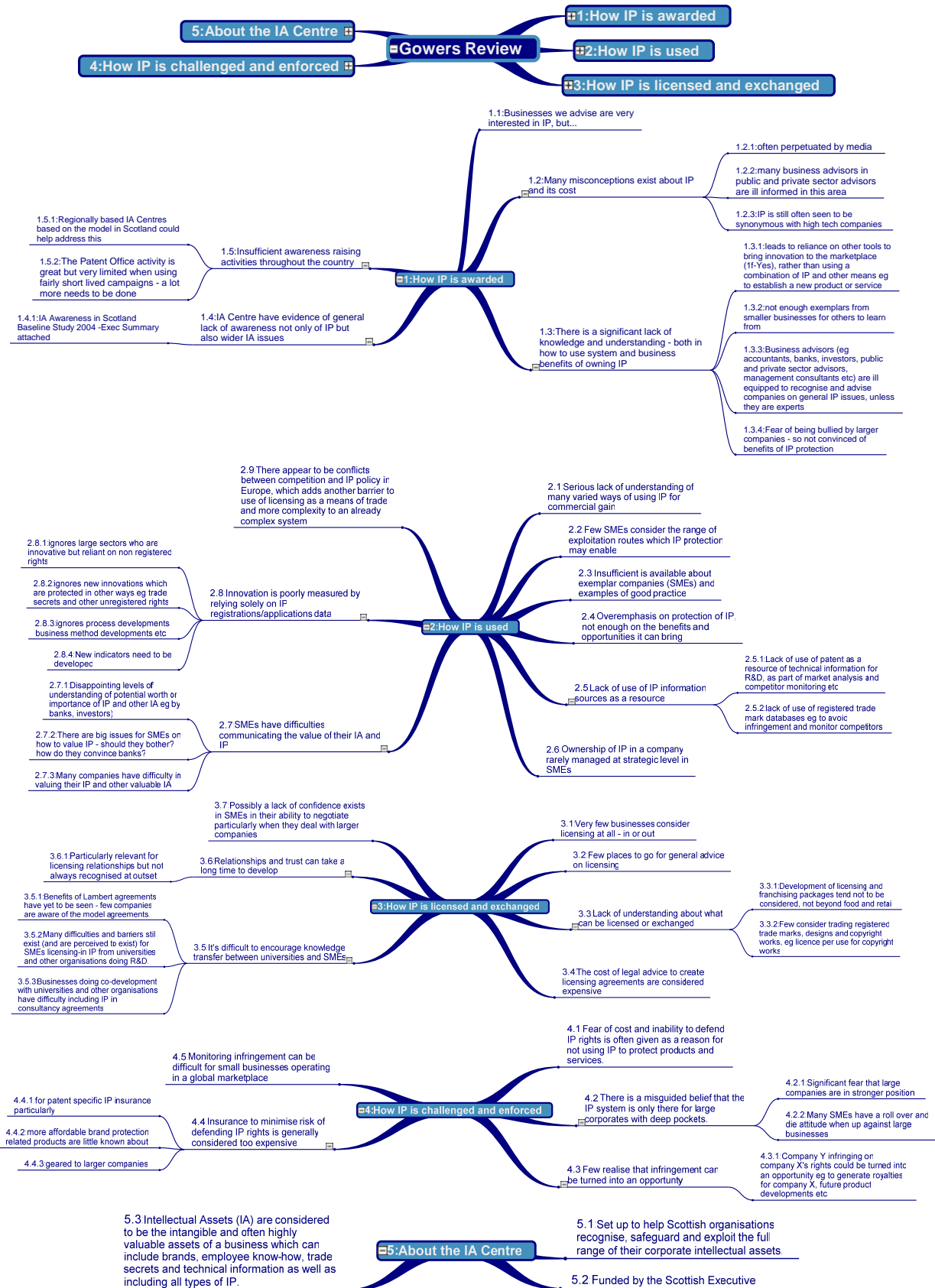
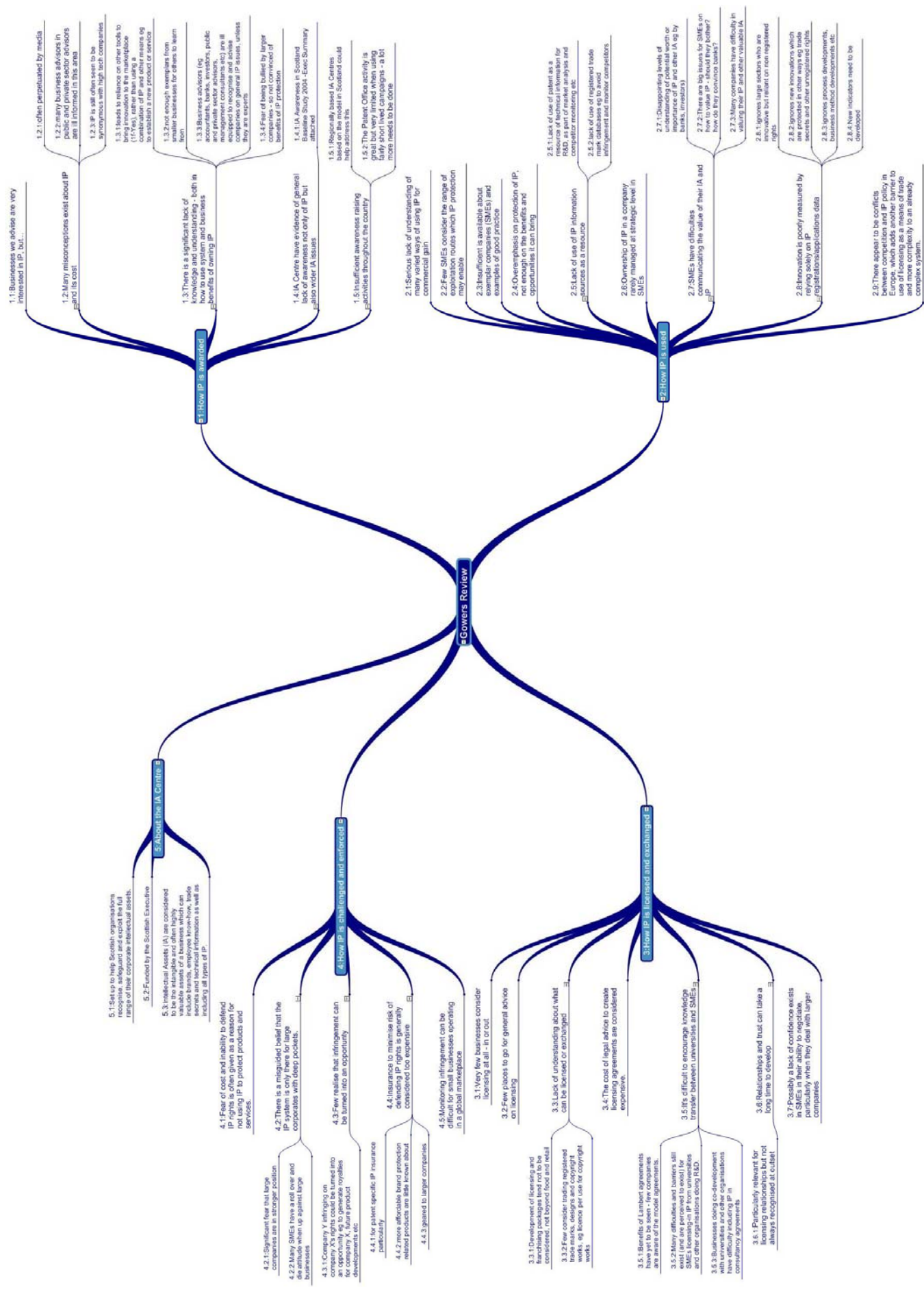


