

U.S./Canadian Licensing In 2004: Survey Results

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Initial Results of a Survey Conducted in January/February 2005 by the Licensing Foundation of LES (USA & Canada),¹ on behalf of The Licensing Foundation.²

Abstract And Summary Of Findings

Reported here is the survey data obtained by The Licensing Foundation of LES (USA & Canada) during January and February 2005 for the year 2004. Such results derive from the second annual licensing survey sponsored by The Licensing Foundation (TLF) of (USA & Canada).

The primary focus of this year's survey was the motivation for licensing. The level of response was sufficiently large that we are able to present data representing four discrete industry groups (Health, Digital Information Communications and Electronics, Industrial [including transportation and chemicals], and University/Government) for two distinct company sizes (Small with less than 500 employees, and Large with more than 500 employees).

These data show us interesting ways in which all the sizes and sectors are similar (in the importance, for instance, they place on the different forms of IP), and how they are differ from one another (in the primary motivations to in or out license). The presence of both strong similarities and notable dif-

ferences supports the idea of the LES "campfire" ...all of us in licensing do indeed have common interests, despite coming from highly disparate licensing contexts, and yet we bring different perspectives and learnings that we can share to each other's benefit. If we were all and only the same in our experiences and priorities, or all and only different, the LES campfire would be either too boring to enlighten or too chaotic to cohere.

Introduction

The Licensing Foundation (www.licensingfoundation.org) is a 501C3, not-for-profit corporation founded by LES (USA & Canada) in 2001 for the purpose of public education and service regarding licensing. The emergence of the licensing profession in the 40 years since the founding of LES in 1965 is generally recognized as being one important indicator of the growth in trade of intangible assets in all its many forms. Yet the extent and character of this business of trade in intellectual property has not been as well studied as the industry segments in which licensing occurs, such as the pharmaceutical and communications industries, or other forms of trade such as merger and acquisitions.

In the December 2004 issue of *les Nouvelles*, The Licensing Foundation (TLF) presented the results of its first survey of LES (USA & Canada) Members taken in January and February 2004 covering the period 2003 (2004 Survey).³ In the present paper,

the result of the second of such annual surveys is reported. The long-term aspiration of such surveying initiative sponsored by TLF was and remains to:

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 provided here were again derived by electronically surveying LES (USA & Canada) Members, during the period January and February 2005, with most questions directed to the respondents' experience over the then ending 12 months, essentially the year 2004. The reader is referred to the 2004 Survey for further background for TLF's motivation for inaugurating such licensing survey, the overall survey methodology, and a literature review of other survey and research information.

A key aspect of TLF survey was the desire to focus on licensing matters primarily involving corporate IP asset owners who are members of LES (USA & Canada) and, thereby, more readily accessible to TLF, and which conduct both out- and in-licensing

1. www.licensingfoundation.org. The Licensing Foundation is a wholly-owned 501c3 subsidiary of LES (USA & Canada).

2. The Licensing Foundation during 2005 was managed by its Board comprised of Louis Berneman, Ted Cross, Kathleen Denis, Ada Nielsen, Richard Razgaitis, and Art Rose, on behalf of the Board of LES (USA & Canada).

3. Razgaitis, Richard, "U.S./Canadian Licensing in 2003: Initial Results of a Survey Conducted in January 2004," *les Nouvelles*, Volume XXXIX No. 4, pp139-151.

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despite being (normally) capable of directly commercializing such IP assets and in-licensing despite (normally) having its own R&D/product development capabilities. To simplify the scope of the survey we excluded licensing activities from the following areas: Right-to-Use licensing (sometimes known as “shrink wrap” licenses), copyrighted content licensing (music, text, and the like), and trademark licensing. Though we did ask some questions about cross-licensing, this practice was not a major focus of the survey. Further, because our database of respondents were members of LES (USA & Canada) we asked for data and perspectives for licensing activities in North America only.

Assisting TLF in preparing the survey instrument, conducting the survey, and participating in the analysis of the data was again Professors Iain Cockburn of Boston University and Ajay Agrawal of the Queen’s University in Kingston Ontario, Canada. Prof. Cockburn contributed to this paper in the below estimates of the size of the licensing industry and the description of the survey methodology. Both their contributions are gratefully acknowledged.

How Big Is The Licensing Industry?

Before considering TLF survey data, it is useful to gain a perspective on the extent of annual technology licensing in the U.S. and Canada. Developing a reliable estimate of the volume of technology licensing continues to be hindered by a lack of comprehensive data on licensing activity. Where these data are currently collected by statistical agencies, reported data are either highly aggregated (e.g. patent licensing fees and royalties bundled with payments for use of trademarks, for copyrighted creative works, for mineral rights, for franchising etc.) or appear to suffer from reporting issues (sampling based on plant-level establishments, with weights based on employment) leading to misclassification or under-reporting of corporate functions and activities such as IP management.

