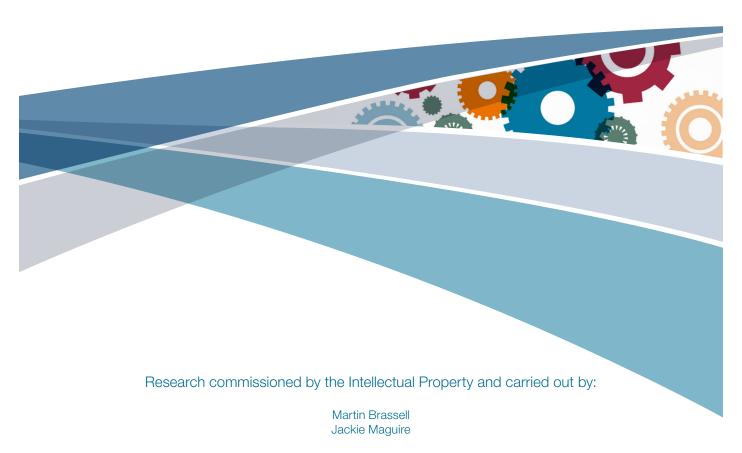


# **Appendix:**UK IP Valuation Methodology



August 2017

This is an independent report commissioned by the Intellectual Property Office (IPO) Findings and opinions are those of the researchers not necessarily the views of the IPO or the Government.

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# 1. Industry interviews: specialist IP valuers and intermediaries

## 1.1. Methodology and sample

To gain evidence of the customs and practices deployed by IP valuers, a series of face-to-face and extended telephone interviews was conducted with companies known to be actively delivering in the IP valuation market, and others playing a key intermediary role who often instruct valuers on behalf of their clients.

A core sample of 23 suppliers and intermediaries has been interviewed, consisting of 15 specialist valuers and representatives of 8 intermediaries. The interviewees were generally at partner/director level. The companies interviewed are mostly headquartered in the South East of England, but with regional offices wider afield such as in Scotland and Wales, and occasionally a global presence.

Selected views and quotations provided by these interviewees have been included in the main report, in order to provide evidence in support of its findings. These 'pen portraits' are placed wherever the extract appears most relevant.

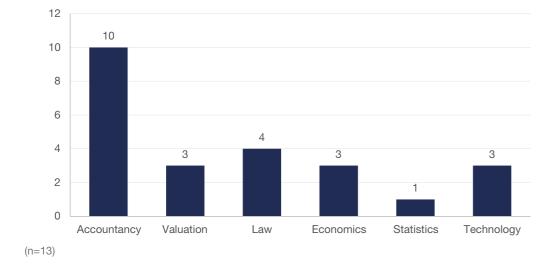
In addition to the core sample, several more participants, including valuers and intermediaries in finance and insolvency practice, declined to contribute formally to the report but did make time for unstructured telephone discussions. These anonymous contributions (six in particular) have been taken into consideration and are reflected in the findings set out in the main report.

2

## 1.2. Valuer backgrounds

Individual valuers have entered the IP valuation market from different disciplines. They tend to be educated to degree level, and many have further professional qualifications in a range of subjects Figure 1-1. Some have a technology bias, some financial and others focus on marketing/brand. Most provide services to value the full range of intangible assets found in business.

Figure 1-1. Experience and/or qualifications of employees involved in valuation in valuation firms

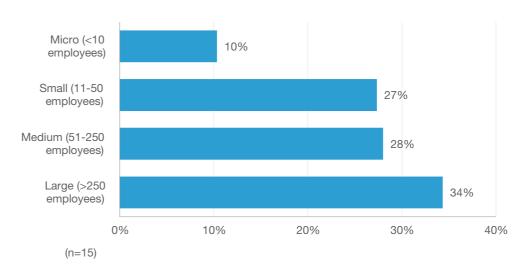


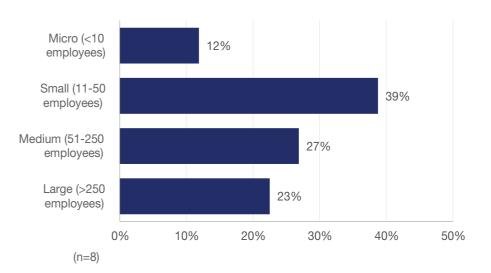
#### 1.2.1. Client profile

We asked the companies to provide a breakdown of the size of firms that they were serving. This confirmed that clients of all sizes were covered within the survey set, albeit some firms have a tendency to serve larger clients and some focus more on SMEs, as set out in Figure 1-2 and Figure 1-3.

Figure 1-2. Average size of client firm served by specialist valuers

Figure 1-3. Average size of client firm served by intermediaries





1

## 1.3. The purposes for valuations being instructed

The suppliers and intermediaries were asked to comment on the purposes that most commonly drove an IP valuation to be instructed, and by whom.

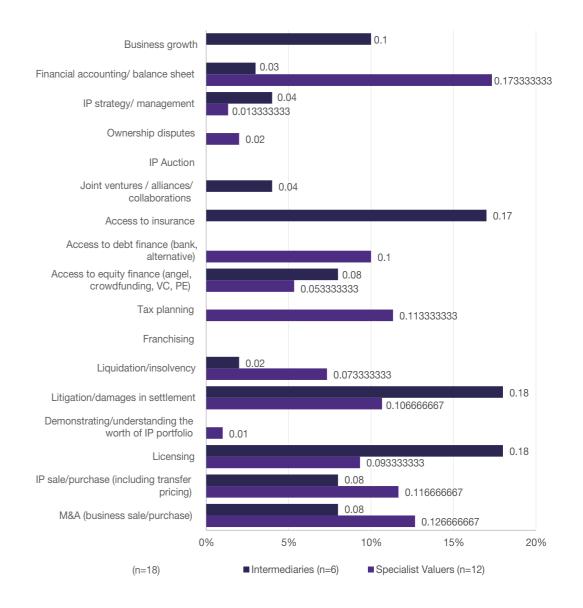
In the majority of cases, the valuation was instructed by the Finance Director or CEO of the client company. General counsel (where applicable) and other board members were also involved.

With regards to the reasons for the valuation being requested, a range of responses was received from valuers and intermediaries with transactions, litigation, financial reporting, access to finance, tax planning and insolvency being the immediate responses. When prompted, many additional purposes such as strategic management, licensing, ownership disputes, share issue and franchising were listed, albeit at lesser amounts (Figure 1-4 and Figure 1-5). IP auctions and access to insurance was rarely recognised as purposes for which valuations had been instructed.

The valuation instruction was stated by 80% of valuers as being integral to other activities (such as a transaction or litigation proceedings), although sometimes it was instructed as a separate stand-alone activity.

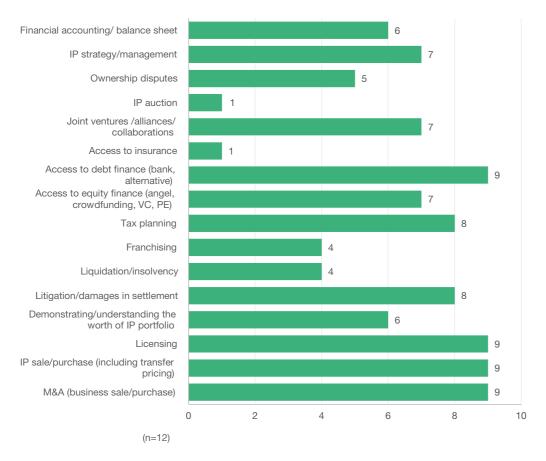
The purpose of instructing the valuation did not appear to be dependent on the size or sector of the client firm. One specialist valuer however summarised the general sentiment: 'It's about the value of the IP, not the size of the firm. However, valuable IP does not tend to be owned by the smallest companies'.

Figure 1-4. Reasons for firms carrying out IP valuation: unprompted responses from intermediaries and specialist valuers



6

Figure 1-5. Reasons for firms carrying out IP valuation: prompted responses (specialist valuers only



Some valuers have a reputation for expertise in carrying out valuations specific to a sector and this may influence the instructions and referrals that they continue to receive.

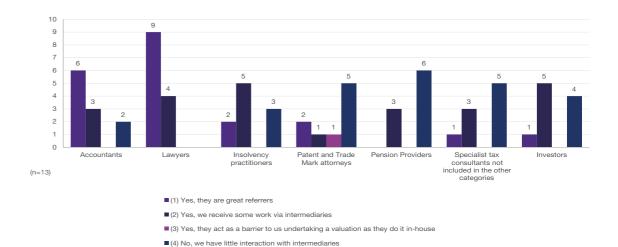
#### 1.4. The role of intermediaries

Intermediaries play a key role in the instruction of valuations. On average, 55% of the specialist valuers' work comes from intermediary referrals. For some valuers up to 90% of their work comes via intermediaries.

Many of the intermediaries do not attempt to provide an IP valuation themselves, as it must be seen to be independent. The exception to this are the large firm accountants, who do outsource specialist valuations, but particularly in the case of post purchase acquisition (PPA) valuations, also carry out the work themselves within their specialist in-house valuation team.

All of the specialist valuers interviewed (including those in accountancy firms) received referrals from lawyers and 82% received referrals from other accountants. Insolvency practioners, patent attorneys, tax advisors and investors were cited as influential referrers. Other categories of referrers were also mentioned such as large pension schemes (particularly in relation to funds in deficit), banks, other funders (such as business angels and venture capital firms) and specialist insurers (Figure 1-6). Interestingly, only one specialist valuer saw an intermediary group (patent and trade mark attorneys) as a threat or competition, and no one reported accountancy firms or other intermediaries as a threat or competition.

Figure 1-6. Response from specialist valuers to the question 'Do specific intermediaries play an important role in your firm being instructed to carry out a valuation?'



## 1.5. Standards and methodologies

A wide range of intangible assets are valued using the standard methodologies, including registered and unregistered rights and the broader assets relating to know-how, brand, customer relationships, key people and so on. When asked 'To what extent are other key intangible assets (that are not formal IP rights) important in establishing an appropriate IP value?', 11/13 of the specialist valuers interviewed said that they had a large impact.

Most valuers interviewed were asked to list the steps that they took in carrying out a valuation. A similar process was used by the majority of those interviewed, to the point of issuing a final report where it is appropriate to do so. Figure 3-5 of the main report summarises the process that is typically followed.

Only three out of 10 who answered this question specifically indicated that they get involved in auditing the revenue flows for clients, tending to rely on the data provided directly by the clients themselves. This does not mean, however, that valuers do not take a view on the reliability of the data they are presented with. Also, this level is likely to be an understatement, as accountants may be likely to assume that this is always a requirement (alternatively, they have been at least partially responsible for generating the figures themselves).

Valuers use a range of data sources to obtain comparators and (where appropriate) relevant royalty rates. Sources specifically mentioned by multiple respondents were Royalty Source, KTMine, Capital IQ, Bloomberg and SEC filings. All 13 verbatim answers to the question 'Which sources of external data do you use, and do these add significantly to the cost of delivering your service?' are displayed below.

'Yes – main types of research is how company is performing in the market.'

'I guess royalty databases, but there may be others?'

'Tend to use RoyaltySource and KTMine.'

'RoyaltySource, KTMine etc.'

'KTMine, SEC filings, Academic institute publications.'

'KTMine, RoyaltySource, Lexis Nexis, SEC EDGAR database (important for transfer pricing) and others."

'Bloomberg for discount rates and comparables. Also SEC fillings. Royalty Source, London Business School risk management service, Duff and Phelps valuation handbook for certain premiums and Damo Daran (New York academic's web site), Morning Star and Reuters.'

'Online sources.'

'Royalty databases.'

'Royalty databases plus databases to determine cost of capital, eg Bloomberg, Capital IQ, InFinancials, etc.'

'Capital IQ, Bloomsburg, RoyaltySource, Debtwire and others.'

'Subscribe to Cap IQ also use RoyaltySource, RoyaltyStat, Markables, Desktop research and KTMine."

'RoyaltySource, market data, trade press, British Library, Frost and Sullivan, Espacenet, Google Patents, TMView, DesignView, Indian Company for prior art searches, Companies House.'

Rules of thumb, such as the 25% rule are used cautiously by some valuers, and a few made use of average prices per patent/domain/trade mark etc., to provide sensitivity testing. The consensus from the specialist valuers was that rules of thumb were to be used 'with a pinch of salt'. However, one valuer pointed out that the 5% rule has its origins in licences of right issued by the courts, and therefore has a factual basis.

The process used by individual valuers is set out as a flow chart in the main report.

Hidden Value: A study of the UK IP valuation market - Appendix

# 1.6. The barriers to receiving an instruction to carry out a valuation

The specialist valuers, and the intermediaries, identified with many individual barriers to why valuations were not carried out (both prompted and unprompted). However, their comments were revealing in their initial responses to the basic question 'What are the main barriers to businesses requesting more valuations?'

One interviewee summarised the feeling from many suppliers who consider the main barrier to greater uptake to be: 'End users only have assets valued when they need to. They don't see the benefits of valuation, as they don't see (understand) that the valuation process adds value'.

Some other individual comments received were:

'They don't see the benefits of valuation as they don't see that the valuation has value.'

'There is no imperative. There is no commercial purpose unless they want to raise finance or license. The situation is obviously different for high tech or pharma.'

'They capitalise R&D but don't know what else they can do.'

'Lack of confidence in the output is not a problem so long as it is not under- or overvalued and does not lead to a disadvantageous outcome. The concerns over quality, impartiality and credibility might be an external perception regarding the value rather than that about the valuer, but an external valuation report can help to back up a higher real value'

'Clients don't have a need usually'

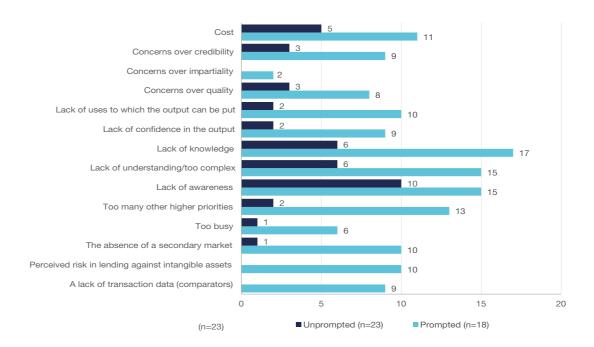
'The issue on cost is because there is no perception of the value of the IP valuation'

'No formal requirement to do a valuation'

'Lack of education'

Figure 1-7. Prompted and unprompted responses on barriers from specialist valuers and intermediaries

Overall, even when prompted, there were fewer concerns regarding quality, impartiality and credibility than the other barriers listed. Being too busy was the least relevant barrier cited by the valuers and intermediaries.



## 1.7. The barriers to entering the market

When asked if they found it difficult to enter the market, a number of the smaller valuers said 'no' but commented:

'At the beginning there were difficulties. This was more to do with the timing and the focus at that time on share valuations moving into IP valuation.'

'Not because of competition but building the tools was a challenge.'

'We couldn't enter until we had the tools and expertise to do so.'

'Our firm had an existing network so it was not difficult. However growth is a different matter!!!'

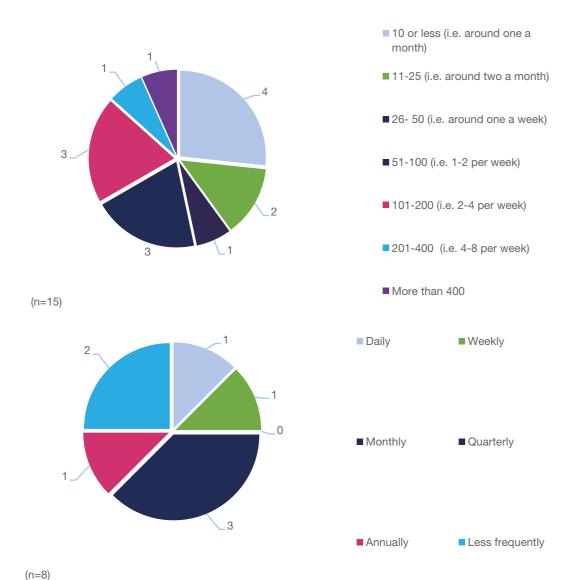
'We were able to enter via accountancy relationships.'

## 1.8. The frequency with which valuations are carried out

The volume of IP valuation work varied between the valuing firms with some firms having valuation as a minor aspect of their overall delivery and a low demand for valuation. Others had IP valuation as a minor aspect of their overall delivery but with a high degree of output and for some, IP valuation accounted for their total turnover. Some intermediaries also showed a high level of demand.

The following figures provide a graphical representation of the answers provided. The data analysed in the main report includes further breakdowns by volume and price.

Figure 1-8. The demand for IP valuations observed TOP, (a) responses from valuers, BOT, (b) responses from intermediaries

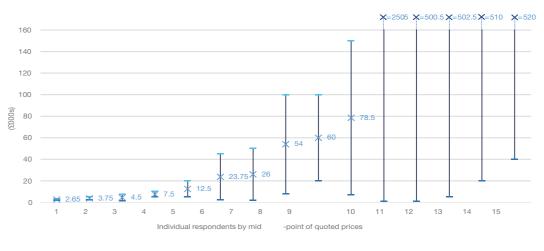


## 1.9. The price for a valuation

The prices for valuations vary widely with purpose. The minimum values for an IP valuation range from £1k to £20k (with the exception of the online valuation tool, provided at £350). The maximum values quoted were £1m for complex transactions or litigation, with values of £100k-£750k not unusual for valuations during large company M&A or litigation where there is an element of risk/reward.

The pricing ranges provided are shown in Figure 1-9.

Figure 1-9. Responses from specialist valuers and intermediaries regarding the typical price ranges for valuation



- Minimum price quoted by firm (£000s) - Maximum price quoted by firm (£000s) × Mid-point of high and low prices quoted by firm (£000s)

Table 1-1. Pricing estimates from specialist valuers and intermediaries interviewed

Individual respondents arranged in order of mid-point on price	Minimum price quoted by firm	Maximum price quoted by firm	Mid-point of high and low prices quoted by firm
	(£000s)	(£000£)	(£000s)
1	1.8	3.5	2.65
2	2.5	5	3.75
3	1.5	7.5	4.5
4	5	10	7.5
5	5	20	12.5
6	2.5	45	23.75
7	2	50	26
8	8	100	54
9	20	100	60
10	7	150	78.5
11	1	500	250.5
12	1	1000	500.5
13	5	1,000	502.5
14	20	1,000	510
15	40	1,000	520

## 1.10. The competition and structure of the market

There are a number of valuers that are well known in the marketplace. Some are known for their general valuation capabilities such as the Big Four accounting firms, while others have smaller resources and fill a niche position, sometimes specialising in particular types of intangible asset valuation. In this sense, the market can be considered to be polarised: specialist valuers and intermediaries each said that it was either very or mildly polarised.

Respondents were asked to name other valuers. The large accountancy firms were often cited first by the intermediaries and the valuers that focused mostly on M&A or litigation activities.

All the following specialist valuers were named by one or more of the other valuers: Amco Agency, BDO, Brand Finance, BRG, Clearview IP, Coller IP, Deloitte, Ernst and Young, FTI, Grant Thornton, Inngot, Intangible Business, IP 21, KPMG, Metis Partners, Oxfirst, PWC, Valuation Consulting.

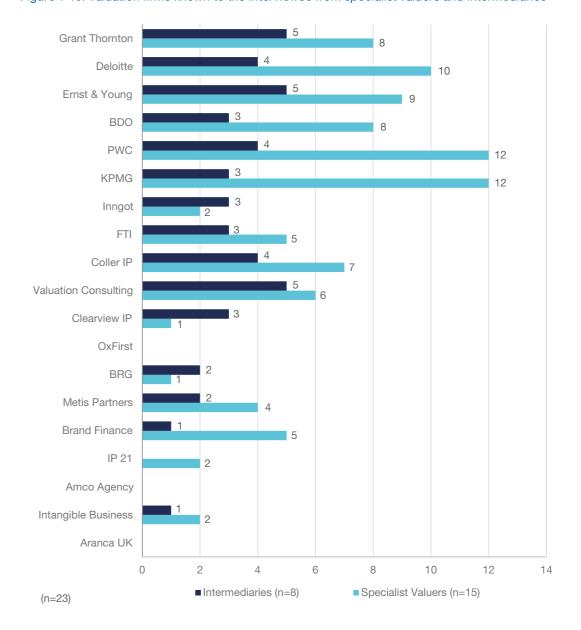
Alvarez Marsall, American Appraisal, Duff and Phelps, Campbell Dallas, Charteris, Crow Clarke Whitehall, French Duncan, Global View, Great American, Interbrand, Johnston Carmichael, Mazars, Millward Brown=Optimore, Moore Stephens, Navigant, RSM and Smith

and Williamson were also named unprompted, highlighting in some cases, the influence of the accountants.

Wyles Hardy and Hilco International were also mentioned by one insolvency practitioner firm as valuers that they might turn to.

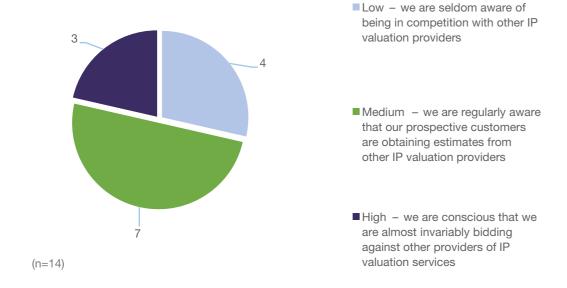
When asked about the level of supply of valuers in the market, the overall response from valuers and intermediaries was that on average there were enough suppliers to meet demand. This is perhaps not surprising: however, the data separately sourced on market size suggests that this view is not without foundation.

Figure 1-10. Valuation firms known to the interviewee from specialist valuers and intermediaries



When asked about market competition, the specialist valuers generally felt that there was a medium level of competition, with some price sensitivity such that they were competing on quality and price. Whilst they sometimes knew who they were competing with for a particular piece of work this was generally not the case (Figure 1-11). The exception was in relation to post-purchase allocation (PPA) activity where competition was higher, particularly amongst the larger accountancy firms.

Figure 1-11. Level of perceived competition observed by valuers



## 1.11. Incentives to encourage more IP valuations

When asked unprompted about incentives to increase the uptake of IP valuation activities, interviewees commented frequently on the importance of raising awareness of the benefits of valuing IP and of finding ways to stipulate that more valuations should be done. Closer links between IP and raising finance were referenced, as were modifications to financial reporting and standards.

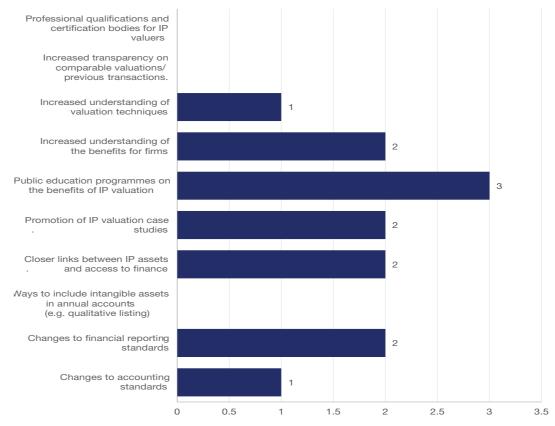
Three figures summarise the findings. The first Figure 112, shows the unprompted views of specialist valuers: the second, Figure 113, shows the combined responses of both groups, prompted: the third, Figure 114 shows the prompted valuer responses only.

Promotion of IP valuation case studies that demonstrated these benefits, and wider education programmes, were highlighted as key – although some felt that these needed to be targeted differently for different audiences such as large companies, SMEs, finance directors, business advisors etc. One interviewee commented that 'PPA is probably one of the most underrated tools for valuing businesses', though another (also quoted in the main report) expressed scepticism regarding the benefits to be derived from attempting to attach individual values to assets, saying that 'It creates a false sense of precision'.

The question of professional qualifications was raised with a number of valuers and intermediaries, potentially because this is a 'live' issue for the industry at present, with a new US qualification having recently been introduced, and steps under way to introduce a related certificate for Europe and the rest of the world. However, views on this area are mixed – the suggestion appears to be proportionately more popular amongst intermediaries (who may feel it assists their client referral process) than it is with valuers (at least unprompted). No valuers raised it as an incentive or encouragement for businesses to carry out more valuations when unprompted. However, 7/11 did agree that it may be beneficial when prompted.

One valuer with extensive involvement in industry training and outreach, quoted in the main report, observed that, 'The difficulty with the valuation arena is that it is very broad, encompassing everything from large and complex transactions, down to a bit of advice to assist with a tax return. It's really hard to know what level of standards to apply that won't be exclusive or burdensome.' Two others from large accounting firms commented that the situation in the US prompting renewed attention to financial reporting standards was different from the UK, making it difficult for them to recommend specific professional development pathways to their teams at present.

