

Can Big, Small Firms License?

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Body of conventional wisdom regarding a licensing partner is challenged in survey of executives

The ever-quicken pace of technology development has made licensing an increasingly attractive option for businesses involved in technology acquisition and deployment. But while the attractiveness of licensing increases, the problem of finding a partner with whom to complete a successful licensing agreement remains challenging, difficult, and, at times, frustrating.

Licensing professionals subscribe to a body of conventional wisdom about effective licensing partnerships. A strong belief in that body of wisdom holds that licensing agreements work best among firms of similar size: agreements stand a better chance of success when large firms license with other large firms, and small firms with other small firms. A corollary to this view is the widely-held notion that licensing agreements between large and small firms are fraught with difficulty, given the many inherent differences that exist between big businesses and small businesses.

These views are the product of the collective experience of licensing professionals accumulated over many years. Yet, given the drastically altered landscape of technology development in recent times and the leading role that small technology companies have played in advancing the state of many technical arts, two questions arise. Does this conventional wisdom still hold? Can big firms win with small firm licensees?

TESTING THE CONVENTIONAL WISDOM

In 1993, the Licensing Executives

Society (USA & Canada) Small Business Committee set out to test this conventional wisdom by investigating the barriers and benefits of licensing between large and small firms in the U.S. and Canada. To further its mission of helping small businesses transfer technology, the Committee conducted a survey of large and small businesses to see how each viewed the other as potential partners, and to compare the results of the survey against the heretofore untested conventional wisdom. The Committee asked licensing professionals about their direct experiences in this area, via mailed survey. Responses fell into a number of categories that spoke to different tenets of the conventional wisdom. For some issues, the responses validated the conventional wisdom. For others, responses raised exceptions to it.

In examining and in presenting these results, the Committee kept the unscientific, experiential nature of conventional wisdom in mind. Such knowledge is often based on generalizations and simplifications; it is passed on through conversation and anecdote. Conventional wisdom groups large populations, representing wide varieties of experience and behavior, into broad categories (i.e. "large firms," "small firms") that may or may not reflect the reality of any one particular member of the population. Yet, conventional wisdom may remain quite accurate. To determine with a higher degree of confidence whether exceptions to the conventional wisdom found in this survey represent inaccuracies in the conventional wisdom or misperceptions by the respondents, further research will be necessary.

THE SURVEY

The Committee mailed surveys to

the approximately 3,500 members of LES (USA & Canada). Respondents were asked for the following information:

- Firm size: over or under 500 employees.
- Tech transfer strategy.
- Transferred technology (in, out, or both).
- Transferred technology to firms of disparate size (large to small/small to large).
- Perceived barriers and benefits of technology transfers to firms of disparate size.
- Willingness to participate in follow-up research.

The Committee received 441 responses, a response rate of 12.6%. The survey was not directly relevant to about 40% (1,400) of LES (USA & Canada) members, mostly private sector law firms. Subtracting them from the survey raises the response rate to 21%.

The majority of respondents (333, or 75%) offered to participate in follow-on research. Thirty-nine respondents (9%) refused, while 69 (16%) did not respond to the question. Follow-on research is planned.

Respondents fell into the following groups by type of organization:

• Large companies:	197
• Small companies:	192
• Universities:	37
• Government:	15

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BARRIERS AND BENEFITS

Breakdown

In total, the survey drew 973 responses to the barriers and benefits questions. To avoid biasing the results, categories were not predetermined. Instead, respondents were asked to write their own responses to barriers and benefits questions. Responses cluster as follows:

- Benefits: 325
- Barriers: 568
- Unspecified: 80

In some cases, an unclear response could be readily classified as a barrier or a benefit, while in other cases the response was ambiguous. Tables 1, 2, and 3 summarize the barriers, benefits, and unspecified responses by issues and institutional type.