Nonetheless, some sense of the magnitude of the licensing “industry” can be gleaned from data reported in sector aggregations by the U.S. Internal Revenue Service (IRS). The most recent IRS analysis of corporate tax returns reports \$115 billion of “royalty” income in 2002 for active U.S. corporations.⁴ Unfortunately this total aggregates payments for “industrial royalties” (patents, trademarks, trade secrets, goodwill, franchises, know-how, and similar rights) with royalties on copyrighted creative works and natural resources. However the IRS also provides royalty data by industry segment which permits at least approximate estimations of, technology licensing royalties. Royalties received for copyrighted creative works seem likely to be largely reported in the publishing and broadcasting industries, for example, while franchise fees are likely to be concentrated in accommodation and food services. Royalties received for technology licenses are likely to be concentrated in sectors such as manufacturing (\$73 billion; \$20 billion of which is in “chemicals,” and \$23 billion in “computer and electronic manufacture”), and scientific and technical services (\$4.7 billion). The data for the information sector (\$13 billion), which includes companies in publishing, movies, broadcasting, Internet, telecommunications, and internet service provision, is likely dominated by copyright royalties but with a significant quantity of technology royalties.

Other indicators of licensing also point to very substantial levels of activity. Considering only patented technology, various studies suggest that of the order of 10 percent of patents may be licensed or cross-licensed. A survey sponsored by

IPO of a small sample of large U.S. manufacturers reported that, on average, these companies out-licensed 19 percent of their patent portfolios.⁵ A much larger scale EU-sponsored study surveyed inventors of over 9,000 EPO patents issued in the mid-1990s and found that 13 percent of such patents were being exploited through licensing.⁶ Though these ratios are likely to be biased upwards (IPO member companies are not representative of the population of U.S. corporations, and inventors of less significant or “dormant” patents may be less likely to respond to a survey) they nonetheless imply a very large annual volume of licensing transactions. In 2004, there were more than 160,000 U.S. patents issued as reported by the USPTO, so even if only seven percent are licensed on an annual basis, such “deal flow” would correspond to 10,000 patents licensed per year.⁷

Although neither the estimate of annual payments for licenses to technology IP, nor the number of associated transactions, is known with any precision, such above figures suggest a large and important economic activity. The economic significance of these IP transactions to the licensees in their respective products and markets adds to such estimates.

Survey Administration

The survey was administered in the form of an online questionnaire

4. “Returns of Active Corporations, Form 1120,” Statistics of Income, IRS/US Department of the Treasury, <http://www.irs.gov/taxstats/bustaxstats/index.html>, accessed 10/12/05.

5. Cockburn, I. and Henderson, R. (2004) “The 2003 Intellectual Property Owners Association Survey On Strategic Management Of Intellectual Property,” Intellectual Property Owners Association, Washington, DC.

6. Giuri, P., Mariani, M., et al. (2005) “Everything You Always Wanted to Know About Inventors (But Never Asked): Evidence from the PatVal-EU Survey,” *LEM Working Paper 2005/20*, Sant’Anna School of Advanced Studies, Pisa.

7. Such figure would not reflect a like number of separate agreements as any single agreement could grant rights to many patents. Further, the data for the percentage of issued patents out-licensed is likely to include agreements whereby new patents are automatically included in previously executed licenses. On the other hand, there are a significant number of licenses that are non-exclusive (40 percent according to the 2004 Survey), and which do not involve any patents (25 percent according to the referenced IPO Survey), both factors that would increase any estimate of licensing activity. Finally, including data for Canada would also tend to increase such figure.

accessed via the Internet. Just over 6,200 members of the Licensing Executives Society (U.S.A. & Canada), Inc. were invited in January and February 2005 to participate in the survey via several rounds of e-mail from TLF. 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 hardcopy mail-back survey instruments. Separate versions of the survey were administered to the approximately 3,658 members identified as technology creator/users and to the 2,530 identified as being providers of professional services (legal, consulting etc.). The survey Web site received a total of 1,273 visits, 798 for the Technology Creator/User Survey and 485 for the Professional Services Survey. Respondents were guaranteed anonymity, and no records linking their identity to the database of survey questionnaire responses have been retained.

A complete copy of the survey instructions and questions is available at the Licensing Foundation Web site: www.licensingfoundation.org.

Response Rate

This paper reports results for the Technology Creator/User Survey. Of the 798 visits to the survey web site, 526 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 473 usable records.

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 re-

sponse rates is not always 473. For example, of the total of 473 usable records, only a maximum of 255 could contain answers to questions about in-licensing. (99 respondents identified their organization as primarily engaged in in-licensing, and 156 as engaged in both in-and out-licensing.)

