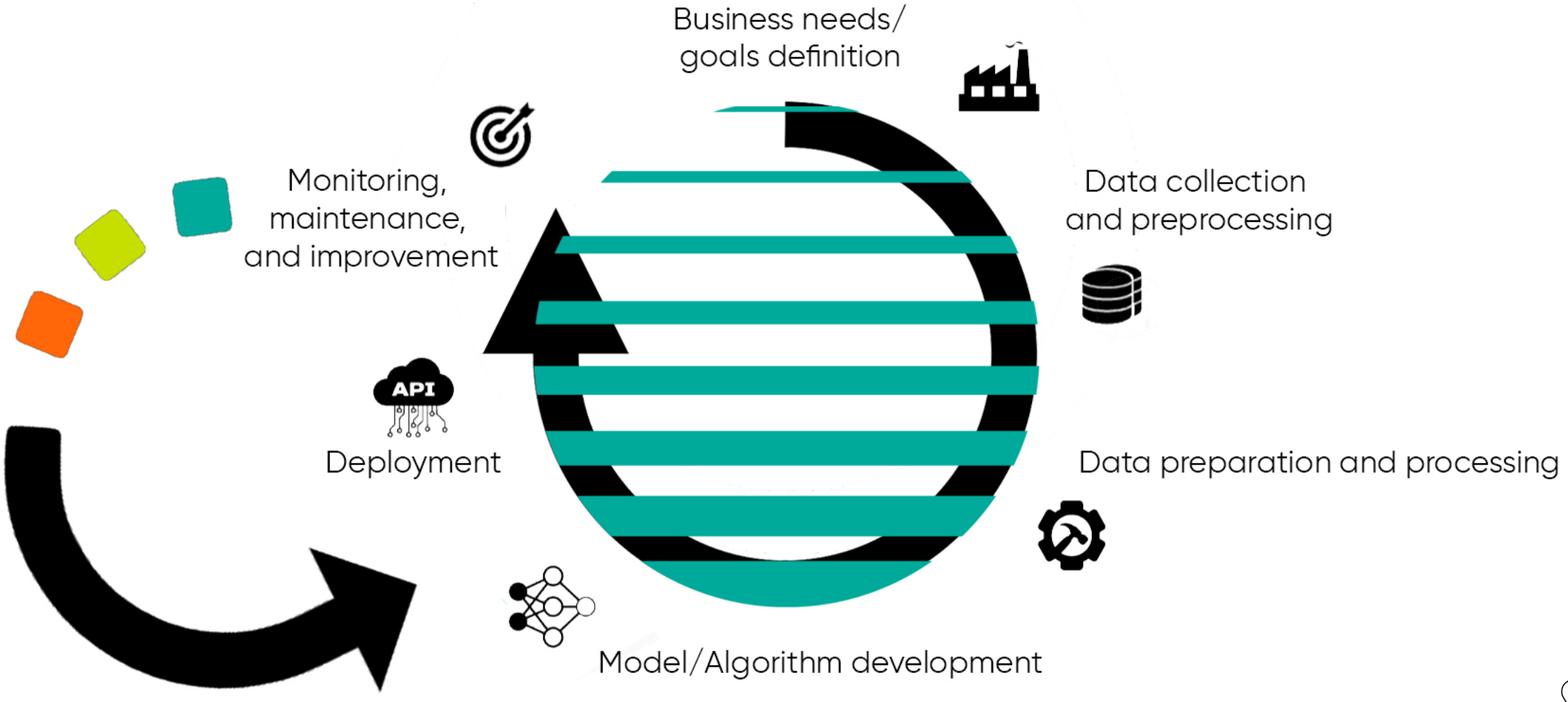
videns

Our Analytical Maturity Model



videns

AI solutions development



videns

How to scale AI projects to different firm sizes?

- Prioritize investments in **high-impact use cases and maturity foundations**
- AI projects should be considered as a **business initiative**, not only IT
- A **business sponsor** is the first requirement
- Company's **vision, culture and change management** are essential to success
- Data is becoming one of the most important **companies' assets**
- Deploying an AI solution a matter of **time** and **resources**
- **Generative AI** can be an opportunity to drive AI adoption and analytical maturity

videns

www.vidensanalytics.com
communications@vidensanalytics.com

https://www.linkedin.com/company/videns-analytics

videns

WOMEN OWNED

Videns Analytics est une
entreprise certifiée Women Owned

Example – SS Rana & Co.

Vikrant Rana
S.S. Rana & Co, India

innovation

FICPI 22ND OPEN FORUM

AI and IP: An Arranged Marriage?

Vikrant Rana
Managing Partner, S.S. Rana & Co.

Will that be easy??

Studies suggest that legal profession has a reputation of being resistant to change!

Let's explore....

Key concerns

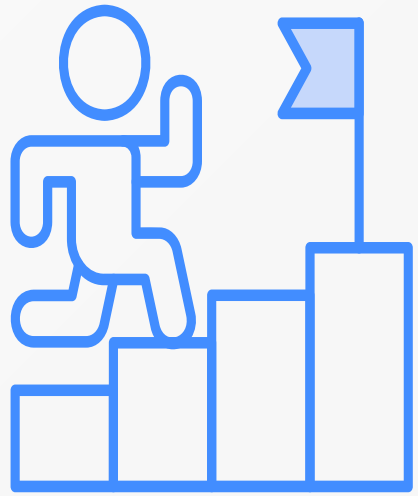
Lack of awareness about software technologies

Resistant to AI adaptability

Reliability

Ethical considerations

Costs involved and Return on Investment



Benefits....

