

How metrics can put IP at the heart of your company's agenda

If senior executives are to appreciate fully the IP management work being done inside their companies they need strategically aligned metrics that relate to their business knowledge. According to recent research, this means expressing IP performance in a language that the boardroom understands.

By Rob Williamson

As intellectual property management (IPM) becomes a more visible activity within the corporation there is a growing need to communicate the business value that it provides. However, although many in top management intuitively understand the role that intellectual property plays in driving corporate value, at the same time they have struggled to correlate the returns on investment. Top management has come to view intellectual property as necessary but as something with unclear and hard-to-define business rewards. The lack of hard measures in many companies results in intellectual property management being an undervalued activity.

The challenge for IP leadership has been to develop metrics that clearly communicate the business value of their IP. This would assure IP management that their activities and resources are aligned with the business strategy and value drivers, which should be the ultimate objective.

In the future we believe that top management will mandate that the IP function be run like other business functions and will therefore require it to show an acceptable and realistic return on investment (ROI). The IP leadership will have to behave like top management: planning and executing financial controls; aligning IP strategies with the corporate strategy; campaigning; and performing all the other disciplines necessary in running a business operation. This will force IP leaders to fit into typical business practices.

This approach may seem unachievable or far reaching given current circumstances but many leading companies have been operating in this manner and achieving tremendous success. If one wants to be the corporation's IP business leader one will have to make a

transition that will align the IP efforts to the business drivers. Consider the value to the business and the IP champion when the business value contribution can be articulated in terms that top management can understand and calculate.

It is evident from our research that the lack of alignment and clarity of communication has resulted in lack of understanding on the part of business people. It is the responsibility of the IP leadership to help connect the dots between the language the top management and business understands and the metrics that are used in IP activities.

Everyone knows what the IP organisation is doing and values its contributions, but unless IP accomplishments are communicated with measures that demonstrate that actions are business aligned, appreciation and recognition will not be fully achieved.

Establishing and communicating business-aligned measures will help tell the IP story more clearly and effectively.

The Holy Grail

Business-aligned metrics are a catalyst for better enterprise visibility and performance management. Aligning IP measures with the business drivers is the Holy Grail. That might not be hyperbole. The leading IP-intensive companies have been doing this for many years.

Business alignment occurs when the IP organisation demonstrates value that is aligned with the business strategy and business value drivers. Illustrated in Figure 1 are the many IPM tactics and plans organised by value preservation and value growth. Effective IPM makes significant contributions to drive share shareholder value, company profitability and market share.

It is evident from our research (Strategic and Operational Management of Intellectual Property) that most IP organisations are focused on operational effectiveness. Furthermore, from our study, IP leadership stated that “a lack of understanding of the importance of IP” is the biggest IP challenge experienced in moving IP programmes forward. Certainly there is value in collecting and evaluating operational metrics such as application preparation time, attorney time and cost, etc, but those metrics are only one aspect of intellectual property management.

Many IP leaders struggle with demonstrating the connection that the IP programme has on revenue and profitability. Establishing measures that relate to business alignment is what demonstrates that the organisation’s IP contribution is strategic. The leading IP-intensive companies such as IBM, QUALCOMM, Dow Chemical, HP and 3M are examples of companies that have invested in developing the best measures that show the value contribution to the business strategy.

Business alignment can occur at multiple levels within corporate and, if needed, individual business units. In situations where the businesses are not homogeneous, which is the case in most diversified corporations, measures that are more appropriate to the individual business strategies are required.

The first step in achieving business alignment is to know the business strategy and identify the business value drivers that will achieve the strategy.

Business strategic value drivers

The primary strategy for the vast majority of commercial enterprises is creating shareholder value, whether it is for the shareholders of a large corporation or the owners of a small company.

Shareholder value is created by successfully navigating the value drivers that allow the achievement of the strategy:

- Strategic value drivers (dealing with anticipated future value).
- Financial value drivers (eg, revenue growth, profit margin, capital expenditure, tax, cost of capital).
- Operational value drivers (eg, customer satisfaction, quality of product or service, reduced unit costs, improved competitiveness, risk reduction, etc).