The degree to which the results presented here can be considered statistically representative of all technology licensing activity in North America is difficult to assess. It is important to note that the LES (USA & Canada) membership list is a “convenience” sample, not a randomized quota based or stratified sample designed to be statistically representative of an underlying population. “Frame bias,” i.e. the fact that the membership of LES (USA & Canada) can generally be assumed to be reasonably representative of 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 (USA & Canada), and who differ systematically from those who are. “Response bias,” i.e. systematic differences between 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 Healthcare 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.

Though 526 responses from a sample frame of 3,658 may seem low, it is in line with similar voluntary surveys that typically have a 10-30 percent response rate. Note that because LES (USA & Canada) membership is individual, not corporate, a single organization can appear multiple times in the mailing list. The 3,658 members identified as belonging to

the Technology Creator/User category come from fewer than 1,200 distinct organizations, with few organizations generating multiple responses. We therefore achieved coverage of about 35 to 40 percent of the total number of Technology Creator/User organizations represented in the LES membership.⁸

Characteristics Of Respondent’s Organizations

Respondents come from a wide range of organizations. The breakdown of the sample by industry sector of the respondent’s organization was 45 percent Healthcare, 24 percent University/Government Labs, 12 percent Electronics (including communications, telecom, Internet), 10 percent Energy, chemicals, petrochemicals, polymers, and allied industries, four percent Transportation and Mechanics, three percent Software, and two percent Food and Beverage. Just over half (53 percent) of these organizations were “Small” i.e. have 500 employees or less, with 43 percent of the total reporting 100 employees or less. Average sales (based on center points of response categories) were \$3.1B, and average R&D spending was \$237M. However, these averages derive from a very wide underlying range, with 16 percent of the sample reporting sales of less than \$1M and 8 percent more than \$10B, and 18 percent reporting R&D expenditure of less than \$1M and nine percent more than \$1B. Sixty percent of respondent’s organizations operated internationally. Two-thirds of the organizations claimed they were engaged in performing basic research and three-fourths were engaged in developing new products, though only 45 percent sold to end-users.

For purposes of reporting the survey data, we found it useful to segment our data into eight groups distinguished by two size populations, “Large” and “Small” demarked by 500 employees, and

8. The figure is approximate since individual members do not always identify their organization to LES, and do not necessarily use identifiable corporate e-mail addresses.

Exhibit 1. Who Have We Surveyed?

Size of respondent's organization		# Employees		Sales \$MM		R&D Budget \$MM	
		N	Mean	N	Mean	N	Mean
HEALTH	Large	81	8358.0	80	7514.7	78	512.8
	Small	130	92.2	124	72.5	124	50.5
DICE	Large	32	15250.0	32	11893.8	30	655.2
	Small	38	123.8	38	68.2	37	51.6
INDUSTRIAL	Large	49	11648.0	49	7347.7	44	314.3
	Small	29	100.5	28	434.7	27	12.4
UNIVERSITY/ GOVERNMENT	Large	49	5699.0	44	1223.6	44	338.0
	Small	64	34.1	64	31.3	56	135.2

Table entries are derived from the midpoints of categorical response ranges

100X

10X

1X

Order of Magnitude

Exhibit 2. Which of the Following Activities in the Industry Value Chain Does Your Firm/Business Unit Perform?

		N	Basic R&D	New Product Development	Manufacturing	Marketing to End-users
HEALTH	Large	81	75%	99%	84%	83%
	Small	130	62%	86%	36%	34%
DICE	Large	31	39%	97%	71%	61%
	Small	33	55%	73%	45%	61%
INDUSTRIAL	Large	48	44%	90%	88%	73%
	Small	29	48%	93%	34%	48%
UNIVERSITY/ GOVERNMENT	Large	48	98%	33%	4%	2%
	Small	62	84%	50%	5%	19%

Table entries are the fraction of respondents answering any of these questions who checked that option

four "sectors," Health (healthcare including biotechnology, pharmaceuticals, and medical devices), DICE, for Digital Information Communication, and Electronics (including telecommunications, Internet, and software), Industrial (transportation and mechanics, food and beverage, energy, chemicals, petrochemicals, polymers, and allied industries), and University/Government (including government laboratories

and research hospitals). The characteristics of each of these eight groups by number of employees, annual sales, and R&D budgets is shown in Exhibit 1.

Exhibit 1. Who Have We Surveyed?

For the Health sector, Large companies evidence approximately two orders of magnitude more employees (a mean of 8,358 vs. 92) and annual sales (\$7.5 B vs. \$72 M),

but one order of magnitude greater R&D expenditure (\$513 M vs. \$51 M), strongly suggestive of a greater R&D intensity with Small companies. Interestingly, the same relationship is also evidenced with the DICE sector, namely two orders of magnitude difference between Large and Small with respect to employees and annual sales, but one order with respect to R&D budget. For the Industrial sector, the difference in an-

Exhibit 3. How Important Are the Following Types of IP in Creating Competitive Advantage?