Respondents identified twice as many barriers to licensing as they did benefits of licensing, a ratio that may suggest something about the difficulties of the licensing process. The 2-to-1 ratio of barriers to benefits held regardless of the size of a respondent's firm. Moreover, barriers tended to cluster around a couple of central groupings. Benefits, on the other hand, did not. Tables 4, 5, and 6 show the issues identified as barriers, benefits, or unspecified by at least 10% of the respondents by firm size.

A majority of the respondents were involved in transferring technology both in and out (see Table 7).¹

Issues Identified

As noted above, categories of barriers and benefits were not predetermined but were generated from responses. In analyzing the responses, the authors found 10 general types of barriers and benefits identified by at least 10% of both large- and small-firm respondents. These categories do not include responses by university and government organizations, because only a small number of responses were

1. Sixteen respondents said that they transferred neither in nor out. These respondents classified themselves as technology brokers or lawyers who provided a service to licensees and licensor.

BARRIERS				
Issue	Organization			
	Government	Large Firm	Small Firm	University
Finances	3	74	24	13
License Planning	0	13	9	1
Resources	1	15	5	5
Culture	9	85	76	13
Responsiveness	1	16	42	5
Technology Devel.	0	14	5	3
Marketing	3	10	18	7
Contractual Terms	0	30	15	4
Risk	0	7	6	3
Other	0	12	18	3
TOTAL	17	276	218	57

Table 1

BENEFITS				
Issue	Organization			
	Government	Large Firm	Small Firm	University
Finances	2	24	38	6
License Planning	2	5	1	4
Resources	0	13	15	7
Culture	1	19	9	7
Responsiveness	0	24	4	7
Technology Devel.	1	18	9	1
Marketing	2	24	26	1
Contractual Terms	0	3	2	0
Risk	1	2	3	0
Other	4	16	17	6
TOTAL	14	148	124	39

Table 2

UNSPECIFIED				
Issue	Organization			
	Government	Large Firm	Small Firm	University
Finances	1	0	0	0
License Planning	0	3	0	0
Resources	0	3	2	0
Culture	1	11	9	1
Responsiveness	1	5	4	0
Technology Devel.	0	0	0	2
Marketing	0	1	1	0
Contractual Terms	1	1	4	0
Risk	0	1	0	1
Other	3	10	13	1
TOTAL	7	35	33	5

Table 3

received from these sectors.² The categories were (in alphabetical order):

- Contractual terms: Terms and conditions that appear in licensing agreements (e.g. intellectual property rights, exclusivity, etc.)

- Culture, Perceptions, and Expectations: Organizational culture/environment, the way one type of organization thinks another type functions, and institutional expectations when faced with specific conditions.

BARRIERS IDENTIFIED BY >10% RESPONDENTS				
Issue	Organization			
	Government	Large Firm	Small Firm	University
Finances	♦	♦		♦
License Planning				
Resources				
Culture	♦	♦	♦	♦
Responsiveness			♦	
Technology Devel.				
Marketing	♦			♦
Contractual Terms				
Risk				
Other				

Table 4

BENEFITS IDENTIFIED BY >10% OF RESPONDENTS				
Issue	Organization			
	Government	Large Firm	Small Firm	University
Finances	♦	♦	♦	♦
License Planning	♦			
Resources		♦	♦	♦
Culture		♦		♦
Responsiveness		♦		♦
Technology Devel.		♦		♦
Marketing	♦	♦	♦	
Contractual Terms				
Risk				
Other	♦	♦	♦	♦

Table 5

UNSPECIFIED IDENTIFIED BY >10% OF RESPONDENTS				
Issue	Organization			
	Government	Large Firm	Small Firm	University
Finances	♦	♦	♦	
License Planning				
Resources				
Culture	♦	♦	♦	♦
Responsiveness	♦			
Technology Devel.				♦
Marketing		♦	♦	
Contractual Terms	♦			♦
Risk				♦
Other	♦	♦	♦	♦

Table 6

Transfer Type	Organization			
	Government	Large Firm	Small Firm	University
In		19	5	
Out	9	16	38	29
Both	6	159	136	8
No		1	7	
Blank		2	6	
TOTAL RESPONDENTS	15	197	192	37

Table 7

- **Finances:** Financial resources, pricing, valuation of technology, financial terms of licensing agreements.