01

Can be helpful in reducing costs in the long term

Help in developing stronger business strategies

02

03

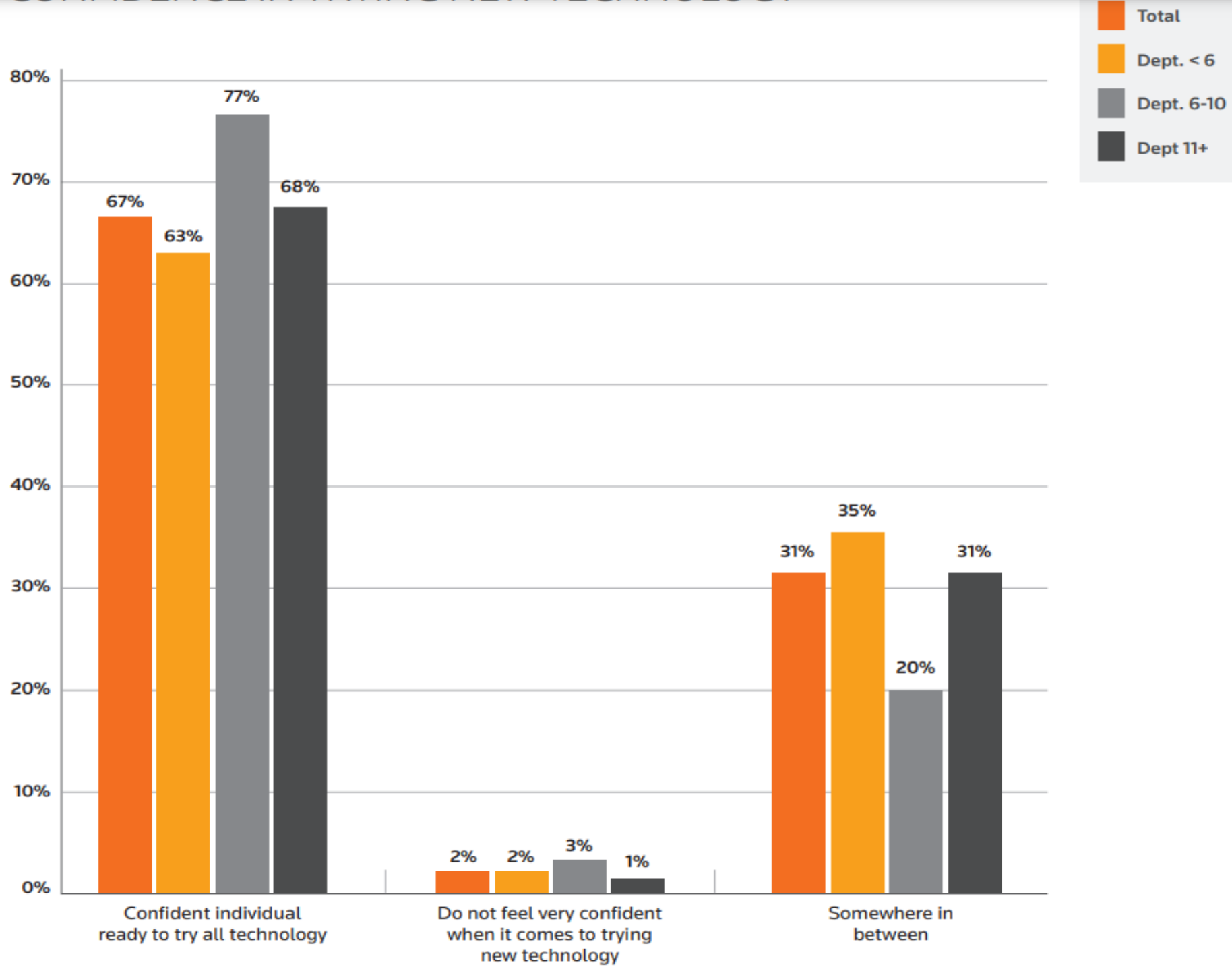
Minimize contractual risks

Increase productivity by automating repetitive tasks

04

What does Thomson Reuters Survey on Confidence of Legal Departments in trying new technologies says?

Source: Thomson Reuters report on Ready or not: Artificial Intelligence and Legal Department, 2025.



Tasks for which AI is being used

- ✓ **Scanning of emails and auto assigning of work/ tasks**
- ✓ **Use of AI for image recognition**
- ✓ **Preparing first drafts of office actions**
- ✓ **Conflict check**
- ✓ **Onboarding of clients**
- ✓ **Human intervention is essential for quality control**
- ✓ **Regular audits essential to fill in the gaps and ensure responsible use of AI**

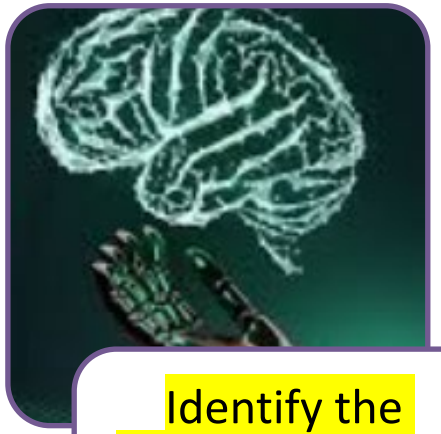
Are AI tools accessible by all law firms?

- Factors to be considered
  - Size of the Firm
  - IT adaptability of the Firm
    - The Firm has a dedicated IT team

How can a firm embrace AI?

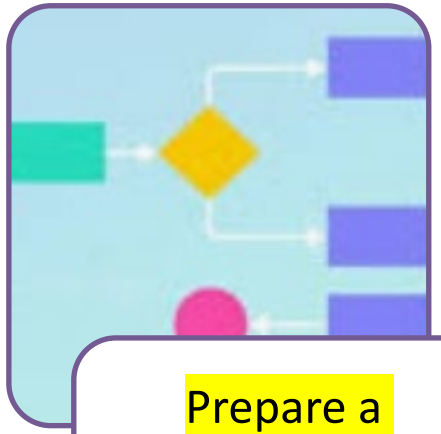
AI adoption and 2 concerns:

- **ROI (Return on Investment)**
- **Trust**



Identify the process that can be replaced by AI

For example- assignment of Tasks



Prepare a flowchart showing- each and every step involved in the process.

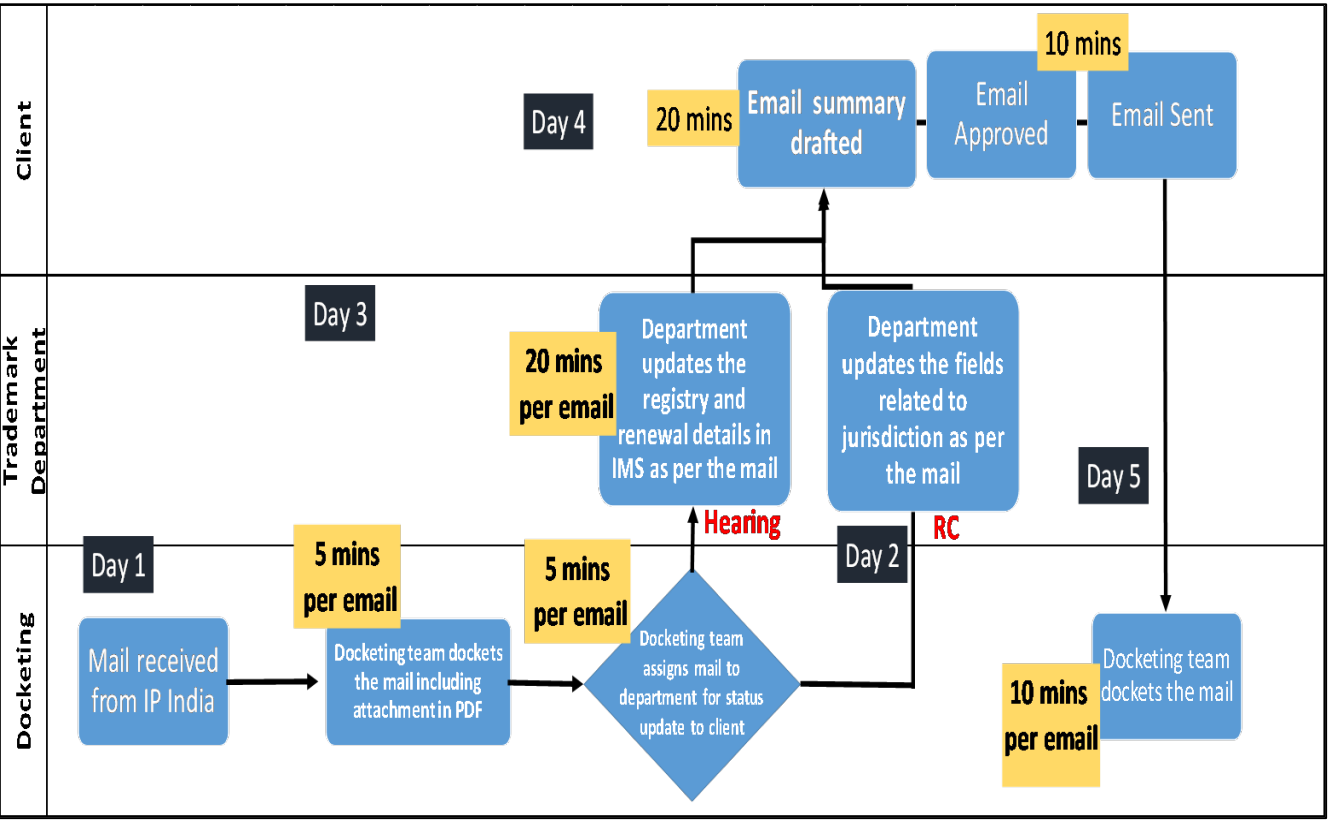
Then analyze, the steps that can be eradicated by the use of AI.

