Chapter 20
The Innovation Engine: A Framework for Overcoming Cultural and Organizational Impediments to Innovation at Scale

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Abstract Large, established organizations fear disruption from large technology companies and startups alike. In trying to thwart this, they have explored several innovation approaches such as labs, acquisitions, and spinouts. Most have not succeeded often due to the impediments that traditional twentieth century corporate culture and organizational design bring. The Innovation Engine is a framework developed to overcome organizational impediments to innovation at scale. The framework has been derived from taking organizational design and processes from successful technology growth and mature companies and the learnings from their application in more traditional companies outside the technology industry.

20.1 Cultural Impediments to Innovation

The rapid disruption of many traditional industries such as media and publishing, advertising and retailing by new, rapid growth firms like Google, Amazon, and Facebook has mostly been attributed to the advent of new technologies, principally the Internet, enabling shifts in consumer behavior and commerce patterns. However, an argument can be made that part of the success stems from their unorthodox approach to product development. This can be attributed to organizational and process design which broke from the traditions of twentieth century management canon. This "new norm" now threatens established industries and companies due to intertwining a new generation of organizational approaches with technology, whereby innovation at scale is now feasible. Even companies in capital intense and highly regulated industries like finance and healthcare face existential threats from the technology industry unless they adapt and discover sustainable innovation at scale.

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The first attempts at innovation within large, traditional organizations was as an appendage by starting a "lab," spinning out innovations and investing in or acquiring startup companies. With few exceptions, these approaches have not materialized primarily due to the lack of integration with the core business (Blank and Simoudis 2015). In some cases, the business model was disruptive to the core business threatening existing cash flow. In others, a modern technology research and development culture could not fit with an operational organization focused on optimization of a mature product line. For example, MySpace was the largest social network when News Corp acquired it in mid 2005. Strategically, extending News Corp's traditional business into the media-oriented social network made sense as it was clear younger users were consuming via this new medium. However, cultural differences and the disruptive business model of MySpace clashed with the more traditional News Corp. Revenue pressure arrived from News Corp requiring more advertising per page view hindering the user experience (Gillette 2011). In addition, experimentation by the team ceased as maintaining their incumbent position required most of the team's product development cycles. The upstart Facebook was not only fueled by founder Mark Zuckerberg's "move fast and break things" (Henry 2014) culture of experimentation but also an embrace of external developers to drive disruptive innovation beyond what its own team could develop. This continued until the emergent Facebook overtook MySpace in unique users by 2008. MySpace's decline continued steadily and was written down and eventually sold by News Corp in 2011 (Albanesius 2009).

Another familiar strategy to invigorate innovation in a staid business is the "acqui-hire" of small companies of engineering talent. In this model, the established acquiring company has little interest in the startup's products typically discontinuing them soon after acquisition. The core thesis is that an infusion of engineering talent and disruptive culture can stimulate innovation in the acquiring company. One case of this was Yahoo's numerous acquisitions after Marissa Mayer became CEO in 2012. She arrived after spending most of her career at Google which was famous for its academically freewheeling engineering driven innovation culture instilled by its founders Sergy Brin and Larry Page. Ms. Mayer arrived with an agenda to replicate that culture at Yahoo (Tkaczyk 2013) who, ironically as one of the Internet pioneers, had, by the time of her arrival, taken on a more traditional management culture after being driven toward a traditional media business by leaders coming from traditional media (Blodget 2008). One of the original pioneering startups of the Internet age was now a symbol of a technology company being disrupted by other technology companies primarily due to its adoption of a traditional business model and culture.

To quickly stimulate these changes, Ms. Mayer acquired 20 startups companies in her first 13 months as CEO (Indvik 2013) primarily for their engineering talent and infusion of innovation into the culture. However, this approach did not provide the innovation she envisioned as the fortunes of Yahoo had not changed by October 2015 with declining revenue and significant organizational departures (Lee 2015). One of the subtle aspects missed by Ms. Mayer and by other approaches to infuse an engineering-driven R&D culture is that most of the benefits to the company

come from business model, product, or marketing innovation enabled by technology but not the technology itself. As the annual studies by Booz & Co. have shown, there is no correlation between corporate research and development spending and financial performance (Jaruzelski and Katzenbach 2012). As has been identified in famous labs like Bell Labs and Xerox Parc, even a massive budget with large groups of sophisticated scientists and engineers did not lead to successful commercialization of the innovations due to lack of focus not only on the business model but in how the operation could absorb them without disrupting the existing business (Blank and Simoudis 2015). Thereby, one can assert that technology itself does not represent innovation. A culture and process integrated into the existing organizational fabric begets innovation.

