



Is your company reaping the ecosystem advantage??

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Introduction

Companies are increasingly realizing there is a limit to which internal investments and resources can contribute to their sustainable competitive advantage and innovation. Insights from gaming and telecom industries show how companies benefit from involving outside developers. They independently conceptualise, code and release games/music for their different platforms. They own the complete innovation cycle, right from identifying the game genres, characters and setting. Gaming console companies delegate the costly judgement of innovation to the developers and benefit from revenues whenever a successful game/chart emerges. Minimizing costly errors due to bounded rationality, investments in R&D telecom and gaming companies gain from assiduously encourage players who undertake the risk and joy of innovation.

Chesbrough, Hass School professor articulated the above as “open innovation” paradigm, where companies can and should use external and internal ideas and paths to market. In this connected age, companies must seek beyond innovation to stay ahead of the curve. They need to develop unique business models and capabilities to exploit friction in the market. Internet aggregators like Uber, Facebook and Airbnb show that a company can emerge as a significant player in a segment without owning any of the assets. Aggregators enjoy a virtuous growth by connecting the demand and supply gaps. Companies need a comprehensive strategy to deal with all the players in the markets they are embedded. Players in the ecosystem can be a a) good source of information, or ideas, b) creators of qualified resources for employment, c) certification and qualification bodies, d)

suppliers of raw materials and semi-finished goods, e) end consumers who can share unmet needs, and f) government agencies. Working with each ecosystem partner is critical stay competitive.

Ecosystem levers

A smart company must learn to align and learn to monetize efforts of its complete ecosystem. A company’s ecosystem includes academia, prospective candidates (including interns), complementary players, dealers and distributors, industry associations, Media & analysts, vendor, customers and employees & alumni. The ecosystem can be effectively used to:

- scan & identify new opportunities
- farm out idea validation, scaling up operations
- conduct experimentation through public funds
- drive development of standards
- influence market perception including stock market, current & prospective employees
- employ costless resources to meet certain objectives
- manage apprehensions from regulatory agencies
- advocacy of the products and thwart competitors moves
- gain legitimacy and influence customers
- CEO branding, and thought leadership
- End use application improvements, field customization
- Adoption trends and renege

Table 1 presents the ecosystem players and the benefits they can bring to a company.

Table 1: Players, Values & activities

Player	Benefits	Activities
Academic institutes	Supply of qualified resources, Investigation of problems, consulting, Advocacy & branding	Centre of excellence, Course development, Marketing platforms, Speaker at conference, Sponsored research,
Students	Cost free resource, data collection, validation, analysis, follow through, implementation, limited experimentation	Internship, Projects, Data validation, On-site experiments, Competitive intelligence, new products
Complementary players	Bundling, co-development, advocacy	Co-branding, joint development projects, co-promotion, cost reduction projects
Dealers & Distributors	End use application service & customization, business model innovation inputs	End use customization scans, Rental & lease models, competitive campaigns, Spurious parts call outs
Industry association	CEO branding, Thought leadership, Credibility, Lobbying & advocacy	CEO & thought leadership events, Industry Lobby seminars, Meet the Government events
Media & analysts	Intelligence, Market inform & influence	Paid & unpaid inserts, Quotes, Analysts briefs, Awards, Jury Committee,
Vendors	Supply chain cost optimization, alternate options, benchmarks	Cost optimization projects, Industry benchmarks, Material Innovations, Sourcing intelligence
Existing customers	Unmet needs, feature adoptions, renege behaviour	Fill in products, New features, Price-performance meets
Employees & alumni	Company branding, cost of hiring, culture	Innovation, External relationships, Mentoring programs

Academic institutes are not just supply houses of talent for the industry. A smart company can use them to a) create “branding”, b) access to “future solutions, c) validation for “application engineering solutions”, d) influence federal agencies and e) co-creators of innovations. Companies can ensure the course curriculum is inserted as a special topic or a complete subject there by having resources with adequate exposure to concept and reduce training during induction. Maverick system recognized the need to create testing specialists with interest in BFSI sector aligned with couple of colleges in Tamil Nadu and Karnataka. They had experienced IT specialists handle the classes not just to enthuse the students about testing, also identify potential candidates and lure them to the company through internship and scholarship. Companies also realize creating a dedicated centre of excellence works is the best way to create sustained relationships between academic and the company. Establishing a centre of excellence ensures availability of specialized resources,

identification and support of academic champions and branding. Cognizant systems and TCS o meet the requirement of open source entry level professionals created CoE across colleges. SAP extensively used academic institutions in North America and India by creating centres of excellences or infusing SAP content into Production/Operations courses. They also extensively used the senior faculty of these prestigious institutes as keynote speaker or Chairs of Industry seminars. Pharmaceutical industry giants extensively use sponsored research and brief building to direct drug development and influence regulatory agencies and public opinion.