Business value drivers are the key parameters that top management and the board of directors look to for assurance that the corporation is on course and supporting the business strategy. Examples of value drivers include: increased income; reduced

cost; access to capital; improved competitiveness; risk reduction; and growth

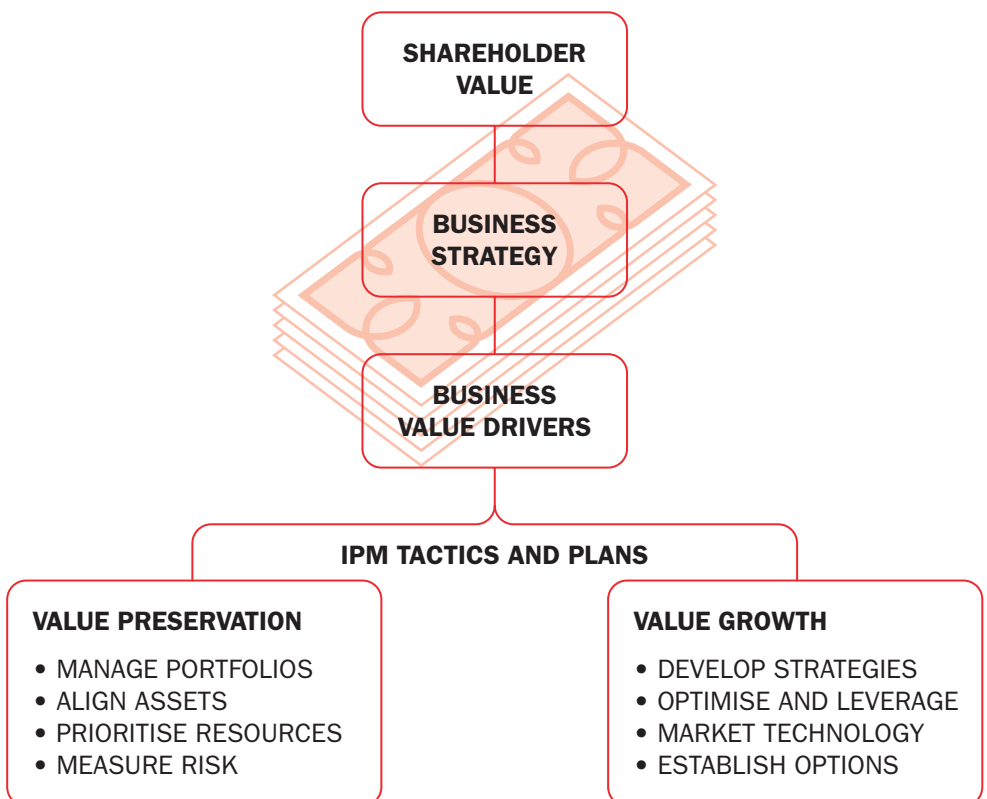
Understanding and communicating IP measures in relationship to such business drivers is critical to the IP organisation’s success in demonstrating business alignment.

As illustrated in Figure 1, value drivers within the hierarchy are interdependent. Business strategy is connected to the tactics and plans that the IP department will execute on.

IP leadership’s ability to transform IP measures enables it to set objectives and prioritise IP investments. It also helps to increase understanding of the value of an objective and its contribution to the overall picture, something that is a powerful motivator for achieving the objective.

Intellectual property can have a positive impact on many of the value drivers, both active business value and passive business value. Active value is generated when IP is used as the basis from which to, for example, increase prices, market share, profits and licensing revenue. Passive value is generated when IP is used defensively to, for example, protect prices, market share or profits. Both strategies have a positive influence on the business and it is critical to articulate this fact to top management.

Figure 1 Alignment of IPM with value chain



IP metrics aligned to the business value drivers

Metrics are where the rubber meets the road. They identify the IP organisation's operational effectiveness and business contribution towards the business drivers

In most organisations top management has a business case imperative in order to move forward with an IP initiative. In many companies today, the support of IP by management and, indeed, generally by the company as a whole is based on qualitative measures (eg, good acquisitions of IP that are connected to successful products, good inventions and IP that allowed new products to be introduced in to new market segments with a competitive advantage). Without metrics there is a strong probability that support for IP will not be sustained.

Illustrated in Figure 2 is an organised view of sample measurements that support business value drivers. The means to achieve

are the strategy statements or how to achieve the business value drivers. But many IP organisations are more focused on day in, day out activities. For example, most companies that license their technology will measure the number of licence agreements and the revenue they generate; few will measure the value of the licensing relationship. Another common metric is the number of patent actions per attorney. This measure generally is not associated to the quality of the patents or their value to the company. The results of our research confirm IP metrics, in most organisations, are tactical in nature and look at things such as the number of patent applications filed; the number of patents granted; and the number of invention disclosures

Illustrated in Figure 3 are responses to a question in the study: "How do you measure the effectiveness of your IP group?" These measures are inadequate if one is trying to demonstrate that the IPM is impacting on the business drivers. Instead, it is vital to develop metrics that relate to strategic, financial and operational value drivers.

As an example, a financial metric would be a profit margin. With this in mind, identify a licensing transaction that included a product and the company trademark – show senior management that by including the trademark, the company increased margins by 5%.

Metrics need to be actionable and communicated in terms that your audience, particularly top management, can understand. Gaining a common and unified understanding of intellectual property's value to the business is the key to the Holy Grail. Top management gets excited when the portfolio is articulated by its impact on business drivers.

