How to analyse markets using innovation data
– *Video Transcript*

How to plan your research

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Video 1: How to plan your research

Presenter: Welcome back to Academy and this course on analysing markets using innovation data. In this series of videos, we will learn how to explore research using different data sets, and together, we'll build a framework for creating a market analysis report.

There are four videos in this course:

- How to plan your research
- Using research for market insights
- Determining threats and opportunities
- And… Forecasting future trends and other influences

As with almost every project, the key to success is the plan. So, in this first module, we'll start by exploring what you need to take into consideration when planning your research project. But before that, let me introduce you to Arun Hill, who will be our guide on this course.

Arun: I'm Arun Hill, I'm the lead analyst for PatSnap and I sit within the professional services division, and we provide IP data and visualisation services to clients.

Components of a typical market report

So, as with any business question, it's important that you have a plan before you execute the research – so it just ensures that you're focused and that you don't waste your time. So typically, the main components that you might want to think about in a market research report would be: market insights themselves, what the competitive landscape looks like, what are the key challenges, threats and opportunities, and anticipating what the future trends might look like.

Concept, research, analyse, landscape

There are the four stages that I would recommend in terms of getting these particular insights. So, the first would be the concept. So, what is the definition of a technology area? Are there any market insights that you can draw in, and what are the general emerging technologies relating to that technology area? The next phase would be research – so how do we take that definition and bring it into the patent world? How does it correspond to the language we're seeing in patents? Are there trends in terms of filing velocity, in terms of the technology areas that we're dealing with?

And finally, the analysis phase. And what we're seeing here is really: to what extent does the market idea of a technology match up to the patent landscape as well, so are there any similarities and differences?

And finally, I would say it's landscaping – bringing it all together, can we paint an holistic picture of the market using patent information and non-patent information as well? So that normally involves published applications and granted patents, as well as IPCs and CPCs, so technology classifications.

Non-patent literature

We can make a basic distinction between patent data and non-patent literature. So, when we're talking about patent data, that might include things like licensing, opposition data; but when we're talking about non-patent data, really, the world is your oyster. So, you can include merger and acquisition information, funding, news, tech offerings as well – it's really as broad as you want to make it – and the more context you have, the better, the more well informed your analysis will be.

How can a research document help?

So, a research document allows you to collate your initial research and any early hypotheses you have before you carry out the analysis. The types of things that would be included in a research document would be: what is the technical scope that I am looking at for this particular study, are there any market trends and what do I expect is going to happen in the patent data?

Primary and dependent research questions

So, I would say that it is a good practice to have a primary research question, what are you looking at? Think about smart goals, be specific and be metric oriented. And then, as a subset of that, you want to consider what am I going to have to disprove or prove in order to validate that hypothesis. So, you might say for example: is interest in blockchain increasing over time? And so, the dependent research questions based on that would be: is it a favourable market to get into? Are there any particular jurisdictions that stick out to me? Are there any sub-technology areas, as well, so for example, artificial intelligence or neural networks that I would need to take a closer look at in order to prove that?

Defining the 'scope'

So, the easiest approach that I would take to the scope of a study would be to determine: what is in, what is out and what is a grey area. So you're looking at: what do I want to include, what do I want to exclude and what is potentially controversial because I am not sure if I want to include it, or exclude it? And then you can revisit those grey areas and determine whether you want that within your study.

So again, with blockchain, you may – or a better example would be artificial intelligence – you would be looking at the broad area of artificial intelligence – but you may want to include neural networks and machine learning, but exclude visualisation and cloud infrastructure as well – so that may be an example of things you want to include and exclude. But a grey area would be data analytics. So, once you've got a good idea of what you want the scope to be for the study, that's when you can start to think about: what will this query

look like, how will I actually retrieve the data set? So, in the simplest terms possible, you want to think about what is the broad technology area, what are the enabling technologies, and what may be the potential end use that I am interested in? And then, on the basis of that, you can start to produce a more refined query, a more sophisticated version. You might want to produce different iterations of that same query. And then the last step is layering on top of that any filters in terms of the data. So, do I want to focus on a particular time range, do I want to focus on a particular jurisdiction in order to get the results that I need?

Presenter: Thanks Arun. Join us on the second video, when we look at using research for market insights. And don't forget to download the research document template below. Thanks for watching.