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Intellectual asset deals and decisions: are you building or destroying value?
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Tony Hadjiloucas and Mark W Haller

PricewaterhouseCoopers LLP

Key advisory issues
Intellectual asset deals and decisions: are you building or destroying value?

Twenty years ago, the valuation of intellectual property – and, more broadly, of intellectual assets or intangibles – was looked upon as a subjective and arcane exercise, in that there was a lack of consensus on the methodologies to apply and application was limited. This has changed significantly: IP and intellectual asset valuation is now an established business tool. In today's dynamic environment – influenced by vigorous new reporting standards, IP auctions, increasing globalisation and the trend towards alliances of all types – intangible assets are becoming increasingly important in boardrooms around the world.

In fact, following the introduction of the International Financial Reporting Standard for Business Combinations (IFRS3) and similar standards in the United States (Financial Accounting Standard 141), valuing intangibles is becoming less of an option and more of a responsibility. For example, directors of public companies must now identify, value and put on the balance sheet all intangible assets acquired in deals. This regulatory change alone has elevated intangible asset value measurement to the status of a core management issue.

PricewaterhouseCoopers' "Exploiting Intellectual Property in a Complex World" survey (PricewaterhouseCoopers' *Technology Executive Connections*, Volume 4, June 2007) underscores the contention that a company's ability to place a value on IP assets is critical. An executive from Siemens interviewed for the survey had this to say: "If you cannot value your IP, you cannot prioritise your research and development." He went on to cite one of the primary reasons why his company is attempting to create more interaction between business units and research and development (R&D): "The business units know their marketplace; the R&D units know technology. It is only by working together that you can begin to place an accurate value on your IP."

Valuing intellectual property – an area on the verge of profound change

To understand the future of IP management, it is useful to consider where companies themselves see a need for improvement. It is important to compare what companies say with what they say they do best, which reveals a critical gap in the practice of IP management. Specifically, the survey shows that companies need to do much more in the valuation of IP assets. Both the survey results and interviewees' comments show that this is an area on the verge of profound change. When it comes to prioritising in terms of importance, the most important IP management activities are:

- developing new IP assets (67 per cent);
- maximising the value of existing IP assets (50 per cent); and
- valuing IP assets (40 per cent).

Furthermore, 44 per cent of North American, 42 per cent of European and 31 per cent of Asia-Pacific respondents include valuing intellectual property among their top three priorities. Next, the survey asked which activities respondents felt their companies performed most capably. Here the top three answers were:

- developing new IP assets (63 per cent);
- maximising the value of existing IP assets (36 per cent); and
- acquiring new IP assets (29 per cent).

Note that valuing IP assets falls from being the number three priority in terms of importance to number five (at 18 per cent) in terms of capability.

In other words, companies know that the ability to place a value on specific intellectual property is essential, but they realise they are not getting it right.

While there are various reasons why valuing intellectual property and intellectual assets is important (eg, technology acquisition and divestitures, R&D investment decisions, financial reporting, tax issues, dispute resolution and stakeholder communications), the area of alliances, joint ventures and consortia is of particular significance. Intellectual property could be a company's principal, if not sole, contribution to the transaction. This is especially true in cross-border deals – for example, consider a situation where a western company is providing technology or brand input while a local company (often in Brazil, Russia, India, China or another emerging market) is providing local know-how, customer relationships, real estate, people resources and the like.

There is a growing demand from investors, analysts and standard setters for the provision of accurate, properly communicated information on the value of companies' intangible assets. Measuring, protecting and maximising the value of intellectual property are paramount for companies of all sizes and across most industries.

It is important to recognise that while intellectual property (ie, legally protected intellectual assets such as patents, copyrights, trademarks and even trade secrets) is readily identifiable and transferable, other intellectual assets – such as codified know-how, customer relationships or embedded workforce knowledge – may be equally, if not more, valuable in the context of a transaction or investment decision. Since the broader category, intellectual assets, is almost always relevant in the value-assessment process, this chapter uses the term 'intellectual assets' throughout the balance of this discussion.

Navigating the methodologies maze

Most intangibles generate incremental returns for the business that owns them – through either an increase in revenues or a reduction in costs. All valuation methods focus on capturing the value of these additional returns, but the following are deemed most effective for financial statement purposes:

- the excess operating profits method;
- the premium pricing method;
- the royalty savings method;
- the excess earnings method;
- the market approach; and
- the cost approach.