Establishing metrics and linking them to business drivers

IP leadership will need to establish metrics that can be used to show both operational effectiveness and business value contribution. The measures are predictive measures (are you travelling on the right path to get you to your final destination?). And they are performance measures (did you get to where you wanted to go?) and metrics that identify that the mark was achieved. Along the way, IP leadership should be able to identify that it is getting close. This allows adjustments to be made to change performance or influence behaviour.

Establishing a grounded measures programme requires a view of both internal and external conditions. Setting your metrics can be a tricky activity. The credibility of your measures will be evaluated by their defensibility. Many companies use benchmark

Figure 2

Value drivers	Means to achieve	Measurement
Increased income	New products	US\$ licensing revenue + penalties
	M&A impact	
	Revenue recovery audit	US\$ equity or proceeds
	Licensing revenue	% of market licensed Average royalty rate
Reduced costs	Optimised R&D	US\$ expense savings
	Charitable donations	US\$ tax benefits
	Optimised maintenance fees IA/IP holding companies	% of current sales from past R&D
		NPV of pipeline technology
Access to capital	Company unitisation	Δ US\$ of corp credit capacity
	Sale/license-back	ROI
	Asset-backed loan	Credit rating
		Δ WACC (working active capital)
Improved competitiveness	Proactive enforcement	US\$ recovered from assertions
	Product/market differentiation	R&D US\$/patent
	Stronger IA/IP	% 1st allowances granted
	Reduced cycle time	% market share Average time to market
Risk reduction	Security against trade secret loss	Litigation US\$ cost Favourable defence ratio
	Right to practise	Average product life
	Reduced obsolescence	Number of employees trained

Figure 3: Intellectual property group measure of effectiveness

Intellectual property group measure of effectiveness	(0-150) Annual invention disclosures	(150-500) Annual invention disclosures	(500-plus) Annual invention disclosures
# of patent applications filed	69%	75%	100%
# of patents granted	59%	78%	100%
# of invention disclosures	42%	50%	75%
Satisfaction of operating company managers	69%	75%	65%
Measures of patent quality	18%	10%	21%

data to identify and validate deficiencies. Recognise the areas where the IP programme is measuring up to the industry or other organisation of similar condition (size, activity level, industry etc). Internal metrics will be guided by the business drivers.

Deriving metrics from benchmarking

Many leading companies have established benchmarking programmes that allow them not only to see how they stack up but also to identify and validate improvement opportunities.

One of the best ways to gain validation for the IP organisation's metrics and to gain internal support is with external benchmarking exercises. External benchmarking can be done through a variety of methods: conferences and seminars are the most widely used, although this information is generally less reliable and not very comprehensive. Alternatively, publications and third-party published reports, as well as generic or non-generic focused benchmarking, studies are all available.

Non-generic benchmarking is defined as conducting benchmark studies with companies in the same industry. Non-generic benchmarking plays a key role when the company is evaluating how its programme compares to others in the industry. This method has more value but can be difficult to achieve. This method is best done with a third-party intermediary.

Generic benchmarking is defined as conducting benchmark studies with partners across the broad scope of industry. Generic benchmarking plays a key role for a company in helping establish best practices and in paving the way for continuous improvement. Additionally, the confirmation obtained from benchmarking cross industry underpins the internal credibility necessary for the implementation of major cultural, structural or thrust changes in the organisation.

In order to fulfil its objectives, a company must target potential benchmark partners, individuals and organisations, both inside and outside the industry, that appear to possess best practices in areas of interest to the company: this shortlist also includes, as a special subset, individuals or organisations having best practices with specific relevance to the intellectual property management.

Five types of benchmarking activities are commonly practised:

- Face-to-face full-scale benchmarks set up following well-recognised benchmarking principles and carried out in an informal meeting atmosphere to facilitate information exchange.
- Short, focused telephone benchmarks set up to achieve specific targets.

- Conference participation, where networking and discovery are the key elements and serendipity can be a major influence.
- Participation in collaboration where exploration in depth along a well-charted route of investigation is followed.
- Internal cross business benchmarking.

Benchmarking does play a significant role in the leading companies that have actionable metrics to determine the most effective use of their benchmarking efforts. Benchmarking can be worthwhile if done correctly.

Evaluation – measure the value the IP provides the business

Leading companies measure the value that IP provides the business. Doing so brings clarity to a very fuzzy topic. Top management as well as business leaders gain an improved appreciation of IP impact on the business value. Measuring the value of IP does not necessarily require extensive research or costs. It involves portfolio classification and portfolio evaluation methodologies.

