

U.S./Canadian Licensing In 2005—Survey Results

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*Initial Results of Survey Conducted in February/March 2006 by the Licensing Foundation of LES (USA & Canada) on behalf of the Licensing Foundation.*²

Abstract And Summary Of Findings

The data reported here are from the third annual survey of “the licensing industry” of the United States and Canada taken by the Licensing Foundation in cooperation with LES (USA & Canada). The ambitious reference to “the licensing industry” is however confined to the perspective provided by the membership of LES (USA & Canada) who responded to faxed and emailed requests for participation in this project. The data obtained primarily in March 2006 were for the period 2005.³

Two related but distinct survey questionnaires were used, one for IP asset owners (buyers or sellers, licensors or licensees), and one for service providers such as outside law firms and consultants. The data obtained from IP asset owners is presented here in six segments: large and small companies,⁴ based on the number of company’s employees—greater or less than 500, and by four industry groups: Health, DICE (Digital Information Computers Electronics), Industrial, and University/Government.

For the second year we included two questions relating to perceived societal/environmental opposition to certain underlying values of licensing such as the right of an IP owner to protect and license, or not to license, its IP. As for the 2004 data, these

2005 data report a substantial concern, and one that appears to be growing by comparison of year-over-year responses.

The Foundation will continue its annual state of the licensing industry in 2007 (for the year 2006), and will again request members of LES (USA & Canada) to participate.

Introduction

Understanding what is here termed “the licensing industry” is both a challenging and important assignment. Its importance derives from the vastly increasing importance of IP itself, roughly synonymous with the accounting category of intangible assets, as an asset category in a company’s balance sheet. It is widely recognized that in just a “patent lifetime” (e.g., 20 years), such balance

sheets have been transformed from predominately tangible assets such as plants (factories), property (land), and equipment (so-called PPE), and other tangible assets such as cash and receivables, to being dominated by intangible assets. Estimates of the shift in relative importance of intangible assets using, for instance the S&P 500® index, suggests that tangible assets were about 70 percent of total assets just 20 years ago but today it is intangible assets that are about 70 percent of total assets. So, in just one patent lifetime, tangible and intangible assets have switched positions in terms of relative importance.⁵

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1. The Licensing Foundation is a wholly-owned 501c3 subsidiary of LES (USA & Canada). Additional information on the Foundation is available at: www.licensingfoundation.org.

2. The Licensing Foundation during 2006 was managed by its Board comprised of E.B. (Ted) Cross, Ada Nielsen, Patrick O’Reilly, Richard Razgaitis, James Sobieraj, and Art Rose, and assisted by Ken Schoppmann of the LES (USA & Canada) office.

3. There is some potential confusion as to survey periods and publications for these three Foundation surveys. The first survey was taken in early 2004, published in *les Nouvelles* December 2004 (p. 139ff) for data (responses) corresponding to the year 2003. Likewise the second and now the third survey were taken in early 2005 and 2006 and published in the December 2005 (p. 145ff) and now the 2006 issue of *les Nouvelles* corresponding to the data periods 2004 and 2005, respectively.

4. The term “company” is used as a generic reference to an IP asset owning entity, which was primarily represented by corporate entities but includes representation from universities, research institutes, and government laboratories.

5. The reference to “switch positions” does not mean to suggest that Company A in 1985 had (roughly) 70 percent of its assets in tangible form and in 2005 its assets were instead 70 percent intangible. Although such a transformation is perhaps possible, the primary cause of such dramatic shift in relative percentages is the shift from 1985 to 2005 in the kinds of companies present today in our economy, and the various indices of our economy, and their respective valuations. Companies such as Microsoft, Cisco, eBay, Amazon, and all manner of pharmaceutical and biotech companies, and even companies such as WalMart exhibit in 2005 high market valuations and significant relative percentages of intangible assets.

Although the term “knowledge economy” is often used in broader contexts than balance sheet considerations, there is clearly a connection between the term and intangible assets/IP such that being a knowledge economy is manifest at least in part by existence of substantial IP assets.

An obvious value of intangible assets and IP is how it provides competitive advantage to its owner, as reflected in revenues, earnings, and other performance metrics such as revenue per employee or return on investment. Another value of such IP assets is as a source of trade through licensing (including assignment, or sale, of such rights), a subject dear to the readers of this journal and the membership of LES. The challenge faced by anyone seeking to understand the scope and importance of such trade value of IP assets is the difficulty of finding data on this “industry of licensing.”⁶

To this end, the Licensing Foundation has undertaken these annual surveys as an initial, small step to provide some further understanding of the licensing industry. Specifically, the objective of the Foundation’s survey is as follows: provide an annual, synoptic perspective on key statistics, events, and trends in “the business of licensing” that can assist licensing professionals in understanding and advancing the business environment in which they operate and to which they contribute, and can be used by the public, academic researchers, and government policy analysts to grasp the issues and impacts of licensing business practices.

The data obtained by the Foundation’s survey were derived by individual responses by some 1,000 LES (USA & Canada) members using an online survey instrument. Most of the data were collected in March 2006 for the calendar year 2005. Since such LES membership predominately reflects technology licensing of patents, know how, trade secrets, and copyrighted software—and relatively under-represents licensing of trademarks and copyrighted content, for example—the licensing industry so characterized by these data is primarily about technology licensing.

Survey Administration⁷

The survey was administered in the form of an online questionnaire accessed via the Internet. Over 6300 members of the Licensing Executives

6. It should be acknowledged that the Association of University Technology Managers, AUTM, has for more than 10 years published extensive data on the patenting and licensing activities of an important segment of the licensing industry, namely universities and research institutes.