Prospective candidates as interns can form the bench that your company can absorb once they complete their academic program. Hiring them as interns provides a larger time window to evaluate their suitability to the job and reduce selection errors. Interns can also be a good source to collect data, analyse and implement low hanging problems. They can also be used in limited experimentation including simulation, standardize designs and operations and identify newer product areas. Offering industry projects to students is a smart way to gain from open innovation. Coding marathons and design competitions are best suited platforms to reach out to prospective candidates and on board them to the organization. A successful internship requires providing interns a focused problem to solve and directions. Develop a mechanism where corporate mentors would develop a well scoped project proposal that could contribute meaningfully to the company and could be completed within the stipulated time. Develop a mechanism where mentors and others identify candidates, grade their efforts and select a handful of finalists for an

on-site internship. If you plan to use internship as a mechanism to hire for full time, treat the interns as full members and hold them to the same standards as other employees. Mentors many guide them through the process, offer their expertise and act as sounding board, and provide them feedback whenever they are struck. Interns must bear the complete ownership of their projects and must meet deadlines and standards.

Working with complementary players in the industry may lead to new innovation or bundling of products/solutions that may raise the barriers for competitors. So when GM and other Detroit auto manufacturers consider partnering with Valley upstarts to counter Uber and Google, it is faster integration of complementary skills at play. Expanded research agreements are common in Pharmaceutical, Space, Aerospace and defence industry. For example, when Cetek Corporation announced its agreement with Cubist Pharmaceuticals, both companies were putting their best capabilities together. Cetek advanced technologies in natural product extraction and fractionation can use Cubist NatChem library so that time to design new therapeutics is accelerated. Successful complementary co-development should be based on the skills and capability compatibility not on the scale of their business. To make these program work both sides have to look at long term advantages and commit the right people and investments. Many prominent companies have successfully based their new feature additions, bug removal and extensions on Open source development. Companies for instance hire programmers for them or use non-virulent code from OS community and integrate it into their solution. For a commercial firm, adoption of an OSS reduces

software development time, enhances diversity of its product offerings, increases scale of experimentation and reduces time to market. Commercial firms get involved with OSS to support development of appropriate components and tools that serve to extend their product offerings in the markets. For-profit firms gain because- (a) these new product features become available to all users by sharing on a user-to-user basis, or (b) it allows the firm to pick up the innovations and integrate them in future products and then benefit by selling them to all users on a user-to-user basis, or (c) it allows the firm to pick up the innovations and integrate them in future products and then benefit by selling them to all users.

Dealers and distributors not only help in reaching out to end customers, they often are the eyes and ears in the market. They track the competitive moves and bring deep customer insights. They can influence business model innovations like rental and leasing or remanufacturing. While they not only drive aftermarket revenues, they can pass on the service innovations and customizations in the market. Their information scanning and aggregation abilities are key to identification of attachments, and newer models.

Industry associations and think tanks as a platform is key to CEO brand building, gaining legitimacy through lobbying and build organizational credibility. Industry association serve as a platform or exchange, cooperation and joint activities amongst the members. They act as a legitimate platform for companies to position their challenges and reach out to decision makers in government. They can also act as instrument of global expansion by linking agents, industry partners

and experts in various geographies. Sponsored Industry association events are also excellent platform for product marketing.

Media, including industry vertical magazines and business papers are key to position the company and its offerings. Companies successfully build their brands by sharing charismatic stories of their founders, the culture, lifestyles, expansion projects, and their facilities. Media engagement is a must for inform, influence and advocacy goals of the company. Curated and directed content makes a significant contribution in reinforcing the positioning. Media is also a great source of competitive activities including projects won/lost, internal organization and people issues.