Excess operating profit method

The excess operating profit method determines the value of intellectual assets by capitalising on the additional profits generated by the business owning the assets, over and above those generated by similar business that do not have the benefit of the assets.

Drawbacks

It is essential to ensure that the additional profits identified are specifically attributable to the intangible in question rather than to another factor such as a relatively more efficient production facility or distribution network that relates to the business as a whole. To complicate matters further, the business with which you seek to compare the subject's margins or return on assets is likely to have some intangibles of its own that generate additional return. Certain econometric methods (regression and/or conjoint analyses) can help in isolating the revenue and profit attributable to the relevant intangibles, but these require extensive market research data.

Premium pricing method

This is a variation on the excess profits method. It is often used to value brands in the consumer products sector, where branded products are commonly more expensive than unbranded equivalents. The value of this additional revenue projected over the life of the brand, net of the marketing and other brand-support costs incurred to achieve this revenue and discounted to the present day, provides a value for the brand.

To enhance the application of this method, it may be helpful to use consumer research and conjoint analysis to isolate the premium consumers' place on the brand in their minds.

Drawbacks

It is often difficult to find a truly unbranded product. In the food sector, where stores can sell both branded and own-label products, the store's brand itself has a certain value.

Royalty savings method

This stems from the premise that if the business did not own a given asset, it would have to in-license that asset in order to earn the returns that it is generating. The value is calculated based on the present value of the royalty stream that the business is saving by owning the asset. Determining an appropriate royalty rate (reflecting a hypothetical licensing agreement) is an integral part of a valuation using this approach.

Drawbacks

It is difficult to identify truly comparable licensing agreements in the market, as details of licensing agreements are rarely made public. In assessing potentially comparable licence agreements, it is

important to consider both the technical attributes of the intellectual assets and the relative economic impact of the assets in terms of generating incremental profitability for the licensee.

Excess earnings method

This values the asset based on the residual earnings attributable to it after a fair return on all other assets employed in generating the subject cash flows has been deducted (referred to as contributory assets or economic rent). It is necessary to deduct these returns to avoid double counting the value of the contributory assets in the value of the subject intangible asset. This approach is often applied where the subject intangible asset is the business's key asset and other assets contribute to generating the subject asset's earnings stream (eg, customer contracts and some brands).

Drawbacks

This approach relies heavily on the appropriate valuation of the contributory assets. Inappropriate attention to the valuation of the contributory assets can lead to significant under or overstatements of the excess profits.

Market approach

This values assets via comparison with sales of similar assets. This is the preferred approach of the accounting standard setters. Market multiples are derived using the price at which a similar asset has been sold and the attributes of this similar asset (eg, sales). These indicators are then applied to the subject asset to determine its value.

Drawbacks

In an ideal world this would be the best method, in that it provides an estimate based on a true market value. In reality, however, it is very rare to find sufficiently detailed, publicly available information on sales of truly similar intangibles.

Cost approach

This values an intangible asset by accumulating the costs that would currently be required to replace the asset – the premise being that an investor would pay no more to purchase the asset than would be paid to reproduce the asset.

Drawbacks

While this approach is suitable for some assets, particularly those that are not directly generating income, cost is generally not a reliable guide to IP value. Valuable inspiration may cost a dollar while costly perspiration amounts to nothing.

Getting it right

There is no 'one size fits all' solution; nor do all methods fit all circumstances – and results can be misleading if an inappropriate method is chosen. Using multiple methods, balancing the benefits and drawbacks of each, is often more illuminating than using just one approach.

It is important to do your homework in terms of which approach most effectively conveys the value and risks associated with the intellectual asset portfolio in question. Companies that tackle the situation haphazardly and get it wrong all too often pay a significant price for their complacency. And the consequences can be far reaching.

Dealing with uncertainty and risk

A greater risk is usually associated with the potential revenues from the exploitation of an intangible asset than with those from a business or tangible asset. This exacerbates the difficulties involved in reconciling IP valuation methodologies to cost-of-capital theory, in that standard cost-of-capital theory distinguishes between risks that are company or asset specific (and can therefore be diversified away by investors) and risks that are systematic and cannot be diversified.