		N	Patents	Trademarks	Copyright	Know-how	Trade Secrets
HEALTH	Large	81	3.8	3.0	2.3	3.5	3.2
	Small	130	3.8	2.5	2.0	3.5	3.0
DICE	Large	32	3.5	3.2	3.0	3.5	3.4
	Small	37	3.6	2.8	2.5	3.3	2.9
INDUSTRIAL	Large	49	3.4	2.9	2.1	3.6	3.6
	Small	29	3.6	2.9	2.2	3.7	3.5
UNIVERSITY/ GOVERNMENT	Large	49	3.5	2.0	2.6	2.7	1.5
	Small	63	3.8	2.1	2.8	2.8	1.8

Table entries are mean scores on a 1-4 response scale (1=Not Important, 4=Extremely Important)

nual sales is only approximately one order of magnitude.

The respondents were asked to identify how they participate in the product creation value chain by indicating whether they participated in Basic R&D, New Product Development, Manufacturing, and/or Marketing to End-Users. The percentage of respondents who gave affirmative answers is shown in Exhibit 2 for the eight groups (Large and Small in each of four Sectors).

Exhibit 2. Which of the Following Activities in the Industry Value Chain Does Your Firm/Business Unit Perform?

Here we can see some differences among the groups. With respect to Basic R&D, Large Health companies do more of it, in contrast with DICE and Industrial sectors where the Small size companies claim they do more of such R&D (although with the Industrial sector the difference may not be statistically different). For Health, DICE, and Industrial sectors the Large companies participate substantially more in manufacturing than the Small; interestingly, the Large Health and Industrial manufacturing percentages are nearly alike, as are the corresponding figures for the Small. Health and Industrial Large companies are substantially more involved in marketing to end-

users than the corresponding Small companies, whereas for the DICE sector the percentages for Large and Small were identical. These results for manufacturing and marketing to end-users suggest that Small companies are likely to be more dependent on licensing out than Large companies, further supported in the case of DICE and Industrial by Small companies claiming to do more basic R&D than their large sector counterparts. Interestingly, Health, DICE, and Industrial groups, Large and Small, are all active in New Product Development where the reporting percentages all exceeded 90 percent except for Small DICE (73 percent). Although not surprising, the data for University/Government supports the common expectation, namely that they are the most active in basic R&D, do comparatively less new product development than the other sectors and very little manufacturing or marketing to end-users.

We asked respondents to ascribe relative importance on a four point scale, 1 being not important to 4 being extremely important, of creating competitive advantage for each of five forms of IP rights as shown in Exhibit 2.

Exhibit 3. How Important Are the Following Types of IP in Creating Competitive Advantage?

These data suggest that these Sec-

tors are closely similar in their perspectives. All eight groups ranked patents as most important, with the lowest group mean score 3.4 and the highest group mean score 3.8. Also highly important for all six groups in Health, Dice, and Industrial was Know How (all group mean scores between 3.3 and 3.7), closely followed by Trade Secrets (2.9 to 3.6). In the case of Univ/Gov the importance of Know How was substantially less than patents, presumably because of the earlier stage nature of their R&D, and the importance of Trade Secrets was low, presumably because of practice of publishing research. Recognizing the very significant differences between Large and Small companies seen in Exhibit 1, and the significant difference between the markets served by each of these Sectors it is remarkable how similar is the importance ascribed to each of these forms of IP rights.

Finally, we sought to understand how these eight groups compared in terms of the volume of “in- and out-licensing” agreements and payments/revenues, and normalizing such payments (or revenues) by R&D spending and annual sales, respectively. These data are provided in Exhibits 4 and 5.

Exhibit 4. Volume of In-Licensing Exhibit 5. Volume of Out-Licensing

Examining the mean licensing

Exhibit 4. Volume of In-Licensing

		Number of In-License Agreements		In-Licensing Payments \$MM		In-Licensing Payments as fraction of R&D	
		N	Mean	N	Mean	N	Mean
HEALTH	Large	64	41.30	61	126.19	60	0.11
	Small	86	8.65	84	11.51	78	0.11
DICE	Large	18	49.44	10	303.15	7	0.12
	Small	16	18.19	14	61.55	14	0.10
INDUSTRIAL	Large	31	28.55	28	63.18	27	0.07
	Small	14	9.61	13	5.17	12	0.07
UNIVERSITY/ GOVERNMENT	Large	2	75.00	0		0	
	Small	6	6.25	6	0.06	6	0.08

