

Communicating the strategic value of your patent portfolio

Consero Global IP Management Forum

Nigel Swycher, CEO

Niall McMahon, Head of Research

7th June 2021



CIPHER

What we cover

- 01 Why Cipher
- 02 Strategic patent intelligence
- 03 Mapping patents to technologies
- 04 Actionable intelligence
- 05 Portfolio optimisation
- 06 Custom Taxonomies
- 07 Storytelling with data



Cipher's Belief System

- Automation is now part of the day to day
- Data is king when it comes to decision making
- Global patent data is unstructured and inefficient to deal with
 - a perfect environment for machine learning
- Patent data can provide insight for those beyond the IP function
- IP professionals should have good data on which to make decisions

Key Findings I: The importance of Benchmarking

Corporate benchmarking: critical for patent strategy, competitive intelligence, budget management and pruning

“It’s critical to have benchmarking data because you don’t want to operate in a vacuum.”

Andreas Iwerback

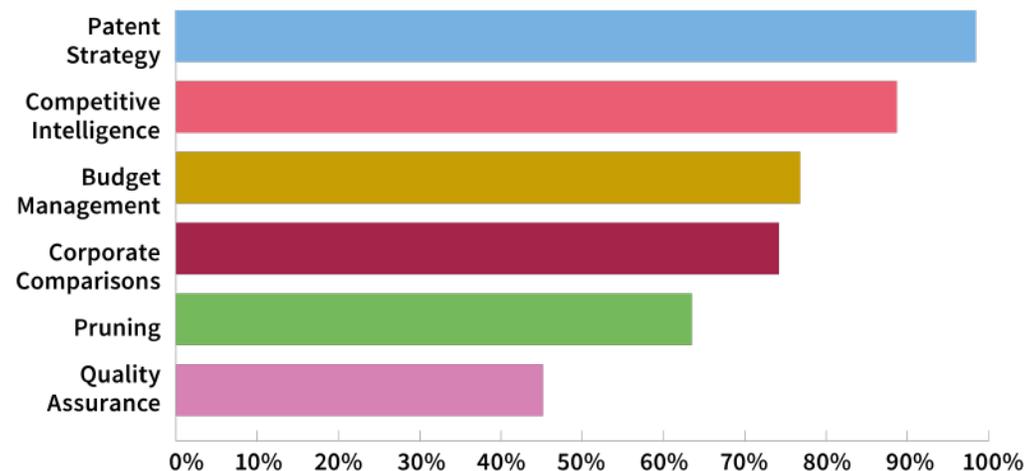
Head of Technology & IP Intelligence, Husqvarna

“Benchmarking supports the communication of our approach, our strategy and why we are building the portfolio in the way that we are.”

Gilbert Wong

Associate General Counsel for Patents, Facebook

Why do you benchmark your patent portfolio?



Source: CIPHER IAM Benchmarking Survey 2020

Key Findings II: Beyond the IP Team

IP professionals remain the key consumer of patent data with the C-Suite starting to consume for certain use cases

Who is reviewing the data?

| | Patent Strategy | Competitive Intelligence | Budget Setting | Corporate Comparison | Pruning | Quality Assurance |
|-------------------------------|-----------------|--------------------------|----------------|----------------------|---------|-------------------|
| Board | 13% | 20% | 12% | 26% | 8% | 11% |
| CFO | 10% | 7% | 16% | 11% | 10% | 4% |
| CTO | 23% | 44% | 20% | 33% | 18% | 14% |
| General Counsel/Head of Legal | 21% | 20% | 24% | 26% | 13% | 18% |
| Head of IP | 81% | 82% | 67% | 78% | 67% | 71% |
| Head of Patents | 42% | 42% | 41% | 41% | 44% | 46% |
| Patent Portfolio Manager | 52% | 42% | 55% | 46% | 59% | 68% |
| Other teams | 18% | 35% | 18% | 26% | 26% | 11% |

Source: CIPHER IAM Benchmarking Survey 2020

“Benchmarking exercises help to explain to management how we can create value and not just be a risk and compliance function within the organisation.”