- **License Process Planning:** Either (1) long-term strategic planning, or (2) planning the technology transfer process.

- **Marketing:** Either (1) the process by which a licensor finds suitable licensee(s), or, (2) the process by which a licensee brings a product/service to the next/end user.

- **Resources:** Resource requirements (people and materials) and availability.

- **Responsiveness:** Timeliness of organizational responses and the perceived approachability of an organization.

- **Risk:** Risks either undertaken or perceived as future risks.

- **Technology Development:** Stage of technology development at the time partners are sought and future technical development required to bring the product to market and/or to retain a competitive edge in the marketplace.

- **Other:** Any responses that did not fall into the above categories.

BARRIERS AND BENEFITS: DETAILED DISCUSSION

As noted, at least 10% of both large-firm and small-firm respondents identified issues that fell into one of these categories as a barrier or a benefit. After grouping the responses by category, the Committee examined each to see whether respondents were involved in licensing in, licensing out, or both. Most respondents, as noted, were involved in both. Thus, the small number of respondents who only license in or out did not permit refinement of the data on this basis.

The survey asked specifically for information about licensing between firms of disparate size. It should be noted, therefore, that some of these issues might have also been identified if the questions asked for issues involved in licensing with any firm, regardless of size. What follows is a summary of the responses by large and small firms for each category, and a brief comparison of these responses with

the conventional wisdom

Contractual Terms

Respondents identified no significant benefits in this category. They did find a number of barriers to dealing with counterparts, however.

Large firms identified confidentiality and indemnification, liability, and insurance issues as major contractual barriers to licensing between large and small firms. Large-firm respondents also remarked that small companies lack sufficient understanding of intellectual property (IP) issues and that small companies want too many IP rights. Difficulties in obtaining best efforts from small business partners were also mentioned as a barrier to licensing.

Small firms stated that their major problem involved poor faith in negotiations and license relationships with large firms. They also expressed reservations about getting all relevant technology from large-firm partners. The contractual terms required by large firms were often hard for small firms to swallow, respondents said. An inadequate understanding of IP issues was mentioned by small-firm respondents as well.

To summarize the results: Large firms do not seem to recognize that small firms do not trust them. Nor did small firms recognize the degree to which their inadequate understanding of the licensing process and related issues creates a barrier to negotiations with large firms.

With regard to contractual terms, the results of the survey substantiate the conventional wisdom that small companies do not understand the terms and conditions of licensing agreements, and that small companies suspect that large companies are trying to "put things over on them."

Culture, Perceptions, and Expectations

This category provided a chance for some griping, and both large and small firms identified few benefits and numerous barriers to dealing with one another. Nineteen percent of all responses (184 responses) fell into this category.

Large firm respondents identified

three significant barrier groups (having 11 or more responses per group) as follows:

1. Small firms have unrealistic assumptions about the time, cost, and probability of technical success, and they underestimate the availability of expertise and resources needed.

2. Small firms are unsophisticated or inexperienced with licensing. They lack knowledge of large firm processes — the approval process, the decision-making process, the negotiation process — and do not understand the need to reach compromise, win-win situations.

3. The diversity of cultures between large and small firms leads to conflicts in the areas of priority setting, extent of bureaucracy vs. flexibility, and their differing needs.

Large-firm responses with regard to the benefits of licensing with small firms were more diffuse in this category. That small firms are unencumbered by red-tape and that one could deal with principals in those firms most of the time was thought to be a significant benefit by large firms. Large firms also credited their smaller partners with greater entrepreneurial spirit, enthusiasm, and innovation. These characteristics, according to large-firm respondents, give small firms the ability to be more aggressive and to exert more energy and commitment to a project.