Vendors are not just the source of cost advantage, but also great spring of information about material and process innovations, newer designs and prospective customers. They can bring supply chain efficiencies and outsourcing benefits, and as work arounds to meet tough labour regulations. Carlsberg involved its partners to redesign and production of packaging material. Suggestions for optimization of recycling and reuse, and improving packaging quality and value has come from vendors including Rexam, Arkema, O-I, RKW and MWV. A supplier to a furniture company suggested to reduce the speed at cutting station to reduce waste. This helped the company to save about 9% of the material cost. The same vendor suggested another company that could buy the dust for their use. Vendors can also bring “benchmark” insights thus helping the companies know the best use in their respective industries and evaluate their own inefficiencies.

Existing customers are best source of changing trends and market requirements. As MIT professor Eric Von Hippel research shows existing customers are the key sources of user based innovation. They can provide inputs in what features fly and why some fail to excite, what new additions are required, what are best bundles that meet their requirements and so on. Majority of innovations in science-led industries like Medical devices have emerged from end users who have to work the instruments. User driven ideas need not be main stream. They could be forward looking and a minority representation. Toyota Primus and social innovations like City Eco lab and Lola are good examples of minority representations. User centred innovations are valuable for incremental innovations rather than radical ones. Apple and IKEA are good examples of user centred outliers.

Finally, employee and alumni are a unique source of ideation, networking advantage and experimentations. Employees and alumni can identify new trends, seek out costly resources who could be moonshined, identify companies that can be aligned for design, development, experimentation, sales and aftersales. While lots is written and available on employee involvement, many companies do not have a formal strategy with respect to alumni. They could form a formidable source for identifying key resources, or projects.

Framework for developing ecosystem exploitation capabilities

Companies need to have a framework to systematically build capabilities to engage and direct outcomes from ecosystem partners.

Figure 1: Developing ecosystem capabilities



Organizations must identify the values each of the player can offer to meet their short-term and long-term objectives. Ecosystem partners can bring: shareholder value, resource value, information value and legitimacy value. Shareholder value includes increase in revenues, market share and lower customer costs. Some partners may help in filling the missing chunks of market information. Others may provide legitimacy and trust making in the market. Others can help in creating the resources required for the firm to manage and extend operations.

Identify Common objectives between the company and the partners. Use an iterative procedure starting with the goals and objectives of each partner. Identify what must be done available to reach goals at each organization level. Next identify actions that contribute to goals of both organizations. Articulate what must be focused on to deliver the outcomes. Mode of engagement for each

ecosystem player must be planned in detail. These may include direct partner, indirect or consortia. Align the priorities of the partner and the company goals and identify platforms that can be pursued with additional investment and without investment. Identify committed champions on both sides who invest time and resources to meet the common objectives.

A key element of ecosystem engagement strategy is the level of involvement of the company with its partners. Some companies may prefer to exercise higher guided control for certain programs, while for others they may prefer a loose organization. Some form of coordination is required to legitimately achieve commercial interests and ensure convergence of goals amongst partners. Companies may pursue three coordination approaches are: *unilateral*, and *participative*. Unilateral coordination is similar to what Schmidt and Werle (1991) address as 'coordination by hierarchy'. While Centre of excellence (CoE) could be tightly controlled process if talent management is the objective, chair professor may be more ornamental and less directed. An industry seminar platform would have more deferential status to a partner to meet legitimacy and advocacy goals. Participatory coordination can be described as a political system where both parties rule. Both members propose, discuss, decide, plan, and implement the decisions. The decision-making process is continuous and significant, and organized around issues. Sponsoring company may seek greater partner participation and expend considerable time and money on relationship. This includes marketing to and recruiting potential contributors, integrating their efforts into the project, and developing a governance structure compatible with commercial interest.

Finally, it is in the best interest of the companies to adopt a result based framework to manage and measure performance as it enables and builds capabilities to manage a

long term oriented goal. Result based management (RBM) is a strategy adopted to measure the performance based on pre-determined results. The focus here is to measure the result of the activities periodically and emphasize more on what is to be accomplished. Result based management integrates people, process, resources and measurements to administer the programmes and improve transparency and accountability. Better monitoring can be done through using the right indicators, and targets. Evaluate the strength and maturity of each relationship, identify what areas need improvement, expand champions on either side to deepen relationships and continuously align with the objectives.

Conclusion

Companies can sustain their competitive advantage and innovation capability by working on not just internal ideas and resources, but also external ideas and resources. Organizations will achieve success if they see ecosystem integration as a strategy rather than a set of activity implementation. Identification of common objectives and continuous integration of commercial interest is a must to maximize the value from the ecosystem. Proper planning, performance optimization and generating maximum benefit on investment are key to a successful ecosystem strategy.

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