John Simmons
Head of IP, Givaudan

For IP teams and their leaders, having **access to the right data** to benchmark is simply table stakes.

Key Findings III: Technology level analysis

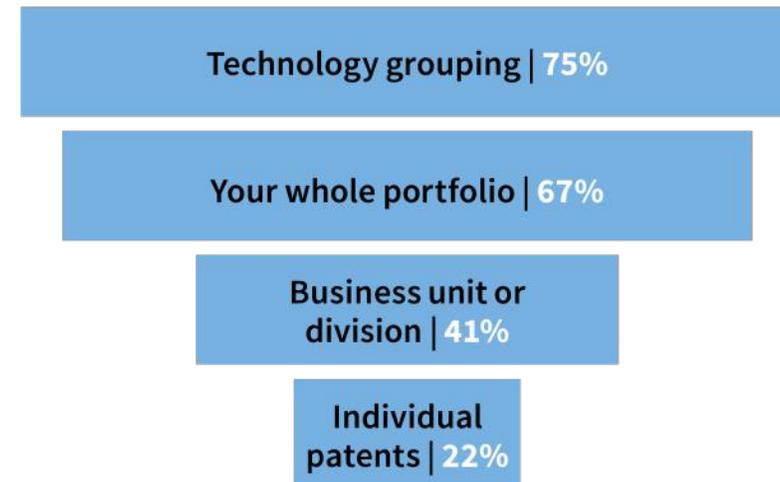
The size of the data gathering challenge is not to be underestimated

A technology lens is key to breaking down the data and gaining strategic intelligence.

“Benchmarking at the technology level is the only way to compare ‘apples with apples’ and to spot meaningful trends.”

IP expert at a major European Semiconductor company

What granularity do you benchmark?



Source: Cipher IAM Benchmarking Survey 2020

Key Findings IV: Selecting the right metrics

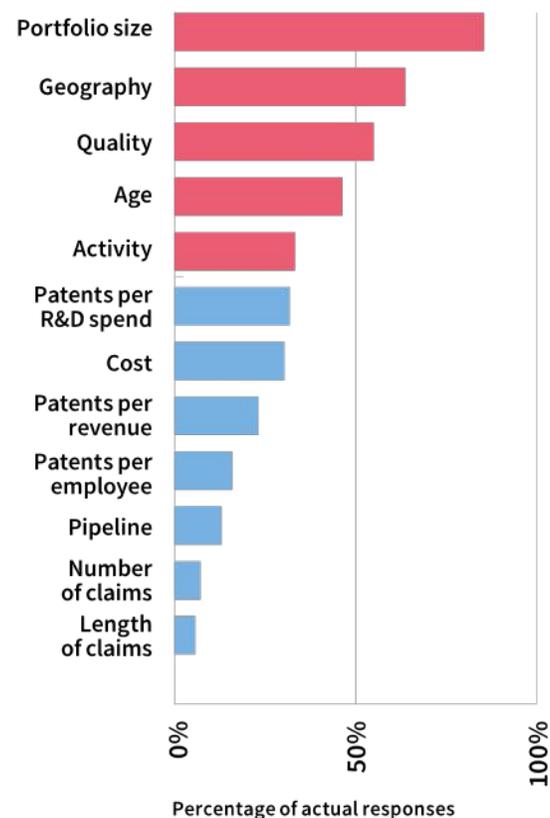
The size of the data gathering challenge is not to be underestimated

There were **12 different metrics** cited within the survey as important when it came to benchmarking – further increasing the size of the data challenge.

“Looking at one isolated patent metric has little analytical power, you have to integrate it with other data points within the business.”

John Simmons
Head of IP at Givaudan

What metrics do you use to benchmark?