Intellectual Assets Centre Comments to Gowers Review of IP

Comments are first presented as mindmap images responding to each general question, in an overview mindmap image and finally in a conventional text list format. Additional supporting evidence from our customer survey will be forwarded as soon as it becomes available to give insight into the various company motivations to protect, manage and exploit their intellectual assets more effectively.





IA Centre comment (conventional list format)

1. How IP is awarded

- 1.1. Businesses we advise are very interested in IP, but...
- 1.2. Many misconceptions exist about IP and its cost
 - 1.2.1. Often perpetuated by media
 - 1.2.2. Many business advisors in public and private sector advisors are ill informed in this area
 - 1.2.3. IP is still often seen to be synonymous with high tech companies
- 1.3. There is a significant lack of knowledge and understanding - both in how to use system and business benefits of owning IP
 - 1.3.1. Leads to reliance on other tools to bring innovation to the marketplace (1f-Yes), rather than using a combination of IP and other means eg to establish a new product or service
 - 1.3.2. Not enough exemplars from smaller businesses for others to learn from
 - 1.3.3. Business advisors (eg accountants, banks, investors, public and private sector advisors, management consultants etc) are ill equipped to recognise and advise companies on general IP issues, unless they are experts
 - 1.3.4. Fear of being bullied by larger companies - so not convinced of benefits of IP protection
- 1.4. IA Centre have evidence of general lack of awareness not only of IP but also wider IA issues
 - 1.4.1. IA Awareness in Scotland Baseline Study 2004 -Exec Summary attached as supporting evidence
- 1.5. Insufficient awareness raising activities throughout the country
 - 1.5.1. Regionally based IA Centres based on the model in Scotland could help address this
 - 1.5.2. The Patent Office activity is great but very limited when using fairly short lived campaigns - a lot more needs to be done

2. How IP is used

- 2.1. Serious lack of understanding of many varied ways of using IP for commercial gain
- 2.2. Few SMEs consider the range of exploitation routes which IP protection may enable
- 2.3. Insufficient is available about exemplar companies (SMEs) and examples of good practice
- 2.4. Overemphasis on protection of IP, not enough on the benefits and opportunities it can bring
- 2.5. Lack of use of IP information sources as a resource
 - 2.5.1. Lack of use of patent as a resource of technical information for R&D, as part of market analysis and competitor monitoring etc

- 2.5.2. Lack of use of registered trade mark databases eg to avoid infringement and monitor competitors
- 2.6. Ownership of IP in a company rarely managed at strategic level in SMEs
- 2.7. SMEs have difficulties communicating the value of their IA and IP
 - 2.7.1. Disappointing levels of understanding of potential worth or importance of IP and other IA eg by banks, investors)
 - 2.7.2. There are big issues for SMEs on how to value IP - should they bother? how do they convince banks?
 - 2.7.3. Many companies have difficulty in valuing their IP and other valuable IA
- 2.8. Innovation is poorly measured by relying solely on IP registrations/applications data
 - 2.8.1. Ignores large sectors who are innovative but reliant on non registered rights
 - 2.8.2. Ignores new innovations which are protected in other ways eg trade secrets and other unregistered rights
 - 2.8.3. Ignores process developments, business method developments etc
 - 2.8.4. New indicators need to be developed
- 2.9. There appear to be conflicts between competition and IP policy in Europe, which adds another barrier to use of licensing as a means of trade and more complexity to an already complex system.