Typically, companies operate with a portfolio of assets – each carrying different systematic and asset-specific risks. Both types of risk should be captured in the cash flows associated with the asset, so that they become truly expected cash flows. However, only the systematic risks – those that cannot be diversified – should be captured in the discount rate. While there are many challenges in arriving at an appropriate discount rate related to judgements about the risk profile of disaggregated cash and income streams of the asset relative to the overall aggregate cash generation of the business, often of greater concern is the treatment of the non-systematic risk factors. These factors can vary depending on the assets' concerns, but often include the following:

- IP-specific risks, including uncertainty of competitive strength, scope of claims, freedom to practise, ability to detect infringers and enforceability of the IP rights;
- technology-specific risks, including the probability that the underlying intellectual property or intellectual assets may have a shortened economic life due to new innovations, changes in user needs or desires, increased supplier costs or differences in the economic environment;
- commercialisation risks, including uncertainty surrounding several factors associated with implementing the intellectual assets to produce or distribute the related product, the ability to scale to

production volumes, customer acceptance, market adoption rates, pricing and profitability; and
- regulation risks, including uncertainty that laws, directives and regulations may affect the intellectual assets' commercial status.

The proper treatment and articulation of key non-systematic risk factors in the estimation of the potential cash flows are particularly important in the context of intellectual asset-centric divestiture, acquisition and joint-venture negotiations, lest parties run the risk of leaving money on the table, paying too much or walking away from the deal prematurely. Internal investment decisions are similarly affected. The use of probability trees during the valuation process (see Figure 1) can prepare parties to discuss and respond to the value impact of key uncertainties and lead to more productive negotiations. Probability trees can also be particularly helpful in valuing options or structuring other agreement terms when parties reach insurmountable differences regarding specific uncertainties.

The key is that proper approaches isolate the value issues so that reasonable people can dialogue about their views and address their differences. Additionally, the value models must be dynamic and flexible so that as your position changes, as new information is revealed or – in the case of a deal – as you receive pushback from the counterparty, your value assessment can accommodate these factors to help you make the optimal choice. Without this ability, value is inappropriately assessed, deals do not get done (or get done incorrectly) and decisions do not get made correctly (or at all).

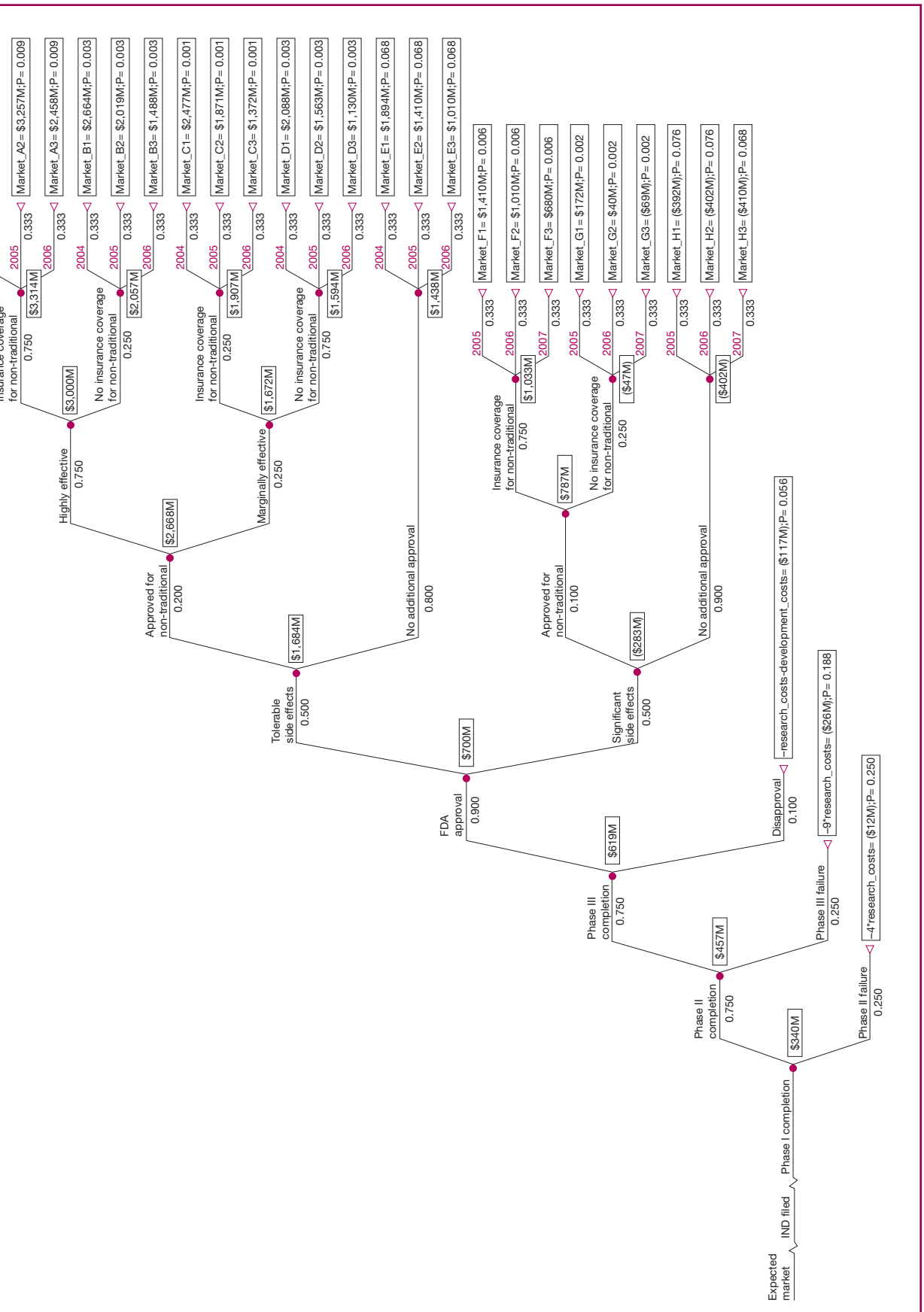
If this sounds complex, that is because it is. Being proactive and planning ahead are critical success factors when it comes to measuring, protecting and valuing intangibles. But when done correctly, what is complex often leads to insight, simplicity and, ultimately, agreement.