Society (U.S.A. & Canada), Inc. were invited in March 2006 to participate in the survey via several rounds of email from the Licensing Foundation. The web survey format was chosen to limit costs, maximize accuracy, and to be minimally intrusive. This type of survey also allows for “dynamic” serving of questions in response to users’ input, minimizing the extent to which respondents are presented with irrelevant or redundant questions. When used for “closed” list-based samples such as the LES membership mailing list, web surveys have been shown to perform as well or better than traditional hard-copy mail-back survey instruments.

Separate versions of the survey were administered to the approximately 3,600 members identified as technology creator/users and to the approximately 2,700 identified as being providers of professional services (legal, consulting etc.)⁸ The survey web site received more than 1,200 “hits” with 588 respondents completing at least one question on the Technology Creator/User Survey and 344 on the Professional Services Survey. Respondents were guaranteed anonymity, and no records linking their identity to the database of survey questionnaire responses have been retained.

Representativeness of sample

The degree to which the results presented here can be considered statistically representative of all technology licensing activity in the U.S. and Canada is difficult to assess. It is important to note that the LES membership list is a “convenience” sample, not a randomized quota-based or stratified sample designed to be statistically representative of an underlying population. However “frame bias” i.e. unrepresentativeness of the LES membership list compared to the population of all licensing professionals is unlikely to be a significant problem, unless there are large numbers of people engaged in technology licensing who are not members of LES, and who differ systematically from those who are.

“Response bias,” i.e. systematic differences be-

7. The discussion here was provided by Prof. Iain Cockburn of Boston University who, along with Prof. Ajay Agrawal of the Univ. of Toronto were retained by the Licensing Foundation to assist in the development of the survey instruments, and collecting and validating the data.

8. LES members self-report, job title, company, professional status, and industry affiliation. However there is scope for errors in identifying “Technology Creator/User” versus “Professional Services.” Approximately 1% of entries in the database were reclassified based on the name of their organization (e.g. “IP Valuation Associates LLP” unlikely to be a technology creator/user.)

tween the members in the sample who choose to respond and those who do not, is not possible to assess fully. The distribution of respondents across industry sectors approximates the distribution in the entire mailing list, with some over-representation of the Health and University/Government sectors. However since we lack information about other characteristics of non-respondents, such as the size of their organization, it is not possible to evaluate potential bias arising from different response rates across, e.g., large versus small entities.

Response Rate

Technology Creator/User Survey

Of the more than 800 visits to the web site for this version of the survey, 588 respondents completed at least one question. After eliminating records for respondents who appear to have moved through the questionnaire without answering more than a handful of questions, the final sample contains 524 usable records.⁹ Of these, 502 answered most, or all, of the questions.

Response rates to specific questions were generally high, generally greater than 80 percent. Note that because the survey questionnaire “branched” at various points to ensure that respondents were only presented with relevant questions, the denominator for calculating response rates is not always 502. For example, of the total of 502 “core sample” records analyzed, only a 188 were presented with questions about “enforcement licensing” after answering “Yes” to Q16 (“In the past 12 months, has your organization entered into any licensing agreements in order to settle or avoid litigation, as opposed to being motivated by a business opportunity?”), and 277 were presented with questions about in-licensing after indicating that their organization was engaged in this activity.

Though 524 responses from a sample frame of 3,600 (the estimated number of IP asset owning companies) may seem low, it is in line with similar voluntary surveys that typically have a 10-30 percent response rate. Note that because LES membership is individual, not corporate, a single organization can appear multiple times in the mailing list. The LES members identified as belonging to the Technology Creator/User category come from less than 1,200 distinct organizations, with only a handful of organizations generating multiple responses. We

therefore achieved coverage of about 45 percent of the total number of Technology Creator/User organizations represented in the LES membership.¹⁰

Professional Services Survey

Approximately 2,700 LES members fall in the Professional Services category. About 10 percent of these do not appear to be actively involved in licensing, for example because they are professional staff recruiters. As with the Technology Creator/User category, the number of distinct organizations represented in the database is much less than 2,700, but because a large fraction do not report any organizational affiliation, it is very difficult to distinguish between employees of a professional firm and “sole proprietor” providers of professional services. Our best estimate is that about 800 distinct substantive professional firms are represented in this mailing list, and at least 1,000 sole-proprietor (or equivalent) entities.

Of the 344 visits to the web site for this version of the survey, 297 respondents completed at least one question. After eliminating records for respondents who appear to have moved through the questionnaire without answering more than a handful of questions, the final sample contains 258 usable records.

Because of the difficulty in identifying organizational affiliation of LES members who fall into the Professional Services category, “coverage” of the total number of entities represented in the LES membership list is hard to assess, as is the representativeness of this sample compared to the population of professional services providers.

Demographics Of The Survey Respondants

The IP asset owners responded on behalf of (a) a corporate licensing office, (b) a business unit/division licensing office, or (c) a standalone subsidiary. The average across all segments was 66 percent corporate, 32 percent business unit, and 2 percent subsidiary. The DICE (Digital Information Computing Electronics) segment had the highest corporate and subsidiary percentage: 78 percent corporate, 17 percent division, and 6 percent subsidiary (which totals above 100 percent because of rounding). The Industrial segment exhibited the largest decentralization: 61, 36, and 4 percent, respectively. Standalone subsidiary percentages varied from a low of 0.4 percent (Health) to a high of 5.6 percent (DICE), with,

9. 524 respondents worked through the first two sections of the survey, but 20 then dropped out.

10. The figure is approximate since individual members do not always identify their organization to LES.

interestingly, a higher percentage for Small companies, 3.5 percent, than for Large, 1.3 percent (the distinction is based on 500 employees).

Respondents were asked about the extent of their personal involvement in licensing, choosing between 0-1 years, 1-3, 3-5, 5-10, 10-20, and 20+. Every experience level in every segment reported not less than 3.6 percent for each experience level. The percentage of respondents with less than one year's experience ranged from 4.5 percent (Health) to 9.5 percent (Industrial); at the other extreme, the range for 20+ years was 3.6 percent (Industrial) to 13 percent (DICE). The mean value for all segments was 9.5 years, ranging from a low of 7.5 years (Industrial) to 10.4 years (University/Government, hereafter Univ./Gov't).