Small firms emphasized the difficulties of dealing with large firms. The bureaucracy of large firms, the turf issues (especially the not-invented-here syndrome), a perceived reluctance to deal with small firms, and an inability to understand the resource limits of small firms were among the barriers most frequently cited by small-respondents. Other barriers noted included the inflexibility of large firms and the longer time periods required to analyze details. Differing objectives and agendas between large and small firms were also cited as barriers, as were different organizational structures, languages, and expectations, which make clear communications between large and small firms more difficult. Small-firm respondents noted very few benefits in this category. The most

significant held that small firms gained credibility by having a large firm as a licensing partner.

In sum, the cultural differences between large and small firms significantly inhibit licensing between them. Large firms perceive that small firms have unrealistic expectations while small firms say that the bureaucratic cultural characteristics of large firms makes licensing with them more difficult than need be.

The survey substantiates the conventional wisdom in that cultural differences significantly inhibit licensing opportunities between large and small firms. The conventional wisdom also speaks to the unrealistic expectations of small firms regarding technology valuation, royalty splitting, market penetration volumes, and their dealings with large firm partners.

Finances

The large number of responses that fell into this category highlights the importance of financial issues to licensing. Nineteen percent of all responses to the survey fell into this category. While 75% of large firm responses identified benefits, 61% of small firm responses identified barriers.

Large firms focused overwhelmingly on the divergent technology valuations of large firms and their small-firm partners (39% of all barriers noted). Insufficient availability of funding for small firms and questions about their financial soundness were among the other financial barriers cited by large firms. As to benefits, large firms focused on licensing as a source of funding for small firms, and as a means of enhancing royalty streams as well as economic benefits for both partners.

Small firms focused (58% of all benefits noted) on the increased royalty stream received when licensing with larger partners. Responses to financial barriers were scattered but did identify insufficient funding, costs, and the demands on small firms for up-front cash as barriers to licensing with large firms.

On finances, the survey provided general concurrence with the conventional wisdom with the exception that small-firm respondents did not seem to perceive that their larger

partners are worried about the financial stability of small firms.

The conventional wisdom, which, here again, was generally substantiated, holds that:

1. Small companies need money, and licensing is a source of revenue for them and their larger partners.
2. That large firms are worried about the financial stability of their smaller partners.
3. That small companies have unrealistic expectations about their share of the royalty stream.

Planning to License

Planning for the licensing process is another issue that appears to be more significant for large firms than it is for small firms. Large firm responses in this category outnumbered those from small firms almost two-to-one.

Large firms tended to agree that small companies are more focused than large companies. This was, in their view, one of the benefits of licensing with them. Despite the small firms' greater focus, large firm respondents expressed the view that small firms have little knowledge of the licensing process. Large-firm respondents also believed that small firms generally receive poor legal advice, lack a strategic outlook for new technologies, suffer short attention spans, and lack business judgment.

Responses by small firms were, again, few and scattered in this category. Only one point was made by more than one respondent: Small firms do not know the licensing process and related issues very well.

Thus, large firms appear frustrated by the small firms' lack of savvy about license process planning. A small number of small firms corroborated this view.

These results differ significantly from the conventional wisdom in this category, which holds that small companies know how licensing is done and small companies understand the licensing process within large companies.

Marketing

On marketing issues, both large and small firms identified twice as many benefits as barriers. Large firms focused on increasing their

competitive position in the marketplace through leveraging complementary capabilities, R&D portfolio strengths, and distribution channels with small firms. Large-firm respondents also noted that small firms can often better serve niche markets and achieve better and faster market penetration when teamed with a large firm. In terms of barriers, large firms focused on the difficulties of finding good fits for specific technologies.