Exhibit 5. Volume of Out-Licensing

		Number of Out-License Agreements		Out-Licensing Revenues \$MM		Out-Licensing revenue as a fraction of sales	
		N	Mean	N	Mean	N	Mean
HEALTH	Large	35	24.20	34	48.14	33	0.05
	Small	91	14.83	89	11.38	84	0.42
DICE	Large	24	51.40	16	165.23	16	0.12
	Small	29	30.84	27	17.26	28	0.47
INDUSTRIAL	Large	33	38.62	31	42.49	32	0.06
	Small	25	25.20	25	11.75	24	0.32
UNIVERSITY/ GOVERNMENT	Large	48	58.60	46	10.23	40	0.15
	Small	61	46.35	61	18.55	60	0.49

revenue data in both Exhibits (payments in Exhibit 4 and revenues in Exhibit 5), the higher corresponding value is shown by underlining. So for Large Health, Large and Small DICE, and Large Industrial, there were greater in-licensing payments than out-licensing revenues. For Small Industrial and both Large and Small Univ/Gov the out-licensing revenues exceed the in-licensing payments. (In the case of Small

Health the two corresponding dollar figures were essentially identical.) Given the substantial difference in size between Large and Small (seen in Exhibit 1), the corresponding difference in payments and revenues suggests that Small companies are more licensing intensive. The ratios expressed in the right most column of Exhibit 4 and 5 are for the purpose of seeing whether there exists a common measure of license payment or

revenue intensity. Interestingly, for all seven groups for which there were data, group mean in-licensing payments ranged from seven to 12 percent of R&D spending, which seems to be a very small difference considering the dramatic differences in size and markets. The corresponding data for out-licensing revenues as a percentage of sales is much more disparate: from a low of five percent to a high of nearly 50 per-

Exhibit 6. Is Licensing Mainly About Litigation?

		N	Mean
HEALTH	Large	80	0.22
	Small	130	0.10
DICE	Large	32	0.27
	Small	37	0.25
INDUSTRIAL	Large	48	0.19
	Small	29	0.11
UNIVERSITY / GOVERNMENT	Large	49	0.09
	Small	63	0.05

cent. But even here there appears to be some meaning. The Small group in Health, DICE, and Industrial were much more highly dependent on licensing revenues as a percentage of their sales—group means of 42, 47, and 32 percent, respectively, than the corresponding Large group—5, 12, and 6 percent, respectively. These data tend to highlight the difference between Large and Small company populations but again tend to show strong similarities across sectors (not including the special case of the University/Government sector).

Survey Data Relating To Big Licensing Issues

In the 2004 Survey we reported data on the impediments of licensing including aspects of buyer's (and seller's) remorse looking retrospectively at deals done. In the current survey we sought to examine the motivations for licensing (or not licensing). In the first such question we sought to assess the importance of litigation-motivated licensing by asking what fraction of activities were motivated by settling, or avoiding, litigation as opposed to some voluntary pursuit of a business opportunity. The results are shown in Exhibit 6.

Exhibit 6. Is Licensing Mainly About Litigation?

The data here are capable of a glass half-full or half-empty interpretation. Is litigation a major mo-

tivator? It is more so for Large than Small companies (Health, DICE, and Industrial), but even so it is for a small percentage of activities: averaging 19 to 27 percent for Large, 10 to 25 percent for Small, and less than 10 percent for University/Government. So, more than 70 percent of the time the motivation for licensing is a business opportunity not driven by litigation. But some might well conclude that 20 percent or more of the transactions being in the context of litigation is a large percentage. (It would be interesting to know the relative dollar value or time intensity associated with such respective percentages; such data may be a better overall measure of the relative importance of litigation-based licensing). Again these data tend to suggest the groups are more similar than they are different. The exception is Small DICE companies; they are more commonly involved in litigation than their Small counterparts in Health or Industrial.

A deeper question than the litigation issue is why even have IP assets? For what purpose or purposes did our respondents claim as the purpose of its IP. The answer is given in Exhibit 7. As before a score of 1 represented not very important, and 4 extremely important. We asked each respondent to score the relative importance of its IP with respect to the nine different motivations shown in the column headings.

Exhibit 7. How Important Are Each of the Following Motivations to Develop IP Assets?