When asked whether they were "the most senior individual in the licensing function" 45 percent answered "yes." There was relative little variation across industry segments, with a low of 40 percent for Univ./Gov't, and a low of 48 percent for Health. Perhaps not surprisingly, 40 percent of respondents in large companies identified themselves as the most senior licensing person, whereas 54 percent did so for small companies.

The diversity of the licensing 'fraternity' is perhaps made most evident by the responses to the question on "what is your primary background outside the licensing field?" For the sample as a whole, the breakdown was 57 percent science/engineering, 20 percent general management, 19 percent legal, and 4 percent all other. As might be expected Univ./Gov't had the highest science/engineering percentages (62 percent, compared to 19 percent for general management, 16 percent legal, and 4 percent other, respectively), but high science/engineering percentages were also evident for Industrial (60, 18, 21, 1 percent, respectively) and Health (56, 20, 18, 6 percent, respectively; and Health had the largest percentage of "other," perhaps reflecting medical backgrounds). DICE had the largest legal representation, 26 percent, and general management, 30 percent, so its distribution was 41 percent science/engineering, 30 percent management, 26 percent legal, and 4 percent other. There was very little difference between Large and Small companies.

These broad distributions in industry, company size, organizational position, licensing experience level, and education backgrounds helps explain the range of interesting people one meets at LES events! One of the great values of the 'LES Campfire' is the

experience from meeting, and learning from, people in the many varied educational and career journeys we have taken.

The raison(s) d'être of IP

One of the recurring questions of licensing is why does it occur? Does licensing represent a transactional 'stop loss' event, wherein a company seeks to get something for IP/technology it has developed but is not using or using fully?¹¹ One question asked: "How important are the following types of IP in creating competitive advantage for your organization?" with choices of patents, trademarks, copyrights, know-how, and trade secrets (where it was left to the respondent to distinguish the latter two choices) and four levels of response as to relative importance: not important (scored 1), mildly (2), moderately (3), or extremely (4). The mean for all segments was the highest, 3.7.¹² The next highest valued IP asset was know how at 3.4, followed by trade secrets at 2.6, trademarks 2.5, and copyrights 2.3. The relatively lower percentages for trademarks and copyrights is likely a reflection of the LES membership being less representative of industries or business processes where such forms of IP are valued and traded.¹³ It is interesting that the respondents made a marked distinction between "know how" and "trade secrets," and ranked "know how" as more important (3.24 versus 2.6).

The distribution of scores for patents exhibited a very narrow range from a low of 3.6 (DICE, Industrial, and Univ./Gov't) to a high of 3.8 (Health), with no difference between Large and Small (3.7). Only a tiny percentage scored patents as "not important:" varying from a maximum of 2.1 percent (Univ./Gov't) down to 0.9 percent (Health). The distribution of scores for "know how", unlike "patents," varied over a large relative range: Industrial had the highest score, 3.7, followed by DICE (3.4),

11. Of course licensing occurs in other contexts, such as with inventing organizations such as universities, research institutes, and government labs, that by their innate purpose do not normally enter commerce, and by companies who find themselves in need of IP belonging to others to complement their R&D or provide freedom to practice.

12. Resulting from a distribution of 80% "extremely important," 13% moderately, 4% mildly, and 1% for not important.

13. Further, copyrights are viewed by LES respondents are likely further underweighted in the area of content copyrights (books, music, graphics, and such) as well as in the software arena. Furthermore, respondents were expressly directed to NOT include right-to-use software licenses in their responses, such as shrink wrap and other software product licenses.

Health (3.3), and Univ./Gov't (2.4). There was little difference between Large and Small: 3.1 versus 3.3, which perhaps surprisingly suggests that small companies place a higher value on know how.¹⁴

For "trade secrets" the high score was again Industrial (3.5), followed in the same order by DICE (3.2), Health (3.0), and Univ./Gov't (1.1); Small companies scored trade secrets more important than Large, 2.7 versus 2.4, as they did for "know how." It is interesting that trade secrets scored lower than know how in all six segments. Does this reflect a more narrow interpretation of what constitutes a trade secret, such as common reference to the legend of the Coca Cola formula locked in a vault for now more than 100 years? Or did survey respondents understand know how more broadly, for example as all the proprietary information/technology regardless of the extent of codification? Or only as-related business assets such as customer lists, actual and prospective, suppliers/vendors, channels of distribution, and business plans and processes? Or, all of the above? Whatever constitutes such know how in the minds of the respondents only an average of 5 percent said that know-how was "not important" and less than 14 percent said it was "mildly important;" so more than 80 percent ranked it as "moderately" or "extremely" important. The corresponding percentages for "patents" was: 1.2 percent (not important), 3.9 percent (mildly), and 95 percent (moderately or extremely).

The above responses were primarily in the context of competitive advantage derived from IP for an IP owner's business. A distinguishing question asked for the motivations that lead the respondent's company to develop such IP assets. Respondents were asked to rate nine options each at same four levels of importance (not important to extremely important). The responses for the overall results are shown in Exhibit 1. The two highest scoring reasons (3.0) were (c) generate licensing revenue and (e) use for strategic partnering and JV's. The higher scores for these two areas likely reflects the perspective of LES 'dealmakers' as opposed to their company's CEO/CFO, who perhaps would have put

the highest scores on (b), (d), and (f).¹⁵ The least important reasons were (i) improve bargaining strength in other business negotiations (2.3) and (f) making life difficult for competitors (2.1). As might be expected Small companies put a higher importance on using IP as a basis for strategic partnering and JV's than Large companies: 3.2 versus 2.9; yet, both segments put a high importance on this reason. Likewise, Small companies put a higher emphasis on signaling capabilities (g), 3.0 (Small) versus 2.5 (Large), improving bargaining strength in other business negotiations, (i) 2.6 (Small) versus 2.2 (Large), and (h) improving bargaining strength, 2.9 (Small) versus 2.6 (Large) Such data contradicts the idea that the use of IP is more important to large companies. Essentially all small companies aspire to be large, and these data appear to support the idea that IP is viewed to provide a greater advantage to smaller companies in such pursuit.