Eradicating steps and reducing TAT through use of Technology/ AI Tools

- **Problem Statement :**
- It was observed that clients were not able to get status on their respective files and the turn around time was long as 7 days resulting into sometimes missing deadline for office action. At the same time there was manual effort spent on status update.
- **Scope Statement :**
- **All files and categories for trademark, patents, opposition**
- **Process Mapping:**
- **Conducted value stream mapping to identify non-value added activities**

- **Root Cause Analysis conducted along with brainstorming session and found bottlenecks, over processing of data, redundancy, wait time.**
- **22 steps in the process were reduced to 10 steps**

Improvements – Before and After Lean Adoption of Technology



Before Improvement:

- Non-Value- Added Activities – Manual work, Wait Time, Inspection, Redundancy, Movement of Flow 60 mins per email was spent in getting the status of file to the client.
- On an average there are 50 emails received from registry, it would take 3000 minutes or 50 person hours and would take 3 full time to update status in 2 days and hence delay in response to customer.

After Improvement:

- Non-Value- Added Activities – Manual work, Wait Time, Inspection, Movement of Flow 1 hour per email, on an average 50 mails received per day – 50 hours of effort reduced to 8.5 mins, as per email it was 10 secs
- In addition error rate reduction to 0

Implementation Rollout and Results

Post Pilot, automation was updated for other scenarios and for trademark dept all status process was rolled out with training to Docketing, Trademark department.

Before (8 steps)

- Mail received from IP India
- Docketing team dockets the mail including attachment in PDF
- Docket team assigns mail to department for status update to client
- Department updates the field related to renewal details or jurisdiction as per the mail
- Email summary drafted
- Email approved
- Email sent

Team Members Working : 5

After (0 steps) - Automated

- Mail received from IP India
- Auto docketing of email and auto status update
- Status updated at file level automatically as per the mail
- Auto search for mark and image using AI
- Auto email sent to client
- Auto docketing of email.

No manual intervention

Team Members : 0

TAT reduced from 5 days to 1 day
Team Size reduced from 5 to 0
Billing days delay reduced from 5 days to 1 day

Annualized 200000 USD Saving per annum only for Trademarks, similar implementation in Patents and other departments have led to >500k USD savings

Return on Investment and Tangible Benefits

Cost Benefit Analysis					
Costs		Tangible Benefits		Non - tangible Benefit (s)	
One Time	Recurring	Benefit (s)	Value	Benefit (s)	Priority
IT Cost –4 person month 320000 INR app.	None	5 person months saving –	20000 USD per month annualized to 240000 USD	Customer gets email on time	I
		Billing delay of 5 days saved to 1 day		Value added work done by legal dept	
		TAT reduced from 5 days to 1 day		Better Feedback from clients	

DPIIT launches AI/ML- Trademark Search Technology to enable faster clearance of trademark applications

The Department for Promotion of Industry and Internal Trade on September 20, 2024, has launched Artificial Intelligence (AI) and Machine Learning (ML) based Trademark Search Technology and IP Saarthi Chatbot.

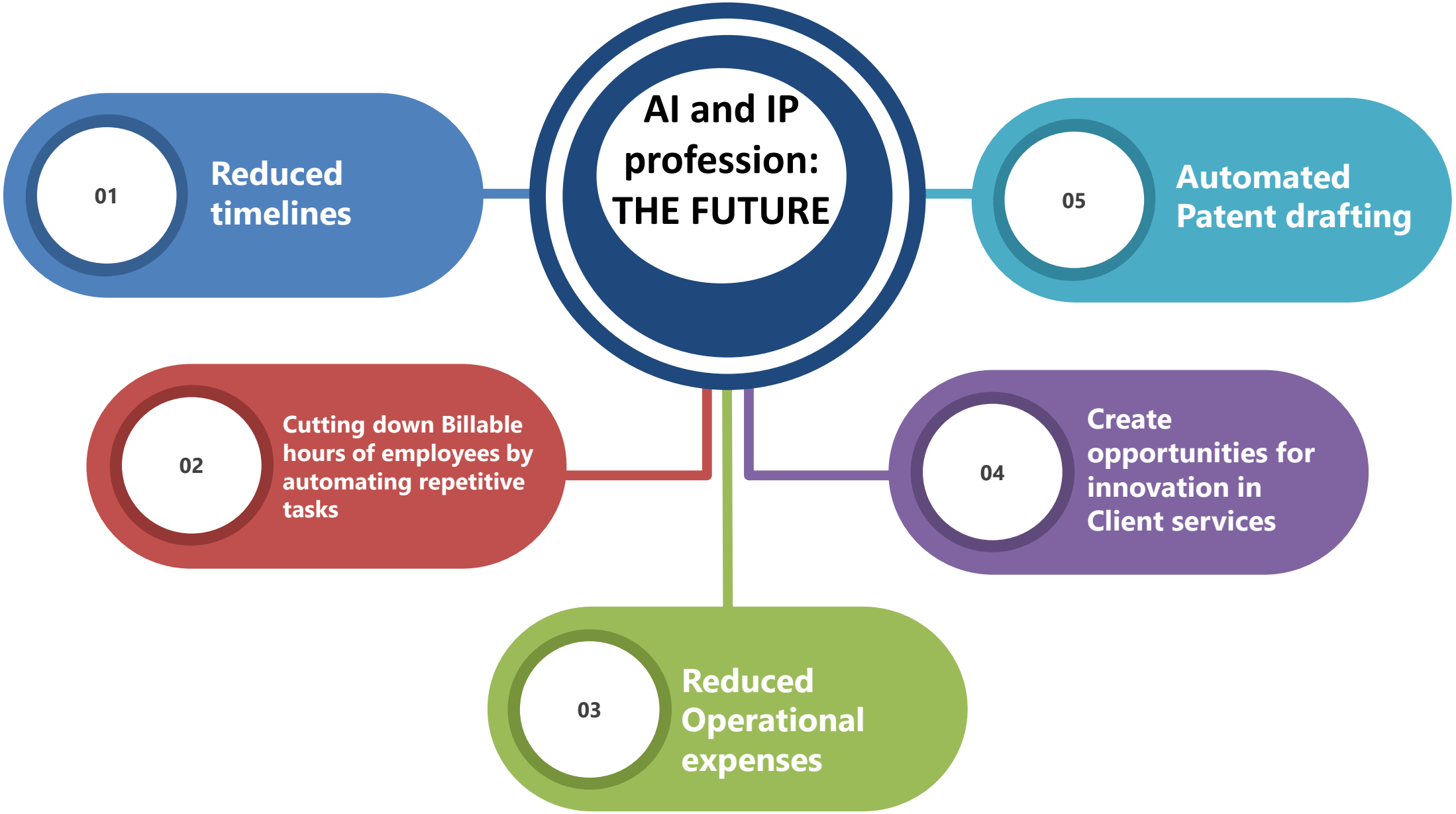
Key features of the new technology include:

1. Advanced AI and ML algorithms for precise trademark identification

2. Streamlined search processes for domestic and international businesses

3. Enhanced protection capabilities for trademarks

•Expedite trademark registration processes
•Improve the overall user experience for IP stakeholders
•Foster international collaboration in IP system development


AI and IP profession: THE FUTURE
01
Reduced timelines
02
Cutting down Billable hours of employees by automating repetitive tasks
03
Reduced Operational expenses
04
Create opportunities for innovation in Client services
05
Automated Patent drafting

ESTD:1989
S.S. RANA & CO.
ADVOCATES
ISO 9001 : 2015 & ISO 27001 : 2013
CELEBRATING 35 GLORIOUS YEARS 1989-2024

Thank you!