20.2   Organizational Challenges in Cultivating Innovation

Traditional organizations are designed to manage away risk optimizing existing products in existing markets to ensure the highest margins. On the occasion of market expansion, an existing product, and its associated business model, is brought to new geographies or adjacent segments with refinement of its marketing messaging to communicate the value proposition to the new market. In these moves, there is no innovation around the product and only minor evolution in the product promise through marketing. It is an extension and optimization of the product. Historically, when a company wanted to develop a new product for an existing customer base they typically did that through careful exploration in focus groups and market tests. The new products were additive to the product mix but not typically threatening their existing market accepted products nor business model. By this definition, innovation constitutes an attempt to change the business model on an existing solution for an existing market need or creating a new market by developing a solution to an unmet yet unknown need displacing the current solutions. For an existing business, both of these are disruptive and risky finding little appetite in the organization.

Exploration of new, disruptive products and models is typically only supported when there is a real or perceived threat to the existing business. In those cases, companies often try and stimulate innovation internally thinking their employees who are closest to their existing products and customers will most easily generate new ideas to defend and extend their market. In some ways, this is a rational behavior but often can generate local maxima due to the existing employee base solely thinking about the company and its traditional business. Even when a new idea might be organically developed by the existing employees, it struggles to be fully realized. Existing employees are in role to optimize the existing business not disrupt it. Even if they were given the freedom to innovate, their skillset does not lend itself to risk taking as they were hired based on their ability to run the existing business. Developing a mindset for experimentation and risk taking is not developed overnight and might even be psychologically distinct (Wolchover 2011).

Thus, new ideas emerge as the currency of the organization once leadership sets innovation as a cultural goal but fails in execution and testing those ideas for market readiness.

Large, multi-product, multi-market organizations typically organize in distinct business units so they can operate more freely. These companies within the larger enterprise can be quite independent and collaboration across them is difficult and not incentivized by the business unit's goals leading to gaps and overlap. Ideas which may lead to innovation needing different business units to collaborate require employees to rise above not only their day-to-day responsibilities but the lack of processes to share information and work across business units. Without execution ability, information hoarding becomes common to ensure power strictures amongst the business units. Pursuit of opportunities by each unit arising from partial information leads to overlap and unhealthy competition amongst units and little collaboration stifling innovation.

Trying to solve for this, leadership will instill processes across the organization for information sharing. Process is the lifeblood for any scale organization as their sheer size and inability to communicate uniformly amongst the employee base requires policies and controls. For new ideas to work through these processes, alignment is needed for all decisions to ensure that all affected groups agree with the new approach. The greater the number of operational employees who are invested in the status quo and who are involved in evaluating new products and business models, the more that organizational inertia takes over and objections will be found. Even when leadership dictates some new approach and the lower level operational employees embrace it, operational middle management often passively resists thwarting new initiatives. Middle management as a practice was installed at the beginning of the twentieth century as part of the new class of risk deferment in the modern corporation as embodied in General Motors (Davidson 2014). An unpredictable side effect of building a professional class of risk managers was that the focus of the employees in that class was not on the organization but on oneself. If you failed, you were fired. New ideas might not work, might eliminate jobs or responsibilities or expose the need for new skills not shared in existing managers. In this sense, a twentieth century style organization cannot accept failure as part of its mission.