Litigation arising from IP disputes, principally patents but also know how and trade secrets, is often a newsworthy, one might say infamous, "licensing" outcome of IP ownership. The survey asked four related questions to this issue of IP used for litigation. The first such question asked whether in the previous year the respondent's organization entered into any licenses in order to settle or avoid litigation. The overall majority answer was "no," 62 percent, meaning not *any*. However, the responses by segment varied widely: 73 percent of Small said "no" compared to 55 percent of Large, 36 percent; DICE had the lowest response of "no," 76 percent, and Univ./Gov't had the highest, 76 percent. Clearly litigation was a much more common event in the DICE industry than Health (64 percent "no") or Industrial (51 percent "no"), which appears to correlate with the earlier observation that the DICE respondents had the highest percentage of legal backgrounds.¹⁶

A related litigation question asked for what percentage of licensing activity in the preceding year resulted from the respondent's company enforcing its IP rights against another party. As above, the mean response for all companies was low, namely 17 percent. However, here, Small companies re-

14. This may reflect lesser resources in developing an extensive patent portfolio, or a more nascent patent estate, or even, perhaps, a greater fear of the affordability of enforcing patents against perceived infringers (and, so, maintaining more of its IP in the form of know how).

15. One of the long-term objectives of the Foundation's surveying is to acquire responses from other perspectives, such as CEOs and CFOs.

16. So this raises the 'chicken and egg' question: is the higher frequency of litigation innate and thereby leads to the need for more licensing officers with a legal background, or is the higher percentage of such officers from a legal background causing a higher frequency of litigation? This is left to the reader as an unsolved mystery and point of contemplation.

Exhibit. 1 (Q14): How important are each of these motivations for your organization to develop IP assets?

	N/A	Not important	Mildly important	Moderately important	Extremely important	Score (0-4) Mean	Std
(a) Manage litigation risk i.e. deter or avoid litigation or improve settlement outcomes	7.10%	15.90%	17.10%	23.60%	36.30%	2.7	1.3
(b) Realize higher margins on proprietary products	12%	12.30%	13.30%	17.70%	43.80%	2.7	1.5
(c) Generate licensing revenue	1.80%	7.70%	23.00%	27.40%	40.10%	3.0	1
(d) Prevent or slow down imitation of technology or products	9.70%	18.70%	16.70%	23.20%	31.70%	2.5	1.4
(e) Use as basis for strategic partnering and JVs	4.80%	4.20%	17.90%	33.70%	39.50%	3.0	1.1
(f) Make life difficult for competitors e.g. by blocking technology development, raising their R&D costs	16%	24.40%	18.70%	19.40%	21.60%	2.1	1.4
(g) Signal capabilities to investors, partners, customers, prospective employees etc.	4.60%	10.90%	22.60%	32.90%	29.00%	2.7	1.1
(h) Improve bargaining strength in negotiations or disputes over IP	5.80%	9.30%	20.80%	33.10%	31.00%	2.7	1.2
(i) Improve bargaining strength in other business negotiations with customers or suppliers	11%	14.80%	23.20%	30.10%	20.80%	2.3	1.3

ported a higher percentage than Large, 19 percent versus 16 percent, perhaps explained by a relatively smaller number of total licenses. As above, DICE leads all other segments, 38 percent, followed by Industrial (18 percent), Health (11 percent), and Univ./Gov't (8 percent). Another question asked the same question from the defensive side, namely what percentage of licensing was driven by settling or avoiding litigation threatened or initiated by another party. Here the average for all respondents was even lower, 10 percent, and Large companies gave higher values than Small (11 percent versus 7 percent), and DICE, again, had the highest segment score (15 percent), but closely followed by Industrial (11 percent), Health (9 percent), and Univ./Gov't (4 percent).

The final question in this litigation series asked about who the threatening or suing party was that resulted in the just above quoted responses. The most common threat (or suit) was from a direct competitor (33 percent of time, varying from a high of 50 percent for Industrial to a low of 22 percent

for DICE, (not considering for this comparison the 4 percent response for Univ./Gov't). The next most common proactive adversary was described as "an entity apparently created to exploit a specific piece of IP" (so worded in a conscious attempt to avoid the perhaps pejorative, and limiting, term "troll"): 18 percent was the overall average, lead by DICE (32 percent), then Univ./Gov't (25 percent), Health (14 percent), and Industrial (6 percent), and Large exhibited almost double the frequency of Small (21 percent versus 12 percent).¹⁷ The next most common proactive adversary was a party in a different industry: 17 percent was the overall average, again lead by DICE (25 percent), then Univ./Gov't (29 percent), Health (12 percent), and Industrial (10 percent), but here Small exceeded Large by a small margin (18.1 percent versus 16.8 percent). The least

17. Such data may support the belief that a greater legal background is pertinent to DICE because of the adverse litigious environment.

likely proactive adversary was an upstream entity creating technology/tools used by the respondent's organization: the overall average was 12 percent, but this time lead by Univ./Gov't (19 percent), followed by Health (13 percent), Industrial (7 percent), and DICE, here, being the lowest (6 percent); there was little difference between Large and Small (12 percent versus 11 percent).