The first motivation, manage litigation risk, connects these data with that of Exhibit 6. The group that ascribed the most importance to managing such risk was Large DICE (it was the highest score for that group), which was also the group that reported the highest average percentage (27 percent) of licensing activity motivated by settling or avoiding litigation. So for that group having IP was the single most important reason (score of 3.4), and it was related to nearly as high scores (3.3) for Stop Imitation and Patent Bargaining, both of which are related to litigation matters; however, it also scored 3.3 for Higher Margins which may be a value distinct from litigation matters. For Large Health, the highest priority was Higher Margins (3.7), followed by Stop Imitation (3.3), Manage Litigation Risk (3.1) and Patent Bargaining and Partner/JV (both at 3.0); for Small Health, Partner/JV came first (3.5), followed by Higher Margins and Stop Imitation (both at 3.2) and Licensing Revenue and Signal Capabilities (both 3.1). Consistent with earlier data, these data suggest that Small companies are more licensing intensive, and dependent. Small DICE companies placed the highest importance on Licensing Revenue (3.4) of any of the six non-University/Government groups. Small and Large Industrial companies Exhibited similar priorities: Higher Margin (3.5 and 3.4, respectively) followed by Stop Imitation (3.3 and 3.4, respectively). Clearly for University/Government the motivation was Licensing Revenue (3.4 and 3.6) and Partner/JV (3.1 and 3.0). One other notable observation is that there are many motivations for having IP. For the six Health, DICE, and Industrial groups, the lowest score was 2.5 for any of the nine columns/motivations, which is only a little more than one scoring point below the highest reported score (3.7). (In contrast, the University/Government groups showed a dynamic range of scoring from 1.3 to 3.6.)

Exhibit 7. How Important Are Each of the Following Motivations to Develop IP Assets?

		N	Manage Litigation Risk	Higher Margins	Licensing Revenue	Stop Imitation	Partner/ JV	Raise Rivals Costs	Signal Capabil- ities	Patent Bar- gaining	Other Bar- gaining
HEALTH	Large	81	3.1	3.7	2.6	3.3	3.0	2.8	2.5	3.0	2.6
	Small	130	2.7	3.2	3.1	3.2	3.5	2.7	3.1	2.9	2.7
DICE	Large	32	3.4	3.3	2.9	3.3	2.7	2.9	2.5	3.3	2.8
	Small	38	3.0	2.9	3.4	2.9	2.8	2.3	2.8	2.9	2.7
INDUSTRIAL	Large	49	2.9	3.4	2.4	3.4	2.7	3.0	2.5	2.7	2.5
	Small	29	2.7	3.5	3.1	3.3	3.3	2.7	2.7	2.7	2.8
UNIVERSITY/ GOVERNMENT	Large	49	1.9	1.8	3.4	1.7	3.1	1.3	2.8	2.2	2.0
	Small	63	2.1	2.1	3.6	1.9	3.0	1.5	2.7	2.4	2.0

Table entries are mean scores on a 1-4 response scale (1=Not Important, 4=Extremely Important)

Exhibit 8. In What Fraction of In-Licensing Agreements Were the Following a Significant Goal?

	N	Avoid Licensor Litigation	Avoid 3rd Party Litigation	Minimize Licensing Payments	Compensate for lack of R&D	Utilize Mfg Capacity	Utilize Marketing Capacity	Options for future development	Exploit foreign technology	Influence Competitors	Develop a standard	Promote diffusion	Expand IP Estate	Partner / JV	Learn about partner	Explore unfamiliar technology	
HEALTH	Large	74	0.19	0.19	0.29	0.39	0.15	0.36	0.44	0.22	0.17	0.13	0.12	0.27	0.36	0.19	0.20
	Small	83	0.11	0.13	0.21	0.39	0.10	0.19	0.40	0.18	0.21	0.13	0.14	0.32	0.41	0.16	0.13
DICE	Large	20	0.17	0.22	0.40	0.28	0.11	0.23	0.22	0.13	0.18	0.28	0.29	0.30	0.30	0.15	0.18
	Small	16	0.17	0.23	0.30	0.31	0.10	0.12	0.37	0.12	0.24	0.19	0.23	0.36	0.31	0.21	0.29
INDUST.	Large	33	0.13	0.12	0.17	0.28	0.14	0.15	0.31	0.17	0.20	0.09	0.13	0.26	0.23	0.12	0.19
	Small	14	0.13	0.10	0.29	0.17	0.05	0.10	0.32	0.16	0.23	0.04	0.16	0.32	0.34	0.13	0.04
UNIV./ GOV.	Large	3	0.00	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.38	0.25	0.13	0.13	0.13	0.25
	Small	7	0.00	0.06	0.00	0.15	0.00	0.05	0.25	0.00	0.03	0.03	0.31	0.20	0.35	0.15	0.29

Drilling deeper into motivations, in Exhibit 8 we show the relative frequency that in-licensing agreements were done with respect to 15 different goals given by the column headings (shown in three panels of data for each of the eight groups).

Exhibit 8. In What Fraction of In-Licensing Agreements Were the Following a Significant Goal?

Here the data suggest some important difference in the relative priorities for in-licensing among the eight groups. For Large Health

the top priority was Options for Future Development (this group reported that on average 44 percent of their agreements had this as the significant goal), followed by Compensate for Lack of R&D (39 percent; which perhaps is just the half-empty

Exhibit 9. In What Fraction of Out-Licensing Agreements Were the Following a Significant Goal?