Most large businesses are now enabled by technology even if they are not in the technology business themselves. However, in not having technology as the product or service, they typically rely on an information technology (IT) organization to develop, manage, and support their technology needs. As the shift toward more technology inside large, traditional businesses accelerated starting in the 1990s, businesses often outsourced development as it was not a core competency where they could justify building a large and expensive staff. The IT organization thus became filled with project managers responsible for the operations of new technology development as well as for the operation of the resulting technology products (e.g., the company website). In this way, they mirror their business counterparts in being focused solely on the operational aspects of technology not research and development. Also, like their operational business counterparts, they

have little incentive to disrupt their existing models and were hired for their skillsets as such. The consulting vendors they are dependent upon also have little incentive to disrupt their relationships and the established systems they have developed for their client. This self-reinforcing loop creates a high entrenchment culture difficult to displace in trying to stimulate innovation. This is demonstrated in IBM and Hewlett-Packard's shift from high margin yet risky technology products to low margin, low risk services over the past 20 years (Balakrishnan 2015). The steady revenue born from these parasitical relationships became favored over the risk of trying to innovate on new technology as well as convincing clients to reinvest and adopt (i.e., take a risk with you).

IT organizations also have one additional constraint limiting their interest in innovation processes. A big regression risk is introduced for every new technology solution they try to deploy having them take a conservative approach. This is why mainframes are still the backbone of many data processing intensive businesses like finance and healthcare even though their favor as technology solutions dwindled in the 1990s. They work and thus what incentive does a technology manager have to replace them even when faced with the opportunity to increase performance, add new features or decrease costs. Like all managers, technology managers are hired to reduce risk. All new technology—but especially experimental products—must be analyzed and rigorously tested so as to not negatively impact the technical operations of the existing business. Given that many experiments will be small scale and never fully realized, the cost–benefit analysis for the testing and risk exposure alone often defeats these innovation initiatives. Startup companies are not burdened by trying to maintain existing systems and have a greater risk profile. Hiring and retaining those who have experienced the freedoms of growth stage companies into large organizations poses a notable challenge. Those employees often become frustrated with the real and perceived bureaucracy in large technology organizations they are not familiar with in growth stage companies and academia.

In trying to break the risk averse IT culture and stimulate a more nimble environment familiar to a generation of startup product developers, adoption of Agile methodologies is now common in large IT organizations. While Agile has generally been accepted as a better approach than traditional waterfall, IT leaders need to understand the cultural impact on the existing operational employee base that comes with this more decentralized, less structured approach. IT middle managers are often less comfortable with the lack of planning and predictability. Waterfall was born of traditional engineering methodologies, such as bridge building, which logically said that progressing to the next stage could not occur until the prior one was fully completed and signed off on by all stakeholders. Sensibly, one cannot order the bricks, steel, and labor to build a bridge until the design is completed and approved by the local authority or else face a huge regression expense if something changes or fails. Early software engineering practices followed a similar model with heavy analysis and design phases before any engineering work took place. As technology become more deeply rooted into business and consumer adoption accelerated, it created an environment whereby, even if all your analysis and design was accurate (and that was rare), the technology capabilities and user expectations

had changed while you were developing your solution. It was the equivalent of having the river widen and people shifting from horse and buggy to cars while you were building your bridge. You could never anticipate all factors given the speed of technological change. Agile was a response which said that it was better to proceed with unknowns rapidly iterating the software development process favoring releasing the resulting technology after short iterations and learning.[1] The Lean Startup (Lean) methodology pioneered by Steve Blank in his book "Four Steps to the Epiphany" and written about by Eric Ries in "The Lean Startup" has extended the philosophy to cover the whole product and customer development process based in the scientific method. By embedding innovation around a repeatable process, Lean seeks to ensure that experimentation and customer testing is at the root of all new product development.

While Lean and Agile are now fashionable for large company leadership to show they are innovating, the cultural impacts cannot be overlooked. By focusing on user needs and breaking the problems down into small parts, this new approach requires less of project management skillset and one more of product management, design and having engineering skills more deeply involved in the business problem early in the process. All of these are not typically the skillsets nor processes of employees who were hired to manage IT operations. The business and IT do not share a common language even though they are more dependent on one another in a digital world (Cigaina and Riss 2016). Re-skilling is a common approach but most have found that the skillset and mindset is so notably different that wholesale organizational shifts are required. When faced with a disruptive threat, business leadership has the decision to significantly expand and upskill its employee base while also protecting its existing business. This is not an easy sell especially to bottom-line focused public market investors. Consultants can fill specific skill gaps for a time but their mercenary engagement tends not to leave behind the lasting cultural impact needed for sustainable innovation.