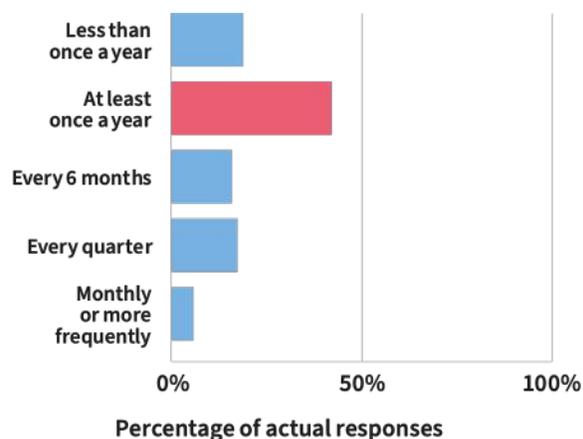


Source: Cipher IAM Benchmarking Survey 2020

Key Findings V: Current data challenges

The size of the data gathering challenge is not to be underestimated

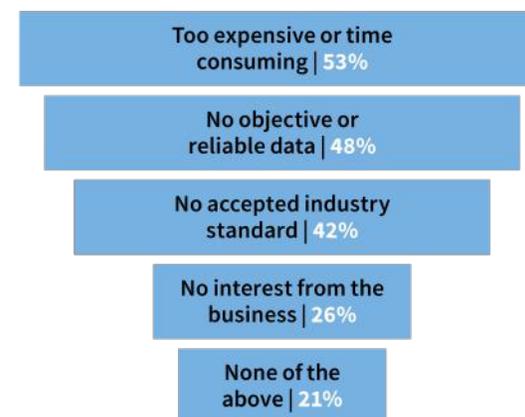
How often do you benchmark?



Source: CIPHER IAM Benchmarking Survey 2020

88% of companies are benchmarking at least once per year – structured data and process is needed.

What are your challenges?



Source: CIPHER IAM Benchmarking Survey 2020

Time and **money** are challenges – the old ways are no longer suitable.

Data **reliability** and **consistency** are a significant challenge for many.

Conclusions

“The Stone Age of analytics was 2008/9 and in just over a decade it’s been like flipping a switch from zero to everything being available. That created its own Big Data challenge because the data is not always easy to organise. So much has changed in a short period of time.”*

Jason Skinder

Chief IP Counsel for Connected Enterprise, Honeywell

“So much has changed. This is a combination of the increased amount of data that’s available, the tools are better and importantly questions that the organisation wants to answer are different.”*

Sarah Guichard

Head of Patent Transactions, Google

Jason and Sarah are right.

Patents are a big data problem now which needs a big data solution and mentality. The questions being asked of patents are different from the past and require solutions that meet the needs of these new questions.

Google

“Data science and machine learning helps us **better manage and shape our portfolio**; and operate more efficiently and at scale so that we can execute on our patent strategy.”