Figure 1-12. Responses from specialist valuers regarding incentives to increase update of IP valuation activity (unprompted)



(n=11)

#### Additional comments were:

'Most people will carry out a business valuation without looking at the IP perspective so therefore we need to find a way to overcome this.'

'Case studies to demonstrate how IP has added to business/enterprise value.'

'Showing that valuing IP adds value whether it is strengthening your balance sheet, allowing you to raise finance, bring tax advantages, benefit from transfer pricing, and so on.'

'More guidance to banks regarding the capabilities of the IP valuation market would be good.'

'Mechanisms for providing tax benefits.'

When prompted, valuers generally considered there to be merit in all the incentives listed. Some interviewees however commented that whilst changes to accounting and valuation standards might continue to help, the current standards were working well for the time being. Amendments to tax regulations and also the introduction of appropriate tax breaks were also cited as potential incentives.

Figure 1-13. Responses from intermediaries and specialist valuers combined, regarding incentives to increase update of IP valuation activity (prompted)

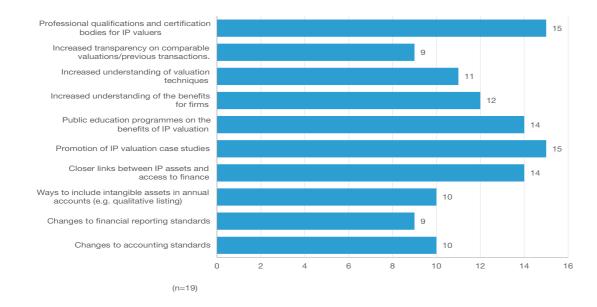
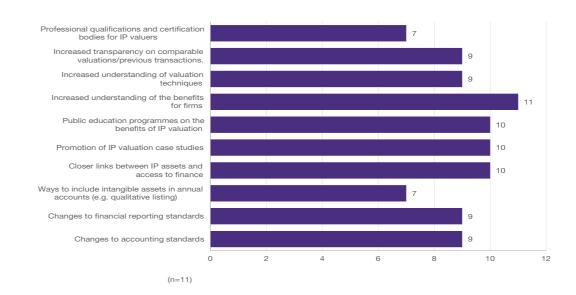


Figure 1-14. Responses from specialist valuers regarding incentives to increase update of IP valuation activity (prompted)



## 2. Industry surveys

### 2.1. Methodology and sample groups

During the qualitative interview stage, intermediaries were found to play a key role in the IP valuation market. Key representatives from intermediaries such as specialist lawyers, financiers and insurers were interviewed in depth, and valuable information was provided. However, it was found that the influence of other intermediaries referenced by suppliers, or recipients of IP valuations, that exist in larger volumes could best be researched by a number of online surveys.

Three industry bodies agreed to promote online surveys to their members: The Intellectual Property Awareness Network (IPAN), Chartered Institute of Trade Mark Attorneys (CITMA) and the Chartered Institute of Patent Attorneys (CIPA). These three survey groups were promoted using tailored links so that the results could be separated. In all, 131 responses were received: 115 from the link distributed by CIPA, 9 via IPAN and 7 via CITMA (though it should be noted that many firms will have staff that belong to more than one of these associations). As it reflects the largest sample, the CIPA findings are analysed in detail first, and comparisons are then drawn with the other two samples.

Structurally, after a set of profiling questions, the surveys asked the respondents questions regarding their experience with IP valuation, divided into two sections. The first section concerned occasions when IP valuation may have been identified as a client need, asking the respondents to reflect on specific experiences with their customers. Here, the survey hinges on the question of whether IP valuation has ever come up in conversations with clients: where this is not the case, then the respondent will skip the following section and go directly to answering the final set of questions, concerning their own attitudes to IP valuation, independently of client-specific experiences.

## 2.2. CIPA-distributed survey

#### 2.2.1. Profile of respondents

The final cut of the survey was taken on 23 January 2017, when a total of 115 responses had been received. The profiling questions directed towards the respondent and their business yielded the following results:

- Over half (52%) of the respondents started trading in 1980 or earlier. Only 29% had commenced trading after the year 2000.
- A large majority (77%) of respondents described their firms' main activities as patent, trade mark and/or design attorney services. The remaining 23% are made up of a variety of over 10 different business activities.
- The businesses surveyed are generally large in size, with 43% employing over 100 full

time staff (20% of them employ over 200). Additionally, only 24% of the businesses surveyed employ 1-10 people, and only 6% currently have no employees. A further indicator of the firms being large is their revenue band: 32% stated they turn over more than £10m annually.

- The respondents also stated what their position in the firm was. 41% were either directors or partners and 19% were chief executives or managing directors. 20% of the respondents were less senior members of staff.
- 94% of businesses surveyed were founded and based in the United Kingdom, with 51% based solely in this country. 6% were founded and based outside the UK, only 1% of them having no UK office.
- 72% serve clients based in the UK, Europe and/or the rest of the world, with only 23% serving solely the United Kingdom.
- Respondents were then asked to indicate the make-up of their client base, split by micro, small, medium and large enterprises. The trends showed that the majority of businesses surveyed served less than 25% micro enterprises, and 25-50% of small, medium and large enterprises.

Figure 2-1. TOP LEFT, Year that CIPA firms commenced trading. TOP RIGHT, Area that describes CIPA firms' main activities. BOTTOM LEFT, Number of staff CIPA firms employ full time. BOTTOM RIGHT, Respondent's position within firm

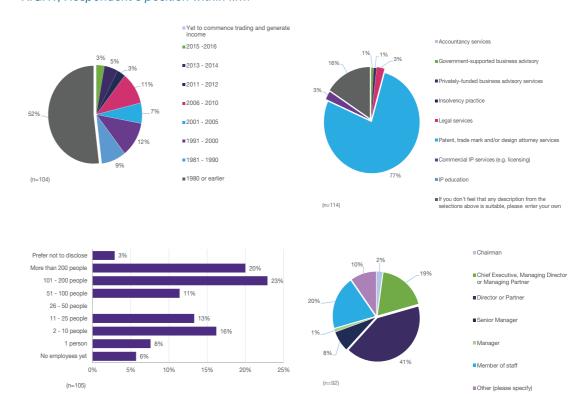


Figure 2-2. Revenue band that best describes CIPA respondents' businesses

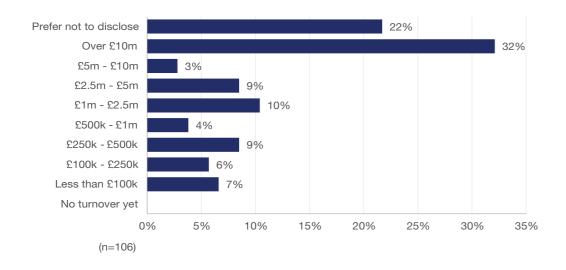
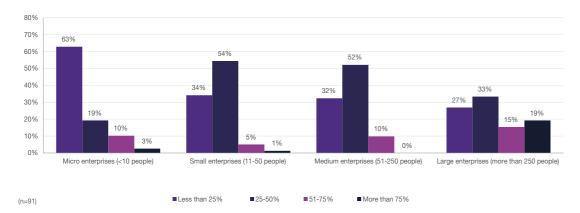


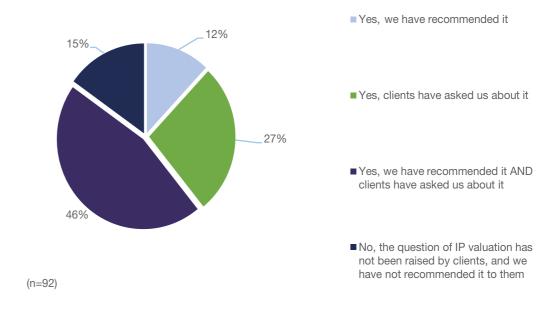
Figure 2-3. Average make-up of CIPA respondent's client base



#### 2.2.2. Client-related valuation experiences

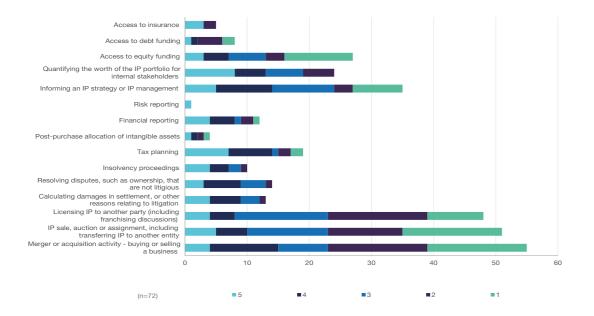
The results from the question, 'Have you ever had occasion to recommend that clients should consider the value of their IP and/or intangible assets, or has a client ever raised the subject of IP and intangibles valuation with you?' were that 85% answered yes, with 58% having recommended it and 73% stating that clients have enquired about it. This demonstrates that IP valuation plays a role in client relationships, whether it arises frequently or occasionally.

Figure 2-4. Occurrence of occasion to recommend that clients should consider the value of their IP and/or intangible assets, or if a client ever raised the subject of IP and intangibles valuation for CIPA respondents



Next, respondents were asked about the most common reasons in which IP valuation discussions occur. The two reasons that respondents ranked 1st the most were 'Merger or acquisition activity' and 'IP sale, auction or assignment'. This was closely followed by 'access to equity funding'. The answers ranked 2nd by the majority of respondents were 'Merger and acquisition activity', 'Licensing to another party' and 'IP sale, auction or assignment'.

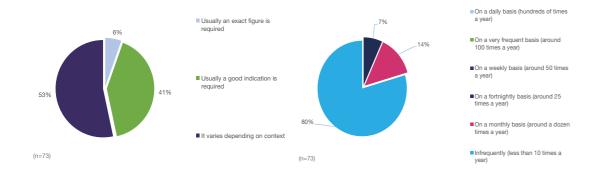
Figure 2-5. Context in which any discussions about IP valuation have occurred for CIPA respondents



When asked how frequently clients identify a potential need for IP valuation, or the respondent's business recommends them to do it, a clear majority of 80% claimed 'Infrequently (less than 10 times a year)'. This determines that although IP valuation is something that almost all firms interviewed have talked about with clients, it is not a topic that is raised regularly. Nobody claimed conversations about IP value to be any more frequent than around 25 times a year.

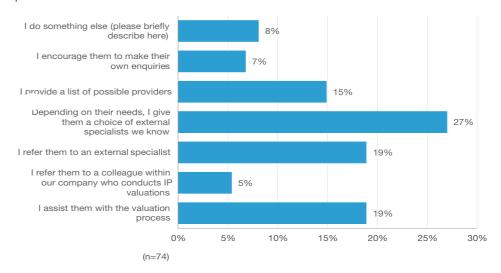
Few respondents saw the need for an exact IP asset value to be calculated, but would rather seek a good indication, although the majority (53%) say that it varies depending on context.

Figure 2-6. LEFT, Frequency of clients identifying a potential need for IP and/or intangible asset valuation for CIPA respondents. RIGHT, CIPA respondents' need for an exact IP and/or intangible asset value, or a well-evidenced indication, for negotiation purposes to be calculated



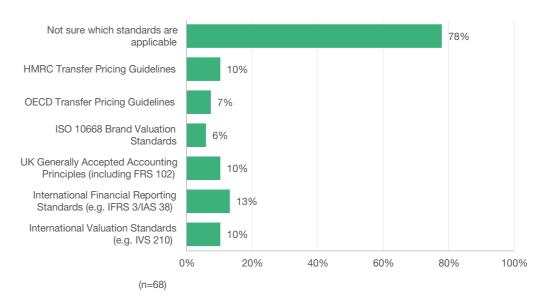
The survey then asked what the next step would be after the client had identified the requirement for an IP valuation. The results were varied, but the stand-out answers were that they either direct them to a choice of external specialists (more likely to be dependent on their needs) or begin to assist them with the valuation process internally.

Figure 2-7. Next step after a requirement for IP valuation is identified with a client for CIPA respondents



The survey asked what standards respondents considered most important when they refer, or begin to conduct a valuation. The vast majority of respondents stated that they weren't sure what standards were most applicable.

Figure 2-8. Standards most likely to be important when a valuation is being conducted for CIPA respondents

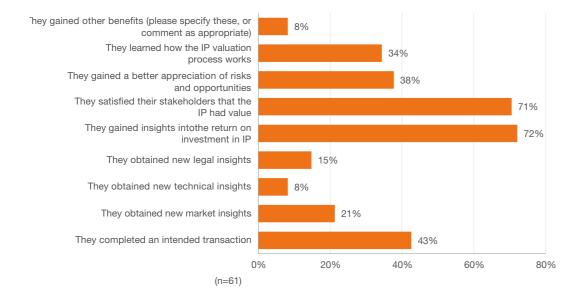


When asked who they are likely to suggest when referring companies to external IP valuers, the most frequently included answers were one of the accountancy firms. Other answers given were:

Patsnap, Inngot, Clearview IP, EPO's IPScore, FTI Consulting, Valuation Consulting, Isis Enterprise

The survey also asked which benefits respondents believed their client received as a result of the IP valuation. The most chosen answers were 'They satisfied the stakeholders that the IP had value' and 'They gained insights on the return on investment in IP' with 71% and 72% of respondents having selected them, respectively.

Figure 2-9. Benefits CIPA respondents believe to have been delivered to clients through IP valuation



For the final question of the first section, respondents were asked if they thought it was important for IP valuation also to consider the other intangible assets that a business owns. 57% replied yes, 11% replied no and 32% were not sure.

The CIPA survey member firms that indicated they conduct IP valuations themselves were asked a few additional questions on their methods and experience. The majority of these respondents claimed to use the 'Income method' (such as capitalisation of profits, relief from royalty, excess earning, profit premium, discounted cash flow) and 'Cost of reproduction or replacement'.

Comments made regarding valuation methodologies included:

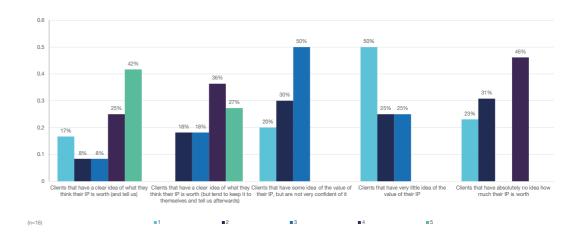
'We usually act in conjunction with accountants when carrying out valuations.'

'Cost of reproduction is meaningless.'

'The is no real standard available for IP asset valuation; existing standards are not of any real value as it is an inexact science.'

They were also asked to rank possible client responses, on IP value expectations, based on how commonly they experience them. The most frequent response selected was 'Clients have very little idea of the value of their IP' with 50% ranking it 1st. This view on client IP value insights is reinforced by the fact that the least frequent response selected was 'Clients that have a clear idea of what they think their IP is worth (and tell us)'.

Figure 2-10. Client expectations regarding the level of IP and/or intangible asset value they have, or should have



Additionally, respondents were asked how they determine whether to conduct a valuation in-house or refer it to others. The most popular response chosen was 'We refer when a different type of valuation is needed' at 38%. Five respondents chose the 'Other' selection and gave the following responses:

'External resource used for non-core activities.'

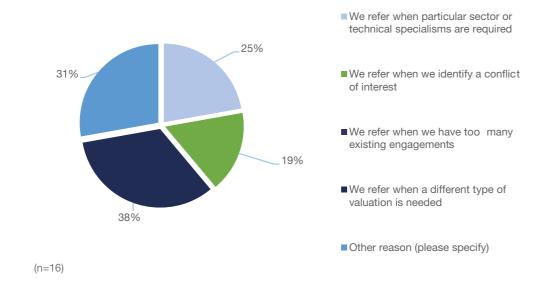
'According to what we are asked.'

'We refer where we are not confident in doing the work.'

'Depends on facts of case.'

'It will depend on complexity, risk and client's aspirations.'

Figure 2-11. CIPA respondents' methods of determining whether to conduct a valuation in-house or refer it to others



The final question asked to this select group of respondents who conduct valuations in-house was about the proportions of valuations that they refer out to external valuers. 79% claimed they offer less than 10%, 14% refer around 10-25% and the remaining 7% claimed to refer 51-75% of the valuation work they receive.

#### 2.2.3. Respondents' own attitudes to IP valuation

Regardless of whether IP valuation had ever come up as a client requirement, all respondents were asked the second set of questions. The first question of this section asked about the possible reasons companies do not obtain valuations for their IP and intangible assets. They were asked to choose their top 5 obstacles. The majority (62%) ranked the obstacle 'They seldom have a specific need to get a valuation' as the number one reason, followed by 'They cannot afford it' with 41%.

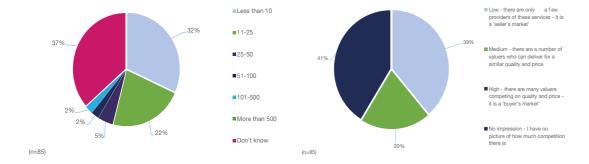
Table 2-1. CIPA respondent's ranking of obstacles believed to deter companies from obtaining an IP valuation

Answer Choices	1st	2nd	3rd	4th	5th	Response Count
They cannot afford it	41%	27%	18%	5%	9%	22
They do not think it represents good value for money	17%	34%	7%	28%	14%	29
They seldom have a specific need to get a valuation	62%	8%	11%	9%	9%	53
They do not consider it to be a strategic priority at board level	16%	28%	22%	24%	10%	50
They don't know who to instruct	15%	19%	22%	22%	22%	27
They have other more pressing priorities	6%	24%	35%	12%	22%	49
They do not feel it would help them to achieve their business objectives	11%	29%	23%	20%	17%	35
They are not convinced an IP valuation would be credible	17%	22%	22%	27%	12%	41
They are not convinced their IP is very valuable	13%	13%	33%	13%	27%	15
They lack the right information to be able to perform it	3%	19%	13%	35%	29%	31
It's never the right time	18%	0%	24%	0%	59%	17
(n=81)						

When asked about their perception of the IP valuation services market in the UK, 32% said that they thought there were less than 10 service provider firms, with 22% saying there were 11-25 firms and over a third of respondents (37%) selecting 'Don't know'.

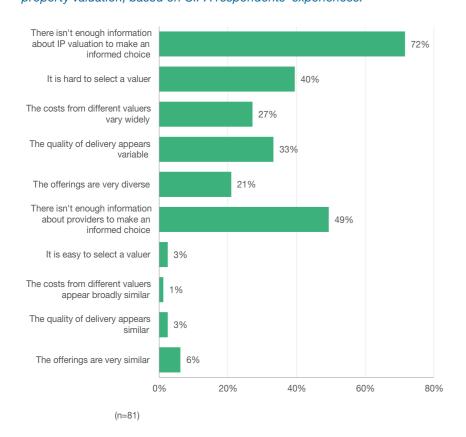
Furthermore, 39% of the respondents thought there is a low level of competition in this market with the majority (41%) again, not knowing.

Figure 2-12. LEFT, Perceived number of IP valuation service providers for CIPA respondents. RIGHT, Perceived level of competition in IP valuation services based on respondents' experiences of CIPA respondents



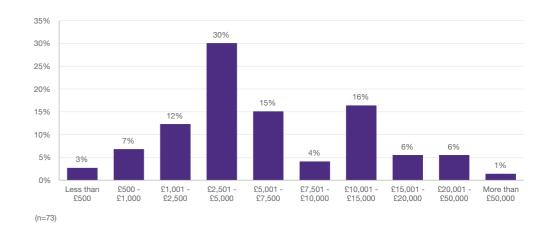
Next, all respondents were asked about their general impressions of the market for IP valuation, and to select the phrase that is most aligned with their client conversations on the subject. 72% agreed with the statement 'There isn't enough information about IP valuation to make an informed choice'. Similarly, 49% agreed that 'There isn't enough information about providers to make an informed choice'.

Figure 2-13. Phrases that best describe respondents' impressions of the market for intellectual property valuation, based on CIPA respondents' experiences.



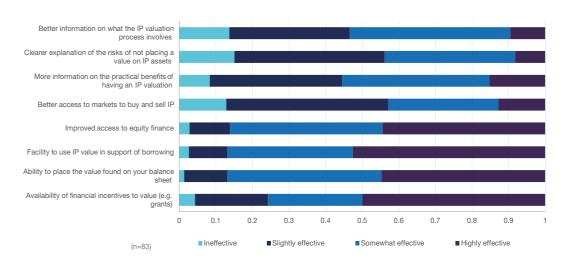
Respondents were also asked what they would expect an IP or intangible asset valuation report to cost. There was a large range of variation in the answers to this question, but the majority (30%) concluded that it should cost in the region of £2,501 - £5,000. 68% of CIPA respondents also claimed that they did not base their answer on any quotation they have seen or applied.

Figure 2-14. CIPA expectations of the cost of an IP and/or intangible asset valuation



Finally, respondents were asked what initiatives they thought would encourage clients to consider having IP valued, and their thoughts on the effectiveness of them. The initiatives seen as highly effective were: 'Improved access to equity finance', 'Facility to use IP value in support for borrowing', 'Ability to place the value found on your balance sheet' and 'Availability of financial incentives to value (e.g. grants)'

Figure 2-15. CIPA respondents' views on the effectiveness of initiatives that could encourage clients to get their IP valued



Respondents were also provided with an opportunity to communicate any other thoughts on intellectual property valuation, in relation to its benefits, cost, complexity or relevance. We received 35 comments, 34 of which are displayed below as they were entered (the remaining comment was requesting a different orientation of questions to suit in-house professionals).

Several of the respondents chose to make specific suggestions for improvement, whereas others focused on the complexity of the valuation process, revealing a high degree of scepticism in some quarters:

'The sector and its benefits are not widely understood by many professionals, let alone by SMEs. The perception by SMEs in my experience is that the process is costly, complex and is of little use to them. All these could change if there were greater market awareness of the advantages of IP valuations; an acceptance of IP valuations by banks and professionals; and if lending organisations were to offer loans, take charges over or offer mortgages against IP assets.'

'It's always been a bit of a 'whatever people are willing to pay for it' level of valuation. This has been the case for decades.'

'I didn't answer the question on costs because I'm aware that some providers offer low fixed price IP valuations (e.g. less than £1k) whereas other providers have quoted many thousands (£5k to £10k I recall) for performing sophisticated valuations of non-licensed IP - the estimates being based on perceived likely value in an acquisition of an IP holding company. I'd not be surprised if a valuation could cost more still, in the case where there is a multi-million transaction in the pipeline.'

'Nearly all of our clients could benefit from a decent regular IP valuation. However, it is very difficult to find available providers and to judge their competence and value. It has traditionally been seen to be a bit of a 'wild west' market where it is difficult to know whether the valuation is justifiable (e.g. because of a perceived lack of agreed upon open valuation standards). Many of our contacts in the field have been found via litigation contacts, where they have been part of multi-million pound cases. However, clients may only have a portfolio worth £100k to £1m. Hence, fee options need to be proportional to portfolio size (e.g. 1-5% max.). However, as there are no standardised products most valuations would appear to be bespoke offerings with highly variable pricing. It would be great if the UKIPO could help with a directory of suppliers, detail on standards, example costs and case stories of benefits / worked accounting examples. This would have an instant ROI in the form of better informed and more IP-savvy UK businesses.'

'The value of IP is intrinsically tied to the owner's ability to exploit it. Hence the valuation of IP as a simple numerical value is highly questionable in its accuracy or significance. People are generally unsure of the extent that they can trust or use an IP valuation.'

'Non-experts are offering valuation services as an interesting diversion from a main professional activity which gives a complex valuation area a bad name. Too few have a recognised IP valuation accreditation and are not regulated.'

'In my personal view, no values can be attributed until the full set of assets (tangible and intangible) have been considered and their inter-relationships with either commercial products or transactional materials (licences etc.) have been identified. In addition, no 'value' should be attributed to a tangible IP-asset without the input of a qualified IP professional [CIPA/CITMA] as to the 'status' of the IP-asset, taking into account both substantive matters i.e. an expedited patent may have been granted in the UK, but later art cited in another country may impact on the potential enforcement of certain claims, as well as other relevant considerations i.e. there may be matters relating to ownership / assignments etc. which remain outstanding and as such need to be built-into the value equation. As an IP professional I strongly believe that we should equip our innovatorcommunity with as many routes to assist them in raising funding / raising confidence regarding their IP-assets as possible - and welcome efforts by the IPO to make IP valuations more accessible - perhaps via an IP-audit-like process. It is also my personal view that it is our responsibility to ensure that IP valuations are meaningful. Perhaps there is an opportunity for joint-input into such reports from experts in value attribution (in monetary terms), and intangible asset identification working together with suitably qualified IP professionals.'