3. How IP is licensed and exchanged

- 3.1. Very few businesses consider licensing at all - in or out
- 3.2. Few places to go for general advice on licensing
- 3.3. Lack of understanding about what can be licensed or exchanged
 - 3.3.1. Development of licensing and franchising packages tend not to be considered, not beyond food and retail
 - 3.3.2. Few consider trading registered trade marks, designs and copyright works, eg licence per use for copyright works
- 3.4. The costs of legal advice to create licensing agreements are considered expensive.
- 3.5. It's difficult to encourage knowledge transfer between universities and SMEs
 - 3.5.1. Benefits of Lambert agreements have yet to be seen - few companies are aware of the model agreements.
 - 3.5.2. Many difficulties and barriers still exist (and are perceived to exist) for SMEs licensing-in IP from universities and other organisations doing R&D.
 - 3.5.3. Businesses doing co-development with universities and other organisations have difficulty including IP in consultancy agreements
- 3.6. Relationships and trust can take a long time to develop
 - 3.6.1. Particularly relevant for licensing relationships but not always recognised at outset

- 3.7. Possibly a lack of confidence exists in SMEs in their ability to negotiate, particularly when they deal with larger companies

4. How IP is challenged and enforced

- 4.1. Fear of cost and inability to defend IP rights is often given as a reason for not using IP to protect products and services.
- 4.2. There is a misguided belief that the IP system is only there for large corporates with deep pockets.
- 4.2.1. Significant fear that large companies are in stronger position
- 4.2.2. Many SMEs have a roll over and die attitude when up against large businesses
- 4.3. Few realise that infringement can be turned into an opportunity
- 4.3.1. Company Y infringing on company X's rights could be turned into an opportunity eg to generate royalties for company X, future product developments etc
- 4.4. Insurance to minimise risk of defending IP rights is generally considered too expensive
- 4.4.1. For patent specific IP insurance particularly
- 4.4.2. More affordable brand protection related products are little known about
- 4.4.3. Geared to larger companies
- 4.5. Monitoring infringement can be difficult for small businesses operating in a global marketplace

5. About the Intellectual Assets Centre

- Set up to help Scottish organisations recognise, safeguard and exploit the full range of their corporate intellectual assets.
- Intellectual Assets (IA) are considered to be the intangible and often highly valuable assets of a business which can include brands, employee know-how, trade secrets and technical information as well as including all types of IP.
- Funded by the Scottish Executive.



Intellectual Assets Centre
realising Scotland's potential

Intellectual Asset Management in Scotland: Baseline Study

Executive Summary

Prepared by:



In a modern, knowledge-based economy, it is critical that businesses can take full advantage of their knowledge and intellectual assets. The ability to exploit these assets is an increasingly important source of competitive advantage and company value, and will drive productivity gain. The better exploitation of Scotland's IA will play a key role in improving the future economic well-being of the nation.

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1. Introduction

In a modern, knowledge-based economy, it is critical that businesses can take full advantage of their knowledge and intellectual assets (IA). The ability to exploit these assets is an increasingly important source of competitive advantage and company value, and will drive productivity gain. The better exploitation of Scotland's IA will play a key role in improving the future economic well-being of the nation.

The Intellectual Assets Centre (IA Centre) was recently established with a remit to champion and support the issues relating to intellectual assets (IA) and their importance to Scotland's corporate sector. It's funded by the Scottish Executive, and the Enterprise Networks, along with the Scottish Executive, are the main stakeholders in the IA Centre. The organisation will target its services and support at businesses throughout Scotland.

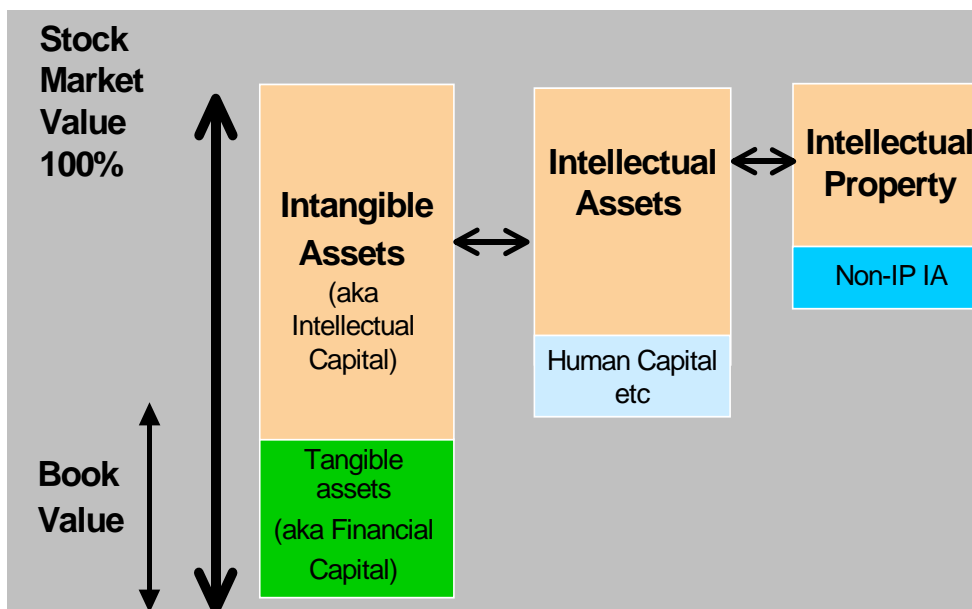
In order to inform the development of the IA Centre's activities, EKOS Limited was commissioned to research current levels of awareness and understanding of IA and extent of engagement in IA management (IAM) activities amongst Scotland's business base. This is a summary of the findings of that research.