Mike Lee, Head of Patents, Google

centrica

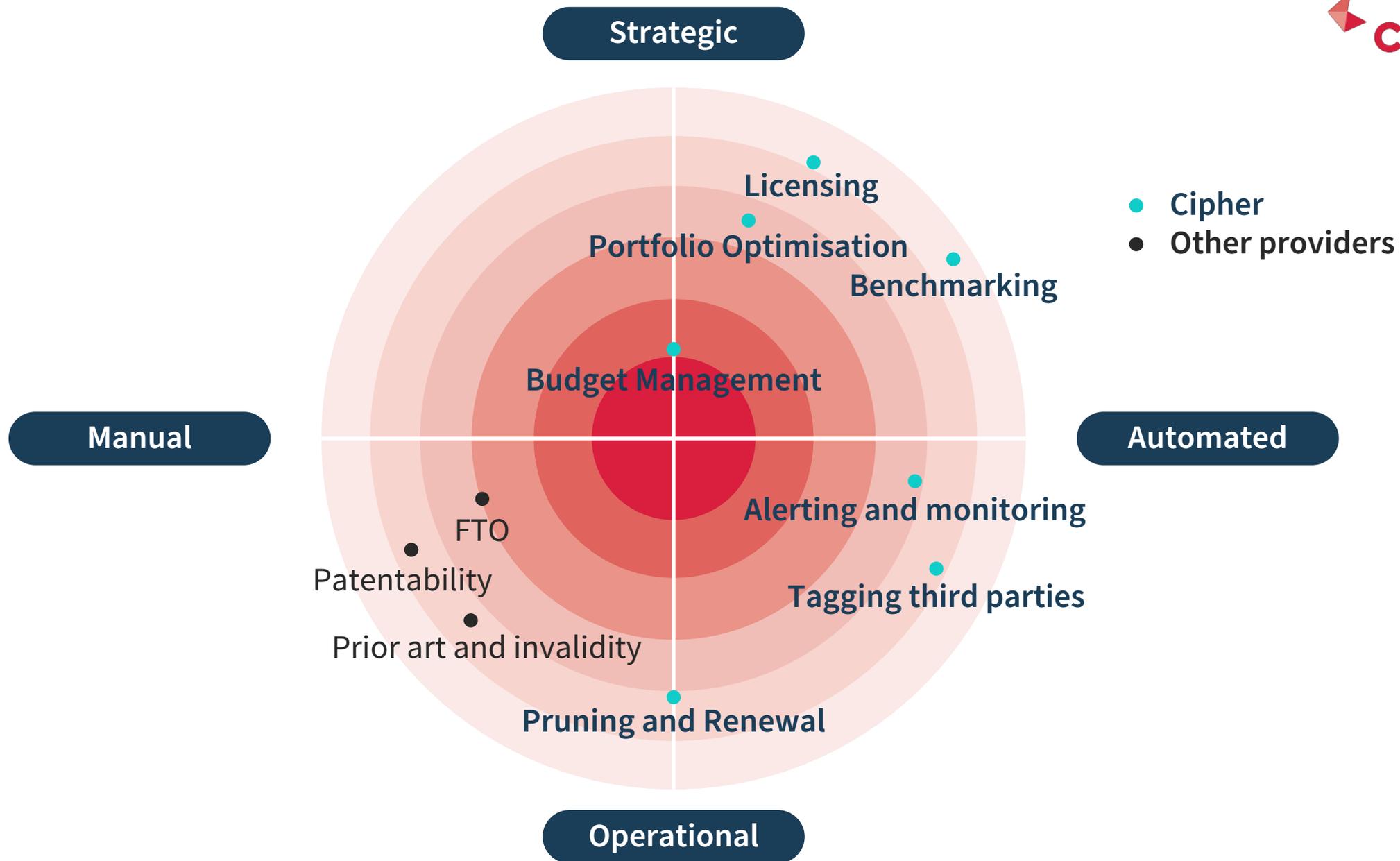
“What machine learning gives us is **speed to enable us to look at the vast amounts of the patent data through a different lens**, in a much quicker time than would be possible using normal searching techniques.”

Charles Clark, Director of Intellectual Property, Centrica

facebook

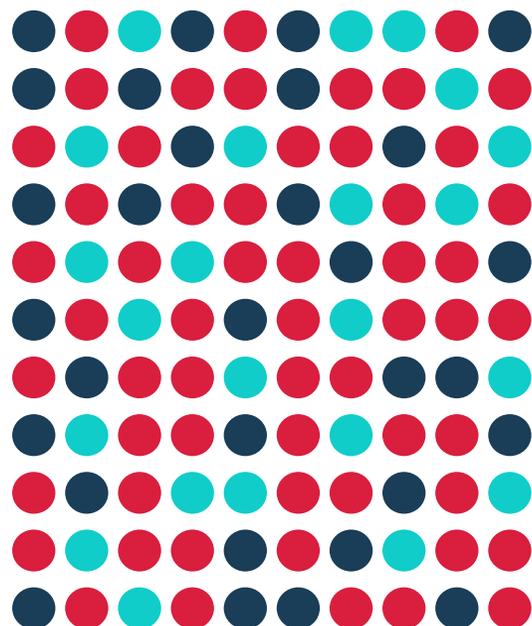
“With improvements in AI technology and other analytics platforms like Cipher, today we are able to **understand the numbers of patents that are relevant to certain technology areas at a push of a button.**”