'I work in the pharma sector where operators generally have the experience to assess the value (or otherwise) of the IP in question. Therefore, I am not sure that independent valuations are required.'

'I would like a clear model to follow.'

'It seems to be a bit of a black art and I have seen reports from the same organisation which seem to suggest that the valuation depends on whether the client wishes to sell (high valuation) or buy (low valuation) the assets in question. Seems to be a sellers' market which gives the client what it wants rather than a buyers' market which gives the client what it needs.'

'Most clients do not consider their IP (other than patent) to be of value. This was not the case in a recent transaction we were involved in. More information and clear valuation process would be very useful.'

'I have virtually no experience of IP valuation so unable to provide useful comment.'

'My perception is that none of our single IP rights is valuable enough to justify a valuation (although the portfolio as a whole may be) - this applies to engineering companies who will own a single patent covering a specific stand-alone product.'

Valuing IP in isolation is actually quite artificial. The value of a strong IP portfolio is really tied to the effectiveness of the operating business that it protects. The IP strategy and the business strategy need to be fully integrated. Valuing IP alone works against this integration.'

'IP management more effective for our business.'

'Most IP valuers are not competent.'

'IP valuation should be tested.'

'A market served by cowboys who pretend to have a scientific basis for their guesses.'

'It all depends on what you are going to do with the information when you have it, and why you think you need it. If you want a valuation for estate duty purposes then you want a low value; if for disposal, a high one. See Ball vs. Druce and Attlee (the Eden Project case) for interesting reading, and a third reason why an IP valuation was important.'

'The variation in valuation methods complicates things and leaves people unsure as to the real value of the IP rights. Unless there is a standard method, it's all subjective and difficult to use effectively.'

'I believe that IP valuation is extremely difficult to achieve in a reliable manner. IP may have no value in its own right but a business plan that exploits IP may have enormous value. Assessed in isolation, IP cannot be given a realistic value, and so any valuation has to be based on the business plans of the IP owner or licensee.'

'The valuation providers I consult are generally US based but operating in the UK.'

'The lack of much by way of recognised markets for IP generally makes proprietors sceptical about any valuation. An IP may be of modest or no value to a general market but form a critical asset to the proprietor's business. In consequence it is worth a lot to the proprietor but little to anyone else. This makes the important function of security for capital problematic.'

'Accountants tend to value without taking into account significant legal and commercial information even if they do comply with their own standards. They might value a highly valuable patent for a new drug as worthless when it isn't. Legal practitioners who provide an opinion on value sometimes don't fully take into account the requirements set out in the accounting standards, they are not experts in the accounting factors. Commercial valuations take into account market factors but might not take into account accounting standards and legal factors. The ideal approach is a multi-faceted approach taking into account input from three specialist fields, accountancy, legal and commercial. We seek to provide experts from the three areas although the costs then become very high. Given the lack of frequent demand for valuation, a true multi-faceted approach is rarely available in the current market hence the diversity of products. Each one of the products amount to an opinion which is open to interpretation in any event. It is not wholly a science. Nevertheless, in our experience, a third party's valuation opinion can be extremely helpful when needed in commerce. The key is that the person engaging with the service of IP valuation understands the kind of valuation he/she is obtaining and its pros and cons.'

'We don't do much valuation. It usually occurs when there is a sale of assets. We value the IP on the income stream which it protects, compared to the income stream if there were

no IP in place (free-market competition scenario for the same products). We do not value IP on any potential income stream. Usually there either is an income stream being protected, or there isn't. For comparison, we also give a value based on of the cost of creating the right, i.e. how much money has been spent in creating the IP, but this is not our valuation, only a comparison. More often than not, we also recommend that the firm's accountant performs a valuation. We are aware of at least one valuation firm who uses Monte Carlo simulation (i.e. computer algorithms) to value IP and charges £10k for this service for valuing one or two patents.'

'It is a nascent area, without well-defined processes and standards, making it prone to charlatanism. Developing better IP valuation accounting standards would help.'

'For clients at an early stage the valuation process is such guesswork that it has limited practical value.'

'My impression is that it is a hard thing to do because a person needs to understand how a particular market works and the impact of IP on that market. There are not enough IP valuation experts to have experience of all markets.'

'This does seem to be a fairly specialised process, or at least not particularly well publicised/ understood, and it would be useful to know more, particularly to ensure that we can give clients all of the options.'

'Too many different models, difficult to compare them, and too expensive if you have a large and technically diverse portfolio.'

'Not convinced that any of the valuation approaches or accounting models used really give a reliable indication of value for the specific facts of any case, rather than trying to give some justification to a hand waving 'about X-ish'.'

'It's a serious problem that there is belief that an accurate and sustainable value can be placed on any patent asset. It is extremely rare. The emphasis on 'monetisation' value as opposed to conventional market impact value is damaging the role of patents in particular.'

'I think that really IP valuation is done well by only a few firms and the accuracy of many valuations is suspect. To truly value you need to know the market very well and generalist firms cannot have this insight.

## 2.3. CITMA Respondents

#### 2.3.1. Profile of respondents

This survey was also circulated by the Charted Institute of Trade Mark Attorneys (CITMA). Seven responses were received using CITMA-supplied link, though as noted above, it is likely that many CITMA members may have answered the CIPA survey above (as this was circulated early in the new year rather than late in December). The average respondent profile from these respondents shows that:

- Respondents were established over a variety of periods, 2/7 started trading from 2015-2016
- 5/7 respondent's firms are mainly involved with patent trade mark and/or design attorney services
- 3/7 were directors or partners, 3/7 were chief executives or managing directors
- 3/7 employ 11-25 full time staff. None of the respondents employ more than 25, meaning that the views expressed represent a set of smaller firms than the average from the CIPA sample
- All of them are founded and based solely in the UK
- The majority of firms said that they serve all sizes of enterprises reasonably equally but stated that medium and large enterprises both accounted for around 25-50%

Figure 2-16. Area that describes CITMA respondents' main activities

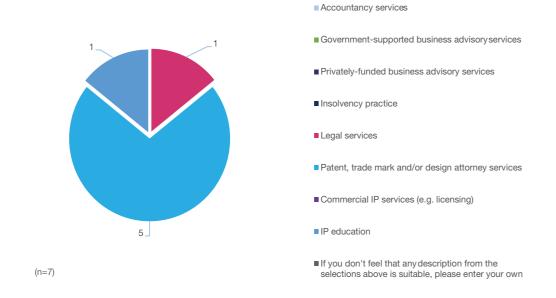


Figure 2-17. Number of staff CITMA firms employ full time

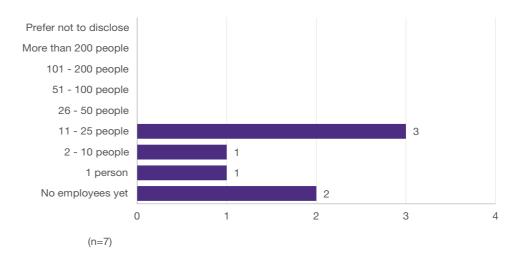
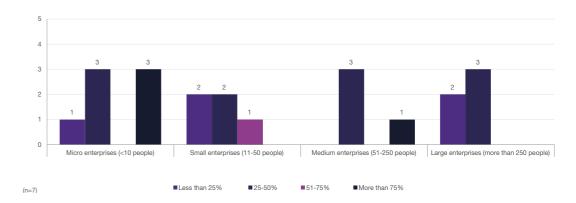


Figure 2-18. Average make-up of CITMA client base



#### 2.3.2. Client-related valuation experiences

6 of the 7 respondents have had occasion to recommend clients to consider the value of their IP, or a client has raised the topic with them.

Figure 2-19. Occurrence of occasion to recommend that clients should consider the value of their IP and/or intangible assets, or if a client ever raised the subject of IP and intangibles valuation for CITMA respondents



The most common reasons selected for discussions about IP valuation among these respondents were 'Merger or acquisition activity' and 'IP sale, auction or assignment, including transferring IP to another entity'.

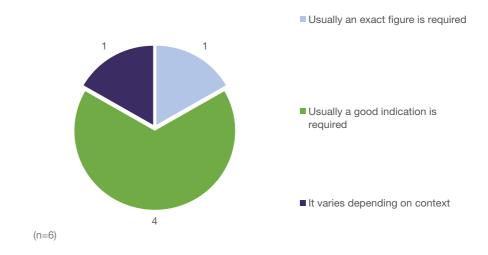
Figure 2-20. Context in which any discussions about IP valuation have occurred for CITMA respondents



On the question of how frequently clients identify a potential need for IP valuation, or the respondent's business recommend them to do it, 100% of respondents answered 'Infrequently (less than 10 times a year)'.

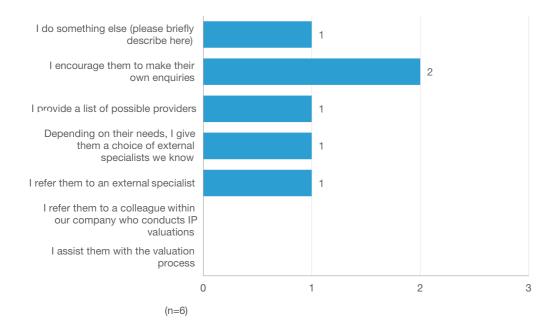
When asked if there was generally a need for an exact IP and/or intangible asset value to be calculated, or is it more likely to be a well-evidenced indication for negotiation purposes, 4/6 agreed that usually a good indication is required.

Figure 2-21. CITMA respondents' perceived need for an exact IP and/or intangible asset value vs. a well-evidenced indication for negotiation purposes



On the hinge question of the next step taken once it is established that a client has a requirement for an IP valuation, no respondents stated that they assist with the valuation inhouse. The majority said that they would encourage them to make their own enquiries. This is in contrast with CIPA survey respondents, around one-quarter of which stated that they would provide some form of in-house assistance. It may be related to the different average firm size.

Figure 2-22. Next step after a requirement for IP valuation is identified for CITMA respondents



External IP valuers that are generally suggested were provided by 3 of the 6 respondents shown below:

Coller IP, Deloitte, EY, Inngot, Intangible Business, KPMG, Metis Partners, PWC, UK Government and Valuation Consulting.

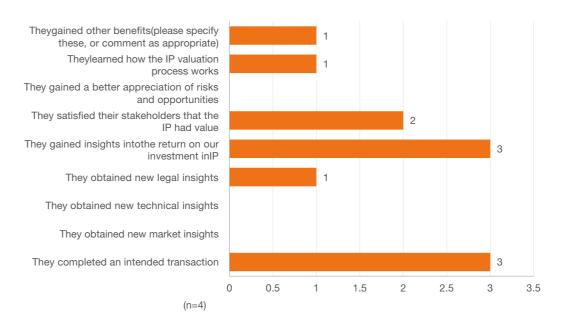
Valuation Consulting

I don't recommend any specific firm because I don't trust any specific firm to the point that I would be prepared to been seen to recommend them

Next was the question on importance of the sets of standards used for valuation. All respondents here agreed and only selected one option which was 'Not sure which standards are applicable'.

On the question of benefits that the IP valuation has delivered to their clients, three of the four respondents selected 'They gained insights into the return on our investment in IP' and 'They completed an intended transaction'.

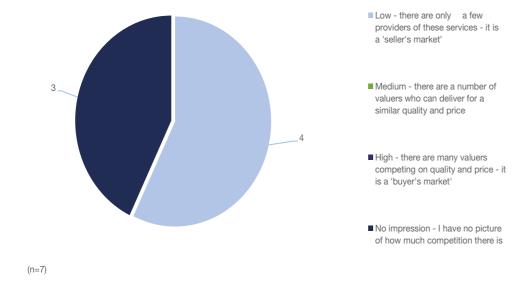
Figure 2-23. Benefits CITMA respondents believe to have been delivered to clients through IP valuation



#### 2.3.3. Respondents' own attitudes towards IP valuation

The next few questions about the IP valuation service market produced similar results to the respondents from the CIPA survey in that they both considered there to be a relatively low number of service providers. Upon being asked how many IP valuation services they thought there were in the UK, 3/7 thought that there were around 11-25. Additionally, 4/7 believed there to be a low level of competition, with the remaining 3 respondents all claiming to have no impression of how much competition there is.

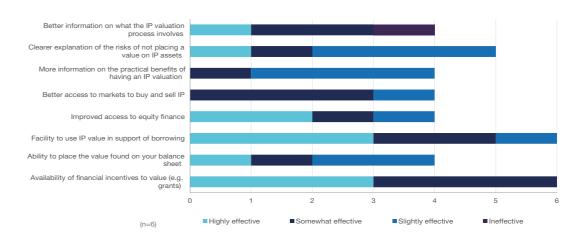
Figure 2-24. Perceived level of competition in IP valuation services based on respondents' experiences of CITMA respondents.



When asked what phrases best describe their impressions of the market for intellectual property valuation, the results were again closely in line with the CIPA survey. The 2 top answers chosen were the same, with almost the same percentages of respondents choosing them. 5/7 respondents (71%) agreed with the statement 'There isn't enough information about providers to make an informed choice', whilst 4/7 (57%) agreed that 'There isn't enough information about IP valuation to make an informed choice'.

Finally, the CITMA respondents were asked to rank the initiatives that would encourage clients to consider having their IP valued. The initiatives regarded as most effective among respondents were all finance related: 'Facility to use IP value in support of borrowing', 'Availability of financial incentives to value (e.g. grants)', 'Ability to place the value found on your balance sheet' and 'Improved access to equity finance'.

Figure 2-25. CITMA respondents' views on the effectiveness of initiatives that could encourage clients to get their IP valued



We gave respondents an opportunity to communicate any other thoughts on intellectual property valuation, in relation to its benefits, cost, complexity or relevance. We received two comments, which are reproduced below.

'I have found the main obstacle to having an IP valuation is overwhelmingly the cost and complexity of the exercise offered by most providers.'

'Many users end up at their accountant who may or may not know how to value IP. Except in specific circumstances (e.g. royalties on a licence), I think it is meaningless to value IP separately to a business (or part of a business).'

## 2.4. IPAN respondents

#### 2.4.1. Profile of respondents

This survey was also separately distributed to a small number of respondents from the Intellectual Property Awareness Network (IPAN). The survey received 9 responses. The average respondent profile from these respondents shows that:

- Respondents started trading in a variety of years, but most (4/9) started in 1991-2000
- Three of the respondents described themselves as commercial IP service providers, two were government supported business advisors, and one of the respondents described the area of their firms' activities as patent, trade mark and/or design attorney services.
- The respondent's firms are a mixture of sizes, 2/9 fit into the bracket of 2-10 or 11-25 people
- All respondents are founded and based in the United Kingdom. 3/7 who answered this
  question have offices in other countries
- 4/8 serve clients based in the UK, Europe and/or rest of the world, 4/8 solely serve clients from the UK
- Most of the respondents serve less than 25% small and medium enterprises, and 4/8
  respondents agreed that they serve more than 75% large enterprises. This is a different
  profile from the CIPA and (particularly) CITMA respondents
- The majority of respondents are either directors, partners, CEOs or managing directors

Figure 2-26. LEFT, Location of IPAN respondents' organisations. RIGHT, Title that best describes IPAN respondents' position within the firm

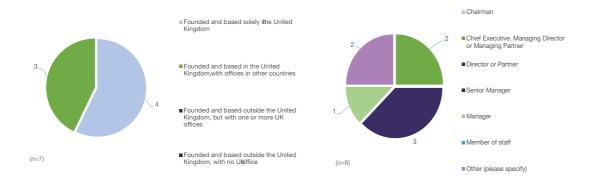
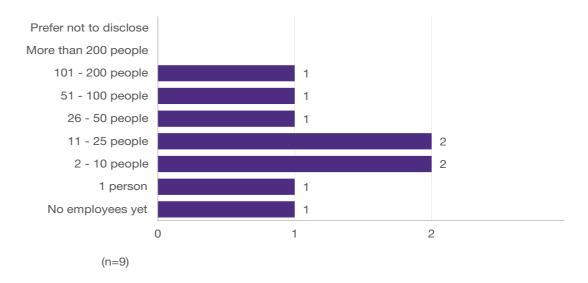


Figure 2-27. Number of staff IPAN firms employ full time



#### 2.4.2. Client-related valuation experiences

8/9 IPAN respondents stated that occasions to recommend that clients should consider the value of their IP, or the client raising the topic, have arisen, with 5/9 saying that both have happened and the remaining third saying that only they have recommended it. Only 1 respondent said that the question of IP valuation had neither been raised nor been recommended by them.

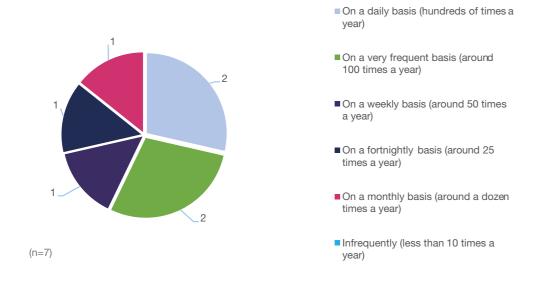
Figure 2-28. Occurrence of the occasion to recommend that clients should consider the value of their IP and/or intangible assets, or if the client ever raised the subject of IP and intangibles valuation for IPAN respondents



Hidden Value: A study of the UK IP valuation market - Appendix

IPAN members feel that the most likely context in which discussions about IP occur are 'Informing an IP strategy or IP management' and 'Licensing to another party'. 'IP sale, auction or assignment, including transferring IP to another entity' was also a popular answer with 2/7 ranking it first. Additionally, they said that on average, clients identify a potential need for IP valuation on a very frequent basis, with 4/7 claiming it happens more than 100 times a year. This may reflect a more commercial emphasis on IP within IPAN member services.

Figure 2-29. Frequency of clients identifying a potential need for IP and/or intangible asset valuation with IPAN respondents



Respondents also agreed that the next step after identifying an IP valuation was to assist the client with the valuation process. There were three respondents who selected 'I do something else', their answers provided below.

'I refer to an external specialist who I work with to understand the IP.'

'I provide information on the various approaches to valuation and what needs to be considered in context of their needs, this then allows them to make a decision to which type of service providers to approach. I can also signpost.'

'We do not offer valuations but see the incredible value to them so recommend they do this themselves or with an expert.'

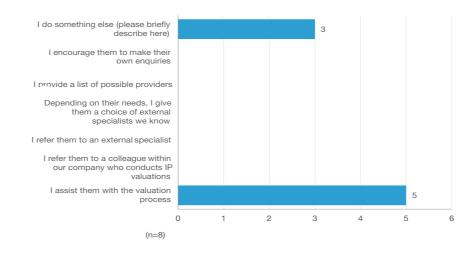


Figure 2-30. Next step after a requirement for IP valuation is identified by an IPAN respondent

When asked about the importance of IP standards, generally respondents were familiar with all of them, although the International Valuation Standards is most recognised to be important, with 5/7 selecting this answer.

Figure 2-31. Standards most likely to be important when conducting a valuation for IPAN respondents



The companies mentioned when referring clients to external IP valuers were:

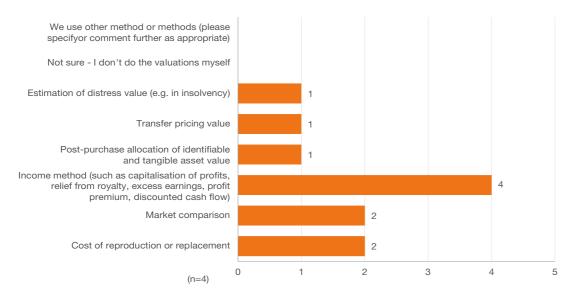
'A specialist IP valuer.'

'I refer them to their patent attorneys in the first instance, if they have VC funding suggest speak to their teams. I have also built up relationships with other providers recommended and or used by the public sector community.'

'Brand Finance.'

IPAN respondents who answered the question on valuation approaches all agreed that the most commonly used one was the income method (such as capitalisation of profits, relief from royalty, excess earnings, profit premium and discounted cash flow) with 4/4 selecting this.

Figure 2-32. Benefits IPAN respondents believe to have been delivered to clients through IP valuation



Three observations were provided regarding valuation methodologies. These were:

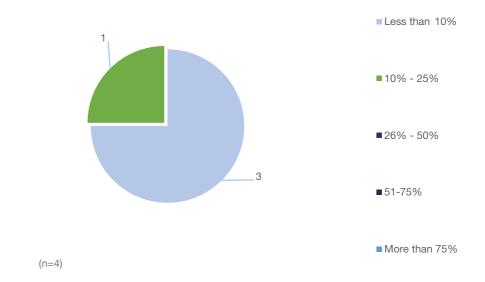
'Transfer pricing value, Post-purchase allocation of identifiable intangible asset value and Estimation of distress value would not be considered separate methods in our firm. We would consider them reasons to do a valuation and would pick a method under the cost, market or income approaches that was suitable for that purpose. It tends to be that methods under the 'income approach' are most appropriate in most circumstances given the uniqueness of most IP but it isn't always the case.'

'The IVS standards are the preferred standards as they are produced by valuation professionals to the highest standards. The industry is rapidly moving to qualification and certification to improve the professionalism of IP and brand valuation.'

'It is important to displace misunderstanding relating to valuation by other professionals, e.g. accountants, as this wholly misinforms clients and investors if funding is sought.'

Respondents were asked what proportion of valuations they refer out to external valuers. Three of the four respondents said less than 10%, whilst the remaining respondent said it was in the bracket of 10-25%, confirming that some respondents are actively engaged in the process.

Figure 2-33. Proportions of valuations referred out to external valuers for IPAN respondents



When asked about the benefits they thought IP valuation delivered to their clients, the top answer (on which all respondents agreed) was 'They satisfied their stakeholders that the IP had value'. Other popular benefits selected by 5/6 respondents were 'They obtained technical insights', 'They obtained new market insights' and 'They satisfied the stakeholders that the IP had value'.

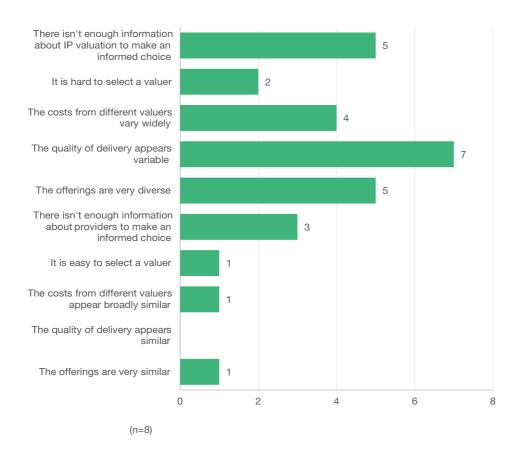
Furthermore, 5/7 IPAN respondents agreed that it is beneficial to consider the other intangible assets that a business owns.

#### 2.4.3. Respondents' own attitudes towards IP valuation

On the topic of reasons companies do not obtain IP valuations, the top two obstacles ranked first were 'They do not consider it to be a strategic priority at board level' and 'They lack the right information to be able to perform it'. Other highly ranked obstacles included 'They seldom have a specific need to get a valuation', 'They cannot afford it' and 'They have other more pressing priorities'.

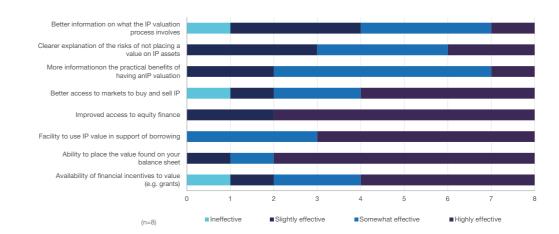
When asked about their general impressions on the market for intellectual property, the most popular phrases selected were 'There isn't enough information on IP valuation to make an informed choice', 'The quality of delivery appears variable' and 'The offerings are very diverse'. This demonstrates more of a concern among quality and consistency of IP valuations with IPAN respondents (which may perhaps reflect the fact that a higher proportion of respondents are actively engaged in it).

Figure 2-34. Phrases that best describe the respondents' impressions of the market for IP valuation



Last of all, respondents were asked about initiatives for clients to get IP valuations and the effectiveness of them. The two initiatives perceived as most effective in encouraging clients to value IP were 'The ability to place the value found on your balance sheet' and 'Improved access to equity finance' with 6/8 respondents believing they are highly effective.

Figure 2-35. IPAN respondents' views on the effectiveness of initiatives that could encourage clients to have their IP valued



IPAN respondents also had an opportunity to communicate any other thoughts on IP valuation, in relation to its benefits, cost, complexity or relevance. The comments are displayed below.