1.1 What are Intellectual Assets?

All companies have assets, or items that have value. Some of these assets are physical and tangible. These tangible assets would include fixed physical assets such as premises and moveable assets like IT equipment or cars. However, businesses also have less tangible assets, often referred to as intellectual capital (IC). These include the skills and knowledge of the people that work in the company, brands owned by the company, the company names and reputation, trade secrets and intellectual property such as patents, trademarks and copyright.

To explain these terms in more detail, it is useful to consider the value of a stock listed company. Microsoft Corporation has a current market value of \$264bn (Business Week, 2003), and yet the balance sheet for 2003 shows total assets of just less than £80bn (Microsoft Corporation Annual Report, 2003), a discrepancy of more than \$180bn.

By looking at a simplified view, such as that shown in the diagram overleaf, it is evident that a significant proportion of shareholder value can be attributed to intangible assets (or intellectual capital). Only around 20% or 30% of the value is based on the tangible assets of a company as shown on the balance sheet. The remainder is based on its intangible assets.



Source: Draft Business Plan for the Intellectual Assets Centre

A company's intangible assets can be broken down into intellectual assets (IA) and human capital. IA are the recorded or recordable, intangible corporate assets. Human capital is the term used to refer to the skills and expertise of an organisation that lies within its people. It is difficult for companies to own human capital, since people leave companies and take that human capital with them as they do so.

The term IA includes assets such as the company name, reputation and goodwill to the company. It also includes company brands, trade secrets, business processes and know-how and intellectual property (IP). IP is probably the best known subset of IA, and covers those intangible assets which can be formally protected by statute law. This includes patents, designs, trademarks, plant variety rights and copyright.

2. Study Aims and Objectives

The overall aim of the study was to provide a robust baseline of the extent of IAM activity within Scottish businesses. The specific research objectives were as follows:

- to ascertain companies' understanding of, and attitudes towards, IAM;
- to measure the extent of IAM within Scottish firms;
- to examine the kinds of IAM activities currently undertaken (and not undertaken) by Scottish businesses;
- to investigate the ways in which companies are using IAM to grow value and reduce risk within the business;
- to examine the external services / products bought or contracted in to assist with IAM; and
- to examine market needs and demands in terms of IAM support services and IAM tools.

3. Method

The study was carried out in four stages as follows:

- **Inception Period** in which the fieldwork materials and survey samples were prepared;
- **Company Survey**, in which a telephone survey of 1,004 businesses was carried out. The survey measured the levels of awareness and understanding of IA across a wide cross section of Scottish businesses in three broad industrial groupings: knowledge industries, manufacturing and other;
- **Business Consultations**, in which face-to-face interviews were carried out with a sample of 43 businesses with a degree of existing awareness of IA issues. The consultations explored businesses' understanding of the business benefits of IAM, and the barriers and constraints faced by businesses seeking to exploit better their IA; and
- **Analysis and Reporting**, in which the data gathered in the company survey were analysed and the final study report produced.

4. Survey Findings

4.1 Survey Sample

The sample of businesses was developed using a sampling framework based on analysis of business stock data from the Inter-Departmental Business Register (IDBR). The purpose of taking such a broad sampling approach was to allow the results to be grossed up to provide estimates for levels of IA awareness, understanding and activity for the Scottish business population in general.

It was agreed that a full breakdown of businesses by industry sector was not practical. Therefore, three broad industry groups were targeted:

- manufacturing industries;
- knowledge industries (OECD definition); and
- other.

It should be noted that the category of knowledge industries includes some manufacturing industries (see footnote). Therefore, the figures for manufacturing **exclude** those activities defined within the knowledge industries category. In addition, it was agreed that size of company would be an important variable, therefore, the sample was further broken down into sizebands as follows:

- 0-19 employees;
- 20-199 employees; and
- more than 200 employees.

A total of 1,004 telephone interviews were completed over a fieldwork period of six weeks. The final sample breakdown is shown in **Table 1**, over, along with the target quotas. It should be noted that 12 companies did not provide data on size of company. Therefore, the achieved sample sizes are based on a total of 992 companies.

	0-19 employees			20-199 employees			200+ employees			actual total
	target	actual	%	target	actual	%	target	actual	%	
Knowledge industries	131	132	101	124	124	100	80	47	59	303
Manufacturing	135	134	99	131	133	102	61	59	97	326
Other	116	130	112	115	135	117	107	98	92	363
TOTAL	382	396	104	370	392	106	248	204	82	992

While most quotas were met, the actual number of interviews achieved with companies with more than 200 employees fell slightly short of the target quota. This was due to the difficulty in accessing appropriate contacts in large firms.

The survey sample was boosted to increase the representation of knowledge industries and larger

companies. So, while knowledge industries account for 14% of the Scottish business base, they accounted for 30% of the survey sample. Similarly, companies with more than 200 employees account for 0.6% of Scottish businesses and 21% of the survey sample. The result of this is that the figures obtained from the survey sample were not directly representative of the Scottish business base as a whole. Therefore, in order to provide grossed up estimates for the whole population of Scottish firms, weighted averages have been calculated. The weighting procedure accounts for the weightings within the overall sample framework and provides estimates for the business population as a whole, based on the share of the total population accounted for by the different industry groups and sizebands. Population estimates throughout are subject to a statistical error of +/- 3%.

4.2 Main Findings

4.2.1 Awareness and Understanding of IA

The survey found that although companies have a general awareness of the importance of *intangible* factors and assets to their businesses, they are more likely to identify the importance of human capital than they are IA. Very few businesses were able to place a value on any of their intangible assets, and reported being able only to value their fixed and moveable physical assets. While this awareness of intangible assets does suggest an almost latent awareness of IA as an issue, it indicates a lack of sophisticated understanding.