Vikrant Rana, Managing Partner, S.S. Rana & Co.

Contact details:
M- +91-9810154485
E- Vikrant@ssrana.com

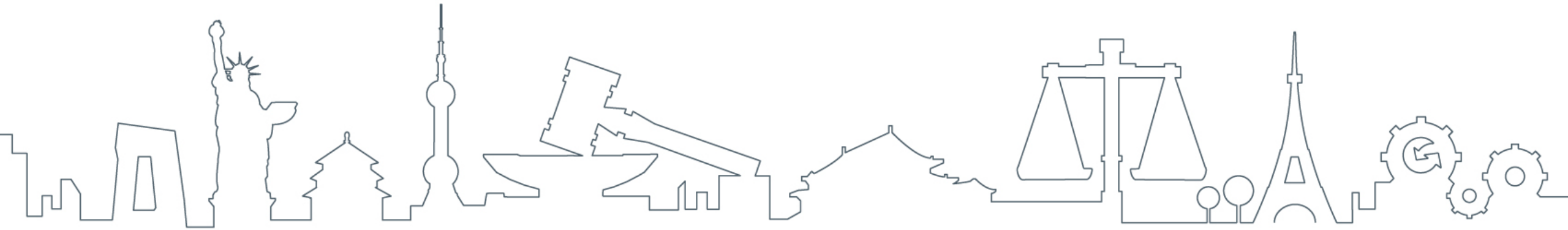
Example: Kangxin Partners

Luna Zhang
Kangxin Partners, P.R. China

innovation

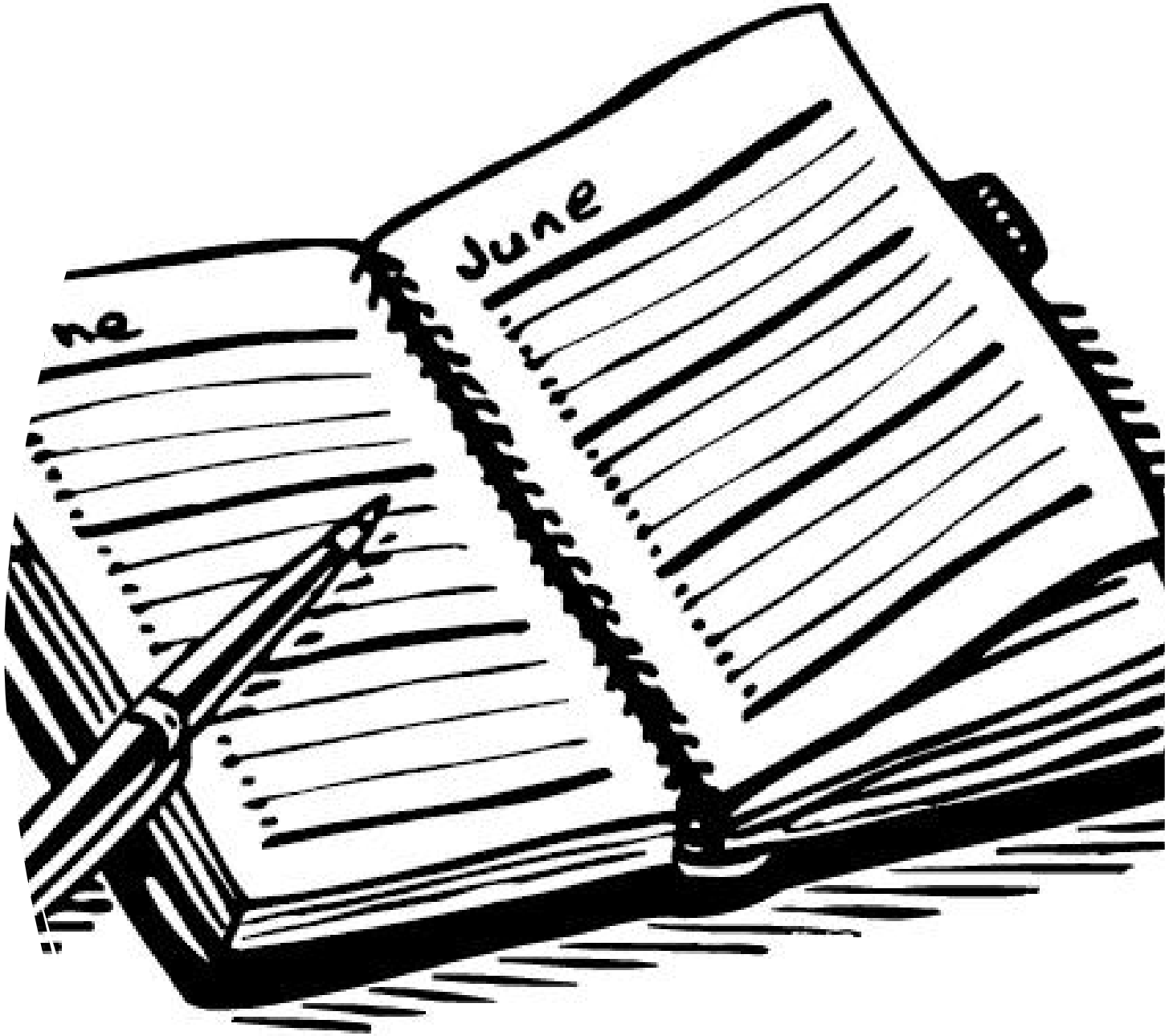
AI & IP: an arranged marriage?

Luna ZHANG
Luna.zhang@kangxin.com



Agenda

- Why and how we start the journey with AI?
- What are our scopes to use AI in our work?
- Our experience and thoughts



Why and how we start the journey with AI?