The lack of comfort in rooting your technology approach in the unpredictable nature of the scientific method also extends to some sales and marketing teams. Innovative, Lean and Agile product development teams carrying out a process of test and learn often face resistance from the groups that control access to the customer. The notion of engaging a subset of customers in a qualitative survey let alone thousands to test scale engagement with a speculative new product is foreign and threatening. This most vital piece to the Lean methodology is ironically rooted in marketing focus groups and market testing but the lack of control by those market facing teams leads to conflict in organizations around customer touch.

All of these impediments to innovation can most obviously be seen in performance review systems within large organizations. The best are derived from the company's mission and values which are communicated, to varying degrees, to

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[1]Beck, Kent et al. The Agile Manifesto. agilemanifesto.org.

form the organizational culture. Humans respond to incentives which, in most commercial organizations, materialize in compensation and promotion rewards. Those incentives are realized through attainment of goals. Goals are rooted in the near term, typically annual, objectives of the organization as well as the mission and values which, if done well, layout the leadership qualities for the successful individual in the organization. If those values do not include innovation, experimentation, and calculated risk taking then no such similar behaviors will flow through to the performance review system. With behaviors not incentivized toward innovation but more toward operational efficiency and consistency, the organizational culture will not support those who operate in a contrarian risk-seeking manner.

Fundamental new product development especially that which is based upon emerging technology has been shown to require heavy collaboration by a group of diverse yet similarly focused people. As Walter Isaacson explains,

> The lesson of Bell Labs is that most feats of sustained innovation cannot and do not occur in an iconic garage or the workshop of an ingenious inventor. They occur when people of diverse talents, mind-sets and expertise are brought together, preferably in close physical proximity where they can have frequent meetings and serendipitous encounters. (Isaacson 2012)

No one person is able to achieve innovative breakthroughs due to the complex nature and rapid evolution of technology. Performance review systems such as stack ranking disincentivize collaboration since they require judging of employees against one another and are directly tied to compensation and promotion considerations. As was described in a study of Microsoft's stack ranking system, top tier R&D employees would not work together out of fear of losing out on compensation and promotion due to force ranking (Nisen 2013). Thus, the combined effect of not memorializing innovation, risk taking, and experimentation in company values coupled with a lack of group incentives tying compensation solely to individual performance ranking drives employee behavior toward self-interested, conservative behaviors not conducive to an innovation culture. In this setting, experimentation is taken at great personal risk.

Innovators within large organizations face many obstacles, but the most common are inadequate funding and support from leadership, risk avoidance, "siloing," time commitments and incorrect measures for innovation programs (Andrews 2006). Traditional business planning and controls do not work for innovation given a new initiative, be it a startup or emerging inside a larger organization, does not yet have a business model which can easily be forecast and measured (Blank 2013). A new model is required to reset the organizational design in favor of innovation. Having leadership speak of innovation is important but that alone has shown not to be sufficient to produce sustainable innovation which affects company performance. Innovation processes, norms, artifacts, and innovative behaviors are required to reinforce the desires of leadership (Hogan and Coote 2014).

20.3   Responsive Organizations

As innovation driven technology organizations have matured, the fundamental elements that allow innovation to thrive at scale has emerged. One philosophy memorializing this is the responsive organization. In an age of constant disruption, responsive organizations are built to learn and respond rapidly through the open flow of information. Transparency is a core value recognizing that information hiding for power and control are relics of an old operating model. Responsive organizations encourage experimentation and learning in rapid cycles. Along the philosophy of Agile and Lean, responsive organizations encode experimentation processes in the organizational fabric to ensure they are always close to the market. Responsive organizations assemble as a network of employees, customers, and partners motivated by shared purpose.[2] Without organizational silos to bound them, their cross-functional relationships allow them to exploit new opportunities across the organization.