*Jeremiah Chan, Head of Patents,
Facebook*



The Big Data Problem Machine Learning Solves

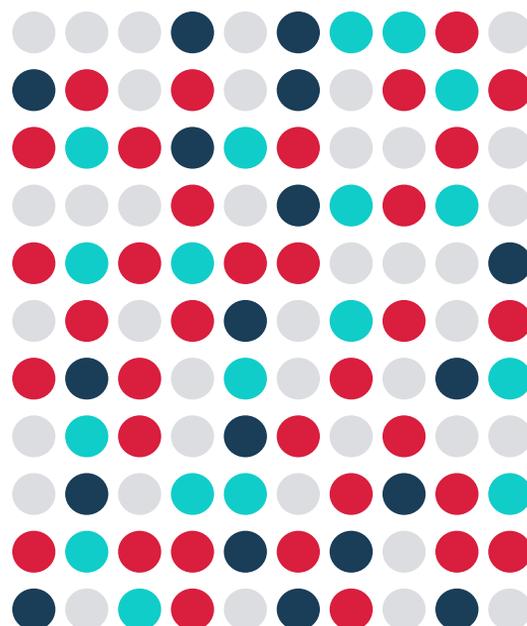
44m+
Active Patents & Growing



Global patent data is available but is unstructured and hard to analyse



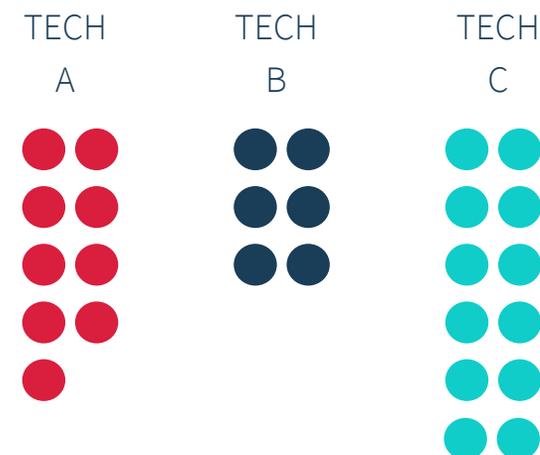
Removed Noise and Focus on What Matters



Classification using machine learning brings efficiency and focus



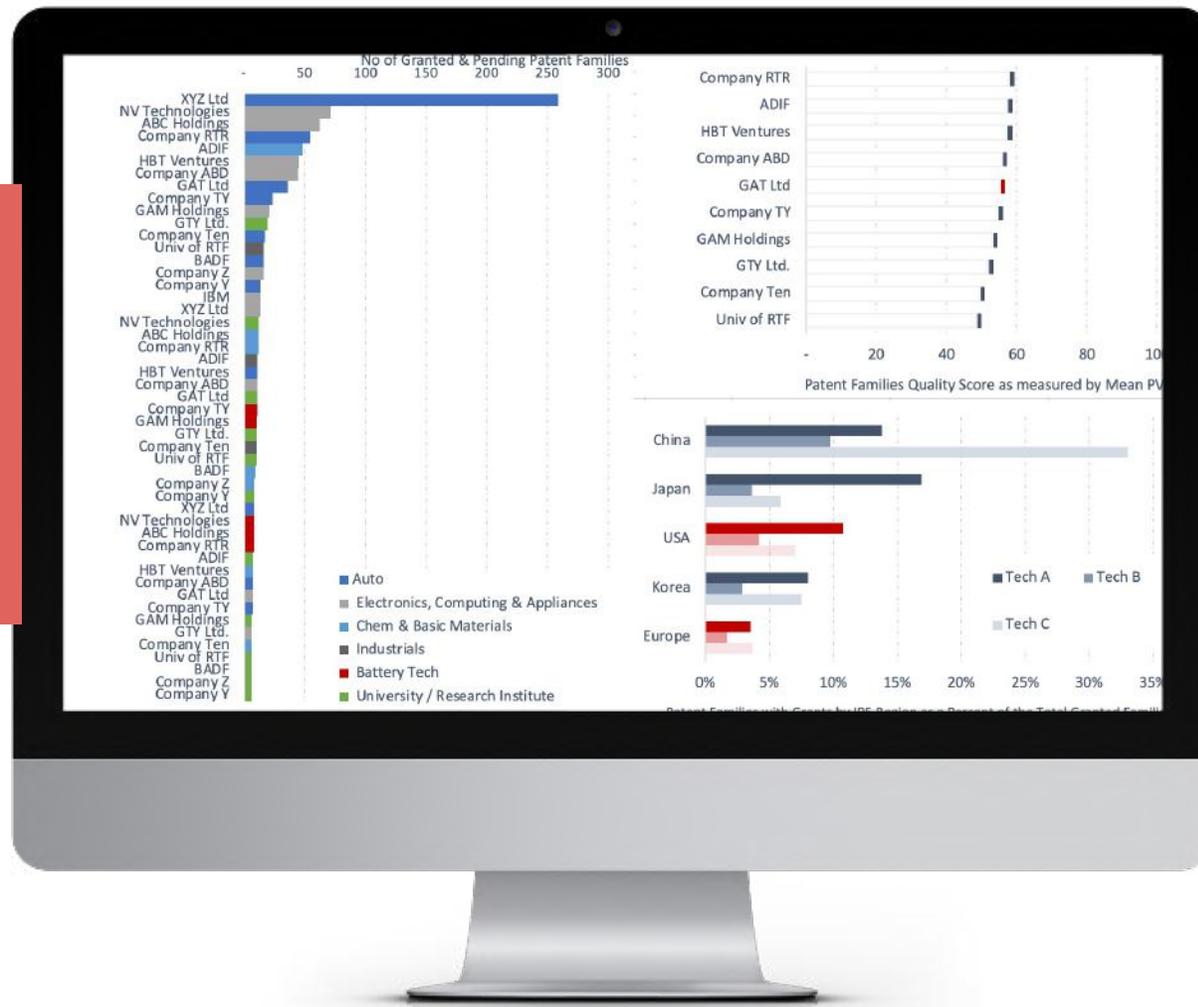
Custom Technology Taxonomy



View patent data through your technology lens, all patents mapped to 3rd parties

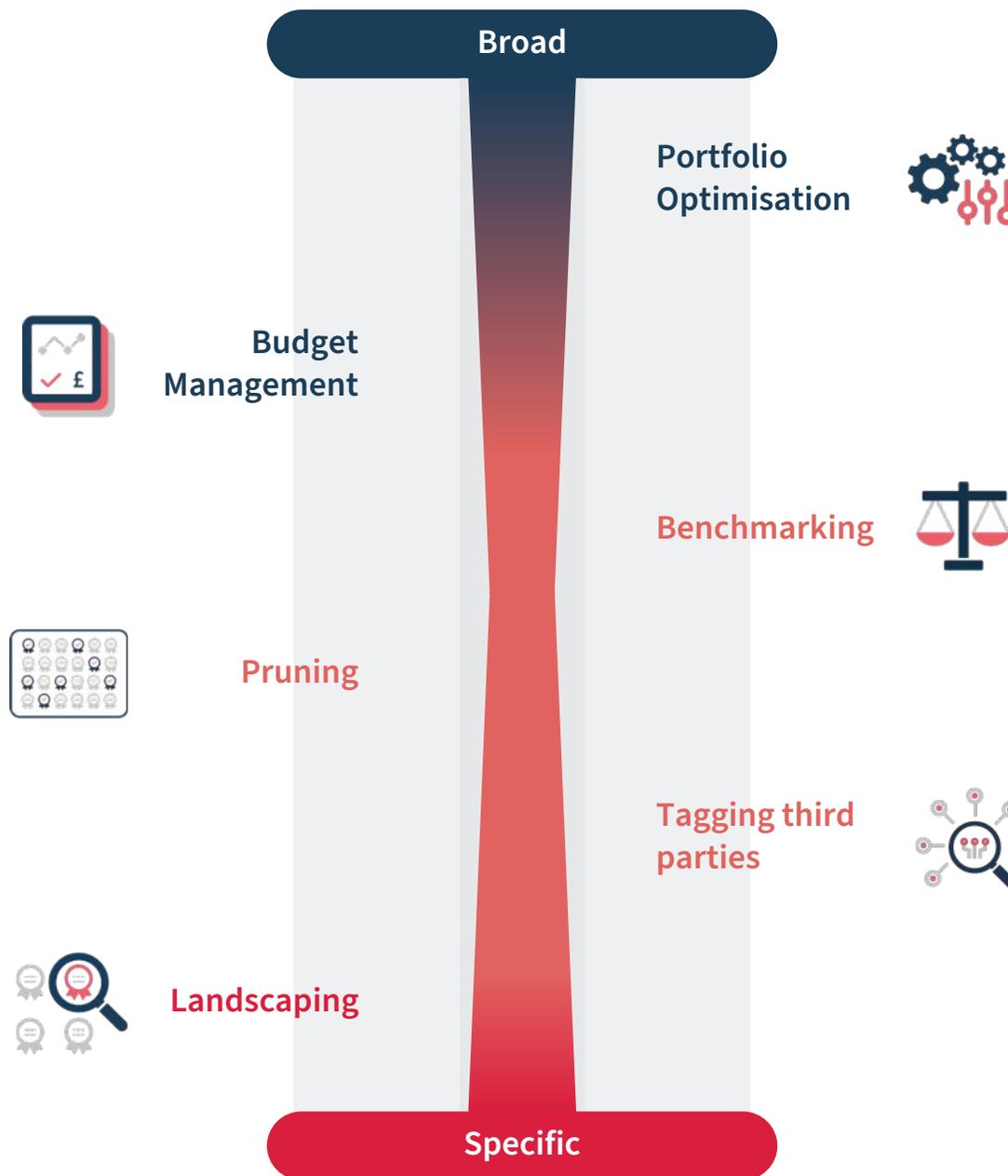