Portfolio classification can be as simple as organising the portfolio by usage (current business use, future business use or no business interest) or business importance (high, medium, low). This systematic method can result in a very effective utilisation report as illustrated in Figure 4. This report provides business leadership with a macro view of portfolio utilisation. Leadership can easily view the IP that is used, potential for use and no business interest. The report can be very revealing when viewing trends over a period of time.

IP evaluation, the next phase, draws from the classification activity, focusing on a subset of the portfolio assets that are currently used or have high business importance. A group of company experts (eg, marketing, technology and legal) are organised to provide input to a group of questions that lead the team to identify the value contribution that a single or group of intangible assets provide. This gives

What are the benefits of business-aligned IP metrics?

- Continuous improvement of management processes
- Provide a better understanding of the value contribution of IP
- Develop better IP in support of the R&D investment and the business objectives
- Create metrics in order to continuously improve processes (CIP) and maintain support.
- Provide a better understanding of the value contribution of IP
- Develop better IP in support of the R&D investment and the business objectives, developing a credible ROI for IP investments

Figure 4: Portfolio utilisation

	Value preservation			Value growth		Alternative value			Total
	Current business use			Potential bus. use		No business interest			
	Practise	Defensive	License	Practise/ use def.	License	Avail. for Corp. lic	Allow to Expire	Abandon	
2/09/03	2910	2590	3380	6762	4288	138	1235	1200	22507
Percent	13%	12%	15%	30%	19%	1%	5%	5%	100%
		40%		49%			11%		

This is an example of an analysis that can be conducted to analyse your portfolio on an ongoing basis* - classifications by business use

*these numbers are always in a state of change

Some basic points about intangible measures

Measures are necessary

What is measured is improved. Whether we like it or not, many people see measures as constricting and inhibiting, but they are required to garner top management support and ensure the highest levels of performance from employees.

Everything can be measured

Measuring can be as simple as using terms such as good, better, best, rising, falling or flat. It is something every individual does consciously or unconsciously many times a day. Every time a purchase is made a measure of value is performed.

Visualise, measure, manage

If you can visualise it, you can measure, manage and then continuously improve it. Visualising is often the most difficult step. It is vital to articulate intangibles in such a way as ensures that there is a common interpretation and understanding of what "it" is.

Value measures (objectives) & process measures (indicators)

Indicators are predictors of the future. Value measures should not be viewed without the associated process measures. Merely looking at value measures leaves an organisation vulnerable to not knowing if it is succeeding until it is too late. Process indicators are important in order to see if the organisation is on track (if the petrol gauge, alternator light, speedometer and so on in my car are all OK then I will have a higher confidence level that I will get to where I want to go). The importance and role of each of these measures have often been confused and mixed.

Quantitative measures are often developed from multiple qualitative measures

Even quantitative measures are often built from many smaller qualitative inputs.

A range of values is usually sufficient for decisions regarding intangibles

All too often people believe a measure needs to be an absolute. We have been conditioned to believe we must always strive to get to a point. In reality few decisions, even critical ones, require absolute knowledge. This is particularly the case with intangibles. Does it really matter to know an employee morale survey's result to the second decimal?

leadership a relative value on the company's IP portfolio. Which, in turn, makes IP much more identifiable in business terms. Now those at the top of the corporation have a measure that they can sink their teeth into. Furthermore, business leaders can establish IP business value and utilisation agenda items in business leadership meetings.

Getting a seat at the table

It is evident from our research that there is a lack of IP alignment and little clarity of communication concerning IP. This magnifies any lack of understanding top management and business leaders may have. It is the responsibility of the IP leadership to help connect the dots between the language the top management speaks and those metrics that are gathered from IP activities.

The secret weapon is strategically aligned metrics. The IP organisation's ability to use clear and defensible metrics to articulate the fact that IP is playing a significant role in supporting the business drivers and growing shareholder value is critical: not only to the decision-making process but also to ensuring continued top-level support for the IP organisation, and perhaps even an enhanced role.

IP metrics have become an important part of many leading companies' public information reporting, which means that intellectual property creation and performance metrics are having an impact on the perception of stock share value. It is recognised that IP is a tremendous indicator of current and future performance.

IP metrics enable business leadership to be in-tune with IP. Where IP is a topic discussed at the highest level it is because the IP leadership have developed clear metrics and a flawless process for collecting them which have become standardised and aligned with business strategies. Even if you're not a multi-billion organisation, business-aligned metrics are the key to the Holy Grail for invitation to the business strategy table.

Make your intentions and aspirations for developing the IPM programme better understood by top management. Make it a reality by developing metrics that can be communicated at the highest levels of the organisation. ■

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Petrash Williamson (PW) has undertaken a number of research projects that look at IP-intensive companies, including market leaders and companies of various sizes and industries. Among other reports PW has produced, Intellectual Property Asset Management Process Analysis of 10 Leading Companies and the Strategic and Operational Management of IP Benchmark Report that had 60 participants