The responsive mindset is a direct affront to the command and control structures common to twentieth century management thinking. Prior to the technology disruption of the past 30 years, large organizations scaled and managed their operations through hierarchies not unlike the government. When the method to scale a business was adding low-level laborers and, with the twentieth century practice of distributing risk across a professional class of middle managers, a sizeable hierarchy was inevitable. Business evolved slowly and was predictable primarily because large entrenched players would invent a new product and then use their marketing scale to tell customers its benefits. As Amazon CEO Jeff Bezos says:

> In the old world, you devoted 30% of your time to building a great service and 70% of your time to shouting about it. In the new world, that inverts. (Anders 2012)

In the digital era, challenges are less predictable and controllable. Consumers are empowered. Most traditional marketing is thwarted by online consumer review sites like Amazon, Yelp, and social media. Any marketing claim made can be substantiated and refuted in seconds by thousands of people online. Consumer behavior and expectations have fundamentally changed. Information has been democratized and made transparent. Communication is instantaneous and ubiquitous. The only constant is change.

Many of our large organizations are vestiges of twentieth century management thinking. twenty-first century responsive organizations are designed not only to survive but thrive in less predictable environments (Table 20.1).

Most successful scale innovation companies demonstrate these attributes. From Google's "Don't be evil" moniker to its "20% time" allowing workers to explore projects of interest one day a week outside of their day-to-day responsibilities, the employees are engaged to set both the company's business and cultural direction.

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[2]Responsive.org.

Table 20.1 Attributes of responsive versus traditional organizations

More predictable	Less predictable
Profit	Purpose
Hierarchies	Networks
Controlling	Empowering
Planning	Experimentation
Privacy	Transparency (see Footnote 2)

20.4 The Innovation Engine

With this backdrop of challenges faced by traditional organizations and lessons from scale innovation companies, I have developed a framework called the Innovation Engine. It provides a set of guardrails with a new view on how to structure an organization for sustainable and disruptive innovation while operating its existing business (Fig. 20.1).

The framework bifurcates the product development organization into two segments: the optimization engine and the innovation engine. The optimization engine can most simply be thought of as the existing product teams maximizing the value of mature or declining products. They operate to ensure they continue to meet known customer needs in a low risk environment improving and enhancing as necessary. Well run traditional organizations should have some semblance of this existing today. Sixty percent of the product development team's focus—and likely
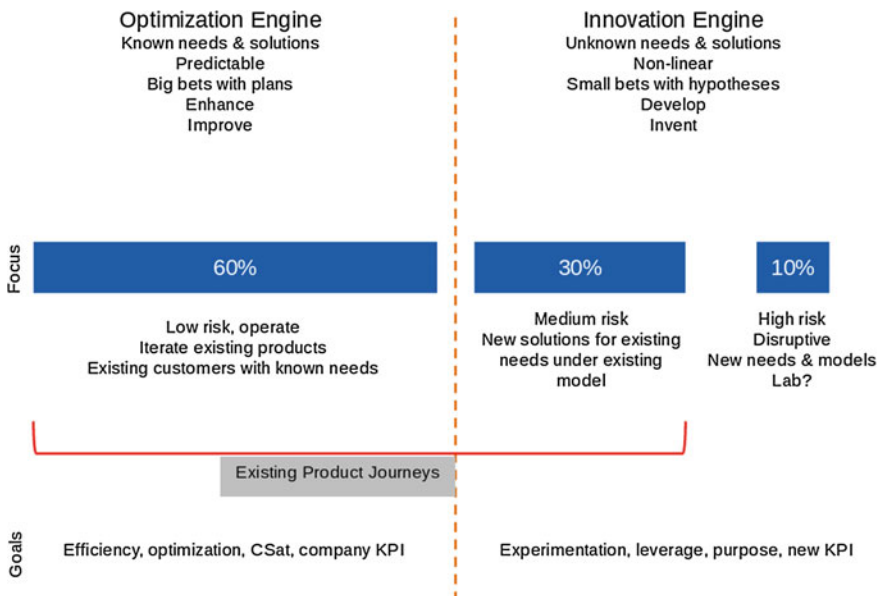

Fig. 20.1 The innovation engine framework

the corresponding investment—should be dedicated to these efforts. This might scale up or down depending on the intensity of disruptive threats but it's important that it remain the majority of the effort assuming the products are not in rapid decline.