Small firms overwhelmingly (27%) focused on getting to the market faster when teamed with a large firm. They also noted that teaming with large firms increased market penetration and strengthened competitive position by leveraging the marketing infrastructure of a large firm, the beneficial publicity, and the increased credibility. Some 72% of small-firm respondents identified finding the "right" person within a company as the single most important barrier to licensing between large and small firms.

While small firms clearly stated their difficulty in finding the "right" partner, they did not appear to recognize that this stems from what large firms see as a lack of understanding about the licensing process. Large firms, for the most part, do not mention the process of finding technologies. This may reflect a tradition of developing technologies in-house.

The survey substantiates the conventional wisdom that large companies have the muscle to market technologies broadly while small companies tend to market to niches. The survey did not identify other facets of the conventional wisdom on marketing issues, namely, that (a) thresholds of acceptable markets differ between large and small firms, and (b) small companies tend to have unrealistic expectations of what it costs to market products.

Resources

Large and small firm respondents alike identified the insufficient resources and lack of technical depth of small firms as both a barrier to licensing between large and small firms and as an impediment to launching small-firm technologies

into markets. Respondents also indicated that small firms tend to lack sophistication.

Survey results validate the conventional wisdom that large firms have resources that small firms do not. However, the conventional wisdom also holds that large firms try to create small firms in their own image. That is, large firms assume small firms have resources, skills, and knowledge, and are sophisticated businessmen. Survey responses from neither group supported this view.

Responsiveness

In this category, survey responses substantiated the conventional wisdom: Small firms are more flexible and move faster than large firms.

Risk

The survey responses indicate that both large and small firms wish to share perceived risks and that small firms have difficulty with the technical hurdles necessary in completing technology development. However, by the ground rules of this survey (a greater than 10% response rate), responses in this category were not significant, indicating that other issues are believed to present more pressing barriers and greater benefits to licensing between large and small firms.

Survey responses in this category did not reflect the conventional wisdom, which holds that risk is a significant issue and that small firms take risks while large firms are risk-averse.

Technology Development

Technology development was raised as an issue by almost three times as many large firms as small firms.

Large-firm respondents complained that small firms consistently fail to appreciate the amount of technology development required prior to market launch. The point was articulated by several respondents as the small-firm tendency to "overstate" the stage of their technology development. Large firms noted that technologies licensed from small firms required development, rather than being complete, marketable products. Despite this,

large firms saw significant benefits to licensing with small firms in terms of the availability of supporting technology development, resulting in saving time and costs. Savings are accomplished, in part, because of synergies between the partners' technologies, and the ability of small firms to focus on development.

The responses from small firms in this category were few and widely scattered. The only issues identified by two or more respondents were these:

1. Licensing with large firms was an avenue for validating a technology.

2. Licensing with large firms increased their capability to develop technology further.

In summary, large firms believe that small firms do not know just how much technical development needs to be done to bring technologies to market. Small firms do not appear to recognize this as a problem.

Thus, the survey substantiates the conventional view that small firms do not know what it takes to develop technologies to the point of market launch. But the conventional wisdom also holds that small companies lack the money required to develop technologies far enough. Respondents did not raise this point as a technology development issue; it appears, above, as a financial resource issue.

CONCLUSIONS

The response rate to this survey, the amount of time that many respondents obviously spent completing it, and the significant number of persons who volunteered to participate in follow-on research indicate that licensing between large and small firms is an important topic to LES members. The survey results show clearly that large and small firms want to be involved in licensing partnerships with one

another because of the numerous benefits that flow to each partner. However, both large and small firms readily point out many areas of frustration when seeking licensing partners and throughout the license relationship. Many of these frustrations arise out of misunderstandings about the needs and world-view of the other partner. Some of the frustrations also arise from looking at oneself through rose-colored glasses.

It is hoped that this qualitative survey will help identify those areas where large and small firms are talking past one another and whether this poor communication is caused by a lack of understanding of the other firm or of one's own. Continued research into this area should provide further validation of the results of this study, and will provide refinement and a more detailed understanding of the major barriers and benefits to licensing between large and small firms.