Getting it right – minimising risks and maximising shareholder value

Regulators, shareholders, analysts and corporate boards the world over are placing more importance – and more scrutiny – than ever before on correctly valuing intangibles and accurately reporting that value. This is particularly true in the case of start-ups and new technologies, as well as during mergers and acquisitions, joint ventures and other alliances when the potential for both opportunities and risks intensifies. To seize the former and avoid the latter, it is vital that management take steps to get up to speed on the various methodologies, tools and techniques available to help them deal with and quantify both the upside potential and downside risk related to these situations – among them probabilistic models and real options.

Executives must not only be aware of the various methods and approaches available for valuing intellectual assets, but also understand which of those methods best suit their company's unique circumstances, and then master the science and art of applying them correctly. The complexities involved in making the right choices and accurately valuing elusive intangibles often lead companies to opt to leverage the valuation expertise of external advisers who can help them understand the value of their intellectual assets, make the right business decisions and internalise these essential techniques for the next deal or decision. Whatever the path to enlightenment, the important thing is that it is done. In the end, those who fail to master this essential skill are doomed to suboptimal decisions and performance – yet for the savvy and skilled, there is much to reap at their expense.

Figure 1: Pharmaceutical industry probability tree-based IP valuation example



Tony Hadjiloucas has 13 years' valuation and corporate finance experience with PricewaterhouseCoopers. He is an expert in the area of intangible asset valuation and exploitation, having presented on this topic at numerous conferences and authored several articles. Mr Hadjiloucas is on the core faculty of the World Intellectual Property Organisation Academy, where he lectures on valuation; he is also a guest lecturer at five US and European business schools. He advises clients on buy and sell-side transactions, alliances, disputes and financial reporting.

Tony Hadjiloucas
Director, market and value advisory
Tel +44 20 7212 1287
Email tony.hadjiloucas@uk.pwc.com
PricewaterhouseCoopers LLP
United Kingdom

Mark Haller brings a wealth of specialist expertise to working with corporations to manage and leverage intellectual property; negotiate and complete transactions involving intellectual assets; enhance internal organisation and business processes; design and implement portfolio management systems; and conduct financial and business analyses in support of transactions to extract greater value from IP portfolios. Active in the ValueReporting™ initiative, he helps companies to understand and communicate the value of intellectual assets in a way that leads to better value recognition by the marketplace.

Mark W Haller
Partner, advisory services, and leader, intellectual asset management
Tel +1 312 298 2550
Email mark.haller@us.pwc.com
PricewaterhouseCoopers LLP
United States