The second segment is the innovation engine. This team is focused on new products for user needs that are not yet well understood. The needs and the solutions for those needs are realized through constant experimentation which might take them on a nonlinear path including one where hypotheses are refuted and ideas killed.

The innovation engine is further split into two parts. The thirty percent segment focuses on medium risk new solutions for existing or emerging needs under the existing business model. In essence, is there a better or more efficient way to operate and deliver against known user needs. Taking an existing product into a new market that required more than just adjusting marketing messages would fall here. On the other end of its responsibilities would be more radical solutions such as when Netflix embraced online video streaming at the possible threat to its existing DVD business. They recognized that there were great advantages in shifting user behavior to online video in the reduction in operational costs and inventory risk. However, one click access could facilitate increased viewing raising already high content costs. They experimented their way transitioning customers slowly over a number of years as consumer technology more readily supported this behavior. However, it was not the technology itself that smoothed the transition but that Netflix found a way to support streaming under their existing monthly subscription plan. Their innovation was in the business model or lack of changing their innovative business model to radically shift consumer behavior. In this sense, it was critical that the product teams coordinated their product journeys across those optimizing and slowly winding down the DVD business with those innovating around the streaming business (Fig. 20.2).
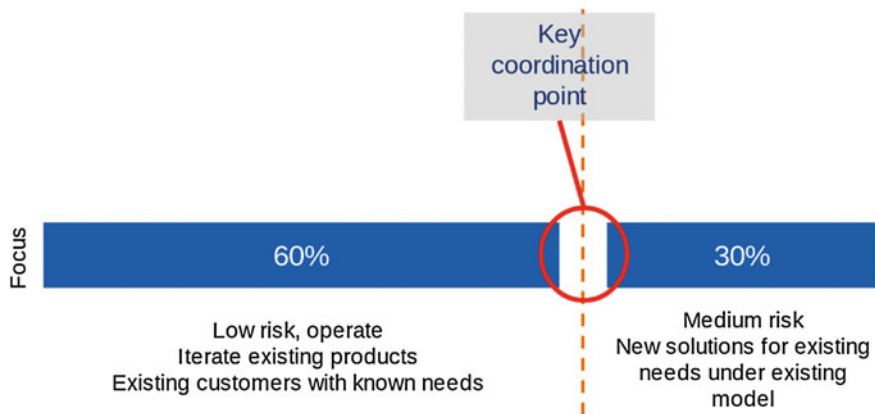

Fig. 20.2 Key coordination point

As a guideline, thirty percent of a company's focus should be in this area of sustainable innovation around existing user needs and business models to smooth the transition to new customer relationships.

The last responsibility of the innovation engine is a ten percent focus on disruptive innovation. These are high risk experiments which explore new user needs and/or business models which do not easily align with the core business. This small but impactful focus has a high failure rate but ensures that companies are playing defense by being on offense exploring what disruptive innovators might be developing in their current and adjacent markets which might, at some time, threaten the core business. Google's "X" business unit is dedicated to this mission operating outside its mainline advertising business seeking new opportunities that are 10 or more years away (if ever). They are pursuing self-driving cars, wearable biometric sensors and wearable computers none of which have an obvious market or business model today. These disruptive explorations have little chance of being absorbed into the main business even after validation and scaling. Google stated mission is to organize the world's information and business is monetizing that information. In the future, they realize that information will be both produced and consumed in different ways and thus do not want to be pushed aside by disruptive startups who define this future.

Within the framework, only the ten percent disruptive innovation is suitable for a lab. The thirty percent sustainable innovation needs to stay close to existing customers and products easing the transition. In revisiting the failure of labs noted earlier, historically there are two main problems:

1. The lab is solely focused on technology innovation and not product or business model innovation meaning technology tends to emerge looking for problems. Labs must be rooted first in seeking solutions to user needs including those where the users may not yet know they have them.
2. The lab focuses on sustainable innovation around its existing products and users. Any innovation that emerged was not easily absorbed back into the main operational organization either due to lack of understanding of the current operating environment or resistance from existing product teams of anything not invented by them.