		N	Maximize Licensing Revenue	Fully Exploit R&D capability	Access to Mfg Capacity	Access to Marketing Capacity	Access to foreign markets	Influence Competitors	Develop a Standard	Promote diffusion	Minimize Enforcement Costs	Partner/ JV	Learn about partner	Learn about new markets
HEALTH	Large	41	0.61	0.46	0.16	0.19	0.19	0.14	0.15	0.25	0.26	0.36	0.15	0.16
	Small	89	0.62	0.59	0.13	0.16	0.24	0.15	0.20	0.36	0.22	0.52	0.19	0.21
DICE	Large	28	0.69	0.45	0.08	0.14	0.19	0.19	0.30	0.36	0.28	0.30	0.08	0.13
	Small	33	0.75	0.39	0.14	0.14	0.26	0.30	0.26	0.33	0.33	0.45	0.28	0.28
INDUSTRIAL	Large	36	0.57	0.38	0.11	0.10	0.21	0.24	0.17	0.18	0.17	0.28	0.17	0.15
	Small	26	0.51	0.41	0.17	0.13	0.29	0.27	0.26	0.38	0.19	0.41	0.13	0.14
UNIV./GOV.	Large	49	0.56	0.73	0.03	0.07	0.08	0.02	0.16	0.54	0.31	0.33	0.16	0.12
	Small	63	0.55	0.63	0.05	0.05	0.08	0.03	0.16	0.47	0.32	0.39	0.14	0.16

way of expressing the same Options value idea), and Partner/JV and Utilize Marketing Capacity (both at 36 percent). For Small Health the highest motivation was Partner/JV (41 percent), closely followed by Options for Future Development (40 percent) and Compensate for Lack of R&D (39 percent). Although the percentages are smaller the order of priorities for Industrial Large and Small mirror those corresponding in size to Health, namely: the highest priority for Large Industrial is Options for Future Development (31 percent) whereas for Small it is Partner/JV (34 percent). Overall, Options for Future Development was the highest ranked motivation for three groups (Large Health, Small DICE, and Large Industrial), and Partner/JV was the highest priority for Small Health and Small Industrial. Paralleling the results of Exhibit 7, the data of Exhibit 8 generally show that there are a wide range of motivations for licensing transactions (here in-licensing). For Large Health companies there were eight motivations expressed with an average frequency of 20 percent or more. For Small Health there were six at 20 percent or more. For Large DICE there were nine, for Small DICE sev-

en. For Industrial there were fewer above the 20 percent frequency: just five for both Large and Small.

In Exhibit 9, the corresponding data as to motivations for out-licensing is presented in two panels.

Exhibit 9. In What Fraction of Out-Licensing Agreements Were the Following a Significant Goal?

The number one motivation for all six Health, DICE, and Industrial groups was Maximize Licensing Revenue (averaging from 51 to 75 percent of out-licensing agreements). Also important to these groups was to Fully Exploit R&D Capability (38 to 59 percent), and Partner/JV (28 to 52 percent). The Small company groups all put a higher priority on Partner/JV than their Large peers: 52 percent vs. 36 percent for Health, 45 percent vs. 30 percent for DICE, and 41 percent vs. 28 percent for Industrial. The large dynamic range of reporting data here for out-licensing suggests a narrower range of motivations than was the case for In-licensing.

In a final pair of questions we sought to determine at what stage companies prefer to license, considering the relative trade-offs. Exhibits 10 and 11 show these data.

Exhibit 10. In Trading Off Licensing Fees Against Development Costs, at What Stage Do you Prefer to In-License?

Exhibit 11. In Trading Off Licensing Revenue Against Development Costs, at What Stage Do You Prefer to Out-License?

The winning answer here is “later,” for Large and Small companies, in all sectors, for both “in- and out-licensing.” The exception is again the special case of University/Government where they would prefer to out-license earlier, which appears to support the common perception of “the gap” problem, namely: the difference between the level of development that universities tend to bring their technology and the level of development desired by their licensees. In preparing this question it was thought there could be differences between Small and Large companies because it is implicit that licensing-in later means a more-costly transaction. Everyone, it seems, wants to reduce their in-licensing risk and time-to-market, and is willing to pay a premium to do so. When out-licensing the motivation for the preference to do it later is less clear. Is it because out-licensing

Exhibit 10. In Trading Off Licensing Fees Against Development Costs, at What Stage Do you Prefer to In-License?

		N	Earlier	Indifferent	Later
HEALTH	Large	48	31%	21%	48%
	Small	73	38%	14%	48%
DICE	Large	19	16%	32%	53%
	Small	11	36%	27%	36%
INDUSTRIAL	Large	24	21%	17%	63%
	Small	14	21%	36%	43%
UNIVERSITY/ GOVERNMENT	Large	3	33%	33%	33%
	Small	6	17%	33%	50%

Exhibit 11. In Trading Off Licensing Revenue Against Development Costs, at What Stage Do You Prefer to Out-License?