From data to insight...

Technology Screening
 Litigation Activity
 Corporate Analysis
 Benchmarking



Taxonomy design & classification creation

Defining the end use cases is essential to the type of classifiers to be built and the shape & size the taxonomy



Taxonomies – structure and hierarchy

FINTECH CLASSIFIERS

[expand] [collapse]

- ▼ FinTech
 - ▼ Authentication and Authorization
 - ▼ Biometric
 - Biometrics (broad) ⓘ
 - Facial Recognition ⓘ
 - Fingerprint Scanning ⓘ
 - Iris Recognition ⓘ
 - Voice Recognition ⓘ
 - ▼ Non-Biometric
 - Behavioral Authentication ⓘ
 - Contextual Authentication ⓘ
 - Non-Biometric Authentication (broad) ⓘ
 - One-Time Password ⓘ

AUTOMOTIVE CLASSIFIERS

[expand] [collapse]

- ▼ Automotive
 - > OVERVIEW
 - > Autonomous systems
 - > Cabin systems
 - > Chassis and body
 - > Complete vehicle systems
 - ▼ Drivetrain
 - ▼ Automatic transmission
 - Automatic gearbox ⓘ
 - Continuously variable transmissions (CVT) ⓘ
 - Dual-clutch transmissions ⓘ
 - E-clutch ⓘ
 - Semi-automatic gearbox ⓘ
 - Torque converters ⓘ
 - > Hybrid
 - > Manual transmission

Taxonomies

Taxonomy design and scope are critical and of necessity a human responsibility.