Again, understanding and getting cultural elements right prove as, if not more, important that the technical innovations themselves.

20.5   Organizing for the Innovation Engine

When the optimization and innovation engines are not clearly delineated with well understood goals and operating environments, the ambiguity can create resentment. One reason operating teams are often unwilling to take innovations from other

teams for their products—be it from a lab or not—is due to resentment. Resentment is created when innovation teams put up walls, believe they are the idea people and stop listening to external input. Ironically, too often this includes not listening to users who are the most important source of insights leading to ideas. Innovation has become a sought after title within traditional organizations. Besides being a boon to one's resume, the perception of the perks that come along with it—foosball tables, a looser dress code and freedom—are undeniable. In some cases, perception is reality but it's important that any employee wanting to join an innovation team also understands the different mindset, skillset and responsibilities that come with it.

First, they are taking on increased risk. By definition, the innovation teams are pursuing riskier bets meaning a large portion will fail. One study of companies following Lean, hypothesis driven experimentation found that over 2/3rds of hypotheses are refuted.[3] Many people are not effective when faced with risk and do not thrive in being found wrong so often. Second, there is little need for traditional management and strategy roles in innovation teams. The groups should be organized into small pods or squads of cross functional teams with the necessary skills to build potential solutions addressing the user need. These teams are often described as "one or two pizza" meaning small enough to feed with one or two pies. With this small size, there are fewer people to update and communication flows freely between them given their commitment to transparency. More rigid process tends to only be needed once a team grows and all members cannot be intimately aware of everyone else's day to day work and findings. This is why startup companies often struggle at their first major growth stage from 10 to 50 people. With small squads, the company insulates itself from this problem by scaling horizontal and in parallel via adding additional independent squads (Fig. 20.3).

Importantly, the skills that the team does need are builder or "maker" where they are contributing hands-on, day-to-day as analytical problem solvers. In technology companies, this spectrum revolves around the three corners of the product development triangle: product management, design and engineering. The more each of those disciplines understands about the adjacent disciplines—often called T-Shaped people (Hansen 2010)—the more effectively they collaborate. With both optimization and innovation teams following strong test and learn models sourcing ideas from and validating with their customers, resentment lessens. Better understanding of their common interests and fewer chances one is perceived as having a more valuable or impactful job than the other breeds collaboration.
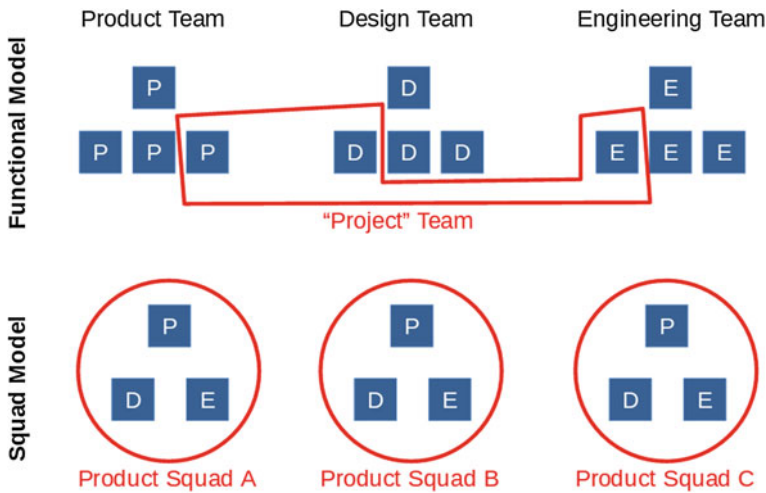
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[3]Launchpadcentral.com.

Fig. 20.3 Squad versus functional models

20.6 Performance Reviews and Compensation for the Innovation Engine

As noted, most corporate review systems are designed as annual reviews of individual performance based on well defined goals. For optimization teams, this might not be far off what they need. However, a system of goal setting called Objectives and Key Results (OKRs) (Klau 2012) has emerged in technology firms as an alternative way to tie company, product and individual goals together. In addition, the most important innovation might be in the breaking of goal setting and measurement from compensation and promotion considerations. In this way, OKRs encourage risk taking by asking employees to set stretch goals they are not sure they can achieve in the defined period.