		N	Earlier	Indifferent	Later
HEALTH	Large	41	24%	24%	51%
	Small	81	19%	15%	67%
DICE	Large	22	23%	32%	45%
	Small	24	29%	29%	42%
INDUSTRIAL	Large	29	17%	28%	55%
	Small	21	33%	29%	38%
UNIVERSITY/ GOVERNMENT	Large	42	45%	19%	36%
	Small	51	51%	20%	29%

is more of a last resort after a final decision has been made not to go into manufacturing?

Are There (IP/Licensing) ‘Barbarians At The Gate?’

Articles and stories, published and oral, over the past year appear to deal more frequently with core IP rights issues. In some cases the published perspective expresses the view that such rights “should” be reduced, even ignored, in some way, sometimes couched in some higher moral principle, sometimes under some kind of new world/age argument. One domain of such debate is the sharing of digital expressions of music, movies, and other content. Another is of avoiding proprietary software products by advocating/

using public domain alternatives. Yet another area deals with so-called gray market attacks against an IP owner’s attempt to maintain territorial product rights. Exhibit 12 shows the data we obtained when we asked what level of concern the respondents had to such attacks on the established norm of IP rights and licensing.

Exhibit 12. To What Extent Did You See These Forces [Attacks on IP/Licensing Rights] as Being Cause for Concern with Respect to Your Business 3 Years Ago? And Today?

Of course the first question, perceptions three years ago being asked in the present does not carry the same weight as if we had actually the question back then. But,

nonetheless, there appears to be a clear belief that the concern is greater today than would have been expressed just three years ago. In every one of the eight groups a greater fraction of respondents reported a greater combined Moderate and Strong Cause for Concern today compared to their belief as to what their response would have been three years ago: Large Health (74 percent today vs. 51 percent three years ago), Small Health (60 percent vs. 53 percent), Large DICE (58 percent vs. 36 percent), Small DICE (43 percent vs. 34 percent), Large Industrial (44 percent vs. 37 percent), Small Industrial (44 percent vs. 34 percent), Large University/Government (50 percent vs. 42 percent), and Small University/

Exhibit 12. To What Extent Did You See These Forces [Attacks on IP/Licensing Rights] as Being Cause for Concern with Respect to Your Business 3 Years Ago? And Today?

		N	No cause for concern	Mild cause for concern	Moderate cause for concern	Strong cause for concern	
Concern for 3 Years Ago	HEALTH	Large	58	12%	36%	17%	34%
		Small	101	23%	35%	25%	18%
	DICE	Large	28	29%	36%	18%	18%
		Small	30	40%	27%	17%	17%
	INDUSTRIAL	Large	35	37%	26%	20%	17%
		Small	27	41%	26%	30%	4%
	UNIVERSITY/ GOVERNMENT	Large	43	28%	30%	26%	16%
		Small	52	29%	40%	19%	12%
Concern for Today	HEALTH	Large	59	5%	20%	32%	42%
		Small	101	17%	24%	32%	28%
	DICE	Large	28	18%	25%	29%	29%
		Small	30	30%	27%	13%	30%
	INDUSTRIAL	Large	36	33%	22%	22%	22%
		Small	26	31%	23%	38%	8%
	UNIVERSITY/ GOVERNMENT	Large	44	16%	34%	25%	25%
		Small	53	17%	38%	23%	23%

Government (46 percent vs. 31 percent). The Health companies share the largest concern, followed by DICE, and Industrial among the six non-University / Government groups. In the case of Large Health respondents, only five percent reported No Cause for Concern.

TLF is concerned about the public discourse on the subject of IP and licensing rights. Defenders of such rights are commonly positioned as defenders of incumbency and greed. Reasoned viewpoints supporting such rights appear to have more difficulty getting time and space in such discourse and are often driven to consuming their allotment by defending against charges of being company public relations automatons. TLF is interested in continuing to assess this issue in future surveys and, more importantly, presenting in

a positive way the societal benefits of licensing.

What's Next: Future Surveys

These 2004 survey data add, we believe, to our collective understanding of the motivations for licensing, in and out. The significantly larger number of respondents in this year's survey enabled us to consider the eight groups we have reported on here. Additional data from this 2004 survey may be made available at TLF Web site: www.licensingfoundation.org.

TLF intends to conduct its third annual survey of the licensing industry in January and February 2006. We will seek to repeat certain questions to enable year-over-year trend analysis, but we also wish to expand our understanding by asking some new questions. We are

open to your suggestions. Please e-mail your advice and counsel to: survey@licensingfoundation.org.

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