Almost two thirds (64%) of Scottish businesses have not heard the term 'intellectual assets' (population estimate). However, knowledge industries and large manufacturing companies were far more likely to report having heard the term before, as shown in **Table 2**, over.

	0-19 employees	20-199 employees	200+ employees	TOTAL
Knowledge Industries	67.4	62.9	66.0	67.1
Manufacturing	34.3	49.6	67.8	37.1
Other	30.0	36.3	46.9	30.6
TOTAL	35.4	40.5	51.7	36.0

The survey also found that three quarters (74%) of Scottish businesses (weighted average) would report not having a good understanding of IA. In addition, it is likely that this is an underestimate, since there was a degree of priming in the survey questionnaire, and an unknown proportion of the 26% that did report a good understanding will think that they have a good understanding when in fact this is not the case. Again, reported understanding was highest amongst knowledge industries and large manufacturers.

TABLE 3: Proportion reporting having a good understanding of what is meant by IA (grossed up population estimates) (%)				
	0-19 employees	20-199 employees	200+ employees	TOTAL
Knowledge Industries	57.6	51.6	57.4	57.1
Manufacturing	23.9	35.3	54.2	26.0
Other	20.0	23.7	33.7	20.4
TOTAL	25.4	27.9	39.1	25.7

More than half of Scotland's businesses have never considered the importance of IA to their businesses (56%). This is a concerning finding, as companies were asked about this *after* hearing an explanation of what is meant by IA. However, knowledge businesses and larger manufacturing companies were more likely than other firms to have already considered the importance of IA.

Therefore, while there is evidence of some very low level and unsophisticated awareness of the importance of intangible assets, and rudimentary understanding of individual kinds of IA (e.g. intellectual property, company brands), it is clear that IA as a concept is poorly understood by Scottish businesses. Within this overall finding, awareness and understanding is more advanced amongst knowledge industries and large manufacturers. This is unsurprising, given the importance of IA in knowledge-based businesses, and the fact that IA management (IAM) was largely pioneered by large manufacturing companies such as Dow Chemical and IBM.

4.2.2 **IAM Activity**

The survey also gathered data on the levels of IAM activity currently undertaken by Scottish businesses. As expected, IAM is in its infancy in Scotland, and very few businesses reported significant IAM activity. Only 16% of Scottish businesses have undertaken any activity to manage their IA, although again knowledge businesses and large manufacturers reported the highest levels of IAM activity. This is shown in **Table 4**, over.

TABLE 4: Proportion reporting IAM activity (grossed up population estimates) (%)				
	0-19 employees	20-199 employees	200+ employees	TOTAL
Knowledge Industries	33.3	26.6	38.3	32.9
Manufacturing	12.7	15.8	44.1	13.5
Other	12.3	18.5	20.4	12.9
TOTAL	15.3	19.2	25.2	15.7

Companies that reported IAM activity were then asked about three broad areas of IAM:

- developing an IA Register;
- protecting or safeguarding IA; and
- exploiting IA.

DEVELOPING AN IA REGISTER

Only an estimated 6% of Scottish business have taken steps to develop an IA Register. As expected, knowledge industries and large manufacturing firms are more likely to report this activity. However, it is not clear from the data what companies understand an IA Register to mean. For example, when asked what kinds of assets were included in their Registers, the most popular response was reputation of the company. A much lower proportion reported recording intellectual property (IP) in their Register. This is counter-intuitive. It would be expected that IP, by virtue of the fact that it is subject to legal protection mechanisms and generally easier (although not easy) to identify than other forms of IA, would be more often recorded on IA Registers. This suggests that companies may have different interpretations of what is meant by an IA Register, and the true number or real IA Registers in Scottish businesses may be lower than the 6% estimate.

31% of those that reported having developed an IA Register used external assistance to do so with management consultants and accountants being the most frequently reported sources of help.

For those companies that had not developed a Register, the most commonly mentioned reasons were time constraints and the fact that they had not even thought about doing so.

PROTECTING OR SAFEGUARDING IA

An estimated 8% of Scottish businesses have taken steps to protect or safeguard their IA. Again, these activities are significantly more common amongst the knowledge industries and large manufacturing companies. This is shown in **Table 5**, below.

	0-19 employees	20-199 employees	200+ employees	TOTAL
Knowledge Industries	23.5	16.9	29.8	23.1
Manufacturing	6.0	11.3	32.2	7.1
Other	5.4	9.6	13.3	5.8
TOTAL	7.9	10.6	17.4	8.2

The IA that were most often protected were company name (72% of those that reported protecting their IA), reputation of the company (67%), company customer base (62%) and quality of products and services (62%). 58% reported that they had taken steps to protect their IP. The most frequently used protection methods were confidentiality agreements (64%) and employee contracts (64%). More specialised forms of protection such as registered designs, patents, IP insurance and copyright were less well used. Indeed, only an estimated 3% of Scottish businesses reported using patents to protect their IA, as shown in **Table 6**.

	%
Patents	3.3
Copyright	3.5
Registered Trademarks	3.4
Registered Designs	0.9
Confidentiality Agreements	4.2
Employee Contracts	3.9
Legal Contracts	2.4
Database Rights	3.5
IP Insurance	3.1
Back-up Computer Files	4.8
Legal Action	3.1

More than half (59%) of those that reported taking steps to protect their IA had used external assistance. In this case, lawyers and patent agents were the most frequently used forms of assistance, followed by accountants and management consultants. When asked to identify the business benefits of protecting their IA, companies were most likely to mention increase in company value, better understanding of business strengths and attraction of new customers. Amongst those that had not attempted to protect their IA time was again the most common constraint, followed by not having thought about it.