'We have two distinct uses for IP valuation. In some cases, where we are raising equity in a new venture, an external valuation is very helpful or key. In our usual client interactions, we use a well researched business case which sets out the role (and hence value) of our proposed IP strategy in the context of the deal on the table.'

'The deficiency in industry recognised standards for IP valuation and differential access to IP valuation information and understanding, add to uncertainty, risk, and in some cases lack of transparency.'

"Quick fix' low cost formulaic services are unlikely to deliver a true value and may be misleading to the client and the market."

'Broadly, I am highly sceptical about valuing IP in general. I think value can be put on IP only in specific situations (for example on a trade mark for a widely sold product - even then, you have to speculate on how easy it would be to market an equivalent product under a different mark).'

'I think the real value in the first instance is in the mapping of the value to the IPR management strategy. Awareness and when and where to apply this should be part of all business plans. This is not taught or considered in any detail in the enterprise and financial training; in fact in the private equity market, most companies over-value tangible IP and undervalue intangible IP. (Unless the IP is linked to revenue through sales/licence or maintaining market share, brand value etc) I cannot see an audit/valuation as being accepted as being of significant value in the business market place (equity/loans). It tends to be a discussion-negotiation point in M&A licensing. Having a uniform processmethodology would be helpful. (Much like the UK Gov Green and Magenta Book methodologies for ROI assessments; though even these vary in devolved govs). The cost to protect these rights is also an issue; so maybe having a good valuation would allow companies to get appropriate insurance to protect in export markets. However, if overseas territories do not honour or recognise the methodology, dispute resolution will become an issue. The role of WIPO and WTO would also need to be considered?'

'This questionnaire was slightly too simplistic. An 'IP Valuation' can be a brand valuation, a patent valuation, valuation of contracts etc etc. There are competitive markets in the valuation of each individual type of IP and the approaches are different as the practicalities have become more and more complex as time goes by. Similar costs and purposes depend entirely on the nature of the company taking IP in to consideration. A multinational company will of course have a significant amount more complexity than a local company with a couple of shops in the UK. As a result, any valuation of their IP will be similarly complex and costly. Similarly, a small private company won't need a purchase price allocation and a company that isn't multinational is unlikely to need it for tax purposes. So, in summary, it would be more helpful for the IPO to segment this questionnaire according to client type and size and the type of IP under consideration.'

'The IP valuation industry needs greater control and regulation by a professional body similar to RICS.'

'IP assets and their identification as corporate resources have travelled far but have a way to go in achieving the status of other assets. Funding against IP is becoming much more readily available through selected sources and it is most important that our industry inspires confidence in the security as a corporate asset, especially for equity funding. Much can be done to encourage understandings from the financial sector, chief amongst these to discourage use of conventional methods of valuation such as are customarily employed for other business assets.'

### 3. End user interviews

## 3.1. Rationale, methodology and sample

The main report draws a distinction between three sets of IP valuation contexts: 'established use', 'opportunity-led' and 'emerging applications'. It also demonstrates that the primary areas of activity in which large accounting firms are engaged relate primarily, though not exclusively, to the 'established use' cases; and that the volumes that are available for IP valuation in these instances are subject to market factors that are external to the IP valuation market as such (including the level of merger and acquisition activity, the volume of IP disputes that arise and go to court, and the number of businesses with IP assets that become insolvent).

The motivations to conduct valuations amongst companies who engage the large accounting firms is therefore reasonably clear. They instruct valuations because the requirement is clear, the risks and rewards associated with the process are to an extent known, and the business needs to have the exercise done by a company whose reputation will add to the credibility of the end result. Also, because the events that will trigger these valuations happen at a more advanced stage of a firm's development, cost should be less of a consideration. Put another way: these valuations will happen regardless of any additional intervention that might be made in support of market development.

When considering how valuation volumes might be increased (so that more businesses will understand that their IP has value, and how much), it was agreed within the design of the research exercise that it would be beneficial to speak directly to companies whose valuations are less likely to have been motivated by considerations of financial reporting or legal compliance. Inngot and Coller IP therefore contacted a cross-section of recent valuation recipients in order to understand their motivations, experiences and (most crucially) how and why they felt the process had been beneficial to them.

In total, 43 companies were interviewed. These companies were relatively widely spread geographically (with ~15% in Scotland, 9% in Wales and the remainder operating from England). The companies also included a range of sizes and development stages, and were selected from a variety of eight different sectors (Figure 3-1) telephone interview sample also included some public sector valuation recipients (who wanted to value a state-owned asset for a possible licensing agreement) and representatives from technology transfer departments in UK-based universities.

Although there is a wide spread of organisations surveyed, it is notable that many of the businesses surveyed to date are relatively early stage (Figure 3-2). This is consistent with the mapping set out in the main report regarding the stages at which 'opportunity-led', nonregulatory reasons for IP valuation are more likely to arise.

Figure 3-1. Companies interviewed cover eight different sectors

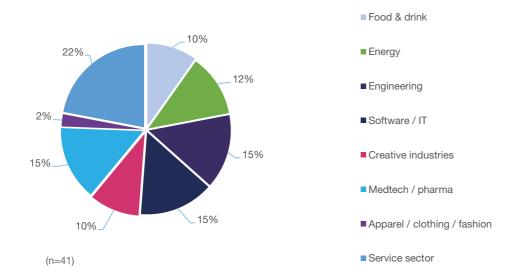
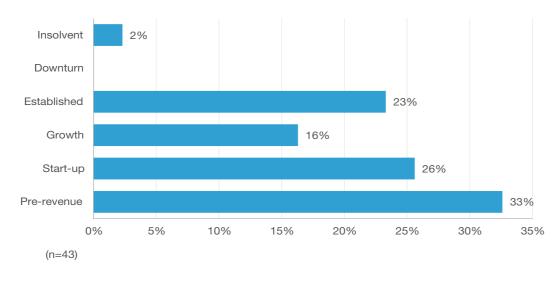


Figure 3-2. The companies interviewed have primarily been early stage (pre-revenue or start-up); no companies surveyed were in downturn



## 3.2. Interview findings

#### 3.2.1. Reasons for and uses of the IP valuation

Participating companies were asked to identify the reasons that the valuation was performed. A range of options were presented to the interviewee and they were encouraged to select all the responses that applied to them. The results are shown in Table 3-1.

The most common reasons were to aid access to either equity or debt finance, to help the company more generally understand the value of their IP portfolio, or for internal strategic reasons. A number of the companies performed the valuation to assist in the transfer of assets into a pension fund (which falls into the 'established use' category according to the definitions set out in the main report), while others were looking to sell their business, or license their IP, and required an independent valuation to assist with the negotiations.

Table 3-1. The number of respondents (and raw number) who performed a valuation for the identified purpose

Answer Choices	Response %	Response count
M&A (prospective business sale/purchase)	16.7%	7
IP sale/purchase (including transfer pricing)	21.4%	9
Licensing	16.7%	7
Demonstrating/understanding the worth of IP portfolio	52.4%	22
Litigation/damages in settlement	2.4%	1
Liquidation/insolvency	2.4%	1
Franchising	0.0%	0
Tax planning	7.1%	3
Access to equity finance (angel, crowdfunding, VC, PE)	50.0%	21
Access to debt finance (bank, alternative)	28.6%	12
Access to insurance	0.0%	0
Joint ventures /alliances/ collaborations	14.3%	6
IP aauction	0.0%	0
Ownership disputes	0.0%	0
IP strategy/management	26.2%	11
(n=42)		

#### 3.2.2. User views on the IP valuation process

The companies were also asked a number of questions about how the IP valuation was accessed (e.g. through an intermediary or internally), who within the company requested the valuation and what their experiences were of having a valuation performed. Of the companies interviewed, there appeared to be roughly an equal split between valuation recipients who identified the need for a valuation internally, and the ones who were encouraged/recommended to have a valuation by a third party.

For those recommended by a third party, this was often a government agency (for example Scottish Enterprise), or a finance professional (business angel, accountant or pension provider). There were also examples of IP valuations being conducted following direct contact with a prospective valuer or a recommendation from a legal professional (law firm or patent/ trade mark attorney). One company initiated the IP valuation exercise after reading an article in the Sunday Times; a number received a suggestion that they should obtain an IP valuation from either an existing or a potential shareholder.

In the majority of cases, the valuation was approved and authorised by the head (CEO, founder or MD) of the company.

In general, the companies who received a valuation had to put in a modest amount of effort to assist the valuation professional but this effort was, in the vast majority of occasions, expected (Figure 3-3). This effort did not appear to be a large burden for most of the companies interviewed and in most cases the valuation recipients were happy with the process and were clear what information would be required from themselves and their advisors (Figure 3-4). There was also evidence that the recommending intermediary only rarely had to input significantly into the valuation (Figure 3-5), though not all respondents answered this question.

Figure 3-3. Responses to the question 'How much additional internal work was required in order to provide the IP valuer with the information they needed, either prior to instructing the valuation or subsequently?'

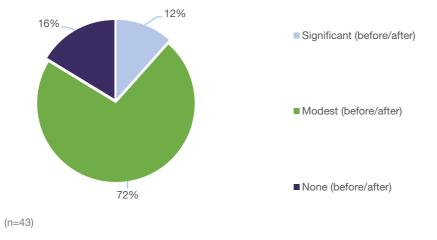


Figure 3-4. Responses to the question of whether the company was given a clear indication of what information might be required during the valuation process

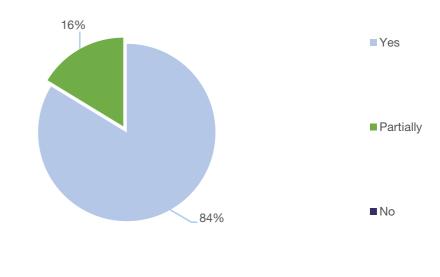
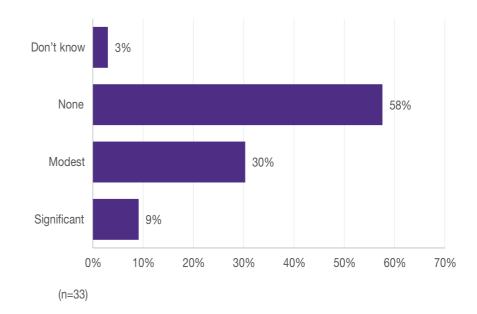


Figure 3-5. Responses to the question of how much input was required from any intermediary recommending that the valuation should be conducted

(n=43)

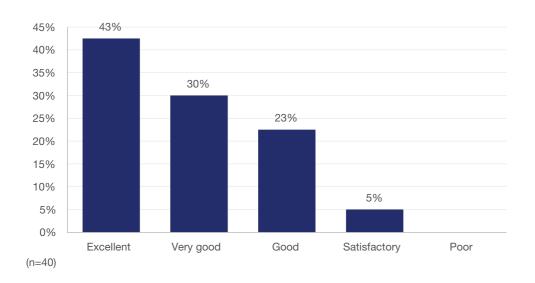


The level of satisfaction in the valuation reports received was very high amongst the companies questioned. Figure 36 shows that 43% of the respondents thought that their report was 'Excellent' value and only two recipients thought that the report was 'satisfactory'. No one said their report was 'Poor' value. Some of the comments provided included:

'Have had only good positive feedback on the report from relevant people and the board.'

'Long detailed report. How do you judge the value of the report? It provides due diligence and was used to raise finance (where it was helpful).'

Figure 3-6. Answers to the question 'Do you consider your valuation report good value for money?'



When asked what level of confidence they have in the valuation outcome, 85% of those questioned had either a high or medium level of confidence in the answer (Figure 3-7). However, since the valuations are opinions or estimates that rely on the judgement of the valuer, there was also some scepticism evident. Some of the responses we received were:

'I take valuations with a pinch of salt.'

'Gave confidence to make the investment.'

'Report, structure and reasoning/ rationale providing a well-argued case supported by evidence.'

'Reasonably high, subject to the underpinning assumptions - corroborated broad ballpark feel for value: 'Not a million miles off.'

'With the caveat that change happens. The articulated methodology and models allow changes to be flexibly considered.'

'The market has verified the valuation by investing based on the valuation.'

'Disappointed by the value and others have suggested it should have been higher since.'

'Can justify the number and, in the end, it is a prudent valuation result.'

'The market thought it was overvalued. This may be because only the IP was sold while the business was not a going concern.'

'Valuation came out higher than we expected.'

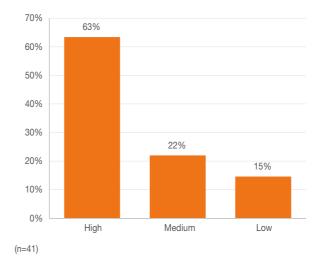
'Value is in the eyes of the beholder.'

'Can't be sure until a deal is concluded.'

'Based on valuation being slightly lower than expected, and therefore probably realistic.'

'Consider valuation to be 'not overblown' and relatively conservative in terms of what value could be in the market.'

Figure 3-7. Answers to the question 'What are your confidence levels in the valuation?'



Looking back on their valuations, the consumers listed a number of benefits of obtaining the valuation (Table 3-2). The most important benefits were understanding the return in investment, the value added by the IP valuation process itself, or successfully satisfying various stakeholders of the value of the IP within the organisation.

Table 3-2. Consumers' views of the most important benefits of receiving an IP valuation

Answer Choices	Response %	Response count
Completed an intended transaction	26.2%	11
Gained new market insights	11.9%	5
Gathered new technical insights	0.0%	0
Obtained new legal insights	9.5%	4
Understood return on investment in IP	33.3%	14
Satisfied stakeholders that the IP had value	66.7%	28
Greater appreciation of risks and opportunities	14.3%	6
Greater understanding of IP valuation	52.4%	22
(n=42)		

Some of the specific comments we received included:

'It was important to have an independent assessment of value.'

'Informed negotiations with the software supplier, who 'bought into' the valuation.'

'The valuation report helped us arrive at an overall value for the company, what we should pay for the business and why.'

'We gained information to give confidence in further discussions and to prepare for decision-making.'

'There is value in going through the thought process and discussing. Plus it provides an insight into the valuation process.'

'Corroboration of value giving confidence to move ahead; satisfying 'internal politics'.'

'Allowed access to pension scheme funding.'

'Raised the required finance; made the balance sheet stronger; helped gain an understanding of where the value sits.'

'Provided the ability to conduct meaningful negotiations.'

'We were able to tell investors that IP has been valued. This made me look more professional!."

'Confirmed the plan to build further value; used valuation to justify an internal accounting adjustment within the group of companies.'

'Built confidence that the business was on the right route.'

'Has given us confidence to invest further in developing these assets.'

'Having an objective, qualified, 3rd party validated valuation. Helped in negotiations.'

'Extended knowledge of IP assets the company possessed.'

'Gave us confidence in negotiations.'

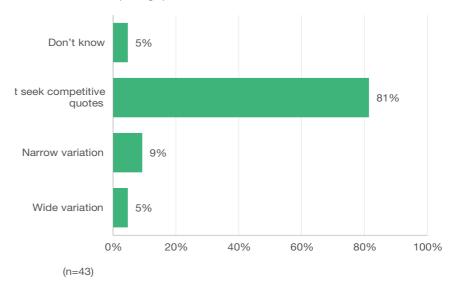
#### 3.2.3. User views on the IP valuation market place

We asked the valuation recipients for their views on the IP valuation market place. The views varied, with a few respondents evidently being very knowledgeable and knowing a number of players in the market. The majority however only knew of the company who performed their valuation and were unable to comment on the level of price sensitivity, how differentiated the market was, or whether there was an over or under-supply in the market.

Table 3-3. The consumer's view on the price sensitivity of the IP valuation marketplace. The vast majority did not seek competitive quotes and so were unable to comment

Answer Choices	Response %	Response count
Low – we are only aware of one or two IP valuation providers	78.4%	29
Medium – there are a number of valuers that can deliver to the same quality and price	18.9%	7
High – we are conscious that we can negotiate down on price	2.7%	1
(n=37)		

Figure 3-8. Valuation recipient responses to the question of whether a wide price variation was seen between competing quotes



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The low level of searching evident from these responses is discussed further within the main report, in the context of intermediary importance as well as levels of competition more broadly.

Where an intermediary is involved, their recommendation appears to be important in helping a company to choose which IP valuation specialist to choose. As shown in Table 3-4, this was by far the most common reason for choosing a specific provider. Other reasons, such as the price, the perceived quality of the valuation and a direct knowledge of the valuer were of less importance. Interestingly, speed of delivery appears to rarely be a decisive factor in choosing the valuation provider.

Table 3-4. The reasons cited why a specific IP valuer was chosen

Answer Choices	Response %	Response count
Price	18.6%	8
Speed	2.3%	1
Perceived quality	16.3%	7
Relevant experience in our field	23.3%	10
Recommendation (from referrer)	74.4%	32
Recommendation (from a previous client)	4.7%	2
Past experience of using this valuer	4.7%	2
Independent research	7.0%	3
Direct contact with the valuer	20.9%	9
Other (please specify)	32.6%	14
(n=43)		

## 3.3. Opinions on the wider market

#### 3.3.1. Barriers to valuation

Valuation recipients were also asked a series of questions about whether they thought other companies could benefit from an IP valuation and if so, what factors were preventing companies from valuing their IP and what could be done to correct the situation.

Here, there was a very large level of agreement with all but two (>90%) of respondents agreeing that more companies should perform an IP valuation. There was also a high level of agreement regarding the reasons for the lower than optimal level of uptake, with almost unanimous recognition that there is a lack of awareness (or if there is awareness, a lack of knowledge) of IP valuations (Table 3-5). Over a third of respondents also selected cost, which was the 2nd most selected answer, highlighting it as an important driver. Furthermore, several respondents also highlighted that an IP valuation exercise will only be initiated when there is a specific identifiable need.

Table 3-5. Reasons why more companies do not undertake an IP valuation

Answer Choices	Response %	Response count
A lack of transaction data (comparators)	2.3%	1
Perceived risk in lending against intangible assets	9.3%	4
The absence of a secondary market	0.0%	0
Too busy	20.9%	9
Too many other higher priorities	11.6%	5
Lack of awareness	83.7%	36
Lack of understanding/too complex	18.6%	8
Lack of knowledge	34.9%	15
Lack of confidence in the output	4.7%	2
Lack of uses to which the output can be put	7.0%	3
Concerns over quality	2.3%	1
Concerns over impartiality	0.0%	0
Concerns over credibility	4.7%	2
Cost	41.9%	18
Unaware of where to find a valuer	20.9%	9
Lack of understanding of types of valuers in the market	4.7%	2
(n=36)		

As some of the following comments suggest, this low level of awareness of valuation may be primarily from a lack of appreciation of the strategic importance of IP more generally. Nevertheless, these insights from firms, who have overcome the barriers and taken the time and effort to conduct a valuation, reinforce the extent of the education gap that exists.

More specific insights into the valuation recipients' thoughts on why not so many IP valuations are taken up, can be gleaned from examining the free text comments provided to this answer:

'Companies ask "Do I really need to do this?" There has to be a clear need.'

'Many businesses don't see the need, or the relevance. Why am I valuing the IP? Who is the audience for the valuation?.'

'There needs to be a reason to do it.'

'Companies are sceptical about the value of it.'

'Companies don't think about the value which is created from the work they are doing.'

'There is a general lack of appreciation of the importance of IP.'

'Lack of awareness of the business benefits of getting an IP valuation; lack of critical mass

in the business community; lack of awareness amongst key intermediaries.'

'Not all businesses are focused on building the business - it needs effort to do so. Having a trusted expert advisor helps. There is possibly a lack of advisors who are aware of the importance of IP.'

'Lack of understanding of IP in general.'

'Some companies do not want to trigger a taxable event and alert HMRC. Others may be interested in IP value only when selling or buying a business. It may not be the right time.'

'Doesn't fit with business plan and may not be applicable.'

'General lack of awareness.'

'Companies feel that there is nothing to value and are not sure how to capitalise on valuation; lack of awareness by financial institutions.'

'Many companies in UK don't think about it. Can be seen as too academic. Contrast e.g. Israel, where there is much more awareness of importance of IP and its value in business. It is a 'state of mind' issue.'

'Many accounting firms are not advocating awareness of IP value for their clients.'

'Unaware of benefit.'

#### 3.3.2. Means of overcoming barriers

When asked, what would solve this issue, the solution most commonly proposed was related to educating the general business community about IP valuation (Table 3-6). A number of respondents thought that in addition to outreach educational programmes, the promotion of case studies would also be beneficial.

Another key driver to encourage more valuations that was identified was creating a link between finance (helping the company obtain either equity or debt) and IP valuation; this addresses the concern that IP valuations will only be performed where there is an identified need. If an IP valuation could help the company to raise funds, respondents thought that more IP valuations would be performed.

Fewer users thought that introducing a professional valuation body or promoting formal qualifications for valuers would be beneficial (given the low level of searching in evidence amongst this sample, it appears doubtful how far it would influence their choice). There was also resistance amongst some respondents to further 'red tape' and potential increased costs, which might result from changing accounting standards, financial reporting standards or the compulsory inclusion of intangible assets in the annual accounts. This is in understandable contrast to a number of the intermediaries who thought that such changes

(e.g. to accounting standards) could be helpful.

Table 3-6. Answers to the question 'What are your suggestions for those incentives that would increase firms' uptake of, and engagement with IP valuations?'

Answer Choices	Response %	Response count
Changes to accounting standards	9.5%	4
Changes to financial reporting standards	14.3%	6
Ways to include intangible assets in annual accounts (e.g. qualitative listing)	21.4%	9
Closer links between IP assets and access to finance	38.1%	16
Promotion of IP valuation case studies	50.0%	21
Public education programmes on the benefits of IP valuation	59.5%	25
Increased availability of comparables (previous transactions)	2.4%	1
Professional qualifications and Certification bodies for IP valuers	11.9%	5
Other (please specify)	83.3%	35
(n=42)		

The comments given to this answer are also instructive:

'Make more of the role of IP in major transactions; need to use case studies to demonstrate the benefit of IP valuation.'

'Address lack of awareness of IP amongst companies; business benefits of valuation need to be made clear.'

'Awareness raising - the importance of recognising value to the business in the longer term as opposed to only looking at last three years of accounts; putting an intangible asset on the BS can have a negative tax impact - a scheme to waive tax penalties for this; assistance with the fee cost of valuation; promotion of the benefit to businesses of valuation.'

'Can't do anything about shortage of time; support for SMEs to help cover the costs of valuation - either free to SME or at a more nominal cost would help; an incentive to allow valuation to be carried out without a tax penalty; improved ways for companies to formally report value of intangible assets (not necessarily on the BS).'

'Make intermediaries more aware.'

'Tax incentives unlikely to work for pre-profit businesses; grant-giving bodies, such as TSB [Innovate UK], should place an onus on companies taking grants to seek an IP valuation at an appropriate stage to ensure that IP is recognised and valued; have personally seen companies receiving innovation funding, but not developing any unique or interesting IP.'

'Don't have a view - not an area I am able to comment on.'

'Government to cover banks or lending institutions for collateral against IP - loan guarantees; education to improve understanding of technology and IP; Technology Foresight programs (as in 1990s)."

'It could be done in small chunks so not large commitment. Not in favour of compulsion to value by putting it into accounting standards.'

'Frequently do an intangible asset summary but should not be compulsion for companies to do it. Teach people how to produce IA registers and other IP education.'

'IP audits made us aware of our IP - this was very useful. More audits would drive more IP valuation requests.'

'I do not think government input would help. This is a niche area - no one would take notice of a blanket campaign; people will go to advisers if they think they need valuation; perhaps making advisers more aware would be more important.'

'Needs comprehension; independent valuation useful for fund-raising; raises awareness of the key assets; finance does not work efficiently for most SMEs; institutional funders are too risk-averse; business angels are individuals and collectively chaotic.'

'Some form of subsidy to assist companies with proof that they would benefit. Case studies of how valuation has helped companies.'

'Case studies of how valuation has resulted in a desirable outcome for business - practical vs theoretical; relevance to international trade and growth.'

'Small business seminars to promote benefits of IP valuation; Chambers of Commerce. funding subsidies. Tax relief on investment in branding (cf R&D tax credits)."

'Promote case studies of benefits of valuation to businesses. Use of infotainment approaches - e.g. Youtube 'How to...' videos. Access to funding, e.g. growth vouchers to offset cost of valuation would help, especially for start-up companies. More vertical integration of services - legal, financial, IP professional and valuation - could make it easier for small companies. Earlier cost-effective access to advice and understanding to assist with forward decision-making choices.'

'Business needs to see a reward for doing it, such as a higher share price. Benefits driven mainly by experience. Need to spread knowledge in a manner that business can relate to. For example, case studies that describe the problem; how the valuation was done; and what the business was able to achieve with the outcome. Also, important to understand where valuation is not appropriate.'