The respondents were also asked about its perception of the merits of the adversary's argument, specifically: did it appear that such adversary was "unlikely to prevail if litigation was pursued to the bitter end (where "unlikely" was defined as less than a 30 percent chance of success)." Here the responses ranged from 28 percent (Health) to 52 percent (Univ./Gov't), with DICE and Industrial in between at 44 percent and 43 percent, respectively. The overall average was 39 percent, and Large exceeding Small (40 percent versus 36 percent). Clearly the respondents believed that a significant percentage of agreements made to settle or avoid litigation were not the result of a highly meritorious case by the proactive adversary.¹⁸

Know How Licensing

As discussed above, know how was a highly rated form of IP. When asked about licensing such know how, namely in the past year "has your organization entered into any agreements that licensed know how," the response was highly affirmative, ranging from a low of 58 percent (Health) to a high of 82 percent (Industrial), with an overall average of 64 percent. Here there was a notable difference between Large and Small: 69 percent versus 57 percent.

Patents are typically included in such know-how licenses. When asked "were licenses for know-how combined with formal IP such as patents" (in the past year) the average response was 68 percent of the time, with responses of all segments in a narrow range from a low of 53 percent (DICE) to a high of 73 percent (Health). When asked how frequent were licenses *only* for know how (i.e., no "formal IP"), the data were consistent with the above observations: only 10 percent of the time was the overall average answer, ranging from a low of 6 percent

(Univ./Gov't) to a high of 18 percent (DICE), with a small difference between Large (9 percent) and Small (11 percent).

Impediments To Licensing

The above data were for deals actually done. As all licensing professionals know, there are not only good deals and bad deals and 'in between deals,' there are also "no deals." Between a deal aspiration and any kind of an outcome, including the outcome "no deal," there are challenges of various kinds to be overcome. The survey asked a series of questions about the nature of deal impediments.

The first such question sought to identify if the impediments were more numerous, or more onerous, for a licensing transaction than compared to one for an tangible asset such as leasing real estate or contracting for the use of a specialized production facility. To concretize this question, respondents were asked to consider a \$10 million value transaction. Did respondents believe that there are fewer potential buyers/sellers for IP than for a tangible asset, choosing from don't know, strongly disagree, disagree, agree, and strongly agree? The overall answer was a highly affirmative "yes," with 84 percent¹⁹ responding "strongly agree" or "agree" Interestingly, all the segments provided a "yes" answer with DICE respondents the most affirmative at 90 percent (strongly agree plus agree) and Health the least at 77 percent, with Large and Small very similar, 85 percent versus 83 percent.

The next question in this series that received the most "yes" votes (as throughout this discussion, "yes" means the relative percentage of "agree" plus "strongly agree") was the following: is due diligence *much more* difficult/costly for the IP deal? The overall answer was 79 percent "yes," led again by DICE at 88 percent with Industrial the lowest at 73 percent; here Small had a higher percentage than Large: 81 percent versus 78 percent.

Did such IP deals require more attention from top management? The answer was again an affirmative "yes," but less strongly so than for the above questions: the overall "yes" was 72 percent, now lead by Health at 78 percent and trailed by Univ./Gov't at 64 percent; here Small was substantially more affirmative than Large, 78 percent versus 69 percent, likely because such a transaction would be more material for a smaller company. Are IP deals more difficult to bring to closure? "Yes" again: 76 per-

18. Another deep question for the reader to ponder: is this just human nature expressing the belief that it's not me that's at fault? Jean Renoir famously said, "The real hell of life is that everyone has his reasons." And, from one of the oldest extant texts, Book of Proverbs from the Bible, ca. 900 BC: "The first to present his case seems right, till another comes forward and questions him." (Prov. 18:17, New International Version).

19. This calculation was done by *not* including answers of "don't know."

cent, with DICE being the most affirmative at 83 percent. Addressing the closure difficulty question another way, the survey asked is an IP deal more likely to end up not being licensing or sold to *anyone*? Answer: 66 percent “yes,” so the ‘no deal with anyone’ outcome is notably more likely with IP as opposed to tangible assets, with Univ./Gov’t experiencing this most strongly at 80 percent, and Health least strongly at 58 percent. Is the IP deal more likely to be part of other, parallel negotiations? “Yes” at 64 percent, lead by Health at 70 percent, and Small (69 percent) more affirmative than Large (61 percent).

So for those feeling a little beaten down in terms of IP deal flow statistics, we can all take some collegial comfort from what is a widely common experience in all segments for every one of these impediments questions.

One different type of impediment is an organization’s unwillingness to license (or sell) certain ‘off limits’ IP. The survey asked several questions on the nature of IP it was unwilling to license to others: thinking about your organizations entire inventory of IP, approximately what percentage would NEVER be licensed voluntarily? The overall average answer was 31 percent, ranging from a high of 39 percent (Industrial) closely followed by Health (37 percent) to a low of 19 percent (Univ./Gov’t); Large exceeded Small by a large margin: 35 percent versus 27 percent.

When asked why such IP was not to be licensed, the most prevalent answer was because it was “core technology” (42 percent overall, but 63 percent for Industrial, and 45 percent for Large versus 37 percent for Small). The next most prevalent reason was that it was “strategically vital” to retain exclusive access: overall 32 percent, led now by DICE at 49 percent followed by Industrial at 46 percent. The least important reason was perceived minimal value: is it too costly to market outside the organization relative to anticipated returns? The overall response was 24 percent reporting very consistent answers ranging between 21 percent and 27 percent.

Related to willingness to license is a belief that a licensing campaign for a particular IP package is likely to succeed in a worthwhile deal. When asked what percentage of all IP that is available, in the sense of the asset owner’s willingness to sell, is *unlikely ever* to be transacted: the overall average was 37 percent, led by Univ./Gov’t at 54 percent with Health the lowest at 26 percent, and Large exceeding Small by 41 percent versus 32 percent. When asked why was such IP unlikely to be transacted, the

most common, and sad, answer was in response to the choice “has no discernable demand from end-users:” 42 percent overall, led by Univ./Gov’t (54 percent), and Large (47 percent) exceeding Small (35 percent). The next most affirmed choice was “only useful in conjunction with IP that are exclusive to your organization:” 26 percent overall, lead by DICE at 46 percent, with Small (30 percent) exceeding Large (24 percent). The least affirmed explanation, of the three choices provided, was “not effectively protectable” as IP: 19 percent overall, lead by 25 percent for DICE, with Small (21 percent) exceeding Large (18 percent).