EXPLOITING IA

The survey findings indicated that an estimated 6% of Scottish businesses have taken steps to exploit their IA. As with previous findings, knowledge industries and large manufacturers are leading the way in this area. These data are shown in **Table 7**, below.

	0-19 employees	20-199 employees	200+ employees	TOTAL
Knowledge Industries	17.4	17.7	27.7	17.5
Manufacturing	5.2	8.3	27.1	5.9
Other	3.8	7.4	11.2	4.2
TOTAL	5.8	8.7	15.1	6.1

When asked what kinds of IA they had taken steps to exploit, the most common responses were reputation of the company (76%), company name (69%) and quality of products and services (67%). 46% of this group of companies reported taking steps to exploit their IP.

In terms of the different ways in which companies have exploited their IA, the proportions of Scottish businesses that have used different methods is very small indeed, as shown in **Table 8**, below.

	%
Licensing deals	1.7
Sales of intellectual assets	2.0
Using IA as a marketing tool	4.2
Business spin-outs	1.3
Joint ventures and partnerships	0.9
R&D tax credits	0.3
Legal action	1.1

Just less than half of these companies had used external assistance to help them exploit their IA and the most common sources of help were patent agents, accountants and management consultants.

In terms of reported business benefits of IA exploitation, the most commonly cited impacts were increased company value, increased sales and new customers.

The main barrier to IA exploitation amongst those that had not taken such steps was that companies had not thought about doing so. Some respondents also commented that they felt that their company was too small to exploit their IA.

4.2.3 **Support Needs**

In order to provide the IA Centre with a first level assessment of the expected demand for different kinds of support, companies were asked about their interest in IA and the areas in which they felt they would benefit from further information or advice.

More than half of the sample (56%) was interested in knowing more about IA. The most popular areas in which more information was required were:

- general information about IA;
- information on how other businesses have addressed IA; and
- how to value and exploit IA.

Companies were also asked about the best way to provide them with further information on IA. Newsletters, email updates and online information were the most popular responses, with less evidence of demand at this stage for face-to-face contact. This may partly reflect levels of awareness and understanding of IA, leading to lack of confidence on the part of companies or uncertainty about the value of IA and IAM. These are issues that can be addressed by IA Centre through the provision of relevant high quality information about IA.

5. Business Consultations

In addition to the company survey, 43 face-to-face consultations were carried out with businesses that already had an awareness of IA. The purpose of the consultations was to gather more in-depth information on IAM activities within Scottish businesses. The sample divided into two main groups of companies:

- Group 1: businesses aware of, but not managing IA; and
- Group 2: businesses aware of and managing their IA.

5.1 Main Findings

5.1.1 Awareness and Understanding of IA

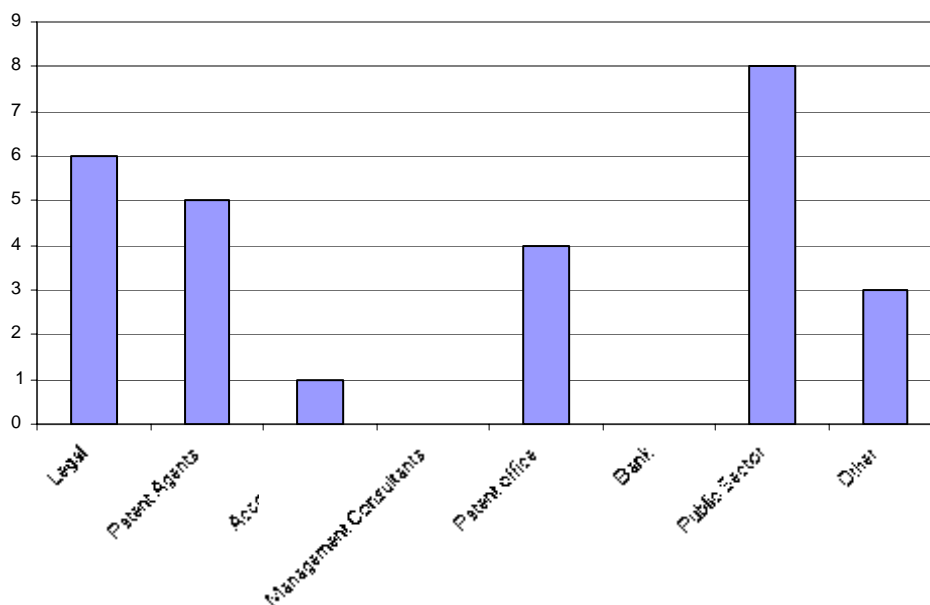
All but one of the companies consulted had heard the term 'intellectual assets' and just over two thirds (67%) reported having a good understanding of what it meant. When asked in more detail about their understanding of IA, the companies in Group 2 (actively managing their IA) were more likely to report good or very good understanding of a range of IA issues. In particular, very few of the companies in Group 1 reported having a good understanding of how to protect, value or exploit their IA. Therefore, there is a gap between general awareness and understanding of IA. While the majority of businesses were able to identify intellectual assets from a list, there was a widespread tendency to confuse IA with human capital, a finding that is consistent with the main survey. Therefore, even amongst companies with greater awareness of IA, there is still a lack of sophisticated understanding.

Businesses were asked about the main barriers that they faced in attempting to manage their IA. Unsurprisingly, companies in Group 2 reported fewer barriers than those in Group 1. As with the main survey, the major barriers were time and money, with 60% of the sample identifying these factors. When asked about what would help them to overcome these barriers, 65% reported that one-to-one advice would help, and 53% mentioned financial support. Group 2 companies reported needing less help than those in Group 1.