E-clutches (electric/electronic-clutches) are systems that replace solely mechanical systems by turning them into fully, or partially, automatic clutches i.e. hybrid clutch solutions with some form of electric/electronic components that operates constantly, or under certain driving conditions. This technology definition includes core e-clutch systems as well as associated systems including, but not limited to: field coil assemblies, cooling structures, electronic step less speed adjusting systems, magnetorheological fluid clutch, electrohydraulic devices, electronically controllable clutches, clutch actuation device e.g. method for control of clutch release device, clutch synchronization assisting method. Excludes manual activation unless a control system or sensor detects positions or forms part of a wider control system to detect and act on positions e.g. from flywheel, transmission or other driveline/PT related components. Excludes friction clutches unless they are automatically or electronically actuated e.g. automatic actuation of a friction clutch.

Benefits of automated classification



Automated data collection

Automates the data collection capture and processing process



Building on client data & knowledge

Leverage both existing datasets and/or in-house knowledge



Save time

IP teams can focus on analysis in an objective, consistent and repeatable way



Customised to you

Customised to the agreed definition of the technology ensuring ease of communication



Always on, Always updating

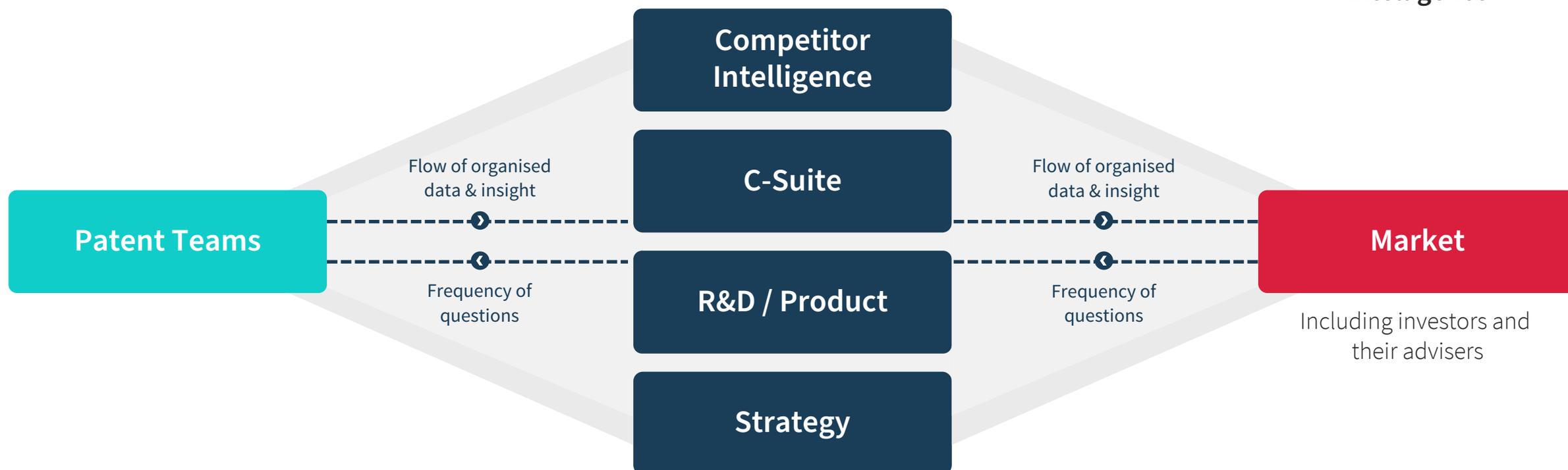
Monitoring, tracking & updating are achieved without additional effort or resource

Storytelling with data

Traditional Consumer
of Patent Data

New Consumers
of Patent Data

Future Audiences
for Strategic Patent
Intelligence





CIPHER