Deal Failure

As if the difficulties of licensing IP wasn’t challenging enough, there is the situation where IP is available for licensing, is marketed, leading to direct negotiations, and yet no deal was closed. When asked how often potential licensees/licensors were identified for which no substantive negotiations were started, the overall answer was 33 percent,²⁰ lead by Industrial (40 percent). The survey then asked for the percentage of deal success once substantive negotiations had begun: 53 percent overall, lead by Univ./Gov’t (65 percent) and trailed by DICE (42 percent), with Large (56 percent) exceeding Small (49 percent).

When deal failure occurs, after substantial negotiations, the leading cause was financial terms: overall respondents identified this for 31 percent of cases, led by DICE (42 percent) with Univ./Gov’t (21 percent) reporting the lowest percentage; Small (31.8 percent) was slightly greater than Large (30.2 percent). However, inability to reach agreement on acceptable non-financial terms was also important: responsible for 25 percent of deal failures overall, with all segments reporting over a narrow range (22 to 29 percent). The other nine deal failure explanations scored much lower: better alternative emerged for one or more parties (14 percent overall), due diligence revealed problems with enforceability/validity of IP (12 percent overall), inability to agree on appropriate scope of IP to be included (9 percent overall), ego/hubris (8 percent), lack of trust/bad faith (8 percent), poor negotiating skills (7 percent), too many parties at the table (5 percent), clock ran out (5 percent), legal/regulatory problems (3 percent). So, although there can be many reasons for deal failure, and the ones surveyed were not mu-

20. Meaning that two-thirds of the time substantive negotiations did occur.

tually exclusive, the leading ones were the issues of money and primary deal terms, which supports the best practice of early use of term sheets in negotiations, summarizing deal terms sought.

Anticipating money agreement issues, the survey asked for a series of responses as why mutually acceptable financial terms could not be reached. The most important reasons, of the four choices given, was disagreement on basic facts or assumptions underlying valuation: 33 percent overall, with all segments in a narrow range (30-38 percent) except Industrial (25 percent). The next most prevalent explanation was irreconcilable differences on amounts to be paid within an agreed structure (e.g. royalty rate or amount of upfront fees): 27 percent, led by DICE (37 percent). Next was irreconcilable differences on the financial structure itself (balance between upfront payment and running royalties, paid-up versus contingent payments etc.): 23 percent overall, here led by Health (26 percent), but all segments were in a narrow range (19 to 26 percent). The lowest scoring answer was “no financial model:” 12.6 percent overall with all respondents between 11 and 13 percent.²¹

Closely related to the above series of responses were questions related to the preparation of a financial model and its effect upon dealmaking. Did having such a model improve the terms of the deal? Affirmatively “yes” (72 percent overall), led by DICE (85 percent). Did it increase the likelihood of a deal getting done? Still the overall answer was “yes” (58 percent) but notably less affirmative than the previous response. Did it shorten the dealmaking time? Less than half of all reporting (45 percent) said that it did, though DICE (62 percent) and Industrial (55 percent) had more than a majority say “yes.” Did it reduce the total costs of reaching agreement? No segment reported more than 50 percent “yes” (though Industrial had the highest affirmative response at exactly 50 percent), with an overall average of 34 percent. So the survey suggests the primary benefit of having a financial model was that it improved the deal itself, a clearly important objective, but not primarily that it increased the likelihood of deal consummation, or reduced the negotiating time or costs.

21. These questions were also asked in the Foundation’s first survey of this kind in 2004, and this year’s responses closely track the earlier findings. The robustness of these results indicates that pricing licensing deals is a serious challenge for all participants.

Trend Data For Dealmaking

The survey also asked several deal trend questions. Has the level of interest in using licensing to realize value from technology increased? The overall response was dramatically emphatic with 65 percent saying it has increased versus 5 percent decrease (25 percent said it stayed the same); DICE and Health lead this observation, 72 percent increased versus 3 percent decreased (DICE), and 70 percent increased versus 4 percent decreased (Health); so the response for “increase” was more than 10 times (10x) that for “decrease.” Has the percentage of IP you want to license but can’t, with at least one potential licensee, gone up or down over the past three years? The overall response was favorable, 29 percent saying it increased versus 8 percent saying it decreased (and 63 percent saying it stayed the same). Here the “increase” vs. “decrease” response was about 3.5x. Has the percentage of deals closed once substantive negotiations were started increased? Overall 31 percent said closure increased compared to 5 percent decreased, lead by DICE (40 percent increase versus 8 percent decreased); here “increase” was greater than “decrease” by about 6x.

Such reported positive increases in dealmaking mirrored organizational changes over the past three years. Has your organization become more open to licensing as a way to exploit or gain access to IP? 69 percent overall said yes, with Industrial, DICE, and Health reporting 79 percent, 79 percent, and 75 percent respectively. Has your organization invested significantly in developing internal skills, capabilities, and business processes supporting/licensing? Overall 60 percent said yes, with all segments reporting in a surprisingly narrow range (60 to 61 percent). Has reorganizing or restructuring your licensing organization made you more effective? Less than 50 percent saw increased effectiveness (46 percent overall), with Health (40 percent) least affirmative, and only Industrial (55 percent) had a favorable view of the effect. Has your organization become more focused on generating easily licensable IP? Again the overall response was less than 50 percent (44 percent) responding affirmatively, only DICE (at 54 percent) was above 50 percent. Finally, has your organization placed more reliance on outside counsel or consultants in conducting licensing transactions? Here the answer was substantially weighted toward “no:” overall 25 percent responded with “yes,” lead by DICE (38 percent).