Introduction of KangXin

Established in 1994

Headquarter: Beijing

Branches: Tianjin, Qingdao, Xian, Wuhan, Hangzhou, Guangzhou and Dongguan

Employees: 600+

Full IP Services

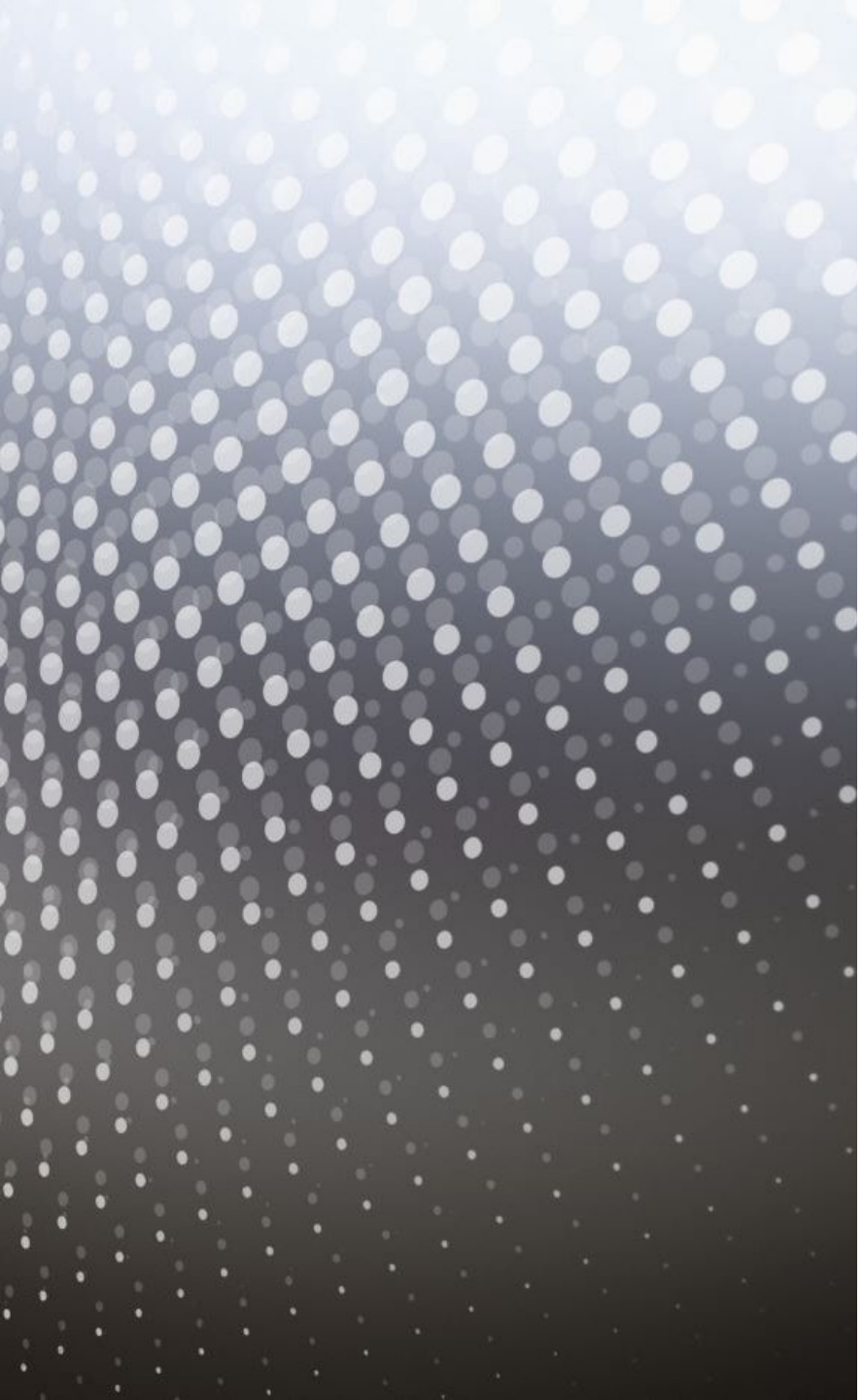
Technology in our DNA:

- IT systems: Built in 2009
- Digitalization/E-flings: from 2010
- AI: from 2017

Macro Background

- The **international trend** of applying artificial intelligence across various industries and the **support of the Chinese government** for its development.

- 1. In 2017, China announced an ambitious programme for its domestic development of AI, with the aim of becoming the world's 'major AI innovation centre by 2030.
- 2. From 2021, the Chinese government’s strong support for building a Powerful IP Nation with digitalization. In the same year, the AI special committee of the China Patent Protection Association was established.
- 3. In 2023, the Patent Agents Association promoted the use of AI in IP firms and decided to conduct specialized research on the topic. We undertook this project.



Technology

1. Enhanced Data Processing
2. Enhanced Search Capabilities
3. Natural Language Processing
4. Improved predictive analytics

Other elements

1. International data, more accessible
2. Collaboration and information sharing in the globalization of IP
3. Increased awareness and demand

Our vision and expectations

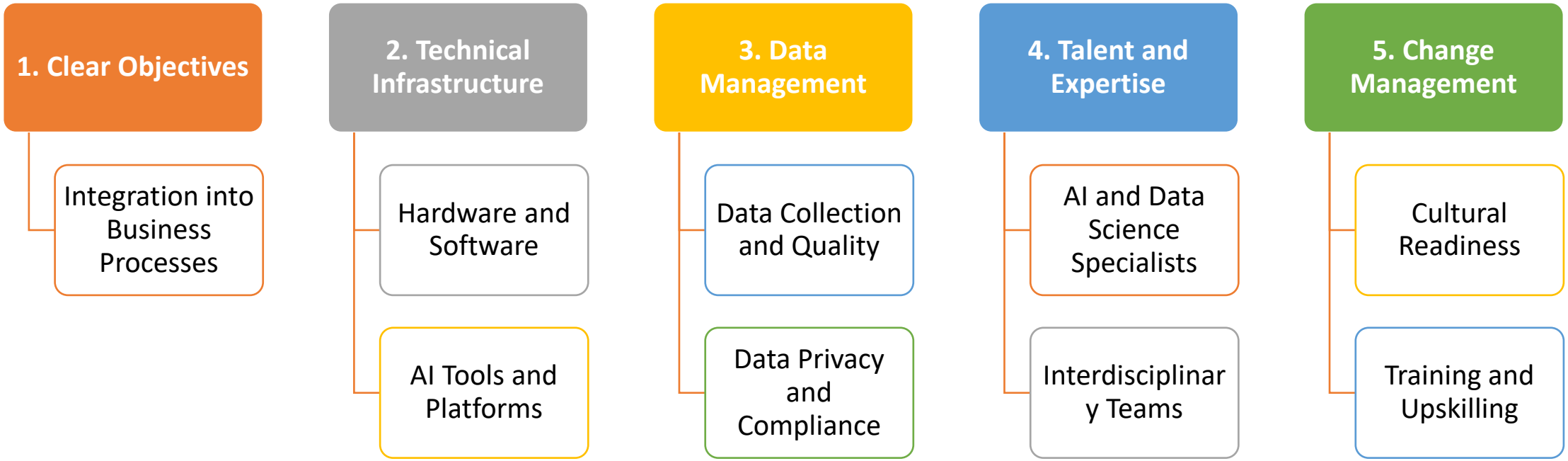
Strategic vision

Our partners' strategic forecast for the future is: If we do not innovate, we will be innovated upon and disrupted. We intend to respond to this revolution with a positive attitude, seizing the changes and opportunities that it brings.