If adopted by the full company—but full company adoption notwithstanding—OKRs flow down from overall company goals and goals of leadership. Any individual on a product development team should form their OKRs based on a combination of company goals and the Key Performance Indicators (KPI) for their products. The objective is a top level goal. For each objective, there are one or more *measurable* key results such as (Fig. 20.4):

At the end of the defined cycle, OKRs are measured on a zero to one scale not simply as a binary yes or no as to whether they were achieved. The measurement removes subjective input from the leader and the scale allows for partial credit. In fact, OKRs are considered successful if, in aggregate, the employee achieves a score in the 0.6–0.7 range. If the score is too high closer to 1 then the employee likely did not set aggressive enough stretch goals. The system also allows for the dynamic nature of rapidly changing business environments where innovation teams
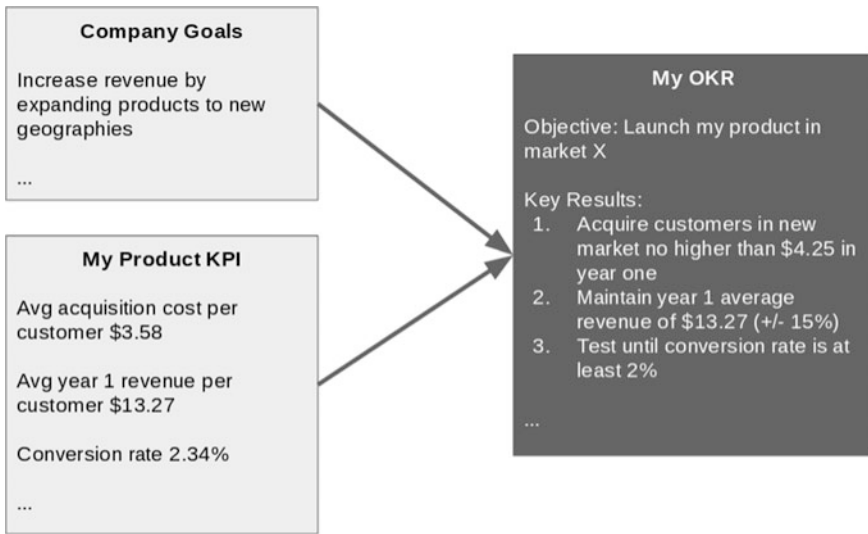
Fig. 20.4 OKR example

cannot foresee far into the future. They also focus the teams on a product KPI mindset where success is measured by achieving the product goals and not simply getting credit for delivering the product—a historical project mindset that achieved no tangible outcome for the business. From there, compensation and promotion considerations are taken on a different cycle. OKRs obviously will have some influence but by breaking the two apart, employees no longer optimize and conform their work behavior solely to their incentive system.

20.7 Conclusions

The Innovation Engine framework provides a working model that can be morphed for many different organizations in different cycles of product development threatened by different disruptive elements. One constant that has emerged is the need for executive sponsorship, interest, and involvement in what the innovation teams are working on. Creating innovation labs as executive vanity plays dooms them to failure almost from the start and their funding gets pulled as soon as the leadership team changes or a few bad quarters bring investor pressure to rationalize investments.

As noted, organizational inertia can arise from several places. Having clear definitions of roles and goals especially within the IT organization is a must. Constant communication with optimization teams training them on the test and learn process reduces resentment and can create opportunities for partnership

helping them with problems where they do not have time nor expertise to delve into. If an immediate opportunity for innovation is not there, finding a challenging product problem the organization has not been able to solve and execute against is another path toward proving the model.

Finally, careful selection of the innovation team is a key. Besides the necessary skills, confirmation that they have the appropriate aptitude and attitude to take on risk, adapt in the face of failure and can work with radical transparency are fundamental. They will face many hurdles beyond just their products and a strong conviction and buy-in on the philosophy will be key as well as their advocation of it to others outside of the innovation team. The team should also constantly reflect upon and adjust the innovation process itself. No single process works for all teams in all situations and learning about and iterating on your own process is just as important as for your product. The product development team are the users of the product, test and learn with them to innovate.

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