Hidden Value: A study of the UK IP valuation market - Appendix

'Consultants should be telling companies about IP valuation. They are aware of legal aspects of IP but not market aspects.'

'If more businesses could leverage finance, it would encourage more valuation. Tax breaks may help some businesses.'

'Getting the message out more into business networks and Federation of Small Businesses; marketing/education/awareness-raising; raising awareness of intermediaries; accountants tend to be nervous of putting IP value on the balance sheet. We ended up changing accountants to find one who would do that. Our existing accountant would not do it.'

'More access to use IP as a security; use of IP to leverage business recovery; government can do a lot more to underpin these difficult areas, e.g. government backing for lending against IP assets; a bank specifically set up for lending against IP, e.g. Scottish Investment Bank.'

'Raise awareness of a broader framework of assets that can be considered for valuation. A register of accredited advisors? Raising awareness of IP and valuation in accounting firms.'

'Crowd funders / Angel networks should be encouraged to incorporate IP valuation into their processes. Some sort of professional certification may help. Against putting intangibles on balance sheet, but good idea to put a qualitative listing.'

'Anything that makes a potential funding organisation feel more comfortable about funding would help.'

'Stand at trade shows. Making accountants, patent agents and other intermediaries more aware of IP valuation services."

'Changes in the way that CEOs are rewarded from (mostly) earnings based to value increase. Newer companies are increasingly being bought/sold on their IP. People need to understand better how IP is used to buy/sell businesses.'

'I ist of benefits on websites.'

'Provide grants to cover costs for SMEs.'

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'Government pressure on banks to recognise IP. More education for businesses. Raise awareness that IP is present in many companies. Building a market place for IP. Government is the body that can make a change and create an environment for IP to be better recognised - businessmen are not stupid. For example, underwrite financing/lending against IP assets.'

'Vital to have a valuation for investment. Better availability of illustrations/case studies of valuations and opportunities, and what to protect and develop. Scottish Enterprise support helps to signpost advice/persuade companies. Tax incentives of limited value to start-ups. Government is concerned about keeping IP in-country. Should Government collect more data on how much IP is in-country (vs risk of a further burden on small companies)?'

'Government grants for IP costs in early-stage companies; removal of exclusions of IP professional fees in tax break schemes.'

'Accountants and auditors should adopt IP valuation as part of their remit to take to all clients, as an area for review.'

'Standardisation and understanding of flaws/risks in IP valuation. Understand it is not accurate and this is not required.'

'Visiting incubators and giving talks.'

## 4. End user surveys

## 4.1. Methodology and sample

In addition to the in-depth interviews documented in section 3 of this appendix, it was considered important to understand attitudes towards, and experiences with, a wider group of IP-owning companies. This was achieved by distributing a survey to recent recipients of intellectual property-related support, specifically the IP audit programme sponsored by UK IPO. Whilst not a representative sample of businesses as a whole, this has enabled the views of a cross-section of different-sized companies to be obtained where IP is of known relevance. The survey questions were directed towards the rationale for decisions made by these companies regarding IP valuation.

#### 4.1.1. Innovator profiles

There were a total of 49 respondents who took this survey, though only 46 answered the questions on their attitudes towards IP valuation. The sample contained a wide range of business age ranges and activity sectors, with no option being selected by more than 18%. The respondents' businesses are from a variety of development stages, with established being the most prominent, closely followed by growth. Additionally, 43% of the businesses surveyed employed 2-10 people demonstrating the innovators to be relatively small in size. Most respondents were also CEOs and worked in general management.



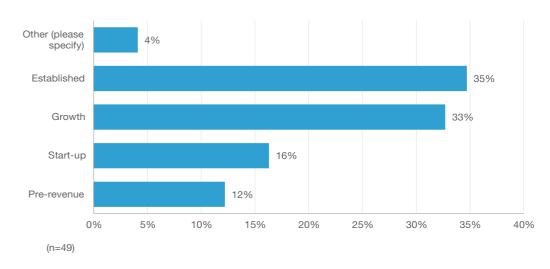
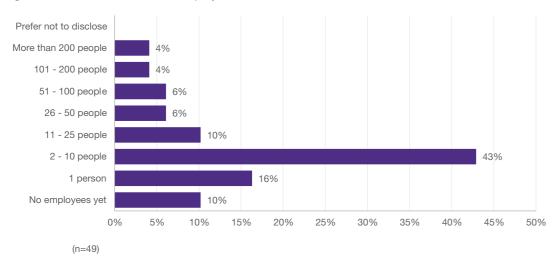


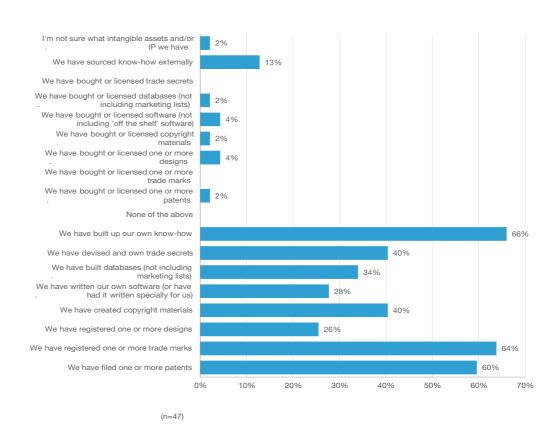
Figure 4-2. Number of full time employees



All respondents were founded and based in the UK with only 11% having offices in other countries. The majority of businesses surveyed (71%) serve the UK, European and/or rest of the world markets, 2% serve the UK and other European countries and 2% only trade outside the UK (with the remaining 25% serving solely the domestic market).

Respondents were then asked to identify the types of intellectual property most applicable to their business at the current time, in order to understand whether there was likely to be any particular bias within the sample towards IP valuation based on the type of rights owned. The results showed clearly that for this sample of audit recipients, IP they have created themselves was considered much more important than any other rights the company may have bought or be licensing in. Built up know-how and registered trade marks were among the most pertinent, with 66% and 64% of innovators selecting them respectively. Filed patents are also seen as important, as they were the third most selected IP type, chosen by 60% of respondents.

Figure 4-3. Most applicable types of IP to innovators' businesses



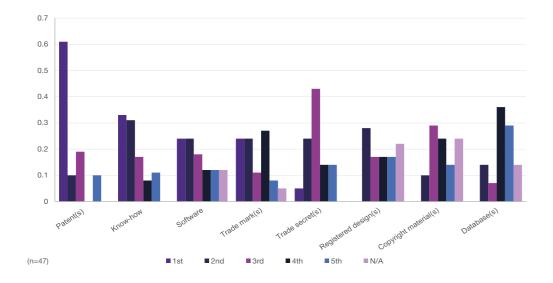
Hidden Value: A study of the UK IP valuation market - Appendix

Respondents were then requested to rank the five most relevant rights in underpinning their businesses' value. Patents came out on top for being ranked first, selected by 69% of respondents with no one ranking them 4th or 6th and 10% selecting them for 5th. Know-how is generally seen as 2nd most important, with 31% ranking it second and 33% ranking it first. 24% thought trade marks and software were their most important intangibles, with both IP types also gaining 24% for 2nd most important. When looking at the weighted averages of all types, patents are shown to be the most important and databases the least important.

Hidden Value: A study of the UK IP valuation market - Appendix

Hidden Value: A study of the UK IP valuation market - Appendix

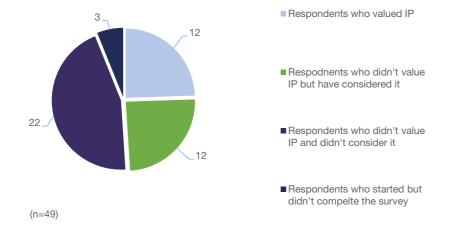
Figure 4-4. Ranked IP rights in order of importance to underpinning business value



#### 4.1.2. IP valuation experiences

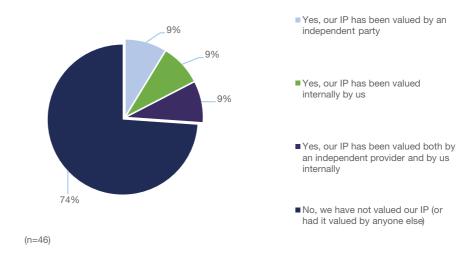
Figure 4-5 following provides an overview of the number of respondents who had actively engaged in IP valuation, compared with those who had considered doing so, and those who had never considered doing so. The 12 respondents who had valued their IP represented 26% of the total sample electing to answer this question – a relatively high proportion compared with all previous surveys. This lends weight to the view that developing a strategic understanding of IP within the business context, and a more comprehensive view of what the value-producing assets are (which an audit should deliver), increase company propensity to value their IP.

Figure 4-5. Respondent counts of innovators divided by previous completion of IP valuation and consideration to value their IP



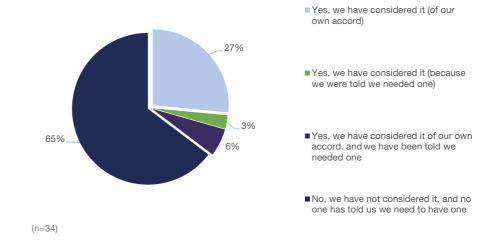
The respondent experiences with IP valuations can be further subdivided. As noted, 74% of those surveyed said that they had not had an IP valuation. Of the 26% that had, 9% of the total sample had valued it internally and 17% had received an external valuation (Figure 4-6).

Figure 4-6. Obtaining a financial valuation for intellectual property



Interestingly, over a third (35%) of the respondents who stated that they had not had an IP valuation had previously considered getting one (26% on their own accord). The remaining 65% had not considered obtaining an IP valuation and no one had told them they should have one (Figure 4-7). This appears to confirm a lack of awareness of valuation benefits amongst companies and intermediaries.

Figure 4-7. Breakdown of the 34 respondents (74% of total) who have not valued their IP

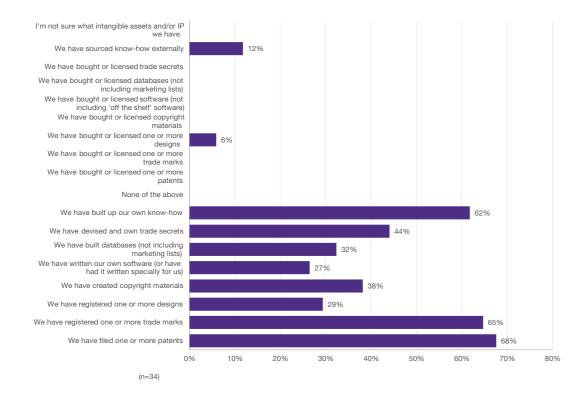


#### 4.1.3. Companies not valuing IP

The 34 respondents who have not valued their IP, or had it valued by anyone else, were further analysed to determine whether this might be related to their profile. Over half (53%) employed 2-10 people and they had a mixed stage of development with 18% in pre-revenue and 32% in both growth stage and established stage. The most prominent non-valuing sectors were engineering/materials and environmental technologies each with 19%. 100% of these businesses are founded and based in the UK, with 91% based solely in the UK (not serving other countries).

The results for the question 'Which types of IP are most applicable to your business' were segmented to determine whether there were common characteristics among companies who had not carried out an IP valuation. The results showed that the top most applicable IP among these respondents are patents, with 68% having filed one or more.

Figure 4-8. Most applicable types of IP to your business for respondents who have not previously valued their IP or had it valued by anyone else



The respondents who had not conducted a valuation, but had considered getting one at some point, were asked a separate series of questions to better understand their business context and IP valuation motives. There were a number of answers that suggested a recent focus on IP which could have triggered the need for a valuation, including 'Planning an IP strategy', which together with claiming R&D tax credits was chosen by 55% of respondents. When asked whether they have ever been involved in conducting an intellectual property valuation at a previous company, only 10% said that they had.

Figure 4-9. Organisational activities in the last 3 years for respondents who have not had their IP valued but have considered it

The three main reasons selected for not obtaining a valuation were, 'We have other more pressing priorities' (58%); 'We are still considering it, but the timing is not right' (42%); and 'We don't know who we could instruct' (33%). 60% of respondents also said there is not enough information about IP valuation to make an informed choice, and 40% said there is not enough information about providers to make an informed choice.

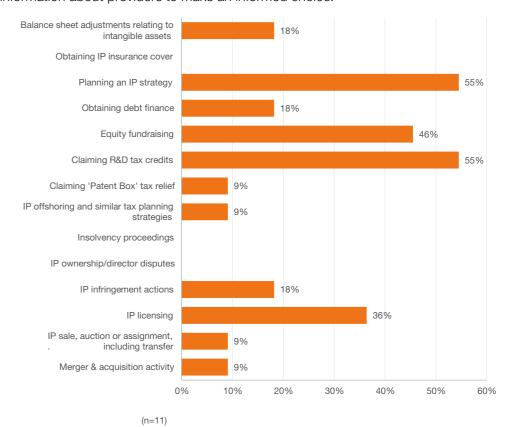
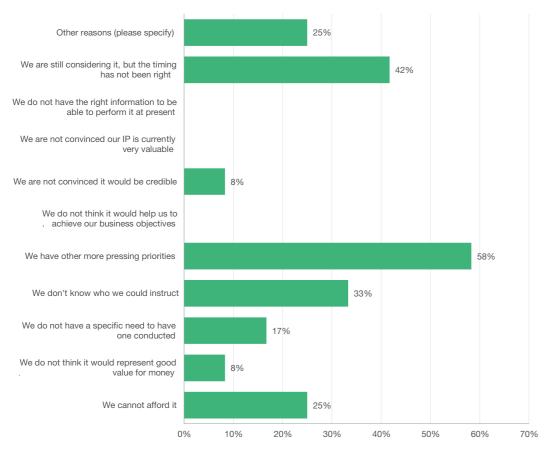
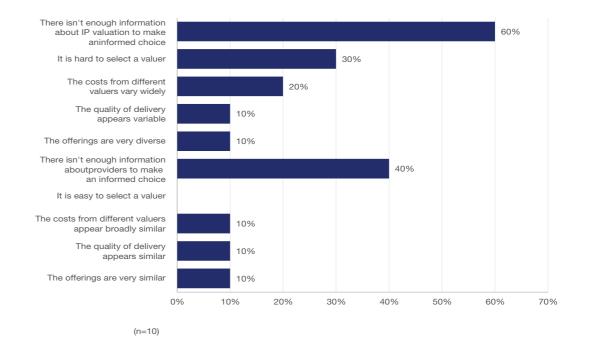


Figure 4-10. Reasons for not conducting an intellectual property valuation for respondents who have not had their IP valued but have considered it



(n=12)

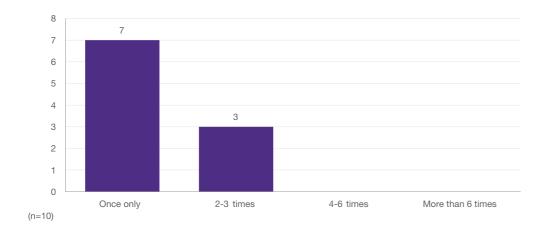
Figure 4-11. Impressions of the market for intellectual property for respondents who have not had their IP valued but have considered it



#### 4.1.4. Companies who have valued their IP

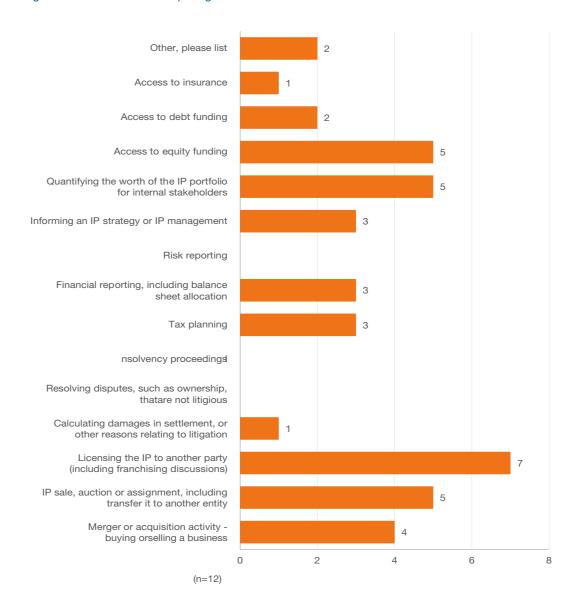
Taking just the respondents who have had an IP valuation, 10/12 have conducted this within the last two years, and 3/10 had valued their IP two or three times. Interestingly, 5/12 had previously commissioned IP or intangible asset valuations in other companies. Although 1/10 of those who have not valued their IP did have previous experience conducting valuations in other companies, it appears reasonable to conclude that organisations are more likely to engage in IP valuation once they have already experienced the benefits.

Figure 4-12. Number of times respondent companies have valued their IP



Those conducting valuations were then asked for their reasons. As with other survey formats, respondents were asked to select all answers they considered applicable. The most popular reason was 'Licensing the IP to another party (including franchising discussions)' (7/12); the next most selected reasons were 'Quantifying the worth of the IP portfolio for internal stakeholders', 'Access to equity funding' and 'IP sale, auction or assignment, including transfer it to another entity', all selected by 5/12.

Figure 4-13. Reasons for requiring an IP valuation



These respondents were then asked about their experiences with IP valuation and how they decided on a provider. When asked about their thoughts on the number of providers, 5/12 believed there were more than 50 IP valuation services in the UK (Figure 4-14) and the remainder did not know.

The most popular process for selecting a provider (selected by 4/12 respondents) was 'An introduction or recommendation from the person identifying the need'. Subsequently, on asking the reasons behind their eventual choice of valuer, perceived quality/professional reputation was the most important reason (6/11) of these respondents who selected it. 5/11 selected based on the price, and 2/11 selected based on the sector expertise (Figure 4-15).

Figure 4-14. Perceived number of IP valuation providers operating in the UK

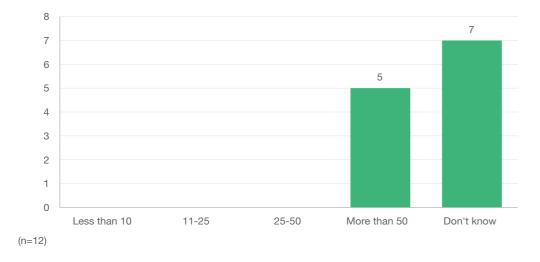
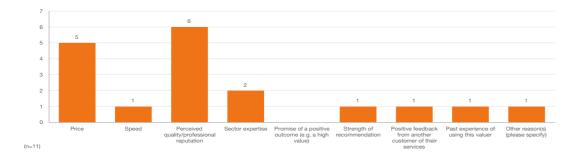


Figure 4-15. Reasons behind the choice of valuer



When asked about the methods that were used to produce their most recent IP valuation, the response rate was significantly less. Of the seven who answered, the two most selected results were 'Market comparison' and 'Not sure', both with 3/7 respondents choosing these. Other popular methods included 'Income method' and 'Post-purchase allocation of identifiable intangible asset value' which both were selected by 2/7 (Figure 4-16).

From the interviews conducted with valuation providers, very few of whom use market comparison as the main method, this appears unlikely to be correct. Together with the low number of responses, it may indicate that companies may not have paid attention to the details of the valuation, or did not understand the calculation in detail.

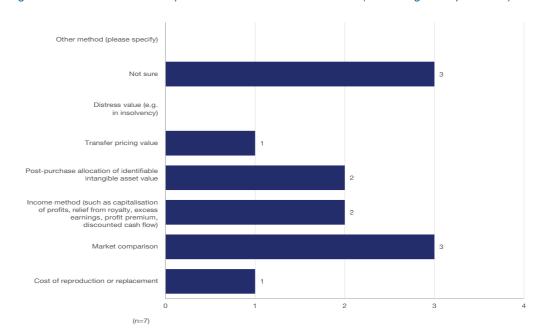


Figure 4-16. Methods used to produce most recent IP valuation (according to respondents)

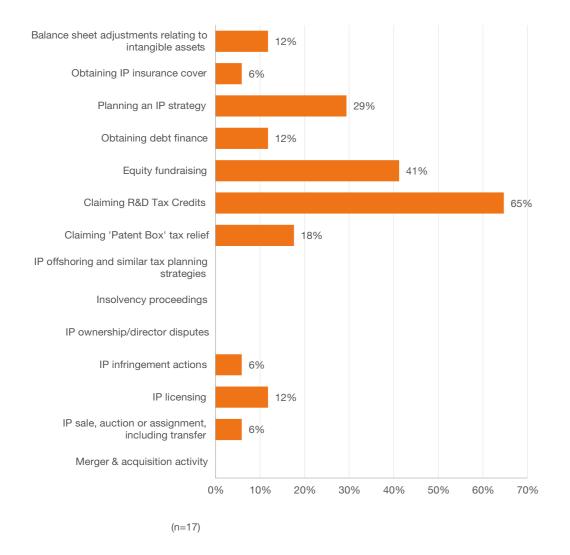
#### 4.1.5. Companies who have not considered IP valuation

Finally, respondents who had not had their IP valued, and also had not considered a valuation, were asked a sequence of questions. These were on activities that might involve IP valuation and their views on the IP valuation market. When asked which potentially relevant activities their company has been involved in over the past three years, the most common answer was 'Claiming R&D tax credits' which were selected by 65%. 'Equity fundraising' was also a popular choice, selected by 41% (Figure 4-17).

This question was asked to two sub-sectors of IP owners to understand more about how the differences in company decisions reflected attitudes towards considering valuation. Comparing the results between the IP owners who had considered IP valuation, and those who had not, highlighted some variations.

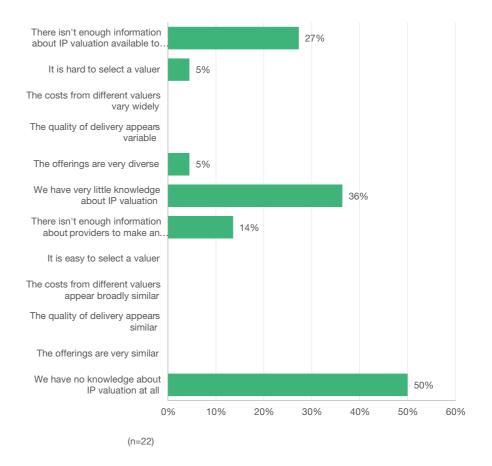
The most noticeable difference between these two groups is that the innovators who gave consideration to IP valuation are much more likely to plan an IP strategy (55% to 29%) and undergo IP licensing (36% to 12%). Apart from these main variances the remainder of the results were reasonably comparable: the two biggest similarities between the two groups were the results for the activities of *'claiming R&D tax credits'* and *'equity fundraising'*. For the IP value considerers, this was 55% and 46% respectively; for those who had not considered valuation, it was 65% and 41%.

Figure 4-17. Organisational activities in the last 3 years for respondents who have not had their IP valued and have not considered it



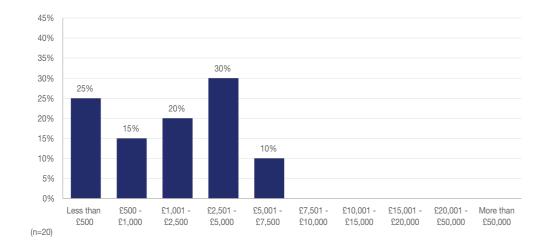
Next, this group of respondents was asked to select the phrases that were most aligned with their impressions of the market for IP valuation. The two phrases most often selected were 'We have no knowledge about IP valuation at all' and 'We have very little knowledge about IP valuation', picked by 50% and 36% respectively, demonstrating the lack of a practical understanding of the subject among this group of IP owners. Similarly, the next two most frequent selections were 'there isn't enough information about IP valuation to make an informed choice' (27%) and 'There isn't enough information about providers to make an informed choice' (14%) (Figure 4-18).

Figure 4-18. Impressions of the market for IP valuation for respondents who have not had their IP valued and have not considered it



One possible barrier to even considering IP valuation was their perception of price. When asked how much they would expect an IP valuation report to cost, the results were varied. 30% of respondents felt that the cost would be between £2,501 and £5,000, whilst 25% expected it to cost less than £500. No respondents anticipated the cost to exceed £7500 (Figure 4-19).

Figure 4-19. Cost expectations for an intellectual property valuation report from those who had not had a valuation



The final question IP owners were asked was about which initiatives they felt would be most effective in encouraging them and other businesses to consider having their IP valued, and how effective they would be.

The two initiatives chosen to be highly effective were 'Availability of financial incentives to value (e.g. grants)' with 61% and 'Improved access to equity finance' with 50%. The least successful measure chosen among respondents was 'better access to markets to buy and sell IP' with 33% believing it to be ineffective (Figure 4-20 and Table 4-1).