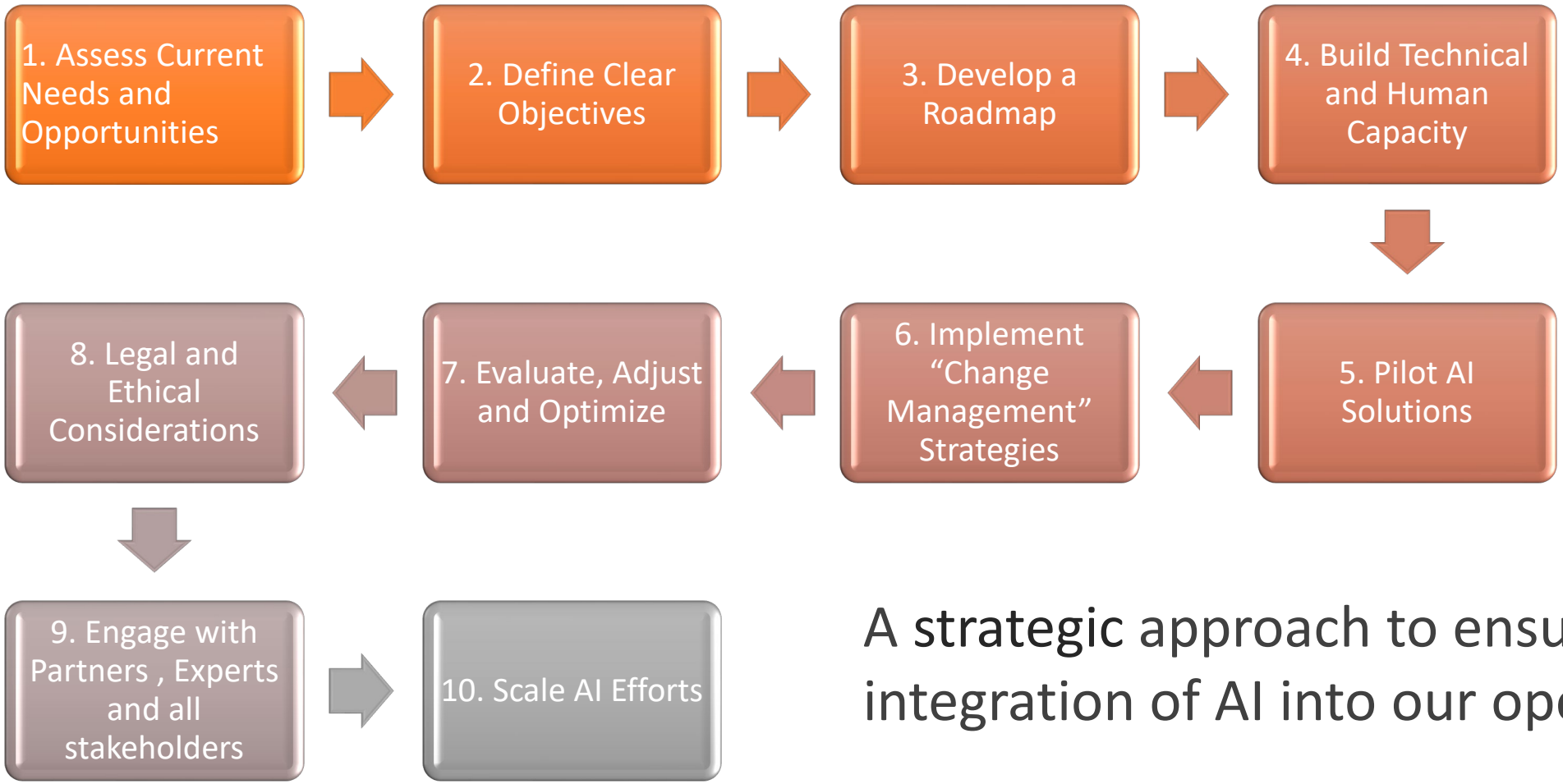
1. **Efficiency and Automation**
2. **Cost Savings**
3. **Integration with Existing Systems**
4. **Scalability**
5. **Client Satisfaction**

In summary, by tackling existing challenges with the support of AI technologies, we can enhance efficiency, improve our service offerings, and stay competitive in a rapidly evolving landscape.

We are ready!

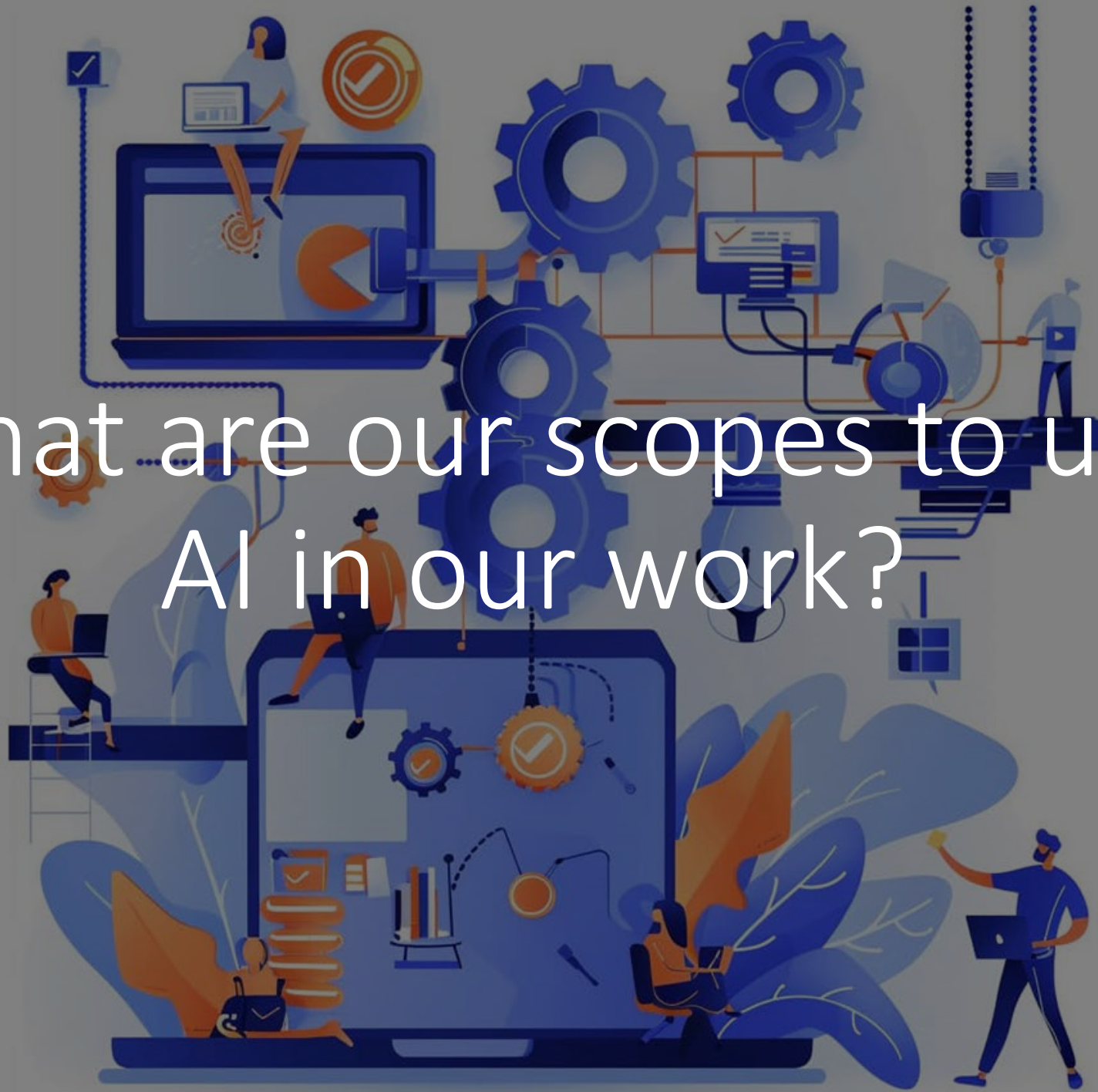

1. Clear Objectives
Integration into Business Processes
2. Technical Infrastructure
Hardware and Software
AI Tools and Platforms
3. Data Management
Data Collection and Quality
Data Privacy and Compliance
4. Talent and Expertise
AI and Data Science Specialists
Interdisciplinary Teams
5. Change Management
Cultural Readiness
Training and Upskilling

How we start the Journey



A strategic approach to ensure successful integration of AI into our operations

What are our scopes to use AI in our work?



