

Strategic Technology and Innovation Management Programme 2017

Roadmapping for Strategic Management of Intellectual Property (IP)

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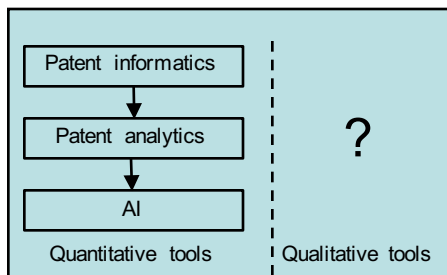
Intangible assets such as IP have now been attributed to somewhere in excess of 75 percent of the value of publicly traded companies.

Therefore, people could expect IP strategy to be a top priority for senior management. However, IP remains a poorly managed asset.

Aims

One of the reasons for the problem is the misalignment between IP and overall business strategy. This project aims to deliver a management tool for facilitating IP management.

While quantitative tools are being developed rapidly, the qualitative tool remains rare for IP management. In this project, we propose using roadmapping as a suitable tool for aligning IP with strategy to maximise business value.

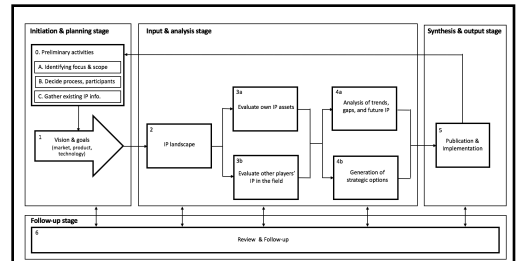
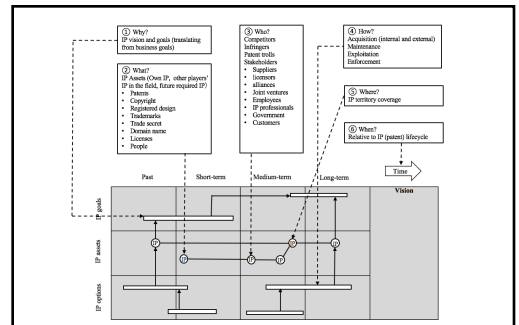


Progress

1. The framework and process model were developed based on literature review, archival analysis, and exploratory interviews.
2. The refinement is being carried out by interviewing with IP consultants, roadmapping experts, and companies' executives and IP managers.
3. Further refinement will require in-company case studies.

Deliverables

The project delivers a conceptual framework and a process model. The steps have also been described in details.



Step	Prompt/Example for Activity
Before	<ol style="list-style-type: none"> 1. Review case selection criteria and utilize industrial connections, academic network and website browsing to search and identify technology companies for potential participants. 2. Contact the identified technology companies with a summary overview of the project to require to see whether they are willing to participate in the interview-based mapping session and to assess whether they satisfy the case selection criteria. 3. Following confirmation of willingness to participate, provide the participants with a brief note that describes the mapping exercise in greater detail. 4. Before the interview, gather information available (company information from websites and IP data from databases).
Vision & goals	<ol style="list-style-type: none"> 1. Identify the business goals, products to be developed, and required technologies for the firm. <ul style="list-style-type: none"> • The step can be done in initiation and planning stage if technology roadmaps have already been available from the firm. • The step needs to be done prior to IP roadmapping if technology roadmaps are not available.
IP landscape	<ol style="list-style-type: none"> 1. Analyze the IP landscape of the relevant technologies, and freedom-to-operate studies carried out in preliminary activity.
Assessment of internal environment	<ol style="list-style-type: none"> 1. Identify the current state of the IP owned or licensed by the firm. 2. Identify competitors and alliances from these players. 3. Identify the relevant stakeholders in the management process (e.g., executives, IP professionals, and investors, etc.)
Assessment of external environment	<ol style="list-style-type: none"> 1. Identify other players and their IP assets in the field. 2. Identify competitors and alliances from these players.
Identification of future required IP	<ol style="list-style-type: none"> 1. Identify the IP assets which will be required in the future. <ul style="list-style-type: none"> • To close the gaps of their own IP portfolio profile by innovation, in-licensing or purchasing. • To block competitor's IP, or acquire bargaining chips for cross-licensing. • To leverage patent system and litigation (patent trolls).
Generation of strategic options	<ol style="list-style-type: none"> 1. For each of three issues of IP assets (owned, other players', and future required), generate corresponding strategies and options. <ul style="list-style-type: none"> • Owned or licensed IP <ul style="list-style-type: none"> • Patent renewal, re-examination and reissue <ul style="list-style-type: none"> ◦ Renew in selected countries ◦ Prioritize patents not worth maintaining • One-licensing (e.g. engage in strategic alliances) • Try to achieve standardization • Enforce its holding against competitors • Other players' IP <ul style="list-style-type: none"> • In-licensing or cross-licensing • Patent opposition/challenge competitor's patent validity • Future required IP <ul style="list-style-type: none"> • Filing timing principles • Filing procedures (e.g., direct or PCT) • Territory coverage • Trade secret as the alternative • Defensive publication
After	<ol style="list-style-type: none"> 1. Convert the map into digital format using software 2. Summarize the participants' comments into a supporting case report. 3. Key issues highlighted by the participants are analyzed as part of the case report. 4. Review the supporting case report and the map to the participants to check the accuracy. 5. Review them based on review and feedback accordingly, and ask the comments on the IP roadmapping framework.

I am currently looking for companies who have interest in IP management to test the tool.