Figure 4-20. Initiatives seen as most effective to encourage businesses to consider getting their IP valued

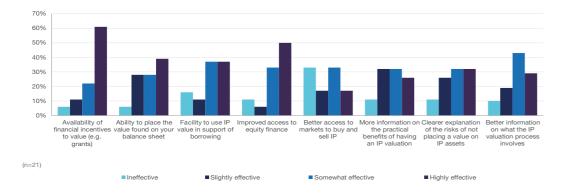


Table 41. Initiatives seen as most effective to encourage businesses to consider getting their IP valued

	Highly effective	Somewhat effective	Slightly effective	Ineffective
Availability of financial incentives to value (e.g. grants)	61%	22%	11%	6%
Ability to place the value found on your balance sheet	39%	28%	28%	6%
Facility to use IP value in support of borrowing	37%	37%	11%	16%
Improved access to equity finance	50%	33%	6%	11%
Better access to markets to buy and sell IP	17%	33%	17%	33%
More information on the practical benefits of having an IP valuation	26%	32%	32%	11%
Clearer explanation of the risks of not placing a value on IP assets	32%	32%	26%	11%
Better information on what the IP valuation process involves	29%	43%	19%	10%

## 5. Accounting and valuation standards

## 5.1. Accounting standards

#### 5.1.1. Permissible balance sheet treatment of intangible assets

Where 'intangible assets' do appear as assets on a balance sheet, this will be for one of three reasons. The first is that the assets have been 'bought in', meaning that there is an auditable transaction to evidence the figure entered. This figure will be reflective of cost - which is not necessarily the same as value, a point explicitly acknowledged by applicable valuation standards.

This exercise may or may not require any IP valuation activity. If for example a company elects to capitalise its patenting costs, these will be evidenced from bills received and can simply be allocated by an accountant. If, however the purchase relates to buying intangible assets that are not simply a business expense (such as paying an inventor for the patents that they have filed in order to assign them to the company), the value may need to be independently justified, because this purchase is likely to create a taxable event for the seller (and may also have tax implications for the buyer).

The second reason is that the assets have been acquired in the course of a business merger or acquisition. Here, a particular type of more specialist IP valuation activity may be necessary, commonly called post-purchase allocation (PPA). This is covered by international financial reporting standards, specifically IFRS 3, described below; while this particular standard only applies to listed and quoted companies, recent changes to UK Generally Accepted Accounting Practice (UK GAAP), specifically the introduction of Financial Reporting Standard 102 (FRS 102), have introduced a close parallel into the accounting standards that apply to UK SMEs.

The third way in which intangible assets may find their way onto the balance sheet is that the company has elected to capitalise certain identifiable development costs. This, too is covered by International Accounting Standards, principally (but not exclusively) International Accounting Standard 38 (IAS 38). Development capitalisation of this nature has historically been permitted under certain, similar circumstances for SMEs under a previous standard (SSAP 13), which has now been superseded by FRS 102. A further standard, IAS 36 deals with aspects of depreciation.

#### 5.1.2. Specific UK standards

FRS 102 came into effect from the end of 2015 (where a company's accounting year is the calendar year) and April 2016 (where it is the fiscal year). It changes the treatment of intangible assets for small and medium-sized enterprises (SMEs), who will now follow substantially the same rules as multinationals, set out in the following section.

Currently, when two companies are combined, either merger accounting (adding the two existing balance sheets together) or acquisition accounting (placing a fair value on all the acquired company's assets) might be permissible. FRS 102 states acquisition accounting must be used in nearly all cases (bar group reorganisations).

These acquisition accounting rules have themselves been updated. Any excess paid over and above the fair value of the fixed assets and liabilities can no longer simply be characterised as 'goodwill'. Instead, it needs to be broken down into goodwill and identifiable intangible assets, in a very similar manner to IFRS 3 (though there are some wording differences).

FRS 102 preserves a company's option of either amortising qualifying development costs of new products and services over a suitable period, or expensing these costs during the year in which they are incurred. However, UK GAAP had previously permitted 'goodwill' to have an indefinite life, as long as the value was tested annually for impairment. Under FRS 102, the concept of an indefinite life falls away and a lifespan has to be specified for amortisation purposes.

If an asset's lifespan cannot be determined reliably, a 'default' figure of five years must be used. This is much shorter than existing UK GAAP, under which it would have been customary to amortise some assets over a much longer period (up to 20 years).

Comments received to date from accounting firms suggest that these changes are beginning to have an impact on the profession and may lead to the process of PPA calculation being increasingly commoditised - not least because so many more UK firms will have to do it.

#### 5.1.3. International standards applicable to larger companies

For large firms, IFRS 3 deals with the scenario where businesses are merged or acquired; IAS 38 deals with the conditions under which development expense can be capitalised; and IAS 36 deals with the handling of impairment charges (where revaluation of an asset already shown on a balance sheet has to be revisited).

IFRS 3 provides an important reference point for IP valuers (and especially accounting firms) because it sets out approaches and provides examples of how intangible assets can be separately identified with sufficient rigour.

Introduced in 2003, and applicable from April 2004, IFRS 3 brings aspects of international standards into line with US GAAP treatment of intangible assets, especially SFAS 141. It was most recently updated in 2008 (with effect from 2009).

Under IFRS 3, intangibles are not simply bundled up in 'goodwill'. Indeed, goodwill in this context becomes a means of accounting for the premium paid once the value of all identifiable assets (tangible and intangible) has been taken into account.

IFRS 3 provides illustrative examples that propose a way of approaching the identification of intangible assets that have been acquired. It suggests five main headings for intangible assets, and sets out a representative set of contents for each, as follows:

#### Table 51. List of intangible assets according to IFRS3

#### Marketing-related

Trade marks, trade names, service marks, collective marks and certification marks

Internet domain names

Trade dress (unique colour, shape or package design)

Newspaper mastheads

Non-competition agreements

#### Contract-related

Advertising, construction, management, service, delivery and supply contracts

Licences, royalties, standstill agreements

Lease agreements (as a lessee or lessor)

Construction permits

Franchise agreements

Operating and broadcasting rights

Use rights such as drilling, water, air, mineral, timber-cutting and route authorisations

Servicing contracts such as mortgage servicing contracts

Employment contracts that are beneficial contracts from the perspective of the employer, because the pricing of those contracts is below their current market value

#### Customer-related

Customer lists

Order or production backlog

Customer contracts and related customer relationships

Non-contractual customer relationships

#### Technology-related

Patented technologies

Computer software and mask works

Unpatented technologies

Databases, including title plants

Trade secrets such as secret formulas, processes and recipes

#### **Artistic-related**

Plays, operas and ballets

Books, magazines, newspapers and other literary works

Musical works such as compositions, song lyrics and advertising jingles

#### Pictures and photographs

Video and audiovisual material, including motion pictures or films, music videos and television programmes

Whilst IFRS 3 only recognises rights that are separable or arise out of contractual or other legal rights (it does not pick up assets that are intrinsic to, and not separable from, a particular business and which add value to it as a going concern), it is nevertheless frequently the case that companies that are acquired are deemed to have far more intangible asset value than would have appeared on a previous balance sheet. This is because the tests that are applied under IAS 38 (i.e. which would have been used even by a large firm up to the point at which it was acquired) are quite narrow and specific.

IAS 38, originally introduced in 1998, defines an intangible asset as an identifiable non-monetary asset without physical substance (IAS 38.8). At paragraphs 9 and 10, it notes that:

9. Entities frequently expend resources, or incur liabilities, on the acquisition, development, maintenance or enhancement of intangible resources such as scientific or technical knowledge, design and implementation of new processes or systems, licences, intellectual property, market knowledge and trade marks (including brand names and publishing titles). Common examples of items encompassed by these broad headings are computer software, patents, copyrights, motion picture films, customer lists, mortgage servicing rights, fishing licences, import quotas, franchises, customer or supplier relationships, customer loyalty, market share and marketing rights.

10. Not all the items described in paragraph 9 meet the definition of an intangible asset, i.e. identifiability, control over a resource and existence of future economic benefits. If an item within the scope of this Standard does not meet the definition of an intangible asset, expenditure to acquire it or generate it internally is recognised as an expense when it is incurred.

The principles in determining whether an asset is identifiable, set out at IAS 38.12, are that it:

- is separable, i.e. is capable of being separated or divided from the entity and sold, transferred, licensed, rented, or exchanged, either individually or together with a related contract, identifiable asset or liability [regardless of whether the entity intends to do so]; or
- arises from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity, or from other rights and obligations.

IAS 38.21 states that an intangible asset should be recognised initially at cost, but if and only if:

- it is probable that the expected future benefits that are attributable to the asset will flow to the entity; and
- the cost of the asset can be measured reliably.

Once intangible assets have been initially recognised in this way, they can only be revalued if there is an 'active market' in that particular asset, which is seldom the case (IAS 38.78 suggests that the only likely exceptions are assets like taxi licences, fishing licences and production quotas). It goes on to specifically exclude some assets:

An active market cannot exist for brands, newspaper mastheads, music and film publishing rights, patents or trade marks, because each such asset is unique. Also, although intangible assets are bought and sold, contracts are negotiated between individual buyers and sellers, and transactions are relatively infrequent. For these reasons, the price paid for one asset may not provide sufficient evidence of the fair value of another. Moreover, prices are often not available to the public.

### 5.2. Valuation standards

#### 5.2.1. IVSC guidance on intangible asset valuation

The main report contains a summary of International Valuation Standards Council (IVSC) valuation guidelines. This omits some additional detail on the guidance it offers in respect of intangible asset valuation (including intellectual property), included here.

IVS 210 is the specific Standard that covers intangible assets. It draws attention to the need to identify other, contributory assets that may be involved in the generation of the identified cash flows and determine whether these are included or excluded from the valuation.

In the detailed documentation, the distinction used in IAS 38 (discussed above) is used to differentiate identifiable intangibles (which require separability or a contractual basis) and unidentifiable ones (generally treated as goodwill). It references a similar list of identifiable intangible asset headings to IFRS 3, but prefers to divide these into marketing related, customer or supplier related, technology related and artistic related assets, and to state that any of these can be contractual or non-contractual.

The Standard confirms the potential applicability of all three of the generic valuation approaches (market, income and cost) to intangible assets, but provides additional commentary on the practicalities of using each one:

- On market methods, the standard observes that it is rarely possible to find evidence of transactions involving similar assets, but suggests that transaction analysis can identify a typical price-earnings ratio or rate of return for other intangible assets in a similar class. Such ratios may need further adjustment to reflect the comparative standing of the target assets in their marketplace.
- On **income** approaches, it lists the principal derivatives applicable to intangible assets as being the relief from royalty method, the premium profits (or incremental earnings) method and the excess earnings method, and goes on to provide suggestions on the usage of each one, noting also that tax benefits can arise from asset amortisation and need to be taken into account.

• On **cost**, it notes that this is mainly used for internally generated intangible assets that are not associated with identifiable income streams. Software, websites and assembled workforces are three types of intangible referenced in this context.

As with the ISO brand standard referenced below, the Asset Standard under IVS references the likelihood that multiple valuation approaches are more likely to be needed for intangible assets owing to their heterogeneous nature.

#### 5.2.2. ISO 10668 Brand Valuation Standard

ISO 10668, first introduced in 2010, concerns requirements for monetary brand valuation. In its introduction, the standard sets out its aim to provide 'a consistent, reliable approach to brand valuation, including financial, behavioural and legal aspects', and it goes on to set out the main (general) requirements of transparency, validity, reliability, sufficiency and objectivity.

The standard lists some of the common purposes for valuation as management information. strategic planning, value reporting, accounting, liquidation, legal transaction, licensing, litigation support, dispute resolution, taxation planning & compliance and loan and equity financing - very much the same scope as described elsewhere in this interim report.

The concept of value, which needs to be specified in accordance with the purpose, is to represent the economic benefit conferred by a brand over its expected useful economic life. Assuming that the brand has not already reached the end of this life, this is indicative of a forward-looking, cash flow-oriented dimension to the valuation process, which may be based on earnings, economic profits or cost savings.

#### 5.2.3. Specific ISO guidance on valuation methods

As is also the case with IVSC standards, the standard specifies that the income, market or cost approach shall be used, either individually or in combination, with the choice dependent on purpose, value concept and brand characteristics. Within each of these three methods, some further guidance is provided.

A number of ways are set out in ISO 10668 to assist in identifying the cash flows reasonably attributable to the brand, which may then be converted (after tax) to a present value by applying an appropriate discount rate. The discount rate should consider the weighted average cost of capital (WACC) applicable to the business and also the brand-specific risks, and the long-term growth rates assumed have to be based on justifiable economic fundamentals.

- The **income** methods that are specifically included are:
- Price premium (comparing a branded item with a generic one, after adjustments for non-brand-related factors and cost variations)
- **Volume premium** (estimating the operating cash profit related to the excess market

share)

**Income split** (proportion of profit attributable to the brand)

- Multi-period excess earnings (present value of future residual cash flow after deducting returns attributable to other assets)
- Incremental cash flow (comparing overall business cash flows with and without a brand)
- Royalty relief (present value of expected future royalty payments, were the brand licensed rather than owned, thus equating the brand value to the royalty payments saved by owning it)

The commentary offered by the standard on the market method describes the process of assessing what brands are worth based on the amounts paid by other purchasers in the market that can be considered reasonably similar to those being valued. As such, it represents an estimate of the price that the assets might be expected to realise if the brand were sold. This will generally require adjustments to be made to compensate for differences, which the standard suggests should be done by computing multiples on the basis of the acquisition price, and applying them to aggregates of the subject brand.

The standard requires that for a brand to be regarded as comparable, it needs to have similar strength, apply to similar goods and services, or be in a similar economic and legal situation, and that the transactions used for analysis need to be reasonably recent.

The valuation can take into account the fact that a price that would be agreed may take into account 'strategic values and synergies that cannot be realised by the present owner'. However, it also cautions that the number of transactions that relate to brands as isolated assets are very small, and that when further scrutinised, their characteristics may prove to be significantly different from the target brand.

Cost is described in the standard as measuring brand value based on the investment made in building the brand, or what it may cost to replace or reproduce it. This is based on the premise that a prudent investor would not pay more than the cost of replacement or reproduction (though it should be noted that strong IP rights could prohibit or severely limit the opportunity for replacement or reproduction).

The actual costs can include those spent building and protecting the brand; the replacement cost should consider the investment needed to create a brand of comparable utility at the value date. This differs slightly from reproduction cost, which should consider the cost of recreating a brand similar to the actual one under analysis, and then adjusting this figure to take into account potential losses of awareness and strength.

The standard cautions that 'it should not be automatically considered that there is a link between money spent and value', and also notes that the retrospective data often used for

cost-based analysis does not consider future earnings potential. It indicates that cost can be used when other valuation approaches cannot be implemented and reliable data exists, and that it may also have utility as a cross-check.

#### 5.2.4. ISO 10668 required inputs

As well as market and financial data, which should be analytically reviewed, the standard identifies the potential importance of **behavioural** aspects of the brand, specifically to determine how much economic benefit is properly attributable to it and what risks are associated with it (which will influence the discount rate used in an income-based approach). Such analysis is also needed to consider appropriate multiples when conducting a market comparison, and the costs of constructing a similar brand.

Ways of generating economic benefits set out in the standard include improved recognition leading to communication efficiencies and thus improved profits; increased differentiation influencing purchasing behaviour and thereby facilitating growth; and improved customer acquisition and retention, leading to reduced financial risk.

Brand **strength** is also discussed in the standard, as is brand **relevance**:

- The common measures referenced to consider **strength** are awareness, perceptual attributes, knowledge, attitude and loyalty, though it is noted that the quality and quantity of data on such aspects is likely to vary widely. It also notes that consumer behaviour and trends, levels of brand investment, competitor activity and the way trade marks are enforced, can all influence brand strength.
- **Relevance** is discussed in terms of the influence the brand exerts on the purchase decision in the target group within a market, as a means to assess how much of the total cash flow associated with (for example) the product is reasonably attributable to the brand.

Lastly, the standard also references legal aspects, particularly what protection is in place for the brand (and who owns it), but also whether there are other legal parameters which may have a positive or negative effect on brand value relating to the environment in which it operates. The assessment of the rights needs to take into account how enforceable these rights are in the territories from which the cash flows derive.

#### 5.2.5. Reference works on IP valuation

Practitioners and academics have written books on the subject of IP valuation, which provide varied and detailed insights into the theory and practice of the subject. A selection of works identified during research conducted for this study confirms that there is no shortage of reference points.

The following is a non-exhaustive list of IP valuation reference works:

- Gordon V. Smith and Russell L. Parr, 2013, Valuation of Intellectual Property and Intangible Assets, 3rd edition, Wiley, ISBN
- Robert F. Reilly and Robert P. Schweihs, 1998, Valuing Intangible Assets, 1st edition, McGraw-Hill Education
- Farok J. Contractor, 2001, Valuation of Intangible Assets in Global Operations, 1st edition, Quorum Books, Greenwood Publishing Group
- Michael Pellegrino, 2012, BVR's Guide to Intellectual Property Valuation, Business Valuation Resources
- Jeffrey A. Cohen, 2005, Intangible Assets: Valuation and Economic Benefit, 1st edition,
- Wes Anson & Donna Suchy, 2005, Fundamentals of Intellectual Property Valuation: A Primer for Identifying and Determining Value, 1st edition, American Bar Association
- Gordon V. Smith & Russell L. Parr, 2005, Intellectual Property: Valuation, Exploitation, and Infringement Damages, 4th edition, Wiley
- William J. Murphy, John L. Orcutt & Paul C. Remus, 2012, Patent Valuation: Improving Decision Making through Analysis, 1st edition, Wiley
- Philipp Sandner, 2009, The Valuation of Intangible Assets: An Exploration of Patent and Trademark Portfolios, 1st edition, Gabler Verlag
- David I W Taylor, 2008, Measuring Intangible Value: A Practical Method to Measure the Intangible Elements of Any Investment Decision, 1st edition, iUniverse
- Wes Anson & David Drews, 28/11/2007, The Intangible Assets Handbook: Maximizing Value from Intangible Assets, 1st edition, American Bar Association
- Jurgen Daum, 2002, Intangible Assets and Value Creation (Accounting), 1st edition Wiley
- Robert F. Reilly & Robert P. Schweihs, 2014, Guide to Intangible Asset Valuation, 2nd edition, AICPA

- Wes Anson, 2010, IP Valuation and Management, 1st edition, American Bar Association
- Richard Razgaitis, 2003, Valuation and Pricing of Technology-Based Intellectual Property, 1st edition, Wiley
- Stevan Porter, Michelle Rakiec & Albert B. Kimball, 2015, IP Strategy, Valuation, and Damages, 2016 edition, LexisNexis
- Andrew J. Sherman, 2011, Harvesting Intangible Assets: Uncover Hidden Revenue in Your Company's Intellectual Property, 1st edition, AMACOM
- Bruce Berman, 2008, From Assets to Profits: Competing for IP Value and Return, 2nd edition, Wilev
- Suzanne S. Harrison & Patrick H. Sullivan, 2011, Edison in the boardroom revisited how leading companies realize value from their intellectual property, 2nd edition, Wiley
- Stephen Johnson, 2015, Guide to Intellectual Property: What it is, how to protect it, how to exploit it, 1st edition, The Economist; First Trade Paper Edition
- Ruth Taplin, 2013, Intellectual Property Valuation and Innovation: Towards global harmonisation, 1st edition, Routledge
- John Sykes & Kelvin King, 2002, Valuation and Exploitation of Intellectual Property and Intangible Assets, 1st edition, Tarquin (XPL)
- Douglas W. Hubbard, 2014, How to Measure Anything: Finding the Value of Intangibles in Business, 3rd edition, Wiley
- Monica Boos, 2003, International Transfer Pricing: The Valuation of Intangible Assets, 1st edition, Kluwer Law International
- Daniel Andriessen, 2003, Making sense of intellectual capital: Designing a Method for the Valuation of Intangibles, 1st edition, Routledge
- Baruch Lev, 2001, Intangibles: Management, Measurement, and Reporting, 1st edition, **Brookings Institution Press**
- Michael Cohen, 2009, The valuation of intangible assets: A new approach using hedonic pricing models, 1st edition, VDM Verlag
- Manoj K. Mondal & Pratap K. J. Mohapatra, 2016, Valuation of Equity and Intangible Assets - An Empirical Study, 1st edition, LAP LAMBERT Academic Publishing
- Margaret M. Blair & Steven M. H. Wallman, 2001, Unseen Wealth: Report of the Brookings Task Force on Intangibles, 1st edition, Brookings Institution Press

- Annie Green, 2008, A Framework of Intangible Valuation Areas: The Sources of Intangible Assets within an Organization, 1st edition, VDM Verlag
- Christopher Mackie (Technology, and Economic Policy Board on Science, Committee on National Statistics), 2009, Intangible Assets: Measuring and Enhancing Their Contribution to Corporate Value and Economic Growth: Summary of a Workshop, 1st edition, National Academies Press
- Shireen Smith, 2015, Intellectual Property Revolution: Successfully manage your IP assets, protect your brand and add value to your business in the digital economy, 1st edition, Rethink Press Limited
- Claire Howell & David Bainbridge, 2013, Intellectual Property Asset Management, 1st edition, Routledge
- Patrick H. Sullivan, 2000, Value-Driven Intellectual Capital: How to Convert Intangible Corporate Assets into Market Value, 1st edition, Wiley
- John P Mc Manus, 2012, Valuing and Licensing Intellectual Property, 1st edition, NuBooks
- Ruth Taplin, 2012, Valuing Intellectual Property in Japan, Britain and the United States, 1st edition, Routledge
- Melvin Simensky, Lanning G. Byer & Neil J. Wilcof, 1999, Intellectual Property in the Global Marketplace, Valuation, Protection, Exploitation, and Electronic Commerce, 2nd edition, Wiley

Since it is not the intention of this study to explore the details of the IP valuation process, but rather the operation of the market, readers are referred to the above list for deeper insights into methodologies.

## 6. Market size calculations: evidence used

### 6.1. IP awareness surveys

#### 6.1.1. Awareness survey methodology

An important source indicating the historical level of IP valuation take-up is the information gathered by the UK Intellectual Property Office as part of its IP Awareness Survey. This has the benefit of three reference points over 10 years, as it has been conducted in 2006, 2010 and most recently in 20151.

The initial survey sent out in 2006 was intended to benchmark the state of IP awareness in the UK. The survey was the largest of its kind at the time and resulted in over 1,700 replies from firms of all sizes and sectors of UK industry. The second survey, run in 2010, had a similar objective of gauging the level of awareness of intellectual property amongst SMEs and to highlight any change in this awareness since the first survey. This resulted in over 1,900 replies from firms of all sizes and sectors.

The 2015 IP awareness survey was structured differently, drawing upon expert knowledge within the IPO to help produce the report. This included its behavioural insight teams, customer research specialists and statisticians. This survey did not focus solely on a general business population, but rather reached out to businesses with which the IPO had established prior contact.

Both the 2006 and 2010 surveys were carried out using mail, whilst the one issued in 2015 was conducted by email. The 2015 survey received 502 responses, representing firms of all sizes and sector, but did not set out to be a representative sample of the wider UK business community. Instead, the commentary accompanying the survey stresses that the findings offer an insight into IP awareness and management activities of firms but should only be interpreted as concerning the businesses which took part.

Due to the revisions within the 2015 survey, in terms of questions and new methodologies being used, direct comparison with previous research findings cannot be made. However, responses to general themes should be comparable.

<sup>1</sup> https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/500211/IP\_awareness\_ survey\_2015.pdf

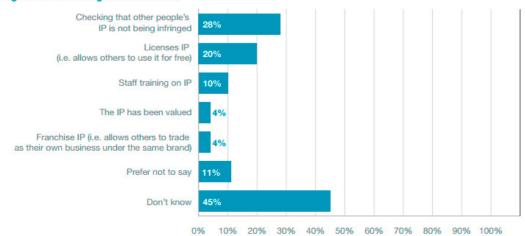
#### 6.1.2. Awareness survey findings

In a section concerning the management of IP by respondents, the 2015 survey asked whether companies had valued their IP as one of a number of possible actions. Only 4% indicated that their assets had been valued:

Figure 6-1. 2015 survey responses regarding the frequency of IP valuation activities, % of firms questioned

#### Q. Does your business do any of the following with its IP (select all that apply)?

Figure 23 - IP management activities.