KANGXIN

Substantive work

- Patent application draft, patent translation
- Responding to office actions;
- Patent documents comparison and analysis;
- Trademark search and monitor, etc

Attorneys / Consults

Process-oriented tasks

- Categorizing inquiry letters according to specific trademark and patent fields
- Managing workflow and track case deadlines

Para-legal / Legal secretary

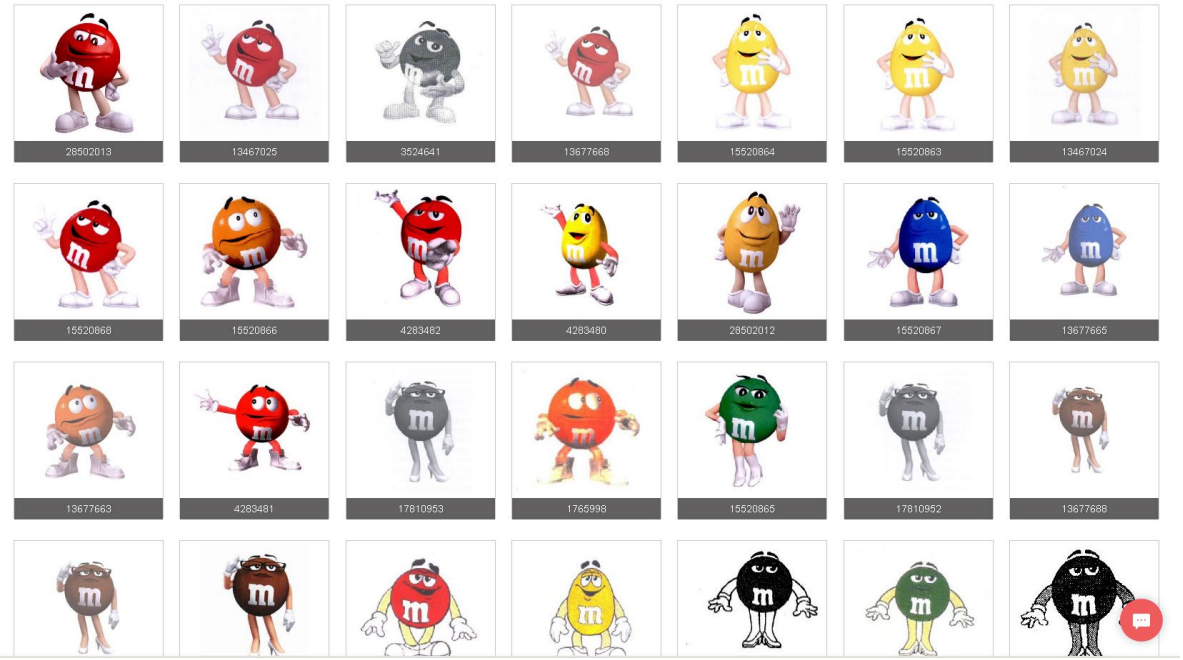
Supportive tasks

- Letters drafting;
- Meeting Minutes
- Statistical reports
- Financial data comparative analysis

Administrative / Marketing/ Finance

Image trademark search

Automatic Recognition of Graphic Elements



Auto Patent Search

Patent Document Comparison and Analysis

Drafting of Claims

OA

新申请

技术方案 | 权利要求书 | 发明说明书 | 发明内容 | 具体实施方式

权利要求书

1．一种云办公环境下的信息安全保护方法，其特征在于，包括：检测虚拟机或物理机中的零终端是否访问共享文件服务；如果检测到访问共享文件服务，进一步检测用户是否发起对共享文件的读取请求；如果检测到用户发起读取请求，进一步检测用户是否进行截屏或截图操作；如果检测到用户进行截屏或截图操作，采取措施阻止截屏结果的粘贴或阻止截图文件生成。

2．根据权利要求1所述的方法，其特征在于，所述检测虚拟机或物理机中的零终端是否访问共享文件服务，进一步包括：在零终端登录虚拟桌面后，持续监控零终端的网络通信，识别访问共享文件服务的行为。

3．根据权利要求1所述的方法，其特征在于，所述如果检测到用户发起对共享文件的读取请求，进一步检测用户是否进行截屏或截图操作，具体包括：监控用户界面上的键盘和鼠标操作，识别截屏或截图指令；监测软件操作，拦截截图软件的启动和运行。

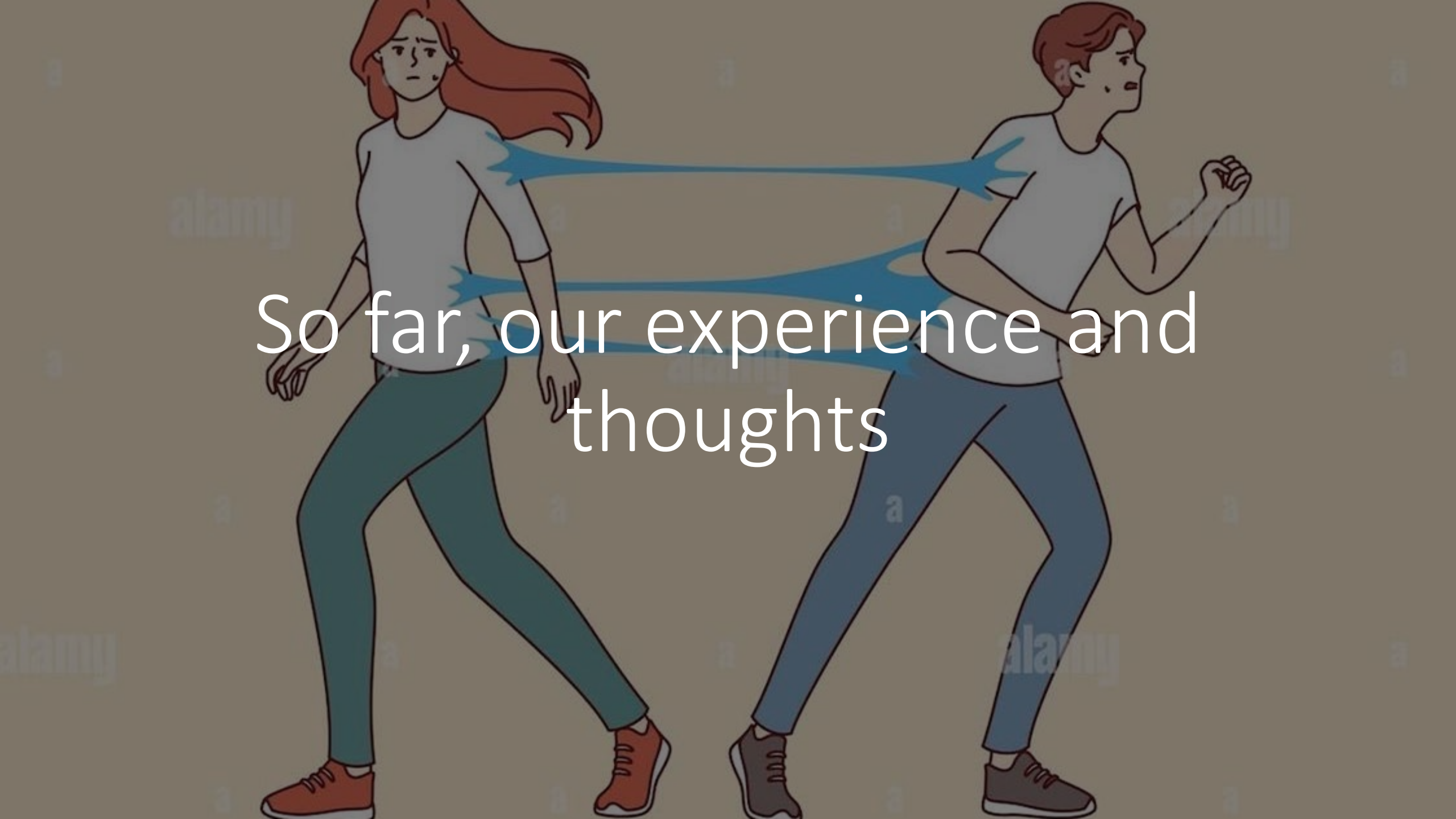
4．根据权利要求1所述的方法，其特征在于，所述如果检测到用户进行截屏或截图操作，采取措施阻止截屏结果的粘贴或阻止截图文件生成，进一步包括：通知剪贴板管理组件阻止当前用户的图像粘贴操作，以防止截屏结果被粘贴到其他应用程序中；拦截createfile API，阻止截图文件的生成或保存，以防止用户将截图保存为文件。