Deal Structures And Remorse

Buyer’s remorse is a well-known phenomenon

Exhibit. 2 (Q42): Thinking about licensing agreements entered into in the last 12 months, with the benefit of hindsight, which if any of the following contract characteristics would you now restructure?

	Checked		Checked
(a) Field of use restrictions?		(g) Grant-back provisions?	
All	43.10%	All	22.90%
D/I/C/E	38.20%	D/I/C/E	29.40%
Health	38.90%	Health	24.80%
Industrial	39.10%	Industrial	18.80%
Univ/Gov	53.20%	Univ/Gov	20.70%
Large	48.60%	Large	23.00%
Small	34.90%	Small	22.80%
(b) Duration of agreement?		(h) Reach-through provisions?	
All	22.40%	All	9.70%
D/I/C/E	20.60%	D/I/C/E	8.80%
Health	23.60%	Health	12.10%
Industrial	29.00%	Industrial	7.20%
Univ/Gov	17.10%	Univ/Gov	8.10%
Large	23.00%	Large	7.20%
Small	21.50%	Small	13.40%
(c) Degree of exclusivity?		(i) Payment structure (e.g. balance between upfront fees vs. running royalty)?	
All	33.20%	All	32.10%
D/I/C/E	17.60%	D/I/C/E	52.90%
Health	36.30%	Health	29.30%
Industrial	36.20%	Industrial	31.90%
Univ/Gov	31.50%	Univ/Gov	29.70%
Large	34.20%	Large	32.90%
Small	31.50%	Small	30.90%
(d) Most-favored-nation (MFN) provisions?		(j) Payment amounts (e.g. royalty rate or amount of upfront fees)?	
All	14.00%	All	35.00%
D/I/C/E	29.40%	D/I/C/E	41.20%
Health	14.00%	Health	40.10%
Industrial	13.00%	Industrial	36.20%
Univ/Gov	9.90%	Univ/Gov	25.20%
Large	12.20%	Large	31.10%
Small	16.80%	Small	40.90%
(e) Technical milestones?		(k) Terms of use?	
All	40.20%	All	14.30%
D/I/C/E	32.40%	D/I/C/E	29.40%
Health	40.80%	Health	12.10%
Industrial	33.30%	Industrial	17.40%
Univ/Gov	45.90%	Univ/Gov	10.80%
Large	42.30%	Large	14.90%
Small	36.90%	Small	13.40%
(f) Business milestones?		(l) Any other terms?	
All	43.70%	All	8.10%
D/I/C/E	23.50%	D/I/C/E	2.90%
Health	40.80%	Health	7.00%
Industrial	37.70%	Industrial	11.60%
Univ/Gov	57.70%	Univ/Gov	9.00%
Large	49.10%	Large	7.20%
Small	35.60%	Small	9.40%

Exhibit. 3 (Q43): What are the three most common reasons why you would restructure some of last year's deals if you could? (Check up to 3 of the following)

	N	Checked		N	Checked
(a) New information has emerged about the market opportunity			(e) Realize that you made mistakes negotiating		
All	380	38.90%	All	380	28.40%
D/I/C/E	36	55.60%	D/I/C/E	36	19.40%
Health	166	40.40%	Health	166	22.30%
Industrial	68	29.40%	Industrial	68	30.90%
Univ/Gov	110	37.30%	Univ/Gov	110	39.10%
Large	226	40.30%	Large	226	28.30%
Small	154	37.00%	Small	154	28.60%
(b) New information has emerged about the performance of the technology			(f) Revised your view of the most profitable licensing strategy (e.g. RAND vs. exclusivity/high royalty rate)		
All	380	33.20%	All	380	20.00%
D/I/C/E	36	13.90%	D/I/C/E	36	27.80%
Health	166	38.60%	Health	166	16.90%
Industrial	68	26.50%	Industrial	68	22.10%
Univ/Gov	110	35.50%	Univ/Gov	110	20.90%
Large	226	31.90%	Large	226	21.20%
Small	154	35.10%	Small	154	18.20%
(c) Stronger IP position today			(g) The other side is not putting their promised effort into the product/ technology		
All	380	16.80%	All	380	52.90%
D/I/C/E	36	22.20%	D/I/C/E	36	36.10%
Health	166	19.30%	Health	166	45.80%
Industrial	68	16.20%	Industrial	68	48.50%
Univ/Gov	110	11.80%	Univ/Gov	110	71.80%
Large	226	13.70%	Large	226	55.80%
Small	154	21.40%	Small	154	48.70%
(d) Revised business strategy			(h) Other		
All	380	40.50%	All	380	5.00%
D/I/C/E	36	50.00%	D/I/C/E	36	5.60%
Health	166	41.60%	Health	166	5.40%
Industrial	68	54.40%	Industrial	68	4.40%
Univ/Gov	110	27.30%	Univ/Gov	110	4.50%
Large	226	42.00%	Large	226	2.70%
Small	154	38.30%	Small	154	8.40%

in ordinary transactions. The survey asked respondents to identify elements of a deal, in hindsight, which they would now restructure. The data are shown in Exhibit 2 showing overall results and the data for each of the six segments. The leading areas of remorse were field of use restrictions (43 percent), milestones (business 44 percent, technical 40 percent), payments (amounts 35 percent, structure of payments 32 percent), and degree of exclusivity (33 percent). Least common concerns were reach-through provisions (10 percent), terms of use (14 percent), most-favored nation provisions (14 percent, overall, though DICE claimed 29 percent), duration (22 percent) and grant-backs (23 percent). Overall 8 percent indicated that there were other terms not identified in the survey that was a cause for retrospective concern.