5.1.2 Use of External Assistance

Half of the sample reported seeking external assistance with IAM, and all of them found that advice easy to find. The main types of external assistance used are shown in **Figure 1**, below.

Figure 1: External Advice



The most popular reasons for seeking external advice were to register patents and trademarks and to seek legal advice on protection of assets. External assistance was generally rated very highly although suggested improvements included:

- Support more focussed on the needs of the business;
- Less expensive services (especially for patent agents and lawyers); and
- Better knowledge of IA within existing advisors.

5.1.3 IAM Activity

Only four businesses in the sample reported having an IA Register, and while the kinds of assets covered by these Registers varied, formal lists were more likely for intellectual property. This contrasts with the findings from the main survey in which the assets most often included in IA Registers were reported to be company reputation and company name.

Three of the four companies had used external assistance to help develop a Register and all of them had engaged lawyers, patent agents and accountants. While this assistance was highly rated, it was also seen as very expensive, particularly in specialist sectors such as life sciences.

The reported benefits of having an IA Register were that it helps to identify business opportunities and allows for better monitoring of company progress. Only one company had actually measured these benefits by recording their assets on the company balance sheet.

As expected, a larger proportion of respondents reported having taken steps to protect or safeguard their IA (20 out of the 21 companies in Group 2). The IA that were most often protected were IP,

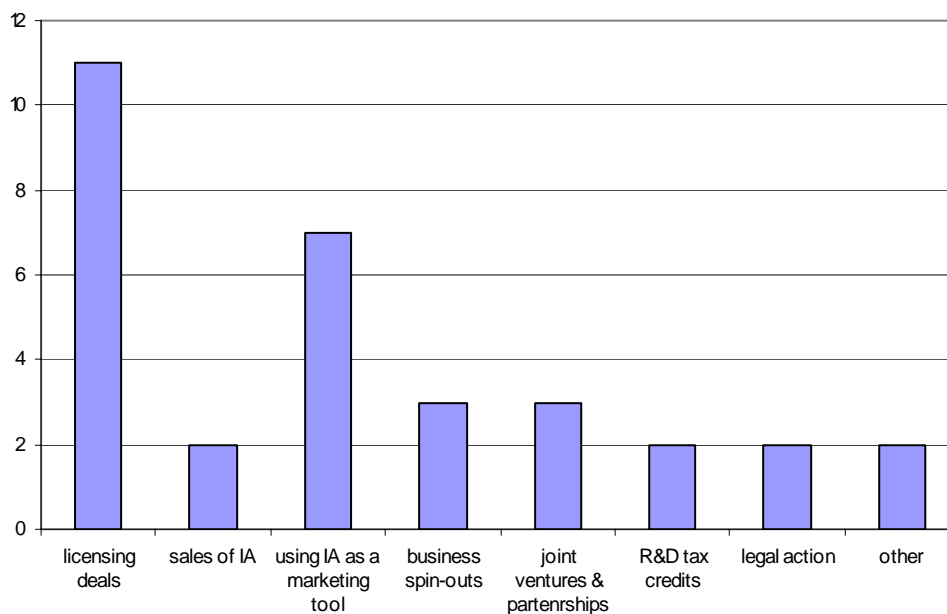
company names and company logo (55% each). Registered trademarks were the most commonly used method of protection with 80% of these companies reporting that they had used them. 65% of the group reported using back up computer files, and 60% reported using patents, confidentiality agreements and other legal contracts such as licensing.

Companies made frequent use of external assistance to help them protect their IA. The most commonly used forms of assistance were lawyers, followed by patent agents. Use of public sector support was limited. Amongst those that had used external advice, it was rated highly.

The benefits of IA protection identified by companies were that it provides greater understanding of business strengths and weaknesses and can be a source of competitive advantage. For others, it had helped to secure distribution partners, created barriers to entry for competitors and provided control that cannot be infringed. Despite this, only five companies had actually measured the impacts of IA protection, with measurement generally being in terms of turnover and profit.

Thirteen of the 21 companies in Group 2 reported having taken steps to exploit their IA. As shown in **Figure 2**, over, the most commonly reported method of IA exploitation was licensing deals (used by 85% of those that reported taking steps to exploit their IA).

Figure 2: Exploitation of IA



The kinds of IA that companies sought to exploit varied significantly. 62% reported exploiting business processes and know how, and 54% had exploited technological know how. 46% had exploited their IP and 38% their company brands. Most of these companies had used external assistance to exploit their IA, most commonly legal assistance. Again, external help was very highly rated.

The reported benefits of IA exploitation were financial return from royalties, and increase in turnover and profit. Again, few companies had taken steps to measure and record these benefits, and only one company reported recording the benefits of IA exploitation of the company balance sheet.

5.1.4 Future Support Needs

Most of the companies consulted felt that it was important to improve IAM within their businesses, and all were interested to know more about IA and IAM. Unsurprisingly, the information and support needs of those companies that are already managing their IA were more sophisticated than those that are not. Valuing IA and exploiting IA were highlighted as areas of great interest, as was one-to-one advice on the current position of the business with respect to IAM.

One-to-one advice and assistance was taken to be the most effective way of delivering assistance. Around half felt that email updates, website and conferences were also very good means of providing information, particularly as an initial introduction. However, it was widely reported that this provision should be followed by one-to-one assistance. Some felt that the conference approach was too broad brush and should be smaller and bring similar sectors together so that it was of specific relevance to them. With regards to newsletters, just under half thought this was a good idea but only if it contained practical advice rather than 'good news stories'.