5．根据权利要求1所述的方法，其特征在于，所述采取措施阻止截屏结果的粘贴或阻止截图文件生成，还包括：记录截屏或截图操作的尝试，生成安全日志，用于审计和追踪用户行为。

Generating Texts from Images

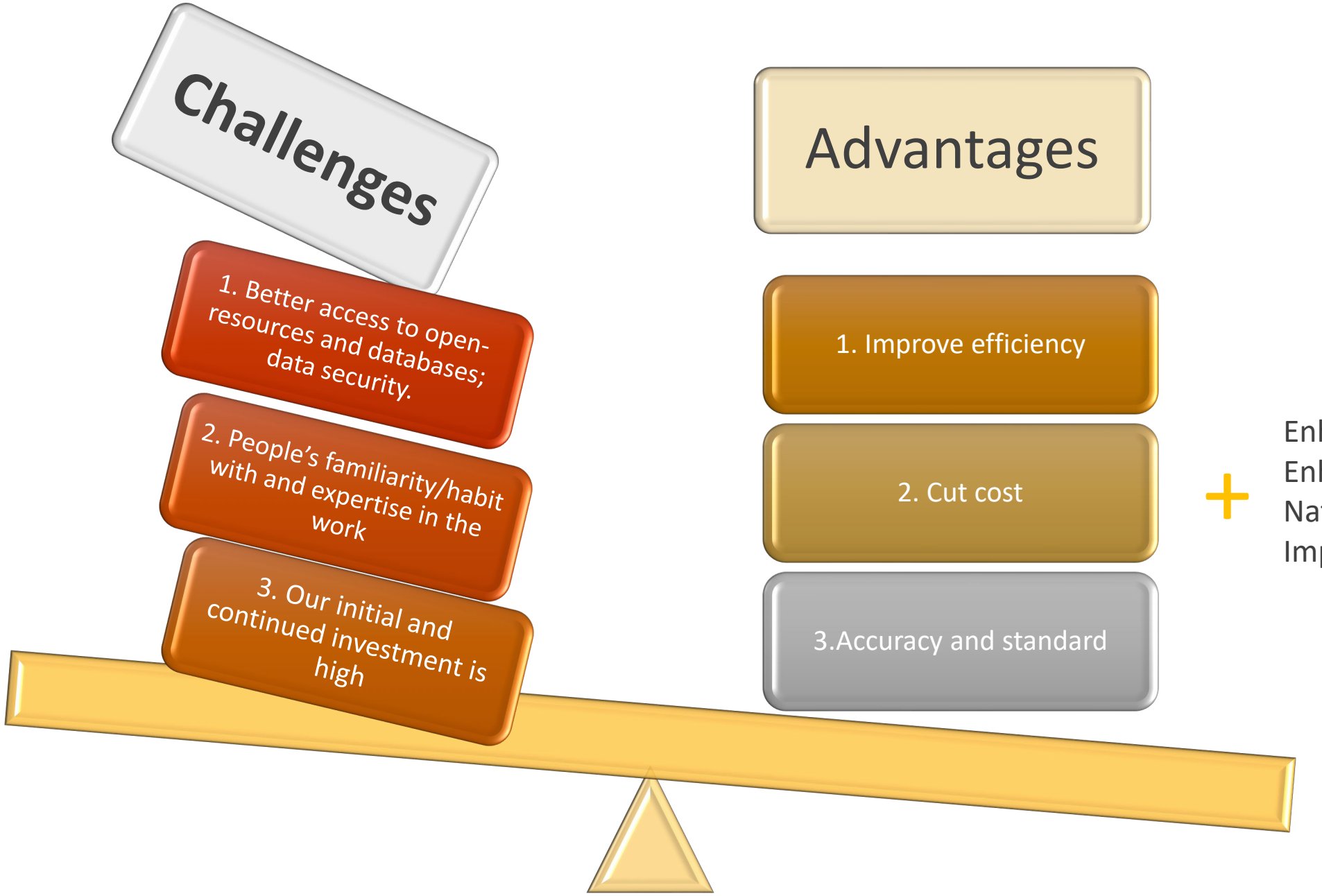
Responding to office actions

.



So far, our experience and thoughts

KANGXIN



+

Enhanced data processing
Enhanced search capacity
Natual language processing
Improved analysis

KANGXIN

How AI matches different firms?

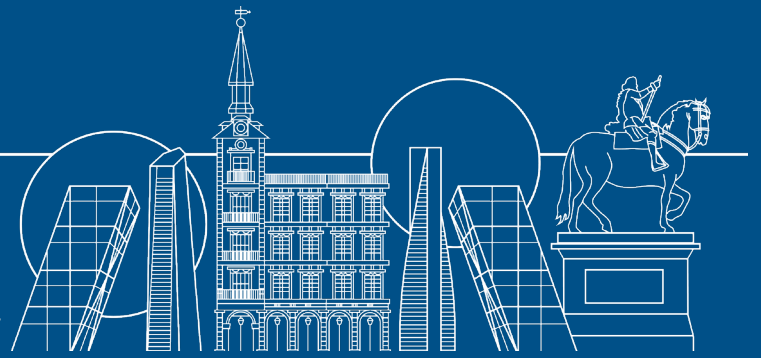
Firms: 1. the size, 2. the willingness,
3. IT capacity, 4. Talen and expertise
5. ROI, etc

Factors: 1. Time, 2. money,
3. future

Preparation: 1. Digitalization
2. Systematization


Thank You

FICPI 22nd Open Forum
Madrid
25-28 September 2024



THIS SESSION IS POWERED BY KANGXIN

KANGXIN

Official Sponsor of FICPI in 2024

Advocating for your IP

STRENGTHENING THE PRACTICE OF THE INDEPENDENT IP ATTORNEY

www.ficpi.org

innovation

FICPI // Events 2025

FICPI Korean Symposium
2-5 April 2025
Jeju Island, Republic of Korea

FICPI World Congress & ExCo Meeting
12-18 October 2025
Naples, Italy

Scan the QR to sign up for advance information and updates

FICPI 22nd Open Forum

Madrid

25-28 September 2024

STRENGTHENING THE PRACTICE OF THE INDEPENDENT IP ATTORNEY

www.ficpi.org