The 2010 and 2006 surveys<sup>2</sup> asked the question in a slightly different, two-part way, first asking, 'Has your company ever tried to assess how much your IP is worth?' The 2010 survey yielded the results in Table 6-1:

Table 6-1. Replies in 2010 to the question 'Has your company ever tried to assess how much your IP is worth?' % of firms

No. Employees	0-9	10-49	50-249	250+	Total
Yes	3%	4%	4%	10%	3%
No	94%	91%	89%	78%	93%
Don't know	3%	5%	7%	12%	3%

The 2006 results for the same question are shown in Table 6-2:

Table 6-2. Replies in 2006 to the question 'Has your company ever tried to assess how much your IP is worth?' % of firms

No. Employees	0-9	10-49	50-249	250+	Total
Yes	0.7%	4.2%	5.1%	14.5%	1.1%
No	97.3%	91.9%	88.8%	72.3%	96.6%
Don't know	2.0%	3.9%	6.1%	13.2%	2.3%

In the event that an affirmative response was made to this question, respondents were asked whether this meant they had engaged the services of a professional valuer, with the results in 2010 shown in Table 6-3:

Table 6-3. 2010 answers to the question 'Has your company ever had IP professionally valued?' % firms

No. Employees	0-9	10-49	50-249	250+	Total
Yes	17%	35%	38%	30%	20%
No	83%	58%	62%	62%	79%
Don't know	n/a	%	n/a	8%	1%

The responses provided to the same question in 2006 are shown in Table 6-4:

Table 6-4. 2006 answers to the question 'Has your company ever had IP professionally valued?' % firms

No. Employees	0-9	10-49	50-249	250+	Total
Yes	0.00%	26.70%	19.70%	43.50%	11.50%
No	100.00%	73.30%	68.20%	38.00%	86.70%
Don't know	0.00%	0.00%	12.10%	18.50%	1.80%

The 2010 commentary noted that the level of professional engagement appeared to have increased substantially compared with 2006, but that this change was not significant owing to the low overall number of respondents. Similar care is required when interpreting the information obtained in 2015: while on the face of it this appears to be a slight increase in valuation activity levels, the sample is a very small base (4% of the total 2015 sample represents only 14 respondents out of the 377 who answered this particular question).

<sup>2</sup> UK Intellectual Property Awareness Surveys 2006 and 2010, Robert Pitkethly, UK IPO

When the 2015 cohort was asked what the reason was behind their decision to have their IP valued, the responses were as follows (multiple selections presumably being allowed):

Table 6-5. Answers to the question 'Please explain why your business has put a value on its IP (select all that apply)?'

Please explain why your business has put a value on its IP (select all that apply)?	Response	% of respondents
To include the IP on the balance sheet	7	50.00%
To get a licensing value	5	35.71%
To sell the IP	5	35.71%
To borrow against the IP	2	14.29%
I don't know	2	14.29%
To seek other finance	0	0.00%
Prefer not to say	0	0.00%
Other (please explain)	0	0.00%

Given the rules that govern the inclusion of IP on the balance sheet (summarised in the preceding section), the respondents indicating that this was their motivation for valuation are likely to have been engaged either in constructing a transaction or in acquisition activity requiring values to be attributed to intangible assets (as simple amortisation of development costs would not require a specific valuation).

Within the overall figure of 4% valuation usage identified in the 2015 survey, the published report broke down the respondents according to types of IP owned. This found that the underlying distribution of valuation activity was as follows:

- Only 7% of respondents had used patent protection, but 9% of companies who had conducted an IP valuation owned patents
- 29% of respondents had trade marks, but 5% of companies owning them had conducted a valuation (note: this is still above the 4% average)
- 5% of respondents indicated they had design protection, and the proportion of design owners who valued their IP was also 5%
- 34% identified that they had copyright protection, and 5% with copyright had valued their IP
- The overall proportion of respondents that had any kind of IP protection was 52% (based on 443 responses)

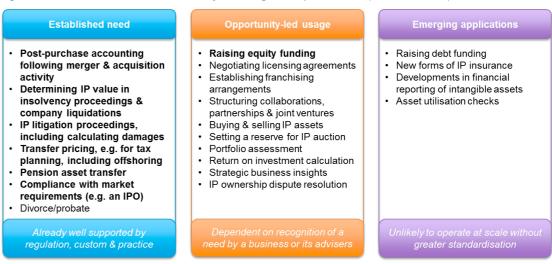
## 6.2. Approach to gathering current market sizing data

#### 6.2.1. What can be measured?

As part of the interview process, we have endeavoured to gain insights from a number of sources allowing the number of IP valuations currently being conducted annually to be estimated. Our strategy has been to seek to 'triangulate' a likely range from a number of sources.

Looking at the characterisation of IP valuation events set out in Chapter 4 of the main report, it is apparent that some elements of the current market volume can be estimated, while others cannot. It is also the case that some of the indicators that are available overlap each other and will require further adjustment. The diagram used to set out the measurable elements is reproduced below as Figure 6-2.

Figure 6-2. Areas of IP valuation activity that might be quantifiable (shown in bold)



The area of activity most likely to prove quantifiable largely corresponds with the first group, representing the established need category. This appears consistent with the evidence presented by the cross-section of valuers interviewed to date, that necessity is the main volume driver.

The main primary source for the current size of the market is the valuers themselves, though this will inevitably be an approximation. Not all companies who conduct IP valuations can be included within the interview process; commercial sensitivities dictate that the information can only be provided in bands; and as is evident from valuer responses, it is known that some businesses may choose to calculate values for themselves.

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In terms of secondary research, the best single source identified is HMRC, since this has potential visibility of the number of submissions received in relation to potentially taxable events. This can be assumed to include a substantial proportion of the 'established need' valuation purposes set out above. In particular, it should cover post-purchase allocation of intangible asset values, insolvencies that require an IP valuation to be conducted, transfer pricing activities (including the use of IP for pension-related finance), asset sales where these produce a taxable event (as would normally be the case). The only established use identified in Figure 6-2 that it would not include would be valuation in the litigation context.

#### 6.2.2. Evidence from valuers: volume of valuations

Each of the valuation firms interviewed for the survey has been asked to provide an estimate of the volume of IP valuations they conduct annually. In view of inevitable commercial sensitivities, this information has been collected in bands relating to annual levels of activity (1-10, 11-25, 26-50, 51-100 and so on).

The valuers interviewed represent a cross-section of the businesses engaged in IP valuation, from very large firms with up to 50 client-facing valuers, down to companies with only one or two staff engaged in the process, and including very large, and large accounting firms, as well as representatives of valuation boutiques that are both generalist and specialist. It is therefore considered reasonable, for indicative sizing purposes, to estimate activity levels by multiplying their interview statements on volume by a factor of three.

The counts of valuations conducted annually identified during the interviews with 12/15 firms – which represent around one-third of all the active UK-based valuation companies identified in the course of primary and secondary research - are shown in Table 6-6:

Table 6 6 The	number of	valuations	porformed by	different valuation firms	
Table 6-6. The	riurriber or	valuations	perioritied by	' amerem valuation illins	s .

Number of valuations conducted	Number of firms in this band	Implied approximate number of IP valuations (using mid-point)
1-10	3	15
11-25	1	17
26-50	1	38
51-100	3	225
101-200	3	450
201-400	1	300
TOTAL	12	1,045

The total number of valuations suggested by these sample responses is in the region of 1,050. If this is extrapolated across the remaining two-thirds of identified market participants, it suggests that the total is in the region of **3,500**. This would include not only those valuations that meet an established need (as defined above) but also those that fall into the 'opportunityled' category, and would therefore be expected to be larger than the total extrapolated from HMRC returns, considered separately in the following section.

#### 6.2.3. Evidence from valuers: value of IP valuation work

There are three other ways of quantifying market size in relation to the activities conducted by the valuation firms identified in the market:

- The number of firms providing IP valuation services. The basis for our estimate of 40 specialist companies is set out in the main report.
- The number of people engaged in IP valuation. This can be approximated from the interview responses and triangulated with internal industry estimates. This is set out in the main report.
- The amount spent on IP valuation activities. This is briefly referred to in the main report, but the estimates that can be derived from the data received are very broad, and therefore not helpful in reaching conclusions on market size.

Overall value is a desirable figure to obtain as it is a good measure of the size of the market. However, it is also a very elusive figure. Due to the commercial sensitivities involved and resulting need to gather information in bands, the total fee income is extremely hard to estimate with any degree of certainty. The range of prices provided is in some cases exceptionally broad, and some valuers declined to answer the question at all (either because it was regarded as too sensitive, or because they felt they could not offer a meaningful figure due to the wide variations in evidence).

The reason for the breadth of the pricing is that the complexity of individual valuation assignments can vary very broadly for a number of reasons. Variables discussed at interview include what the valuation's purpose is: whether the matter is contentious or non-contentious; how urgent or drawn out they are; how much information the company is in a position to provide; how much data analysis is needed to determine the most appropriate valuation route; as well as the mix of senior and junior team members engaged in the valuation process.

The lowest cost option (for use of an online tool intended to produce an indicative result) is  $\pounds 350$ . Bespoke valuation reports are on offer on the market starting from  $\pounds 1.5I$ , though a more typical figure from a larger firm might be a minimum of  $\pounds 7k$  -  $\pounds 8k$ , but will be substantially more in the case of a 'Big Four' accountant (partly because there is a certain cachet to having a valuation 'underwritten' by one of the best known accounting firms – but in turn, a larger liability for the firm in terms of the quality of work with which it is associated).

At the opposite end of the scale, the cost of valuation can run into £ms for highly contentious, complex, large and/or protracted cases dealt with by the Big Four accounting firms and some other specialists. Some of the firms interviewed were not able to provide an upper figure owing to the highly-differentiated nature of their assignments.

A conservative estimate can be produced by multiplying the approximate number of cases dealt with by each valuer by the lowest amount each company would normally charge, and also by the mid-point in the figures quoted (where this has been provided). Adjusting for the possible distorting effect of the online tool this produces the following figures:

Table 6-7. Estimate of the value of the IP valuation market in the UK. The figures in italics represent numbers where the firms themselves declined to supply information, but a figure can be approximated from other valuers.

Individual respondents arranged in order of valuation quantity band	Valuation quantity (number typically conducted per annum, as mid-point of band selected - see table 1.1)	Minimum price quoted by firm	Estimated minimum annual valuation revenue generated by firms	Mid-point of high and low prices quoted by firm (£000s)	Estimated average valuation revenue calculated using midpoint
		(£000s)	(£0003)	(£000s)	(£000s)
1	1-10	5	25	12.5	62.5
2	1-10	7	35	78.5	392.5
3	1-10	20	100	60	300
4	11-25	2	34	26	442
5	11-25	2.5	42.5	3.75	63.8
6	26-50	5	190	502.5	19,095
7	51-100	1.5	112.5	4.5	337.5
8	51-100	2.5	187.5	23.75	1,781.3
9	51-100	40	3,000	520	39,000
10	101-200	Assumed as 20	3,000	Assumed as 500	75,000
11	101-200	8	1,200	54	8,100
12	201-400	20	6,000	510	153,000
TOTAL			13,926.5		297,574.6

On the basis that the distribution of firms interviewed thus far is believed to be broadly representative of the IP valuation market as a whole, this figure needs to be multiplied by three to produce an overall estimate. If the lowest possible cost of every IP valuation were used as a benchmark, this would lead to a very low figure of approximately £50m annually. Since it is clear from our interviews that there are cases where valuations can be substantially more expensive based on their contentiousness, complexity, or the period of time over which they have to be done (whether exceptionally long, or exceptionally short), further calculations have been carried out using the mid-point of the price range quoted by valuers (where available). This produces a massively higher figure – over £1bn annually when multiplied by three.

The range of values indicated by this approximation is extremely broad and therefore of limited use, other than to demonstrate the effect that such wide price variations have on the estimation of the total market size.

Another way of determining an approximate figure could be to consider the turnover estimates associated with IP valuation activity. However, since the revenues generated by each of the valuation teams interviewed also include a wide variety of other activities, and is commercially very sensitive, this approach was not considered likely to yield a useful estimate.

## 6.3. Approach to gathering market size data

There are two limitations to consideration of the potential scope for IP valuations. The first is that, as seen in Figure 6-2 above, only some of the use cases for IP valuation can be examined using secondary data sources. The second is that the limit of what can realistically be determined is the number of occasions that might conceivably give rise to a requirement for an IP valuation, if the parties involved determined that it would be advantageous to have one conducted. However, this appears to be the best way of determining the extent to which the market for IP valuation has headroom for growth without the fundamentals changing (namely, that valuations are linked to events).

Many of the triggers for IP valuation are internal to a business and dependent on the strategic choices it makes. However, because the valuations are generally prompted by, or linked with, some transactional event, discovery of the relevant transactions makes it possible to extrapolate an estimate of the number of occasions where an IP valuation might reasonably be expected to add value to a process or a deal (and how many transactions there could possibly be depending on custom and practice). The indicators found to date are set out below in sections, together with their sources. These cover the following areas:

- Within the established need arena: the number of mergers and acquisitions being
  conducted in the UK that would generate the need for an assessment of IP value; the
  number of IP litigation cases heard by UK courts; the number of businesses undergoing
  an initial public offering or other market listing; the number of insolvency proceedings that
  might lead to a requirement to quantify value achievable from the sale of IP and intangible
  assets; and the volume of pension-backed funding arrangements.
- Within the opportunity-led arena: the number of equity investments made by
  individuals annually, where IP is likely to be a consideration (though not necessarily the
  prime consideration); the number of university spin-outs.
- Within the emerging applications arena: the number of loans provided to small and medium-sized businesses (since IP valuation is not currently an established requirement in such cases).

Pension-backed lending and university spin-out activity are not addressed in this Appendix as these are covered in sufficient detail in the main report.

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Another theoretical constraint on IP valuation relates to the proportion of companies that own IP rights which are capable of being valued – a point considered above. However, such figures do not include copyright assets (such as creative works and software) for which there is likely to be a periodic valuation requirement: and the requirements for post-purchase allocation to be conducted following merger and acquisition activity, for example, apply equally regardless of whether any registered IP rights actually exist.

Each of these areas is summarised in the main report: the following sections provide further detail on how they have been derived, and the detailed basis of calculation, for each of the three 'arenas' set out above.

# 6.4. Current and potential valuation volumes meeting an established need

#### 6.4.1. Merger & acquisition activity

Information on 'business combinations' – mergers and acquisitions – is collated on a quarterly basis by the Office for National Statistics. Three types of activity are recorded:

- Domestic acquisitions, where UK companies buy other firms also based in the UK which are all likely to give rise to a requirement for PPA, especially in the light of the revised UK GAAP that now includes FRS 102 provisions.
- Acquisitions of foreign companies made by UK businesses called 'outward M&A'.
   These will also require the UK company to account for what it has bought, including assessment of the balance sheet treatment of identifiable intangible assets.
- Acquisitions of UK companies by foreign companies 'inward cross-border' activity.
   These probably do not count towards the total number of transactions that are likely to involve a UK valuation process.

The notes provided by ONS indicate that the information collected is based on reports in the financial press, specialist magazines, company and financial websites, and is supplemented by special surveys to businesses to determine the form, value and timing of each transaction. Since the data collected is an important component within National Accounts and used for various other purposes by a variety of stakeholders it is likely to be the best available indication; however, there are sometimes timing issues that preclude the timely collection of fully comprehensive data.

The 2015 figures for all three categories are shown in the table below

Table 6-8. Mergers and acquisitions during 2015 (ONS)

	Domestic and cross-border M & A's involving UK companies (Total)	Domestic acquisitions (UK companies acquiring other UK companies)	Inward cross- border acquisitions and mergers in the UK	Acquisitions and mergers made abroad by UK companies (outward M&A)
Q1 2015 <sup>3</sup>	90	28	21	41
Q2 2015 <sup>4</sup>	93	46	21	26
Q3 2015 <sup>5</sup>	72	31	18	23
Q4 2015 <sup>4</sup>	98	41	24	33
Total	353			

When compared with prior years, the statistics appear to confirm the anecdotal view expressed during data collection for this study, namely that M&A activity is currently somewhat depressed and running at an unrepresentatively low level. In Table 6-9, only the information relating to the two categories of interest is shown, dating back to 2011:

Table 6-9. M&A activity from 2011 to 2015 (ONS)

	Domestic and outward M & A's involving UK companies (total excluding inward M&A activity)	Domestic acquisitions (UK companies acquiring other UK companies)	Acquisitions and mergers made abroad by UK companies (outward M&A)
2011	659	373	286
2012	388	266	122
2013	296	238	58
2014	278	173	105
2015	269	146	123

Even accounting for possible timing issues in the data collection, this source indicates that the current volume of PPA work following to UK accountants is likely to be **250-300 per annum**, less than half the volume that might be expected in a more buoyant year. This reduced level of demand relative to supply may explain why accounting firms consider there to be strong price competition at present.

<sup>3</sup> http://www.ons.gov.uk/businessindustryandtrade/changestobusiness/mergersandacquisitions/bulletins/mergersandacquisitionsinvolvingukcompanies/2015-06-02

<sup>4</sup> http://www.ons.gov.uk/businessindustryandtrade/changestobusiness/mergersandacquisitions/bulletins/mergersandacquisitionsinvolvingukcompanies/2015-09-08

<sup>5</sup> http://www.ons.gov.uk/businessindustryandtrade/changestobusiness/mergersandacquisitions/bulletins/mergersandacquisitionsinvolvingukcompanies/quarter3julytoseptember2015

<sup>6</sup> http://www.ons.gov.uk/businessindustryandtrade/changestobusiness/mergersandacquisitions/bulletins/mergersandacquisitionsinvolvingukcompanies/quarter4octobertodecember2015

#### 6.4.2. Litigation activity

In order to seek to estimate the potential size of this area of activity, data has been examined on the number of cases that are being handled by the specialist IP Enterprise Court (formerly the Patents County Court), including associated Small Claims Track activity, and the volumes associated with the Patents High Court and High Court.

The figures to 2013 that have been collected from the review of the IP Enterprise Court (IPEC) published by IPO<sup>7</sup> across all types of IP assets are as follows. In Table 6-10, the trade mark case count includes passing-off claims; design cases include registered and unregistered design rights.

Table 6-10. IPEC cases from 2009 to 2013

PCC/ IPEC: Case counts, 2009-20138							
Year	Patent	Trade Mark	Design	Copyright	Database	Total	
2009	8	61	16	30	2	117	
2010	8	45	18	37	2	110	
2011	27	57	27	57	3	171	
2012	26	82	39	66	1	214	
2013	17	96	49	106	4	272	
Total	86	341	149	296	12	884	

The above include the Small Claims Track as follows: 2012: 14 copyright, 1 trade mark case; 2013: 41 copyright, 2 design, 10 trade mark cases. There are an additional 2 SCT cases for which no information on the IP right involved is available.

These figures show a significant jump in numbers between 2010-2011, which coincides with (and is probably attributable to) the procedural changes and cost caps introduced to IPEC in 2010 and the damages cap introduced in 2011. There is a similar jump between 2012-2013 relating to copyright infringements which coincides with the introduction of the Small Claims Track in 2012.

The same report also lists the cases relating to intellectual property across the Patents High Court and the High Court over the same period (Table 6-11).

Table 6-11. High Court cases 2007-2013

PHC/HC: Case counts, 2007-20139								
Year	Patent	Trade Mark	Design	Copyright	Database	Total	Copyright♦ excl. PPL	Total♦
2009	49	66	14	265	4	398	57	190
2010	50	107	42	156	16	371	68	283
2011	92	107	21	324	22	566	76	318
2012	89	97	13	271	7	477	51	257
2013	61	60	19	241	6	387	77	223
Total	341	437	109	1257	55	2199	329	1271

The trade mark case count includes passing off claims (relating to unregistered marks) and the design cases listed include both registered and unregistered rights. The copyright figures are shown with and without music rights collecting society cases.

As can be seen from the table, the overall number of cases at the Patents High Court and High Court are significantly greater than those at IPEC; however, the difference is mainly accounted for by patents and copyright, within which the large majority of copyright cases relate to music rights and are brought by either Phonographic Performance Limited (PPL) or the Performing Rights Society (PRS).

Updated information relating solely to patents, indicating the number of cases that have been brought at the Patents High Court and at IPEC, was published in April 2016 (Table 6-12). It relates to the 2014 period and notes that it is common in the UK for there to be a counterclaim in relation to infringement and revocation. The total of 72 shown below compares with 78 in 2013.

Table 6-12. Patent cases heard at IPEC and the high court during 2014<sup>10</sup>

Classification	Count
Total number of patent actions	72
Involving at least 1 European patent	57
Involving at least 1 GB patent	15
Total number of patents in dispute	106
Total number of Eps	87
Total number of GBs	19

<sup>7</sup> https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/447710/Evaluation\_of\_the\_ Reforms\_of\_the\_Intellectual\_Property\_Enterprise\_Court\_2010-2013.pdf

<sup>8</sup> https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/447710/Evaluation\_of\_the\_ Reforms\_of\_the\_Intellectual\_Property\_Enterprise\_Court\_2010-2013.pdf

<sup>9</sup> https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/447710/Evaluation\_of\_the\_ Reforms\_of\_the\_Intellectual\_Property\_Enterprise\_Court\_2010-2013.pdf

<sup>10</sup> https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/514586/Unitary\_Patent\_Court\_ Case\_Counting.pdf

In view of the changes made to IPEC over the period studied, the latest available data would appear to be the most representative of the likely annual level of activity. The reduction in cases heard at the Patents High Court and High Court has declined, but has been offset by a much greater volume being handled by IPEC.

Therefore, the total number of IP-related cases that could potentially (but do not necessarily) require an assessment of damages or other litigation-related valuation work is in the region of 650-750 annually. The actual number of IP valuations will be dependent on the conduct and outcome of individual cases. Based on discussions from valuers operating in this space, it appears unlikely to be more than around one-third of this number, at most – probably around 200-250 events annually.

#### 6.4.3. Business listing activity

Here, only the various types of listing that apply to the London Stock Exchange (LSE) have been considered, in view of the probability that listings on other markets are likely to require local expertise.

LSE provides data sheets<sup>11</sup> on new issues and data on initial public offerings across its various markets - being the main market, international market, Alternative Investment Market (AIM) and Specialist Fund Market (SFM). The Professional Securities Market (PSM) is excluded, as there have been no new issues or IPOS during the 2011-2015 period, but ISDX (formerly known as Plus Markets) is included: this is provided separately<sup>12</sup> as it is now owned by ICAP (the acronym stands for ICAP Securities and Derivatives Exchange).

One of the rules associated with a listing is that an intellectual capital statement needs to be prepared for the benefit of investors, which would normally be assigned to an appropriately qualified individual.

#### The breakdown is as follows:

Table 6-13: list of company listings over time, by exchange<sup>13</sup>

Market	Year	Total #	of which IPO #
	2011	40	20
	2012	26	18
UK main market	2013	33	30
	2014	58	48
	2015	68	50
	2011	90	45
	2012	73	43
AIM	2013	99	61
	2014	118	79
	2015	61	33
	2011	21	10
	2012	10	5
International main market	2013	12	6
	2014	13	8
	2015	12	6
	2011	2	2
	2011	4	1
SFM	2012	7	6
(Specialist Fund Market)	2014	4	2
	2015	8	7
	2011	153	77
	2012	113	67
Total LSE	2013	151	103
	2014	193	137
	2015	149	96

<sup>13</sup> http://www.londonstockexchange.com/statistics/new-issues-further-issues/new-issues-further-issues.htm

<sup>11</sup> http://www.londonstockexchange.com/statistics/new-issues-further-issues/new-issues-further-issue

<sup>12</sup> http://www.isdx.com/investor-info/market-statistics/

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Market	Year	Total #	of which IPO #
	2011	22	-
	2012	9	-
Plus all ISDX	2013	5	-
	2014	2	-
	2015	22	-

Whilst the volumes fluctuate over the period studied, a maximum of 200 deals of this nature might be expected to complete a flotation process. However, there will be an additional number of planned flotations for which preparations are made, but which (for various reasons) do not ultimately make it to market. The estimated volume of IP valuation business (as part of intellectual capital statement preparation) may be higher – **perhaps 300 annually**.