6. Study Conclusions

6.1 Awareness and Understanding of IA in Scottish Businesses

There are a number of conclusions to be drawn in terms of the levels of awareness and understanding of IAM amongst Scottish businesses.

Firstly, it is clear that businesses in general have a strong awareness of the importance of *intangible* factors in overall business success. However, this does not imply awareness of *intellectual assets*. In fact, almost two thirds of Scottish businesses have not heard the term 'intellectual assets'. In addition, almost three quarters of Scottish business do not have a good understanding of what is meant by IA. As discussed, it is likely that these figures *overestimate* the true levels of awareness and understanding.

Secondly, the survey showed that companies, even those with higher levels of awareness of IA generally lack a sophisticated understanding of IA. In particular, there is a widespread tendency to confuse human capital with IA. This is not just a semantic distinction. It is very difficult for a company to own its human capital. It may take steps to protect it and retain key staff, but human capital ultimately resides within individuals, and individuals can leave. The exception to this is where knowledge capture methods can record and codify the tacit knowledge held by employees and transfer that ownership of that knowledge to the company. In general, however, the management of IA requires a significantly different approach to the management of people.

Thirdly, more detailed examination of the survey findings revealed that knowledge industries companies and larger manufacturing firms (200+ employees) were significantly more likely to report having heard the term 'intellectual assets' and to report a good understanding of the term than smaller manufacturing and other businesses. This is unsurprising given the importance of knowledge and IA in the knowledge industries, and the fact that IAM as a business process largely emerged from large manufacturing companies.

Finally, although more than half of companies in Scotland have never considered the importance of IA to their business, 55% did think that IA were important, a figure that rises to 67% for knowledge industries. Therefore, although levels of awareness and understanding are relatively low, there is indication of a latent interest in the topic, and an appreciation that IA would add value to businesses.

6.2 IAM Activity in Scottish Businesses

The research found that levels of IAM activity were low across the Scottish business base. An estimated 16% reported having undertaken activity to manage their IA, although the reported levels of IA management amongst knowledge industries are substantially higher. Once more, it is likely that this figure overestimates the level of IAM activity in Scotland as self-presentation effects will again be present in the data.

Approximately 6% of Scottish businesses report having developed an IA Register. IA Registers are sophisticated business management tools, and as such are quite rare. Therefore, 6% of the Scottish business base would seem to be a very high estimate of the proportion of companies developing such tools. However, as discussed, there is evidence to suggest that survey respondents may have varied interpretations of what is meant by an IA Register. Therefore, it is unlikely that 6% of Scottish businesses have actually developed a sophisticated IA Register. This is supported by consultation with businesses that already aware of IA, in which a lower proportion reported having taken steps to develop an IA Register.

Only 8% of Scottish businesses have taken steps to protect or safeguard their IA. Again this figure is significantly higher for knowledge industries, and for larger manufacturing companies. However, usage of even well developed methods of protection such as patents, registered trademarks, copyright and registered designs, was very low. The levels of usage of back up computer files, confidentiality agreements and employee contracts were higher.

Again, knowledge industries reported higher levels of use of all methods of IA protection, as did larger companies. It is worth noting that the effect of company size is less evident within the knowledge industries than in the other industry groups. Smaller knowledge industries companies are just as likely as larger ones to report IAM activity.

In terms of exploitation of IA, an estimated 6% of Scottish businesses have taken steps to exploit their assets. The most frequently exploited assets were company reputation, name and the quality of product and services. A smaller proportion reported taking steps to exploit their intellectual property. Just over 4% of Scottish businesses have used their IA as a marketing tool and fewer than 2% have used licensing deals to exploit their IA. Further analysis of the data on exploitation of IA confirmed the pattern of knowledge industries and larger manufacturing companies being significantly more active than smaller manufacturers and other service businesses in activities to exploit their IA.

These findings indicate a clear gap between reported levels of awareness and IAM activity. Companies reported time and money as the key barriers to IAM activity, although issues such as the sophistication of understanding will also act as barriers. For example, if companies have low levels of understanding of IA and how they can benefit the business, they are less likely to consider taking steps to manage their assets. This is a key issue for IA Centre to address, as discussed below.

6.3 Levels of Engagement with External Support Providers

Use of external support or assistance with IAM was restricted to those that reported having taken steps to manage their IA. Within this group, external assistance was most often used to help with protection of IA. A small proportion of businesses reported using external assistance to exploit their assets or develop an IA Register. However, within the sample of IA aware businesses, usage of external assistance was proportionately higher than in the main survey sample.

The most frequently used sources of external support were lawyers, management consultants, patent agents and accountants. A smaller proportion of companies reported using public sector support.

Feedback from the face-to-face consultations indicated that when used, external assistance had been highly rated, although there were suggestions that the cost of engaging specialist support was a barrier for some companies.

6.4 Levels of Demand for Future Support

Without doubt, the survey has found substantial demand for further information about IA issues amongst the Scottish business base. More than half of the main survey sample and all of the face-to-face sample were interested in further information about IA. The main sample indicated most interest in general information about IA, reflecting the lower overall levels of awareness and understanding of IA within this group. There was also considerable interest in information on how to value IA and in examples of how other businesses have addressed IAM. For this group, the most popular methods of delivering information were through 'low intensity' channels such as newsletters, email updates or websites. In addition, just over half of the sample (510 businesses) said that they would be happy to be included on a database for future communications.

Amongst the more IA aware companies, the main areas of interest were in more practical advice and information on how to identify value and exploit IA, and there was a marked preference for one-to-one advice. This is consistent with a group that are generally more aware of and active in IAM, and that will consequently have more specific areas of need.