Next the survey asked for the most common reasons why any element of remorse has occurred. The respondents were asked to identify the three most common reasons from a list of eight choices. The results are shown in Exhibit 3. The most common factor is a reflection of disappointment in the partner's post-deal level of effort namely, "the other side is not putting their promised effort into the product/technology:" this was cited 53 percent of the time by the overall respondents, led by Univ./Gov't (72 percent). Next in frequency of response was a revised business strategy. 40 percent overall cited this explanation, lead by DICE (50 percent). The next most important factor was the emergence of new information about the market opportunity, cited by 39 percent overall, but 56 percent by DICE. Next was new information about the performance of the technology, cited by 33 percent overall, lead now by Health (39 percent) with DICE (14 percent) being the lowest citer of this factor. Next was the recognition of mistakes made in negotiating, which was cited by 28 percent overall, led by Univ./Gov't (39 percent), with DICE (19 percent) scoring the lowest of the segments. Notably less frequently cited was a revised view of the most profitable licensing strategy (20 percent), a stronger IP position today (17 percent), and any other reason (5 percent). These data show some interesting reversals between the Large and Small segments. Large more frequently cited the effect of changes in market opportunity (difference of 3.3 points), revised business strategy (3.7 points), revised view of most profitable licensing strategy (3.0 points), and the other side is not putting their promised effort (7.1 points, the largest differential); whereas Small cited more fre-

quently the effect of changes in the performance of the technology (3.2 points), changes in the strength of its IP position (7.7 points, the largest differential), and other (5.7 points). As to mistakes made, Large and Small cited this explanation with essentially identical frequency (0.3 points differential).

The IP Environment

The survey again sought to determine the level of concern with regard to forces and opinions that are generally adverse towards IP and licensing. Specifically, the respondents were asked: "Some argue that IP-protected products should be made available at prices below those for which there are actually licensed or sold. Others argue that there should be no IP protection at all. Still others believe that some form of compulsory licensing should be available under certain conditions. To what extent do you see these forces as being cause for concern with respect to your business?" The second part of this question asked for the respondent's assessment "today" (beginning of 2006) and for what he or she believed would have been their response three years previous. The results are shown in Exhibit 4 for each segment and the overall response. The right-most two columns shown in italics present the data in two ways: the sum of moderate and strong concern, and the differential from "today's" perception versus "today's" perception of three years prior.

Looking at the "today" data, every segment reported greater than 50 percent moderate or strong concern, with the overall result of 60 percent, led by Health (66 percent). In contrast, the data for one's perception three years earlier was below 50 percent for every segment, whereas the "today" data was all greater than 50 percent. The difference between "today" versus three years prior was 22 points overall, lead by DICE (30 points). No segment reported less than a 15 point increase in concern.

Another point of comparison is the "today" data taken for exactly this question in last year's survey compared to the current data. The data taken in early 2005, the overall moderate + strong cause for concern data was 55 percent, where Large (61 percent) showed somewhat greater concern than Small (53 percent), perhaps because companies in the Small segment have many other causes for concern (such as companies in the Large category). The early 2006 data for "today" has shown an increase by 5 points, with Small (60.8 percent) now exceeding (slightly) Large (60.3 percent), suggesting perhaps that companies in the Small segment are experiencing what the ones in Large saw earlier.

Exhibit. 4 (Q5): Some argue that IP-protected products should be made available at prices below those for which they are actually licensed or sold. Others argue that there should be no IP protection at all. Still others believe that some form of compulsory licensing should be available under certain conditions. To what extent do you see these forces as being cause for concern with respect to your business?

	No cause for concern	Mild cause for concern	Moderate cause concern	Strong cause for concern	Moderate + Strong Concern	Today-3 Years Ago
My assessment 3 years ago						
All	22.7%	38.3%	26.0%	13.0%	39.0%	
D/I/C/E	22.6%	47.2%	22.6%	7.5%	30.1%	
Health	20.6%	33.5%	27.5%	18.3%	45.8%	
Industrial	30.1%	32.5%	27.7%	9.6%	37.3%	
Univ/Gov	21.6%	46.0%	23.7%	8.6%	32.3%	
Large	22.0%	38.2%	26.7%	13.2%	39.9%	
Small	23.9%	38.6%	24.9%	12.7%	37.6%	
My assessment today						
All	10.4%	29.1%	38.1%	22.4%	60.5%	21.5%
D/I/C/E	17.0%	22.6%	43.4%	17.0%	60.4%	30.3%
Health	8.0%	26.3%	35.3%	30.4%	65.7%	19.9%
Industrial	11.9%	35.7%	38.1%	14.3%	52.4%	15.1%
Univ/Gov	10.7%	32.1%	40.7%	16.4%	57.1%	24.8%
Large	8.9%	30.8%	37.1%	23.2%	60.3%	20.4%
Small	12.6%	26.6%	39.7%	21.1%	60.8%	23.2%

Future Plans

The Licensing Foundation will conduct its 4th Annual Survey of the Licensing Industry in early 2007 covering calendar year 2006. We will again rely on the generous spirit of LES members in taking time from fighting impediments to dealmaking, overcoming barriers to intangibles marketing and negotiations, dealing with deal remorse, and overcoming increasing concerns about adverse forces in the IP and licensing environment to once again participate in this surveying process. In addition we will begin posting the extensive data that the Foundation has collected during these past three years which has only been summarized in the respective year's *les Nouvelles* articles. The reader should check on the Licensing Foundation's Web site in early 2007: www.licensingfoundation.org. Finally, the Foundation is considering supplementing this member-survey by also developing a company-specific survey as part of an overall index of annual company activities by industry segment.

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We also wish to acknowledge the work of Professors Iain Cockburn and Ajay Agrawal who assisted the Foundation in developing the questionnaire and collecting the data, as they have done for all three surveys taken to date.

Most of all we want to acknowledge the effort made by each of you who responded to our request for participation in taking the survey, and hope that our degree of appreciation will expand in 2007 as even more of you join your colleagues in adding your data and wisdom to this effort. ■