#### 6.4.4. Insolvency proceedings

When studying insolvencies, all individual insolvencies (personal bankruptcies, debt relief orders and individual voluntary arrangements) are eliminated from consideration and only company insolvencies (administrations, company voluntary arrangements and receiverships) have been investigated. These can be broken down by type as follows:

- In the case of liquidation, the legal process is aimed at 'winding up' the affairs of the company, selling the assets and distributing proceeds to creditors, after which the company is dissolved. If there are valuable intangible assets such as IP remaining in the business at this time, it could be sold as part of this process. The liquidation may be compulsory because a winding-up order has been obtained by a creditor, shareholder or director, or voluntary liquidation, where the shareholders agree that the company should be wound-up. A third type, members' voluntary liquidation, is not included in the Insolvency Service figures because it means all creditor's debts are paid in full (i.e. the company is not insolvent).
- Where a company enters administration, it is generally with a view to rescuing the
  company as a going concern, or recovering more value than would be achieved via
  winding up. It may ultimately be liquidated (in which case it is included in the figures for
  liquidation) or it may be returned to the control of directors and management.
- A company voluntary arrangement is another mechanism for business rescue by paying creditors some or all of what they are owed. This process is supervised by a licensed insolvency practitioner.
- A receiver may be appointed under conditions of insolvency (for example, where a
  creditor with a floating charge such as a bank appoints an insolvency practitioner to
  recover the money it is owed) or under non-insolvency conditions.

The information in Table 6-14 relates to 2015 and is taken from the January – March 2016 official statistical summary of the Insolvency Service, in which the numbers are indicated as being 'provisional'. These figures relate to England and Wales, to which can be added a further 1,258 total insolvencies relating to Scotland and Northern Ireland: the creditors' voluntary liquidations and administrations figures are 'seasonally adjusted'.

Table 6-14. Total company insolvencies during 2015 (England & Wales only)

Туре	2015 Q1	2015 Q2	2015 Q3	2015 Q4	Provisional Total
Total company insolvencies	3830	3712	3593	3495	14630
Compulsory liquidations	908	769	614	583	2874
Creditors' voluntary liquidations (excluding following administration)	2506	2477	2514	2484	9981
Administrations	329	374	354	350	1407
Company voluntary arrangements	86	85	110	76	357
Administrative receiverships	1	7	1	2	11

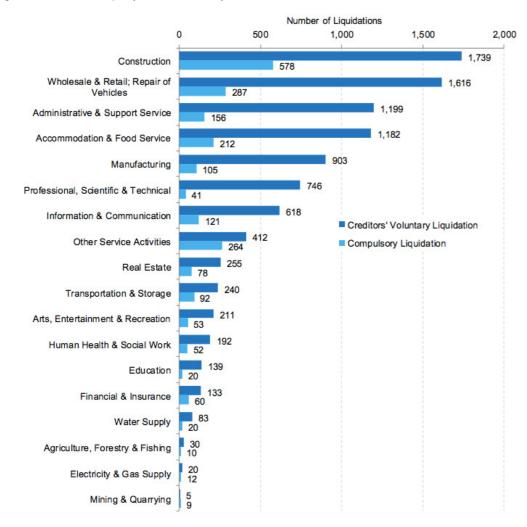
Discussions with insolvency practitioners have highlighted that the presence of potentially valuable IP assets will only lead to a valuation being conducted in a minority of cases. To estimate the actual proportion of the 16k or so insolvencies currently occurring annually across the whole of the UK which may fall into this category, the breakdown of insolvencies by sector has been studied, as provided in the experimental statistics generated by the Insolvency Service as part of its quarterly reporting outputs.

Previous analytical work by UK IPO into patents registered by SMEs in 2014 indicated that three sectors (Manufacturing, Professional and Scientific and Information and Communications) accounted for more than 50% of all filings. The data below indicates that these three sectors combined accounted for 2,327 creditors' voluntary liquidations and 267 compulsory liquidations in 2014. It therefore appears reasonable to conclude that in these cases as a minimum, there could be reasons for studying the recoverable IP assets.

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Figure 6-3. 2015 company insolvencies by sector



2,327 plus 267 produces an estimate that at least 2,500 insolvencies per annum might potentially require an assessment to be made of IP and intangible asset value with a view to disposal. However, soundings from insolvency practitioners indicate that the actual number of occasions on which IP assessment and valuation happens is substantially less than this. If only 10-20% of cases involved any detailed consideration of IP value, this would place the figure between 250 and 500 cases annually.

# 6.5. Current and potential valuation volumes that are opportunity-led

#### 6.5.1. Information sources

When a company raises investment by issuing equity, it is necessary to place a value on the shares. In the case of an early stage company, it is often the case that the majority of any value in the company will relate to intangible assets. While it does not follow that such share valuations are based on a **specific** assessment of IP asset value, a range of valuers have identified that work does arise from equity deals, suggesting that this is an important area for IP valuation, particularly amongst smaller and early stage companies.

The main sources examined in order to derive an estimate of activity levels (which are very likely to contain a significant amount of overlap) are:

- From official records, the number of companies receiving investment under the Enterprise Investment Scheme (EIS) and Seed Enterprise Investment Scheme (SEIS).
- From industry databases, the number of fundraisings recorded by British Venture Capital
  Association (BVCA) members and the number of entries on the Beauhurst database of
  completed finance rounds. The first of these is based on survey data, but with a very
  high level of compliance; we understand the second is generally derived (in the first
  instance) from SH01 form returns to Companies House (these forms record changes to
  share capital, and are a mandatory requirement).

Previous industry reports containing activity estimates from Nesta have also been examined.

Another area identified by valuers, where IP valuations are sometimes sought, relates to university spin-out activity. While there is likely to be at least some overlap between the equity investment data gathered in the following section, and the creation of new companies by universities, it appears worthwhile seeking to quantify this activity separately to lend confidence to the overall estimates being developed. This aspect is not included within the Appendix, as the findings are incorporated within the main report.

#### 6.5.2. Official sources of data on equity investment levels

EIS, first launched for the 1993-4 tax year, and the more recent SEIS both provide attractive tax benefits for qualifying individuals who decide to invest in early stage companies and are prepared to maintain their stakes for a minimum period: SEIS is primarily designed to support very early investment rounds and has more benefits, but more restrictions. The latest data<sup>14</sup> available on EIS and SEIS relates to the 2014-15 fiscal year, though since applications for EIS relief also have a 'carry-back' facility associated with them<sup>15</sup>, there can often be a time lag (reflected in the fact that the prior year's figures have been restated at the same time).

3,130 companies are recorded as having received EIS qualifying investment totalling £1.66bn during the period (2013-14: 2,820 companies, £1.57bn). Of this, half (£880m) related to first time investments, a similar figure to the prior year (2013-14: £881m). There were also 2,185 companies receiving investment under SEIS, raising £168m (2013-14: 2,090, £170m), the vast majority of which (1,715) were raising finance for the first time. The average amount raised under EIS is therefore £530k, much higher than with SEIS (which has a restriction of £100k maximum investment per annum per investor, and £150k in total), with its average of £77k.

This suggests a total of around 5,300 fundraisings annually where individual investors are involved. However, while each individual dataset should not contain overlapping companies, the combined EIS and SEIS sample is quite likely to involve some duplication (with SEIS recipients moving out of the scope of SEIS provision within the same tax year and taking a further round under EIS instead). If, by way of illustration, this has happened in half the cases where SEIS funding has been obtained, it would bring down the overall total of companies receiving qualifying investment annually to around 4,200.

Against this must be set the fact that many investments fall outside the scope of either of these reliefs: for example, investments do not qualify if made by way of certain instruments such as convertible loans. This could make a significant difference to the overall estimates - a 2009 report by Nesta found that only 57% of angel investments qualified for EIS reliefs<sup>16</sup> - but given that reliefs have been made more generous during this time it appears doubtful that the figure would be as low if measured again. If it is assumed that the 57% figure has increased to between two-thirds and three-quarters of all private investments of this nature, it would indicate an annual volume of between 5,600 and 6,200 companies annually.

Since EIS relief is limited to individuals, corporate investment would not be included within these figures unless a combination of angel and institutional funding was involved. However, this is not an uncommon occurrence where companies experience rapid growth. A VCT fund, venture capital company or private equity firm, would be likely to engage in broader technology evaluation work, which would probably be done in-house as part of due diligence activity: this may or may not seek to establish a separate value for the IP, but would generally consider the sustainability of the technology involved (if any) and other areas of competitive advantage.

#### 6.5.3. Industry sources of investment data

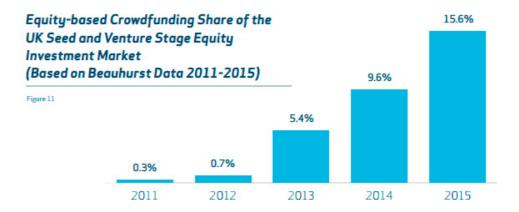
The BVCA collects statistics on investment levels and publishes them annually in its Report on Investment Activity<sup>17</sup>. While based on survey data, the level of participation from the 137 BVCA members is high at 93% (and has previously been as high as 100%). The 2015 figures, published in August 2016, estimate that domestic (UK) investment was made in 795 companies (up from 728 the previous year) and the amount invested increased to just under £6bn in total (from £4.7bn in 2014). This will be mostly additional to the EIS numbers shown above.

BVCA members also make international investments. When the value of these transactions is included, the 2015 numbers rise to 965 and almost £17bn (reflecting the fact that while investments in UK businesses are numerically far greater, representing 82% of all deals reported, overseas investment is often larger: UK investments only account for 35% of deals by value). The character of these types of investment also varies, with venture capital and expansion capital accounting for 80% of domestic investments by number, but only 47% of overseas investments on the same basis.

As a separate indicator of activity, the 2015 edition of Beauhurst's summary of investment activity, 'The Deal' (which does not follow all businesses) records a total of 2,989 investment transactions, of which 1,640 were not publicly announced. The value of investment in UK start-ups and scale-ups quoted in the report is calculated by the company to be worth over £4.9bn, reinforcing the presumption that a substantial proportion of total investment received is not EIS qualifying (because it comes from corporate entities).

Beauhurst data has also been used separately to seek to reach a view on the significance of seed and venture stage equity crowdfunding (Figure 6-4):

Figure 6-4. Equity-based Crowdfunding Share of the UK Seed and Venture Stage Equity Investment Market (JBS, based on Beauhurst Data 2011-2015)



<sup>14</sup> See https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/519345/April\_2016\_ Commentary\_EIS\_SEIS\_Official\_Statistics.pdf

<sup>15</sup> https://www.gov.uk/government/publications/the-enterprise-investment-scheme-introduction/enterpriseinvestment-scheme

<sup>16</sup> http://www.nesta.org.uk/sites/default/files/siding\_with\_the\_angels.pdf

<sup>17</sup> http://www.bvca.co.uk/Portals/0/library/documents/BVCA%20RIA%202015.pdf

By back-calculating, we can infer that of Beauhurst's total amount raised, 15.6% of the £4.9bn identified represents £764m. This figure seems high compared with other indications (for example the JBS Pushing Boundaries report<sup>18</sup>) puts the 2015 figure for total equity-based crowdfunding at £332m, or £245m excluding real estate: also the largest platform, Crowdcube, reports on its website<sup>19</sup> that it had 166 successful raises in 2015, totalling £83m (out of a total of £118m invested).

JBS concludes that the total number of equity crowdfunding deals in the UK has grown rapidly and stood at 720 in 205, according to its alternative finance industry tracking data. We believe this sounds about right: if the Beauhurst total is broadly correct, and the Crowdcube data is representative of other platforms in value terms (which may not be the case), it would suggest that between 1,100 and 1,500 companies would be managing to obtain equity crowdfunding annually. It is important to note that there will be an overlap between this data and returns relating to EIS.

When the data from EIS returns and venture capital activity (including private equity and similar types of corporate investment) is brought together, it suggests that the total volume of transactions is not less than 6,400 companies.

## 6.6. Current and potential valuation volumes for emerging applications

#### 6.6.1. Information sources

Four areas referenced by valuation providers and users fall into this category, and appear to have significant potential to influence future IP valuation volumes. Some are occasionally in evidence now; others are aspects that are attracting industry comment. These are developments in the use of IP as security for lending; greater use of insurance to protect an agreed IP value; possible changes to the regulatory regime that would provide additional incentives to add IP assets to company balance sheets; and additional shareholder pressure to ensure all IP assets are being appropriately utilised.

The area that lends itself to quantification is the first of these, relating to lending. Some national and international precedents for lending against IP assets and their effects on IP valuation are summarised below. The current volumes associated with bank term lending, and some estimates of activity associated with alternative finance, are set out in the following two sections, to illustrate the potential difference they could make. However, it must be stressed at the outset that the presence or absence of collateral is one of many considerations entered into by lenders when determining whether to provide business finance.

On IP insurance, interviews have confirmed that any move towards greater use of IP valuations is inextricably linked to developments in IP finance. At present, IP insurance deals primarily with pursuit and defence cover to give businesses confidence that they can afford to defend their IP if challenged, and prosecute infringers if needed. This is driven from estimates of risk and cost of legal protection and is not directly linked to the intrinsic value of the IP - it is taken as a given that such value exists, but it is not the business of the agent, broker or underwriter to quantify it. The question of volume is considered in a little more detail below.

The question of changes to financial accounting regulations is acknowledged here, but not specifically modelled below. This is for the following reasons:

- There is no doubt that the implications of a change that made it easier to bring internally generated IP onto the balance sheet could be considerable. One of the key underlying presumptions that prevents this from happening in accounting regulations is that there is no established market on which such assets can be traded. Should such markets be created in future, subject to the issues of comparability that are familiar (and often insuperable), challenges for IP valuers, it would not be unduly difficult to argue that the value of specific identifiable assets on the balance sheet should be the price they would command in the market. There seems little prospect of this happening in the foreseeable future for most assets – at least to the level of consistency and transparency required – though it is not inconceivable that this could be done for certain, specified assets (there is already an exception relating to certain specific types of licences and permits that are regularly traded, for example).
- Interviews with accounting firms who have been involved in many transactions that have brought assets onto balance sheets (for a variety of reasons) caution that while such activity has short-term benefits in making company accounts look more substantial, it also has drawbacks. These include the fact that value is memorialised at a particular point in time, and then has to be reviewed annually for impairment or (depending on the treatment applied) amortised over a set period. Any impairment, and all amortisation, affects bottom-line company profitability and could (in extremis) influence distributable proceeds. More importantly perhaps, it means that the value of the assets may appear to be going down, when in fact they may be going up; and there is no opportunity to reflect the value that is being added to these assets through ongoing company investment, other than (in some cases) at cost.

In the absence of any specific proposal, it is very difficult to establish how many companies might be motivated to value their IP by any such change.

The effects of increased shareholder pressure have not yet been extensively tested. The question arises from the (admittedly quite infrequent) occasions on which substantial amounts of IP value have been recovered when business assets are disposed of following an insolvency event. The specific disposals that triggered attention a few years ago, related to the Nortel patents, which raised billions of dollars - raising the question of why this value was not harnessed in order to keep the business afloat.

<sup>18</sup> https://www.jbs.cam.ac.uk/fileadmin/user\_upload/research/centres/alternative-finance/downloads/2015-ukalternative-finance-industry-report.pdf

<sup>19</sup> Information obtained from www.crowdcube.com on 15/12/2016

Conceptually, companies should be reporting asset values to shareholders, which would require an assessment that went beyond any capitalisation of intangibles on their balance sheets. However, it will probably require shareholders to take successful legal action in these circumstances in order to provide the necessary incentive for companies to comply, as the risk of not declaring and actively managing assets for maximum value would currently be perceived to be low.

#### 6.6.2. Summary of principles and practices in IP-related lending

Aspects of IP valuation relating to the use of intellectual and intangible assets as security for lending have been explored in some detail in the 2013 Banking on IP? report. There is little doubt that routine consideration of intangible assets by banks and other lenders would drive a significant increase in IP valuation activity.

Certain types of IP assets – for example, copyrights in films, books and music – have formed a basis for specialist lending activity over a number of decades where they are associated with identified and generally predictable recurring income streams, or with confirmed contracts. The film and TV industries, for example, have access to certain tax reliefs that facilitate project financing. Under such circumstances, the existence of these reliefs relating to expenditure incurred, together with commissioning structures that deliver a guaranteed purchaser, confirmed distribution channels, and companies that specialise in completion bonds, make it possible to finance such assets even as they are being created (some will be in existence from the beginning: for example, there will generally be a film script before a film is financed).

Assets of this kind can also be regarded as 'finished artefacts' that feature in libraries and catalogues, and if there are recurring income streams associated with them, this too may form a suitable basis for lending. While the rights that apply and their ownership may vary by jurisdiction (in some territories, it is much more difficult to obtain and enforce legal charges, for example, than is the case in the UK), the legal underpinning of copyright law means that if demand exists, they can be exploited in the long term. However, lenders will wish to see such libraries and catalogues being regularly refreshed (since in practice copyright assets are far from immune to changes in consumer demand).

In this latter case (which is less frequently seen than project finance, but does occur from time to time), the future forecast incomes will be examined based on past performance and a discounted cash flow calculation applied. This, in turn, may be used in conjunction with a multiple (based on industry precedents and experience) that will set an overall value for a library that can be used as the basis for considering a loan. The amount of value that can be unlocked will depend on how much confidence the lender has that the predicted cash flows will materialise (interviews have confirmed that this comfort can be increased when a professional IP audit and valuation from a recognised source are available).

Lending has also been secured against other forms of intellectual property in the past, and venture debt (currently offered by some mainstream lenders such as Barclays and Clydesdale as well as specialist funds) frequently takes security over IP. With some exceptions, these tend to be larger loans (£ms) that are sufficiently big that they can support the costs of specialist due diligence and valuation work where required.

A slightly different position is evident in the US, where analysis of the US Patent and Trade Mark Office databases by Relecura confirms that patents in particular are taken as security on a relatively frequent basis. This is due in part to the different security regime in the US, which provides additional entitlements under Article 9 of the Uniform Commercial Code. As reported in recent article in IAM magazine<sup>20</sup>, the top six lenders (JP Morgan Chase, Bank of America, Citigroup, Wells Fargo, Wilmington Trust and Deutsche Bank) accounted for twothirds of patent-related lending by overall transaction volume.

However, this activity does not necessarily involve IP valuation. The main motivation for using the patents as security is to have an opportunity to influence borrower behaviour in the event of default (because of the sanction of having an effective charge over them in extremis). This is an important factor (in the same way as taking personal guarantees may enable lending to happen where it would otherwise not take place), but it does not mean that a specific value has been attributed to the assets for the purposes of supporting bank capital adequacy. Also, the main beneficiaries appear to be large corporations: the top seven (accounting for 20% of all patents used in this way) were GM, Avago, Alcatel-Lucent, Kodak, Freescale Semiconductor, Seagate and Dell.

The question raised in Banking on IP? which remains an ongoing area of policy interest, is whether IP can achieve the status of collateral. Whilst banks will point out that serviceability is a much more important lending consideration, such a development has the potential to reduce business borrowing costs, improve bank returns and increase overall lending. This is because secured finance does not compel banks to provide capital coverage for the collateral value element. Such factors would be particularly important in terms of improving access to finance for high growth businesses, most of which also lack tangible assets that can be offered as collateral.

The need to support these businesses has resulted in the development of a number of government-backed schemes, most particularly in Asia, and most prominently in China and Korea, and more recently in Malaysia and Singapore. The support provided in such cases extends not only to underwriting potential losses (ranging from 50% to what amounts to 100%) but may also provide opportunities to reclaim costs associated with the valuation process (in Singapore, for example, businesses may reclaim 50% of valuation costs, but only after completing drawdown).

<sup>20</sup> Available to view at http://www.iam-media.com/blog/detail.aspx?g=903ced39-1ddb-40ec-8688-af0458629e2d

All of these schemes require IP valuation, and while they impose different requirements, this has clearly led to additional business for valuers, including from the US and UK. Separate primary research by Inngot, much of it conducted in-country, has confirmed that approaches to regulation and practice vary:

- In Malaysia, for example, substantial effort has been put into training local companies (though most valuations are still being done by firms based outside the country, including some from the UK). A 'Salient Principles' document has been developed (with expert valuer input) concluding that relief from royalty should be the default method of valuation, though other methods can be used as a cross-check. In Singapore, a formalised panel of valuers has been established, 50% of whose costs can be reclaimed if the loan is subsequently agreed and drawn down (though since this introduces an element of risk, the process generally starts with a simple initial indication in order to confirm the transaction is viable).
- In China, the China Appraisal Society (very closely linked with government) promotes standards, and valuers have to be members when valuation is being done for certain specified purposes, such as when publicly funded assets are being transferred (except via auction). In Korea, control is closest of all: of the 11 organisations authorised to conduct IP valuations as at March 2016, 9 are state-owned.

The following section considers the potential implications, were some broadly similar form of intervention to be introduced in the UK.

#### 6.6.3. Volumes of bank term lending activity

Figures on lending to small and medium businesses, who would be the most numerous beneficiaries of any IP-backed scheme, are released on a quarterly basis by the British Bankers Association<sup>21</sup> based on returns from seven banking groups. Looking purely at term loans, just under 150k applications were made by SMEs in 2015 (compared with approximately 172k in 2014), of which 81% were approved for small businesses and 90% for medium businesses. Clearly any scheme based around IP would only apply to a minority of these companies, though it could still be a substantial number.

Information on the take-up of guarantee schemes in other countries is patchy, partly because most are quite young. The best reference point may be the UK's own Enterprise Finance Guarantee (EFG) scheme (provided to assist smaller businesses who meet bank serviceability and other lending criteria, apart from the absence of collateral), which has been running for a number of years.

Figures published in 2012<sup>22</sup>, which are believed to reflect the latest detailed analysis available, indicate that EFG loans then were running at the level of around 3k annually (this was less than half the level seen in 2009/10). These may have further reduced since, for a variety of reasons. The comparison is far from perfect (since EFG is designed to cope with absence of collateral, but not elevated technology dependency or growth-related risks) but does confirm that collateral is an issue that banks require assistance to overcome in certain circumstances, and that the occurrence of collateral issues is not so infrequent that IP financing would be a tiny niche.

#### 6.6.4. Alternative financing approaches

Whilst it remains the case that the vast majority of small and medium sized enterprises continue to use major banks as their primary source of lending support, there have been changes in the lending market that partially parallel the impact crowdfunding has had in the equity space. Whilst alternative lending is still not widespread, it could be disproportionately beneficial to less established companies with a high dependency on IP, and is on a rapid growth curve: a 2013 Nesta study<sup>23</sup> found that peer-to-peer business lending had reached £193m, while the JBS report of 2015<sup>24</sup> found that non-real estate backed business peer to peer lending had risen to £881m.

In addition to this business peer-to-peer activity (occurring via organisations such as Funding Circle), other routes to improve working capital and leverage assets are increasingly finding favour with businesses. For example, invoice factoring and discounting has been available through mainstream and specialist lenders for many years, as part of an established banking relationship, but has recently been 'opened up' for ad-hoc usage via companies such as MarketInvoice and Platform Black, who use crowdfunding principles to provide early settlement.

Asset finance also lends itself to use with IP, and in this space, attributing an appropriate value to the assets is particularly important, especially given the difficulties in recovery. Several asset finance specialists have lent against intangibles in the past; at present the most active participant in this space is Lombard Technology Solutions, which lends against business-critical software on a sale and license-back basis. It has a particular approach to valuing the IP, which is biased in favour of investment made and adapted from the tests it would traditionally have performed on tangible assets.

<sup>21</sup> See for example https://www.bba.org.uk/news/statistics/sme-statistics/bank-support-for-smes-4thquarter-2015/#

<sup>22</sup> https://www.gov.uk/government/statistics/number-of-enterprise-finance-guarantee-efg-scheme-loans-drawn

<sup>23</sup> https://www.nesta.org.uk/sites/default/files/the\_rise\_of\_future\_finance.pdf

<sup>24</sup> https://www.jbs.cam.ac.uk/fileadmin/user\_upload/research/centres/alternative-finance/downloads/2015-ukalternative-finance-industry-report.pdf

#### 6.6.5. IP insurance

Interviews conducted for this study confirm that at the moment, IP insurance does not represent a significant opportunity for IP valuation, for reasons associated with both process and volume.

There is clearly an underlying presumption that the IP for which cover is sought delivers value to the business paying the premium (otherwise, they would not be willing to pay to protect it). However, the focus when underwriting and setting premiums is on seeking to understand the level of infringement risk and subsequent order of magnitude of the costs of pursuit and defence (in the normal course of things, these are markedly higher in the case of patents than other rights, and higher in the US than anywhere else).

Understandably, no-one associated with IP insurance as it currently stands wishes to talk in detail about how low the volumes of IP insurance policies purchased annually is. However, the small number of agents, brokers, underwriters and insurers engaged in current activity, together with the explanations provided on how difficult it is to persuade companies that the cover provided is good value, suggest that the absolute maximum number taking it out is barely into three figures, and may well be less.

The context in which insurance might have significance in the future is in its use in connection with underwriting IP for finance. Here, any such figure will already be incorporated within the preceding sections.

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