Patrick Whitney has worked with leaders of some of the most innovative companies to integrate design into their innovation processes. In this interview, he shares his perspective on how those leaders motivate, develop, and inspire their organizations, and talks about what it takes to lead an organization to growth through design.

JIM EUCHNER (JE): You’ve worked on design with business leaders at innovative firms like P&G, Steelcase, and BP. How have these firms come to be successful in using design for growth?

PATRICK WHITNEY (PW): I think there are three things that are needed for a company to adopt design methods and layer them on top of their existing methods for driving growth. The first requirement is managers who think that they can do a better job, that their customers and consumers are not being served as well as they should be. Most companies have that desire to improve.

The second thing that seems to be needed is an imminent fear or pain. If a company is doing well and isn’t fearful or feeling pain, there’s no reason to veer away from the tried and true methods of standard business practices. But most companies are feeling fear, if not pain, these days. When Roger Martin and David Kelly and I put together the executive program for P&G, I asked Claudia Kotchka [Director of Design], why P&G was making the push then— P&G was at the top of its game; it was almost as if it had no competition. Claudia said that the business unit leaders didn’t feel fear or pain but A.G. Lafley [P&G’s CEO] did. He felt not pain, but a fear of store brands five years from then. This fear concept is very important.

The third thing that’s needed is a leader who is willing to go down a path, even when they’re not certain what the outcome will be. This is sort of the opposite of a traditional business approach, where you do your research, you get bright people in the room, you do a technology assessment, a business assessment, and an evaluation of user needs. Then you pick a target and you optimize towards it, but you know exactly where you’re going. In the cases where design methods are successful in helping a company with strategy issues—where the company is going to play, where they are going to win—the senior executive needs to know the general direction they’re going, needs to know what characterizes that direction, but crucially, needs to be open to proceeding without knowing exactly where they’re going to end up.

So those are the three things firms successful at integrating design have: managers who know things are not going right, a sense of fear or a palpable fear about the future, and a leader who’s willing to go down the path not knowing what the exact answer is.

JE: Many times there are signals, like the signals that Lafley had about store brands, but not all leaders are willing to acknowledge or embrace them. How do you help leaders recognize the potential of the threat?

PW: Well, they’re calling me because they have a sense that this thing called design could make a difference. They normally don’t know why or what it is, but they’ve heard about it; they’re curious about it. What I do is help them see things a little more broadly.
For example, if you look at the scope of vision in most companies, they almost always think of segments that are likely to buy the products the company already makes. So if you’re a beverage company, a beer company, you think of people as buying premium beer or beer for weekend entertainment or home craft beer or mass beer. You think of people as beer drinkers. Meanwhile, a car company is looking at the same people and thinking of them as potential buyers of luxury cars or sports cars or compact cars. They always think of people’s lives in terms of their propensity to buy the company’s product. But if you look at people’s lives a little more broadly, you see that there’s a lot of room to understand them better and find ways that your product can fit into their lives better.

For example, I might ask managers to put customer segments and propensity to buy aside for a while and think instead of user terrains. User terrains represent the aspirations that people are spending time or money trying to achieve. Those terrains belong to the user; your territory is the small part of that terrain that the company wants to play in.

Going back to beer drinkers, beer drinkers want to have good times with their friends or relax with their families, or they want to be connoisseurs at the craft of making beer. The company should figure out how its offering fits into that life, not define people according to their likelihood of buying a product. Design can help with this.

**JE:** How do successful leaders move from curiosity to commitment? What does a leader, whether at a business unit or CEO level, do that makes design successful in their firms?

**PW:** They do a number of things. Frequently, they set up pilot projects that have a different set of rules than normal projects. They staff them differently and they give them different criteria for success.

Another thing I have observed leaders to do is to reject the requirement that all innovation initiatives succeed at the same level. One of the biggest problems companies have with innovation is that they treat all innovation the same. I think there are three generic types of innovation: step change, jump change, and leap change. Step change is where you tweak existing products and make minor changes to them. These almost always succeed. At the other end of the scale are leap change initiatives: you’re leaping into an area that you’re uncertain about, and you don’t want to do that unless there’s a big prize at the other end. These projects fail frequently, and you have to be willing to let them fail without undue penalty as long as the company is learning. You also have to be willing to sometimes give them more time to succeed.

The third type of innovation sits between step change and leap change; I call it “jump change.” In jump-change projects, you can see where you’re going in general, but you can’t see exactly where you’re going to land. This is where you take your existing products and extend the line into new areas.

The problem occurs when you try to send jump-change and leap-change projects into development: they get treated as if they’re step-change projects. The development process in most companies, however, is set up to assure that there’s no virtually risk in the step-change projects they are designed to manage. When you put jump projects and leap projects into such a process, they get normalized.

Executives need to alter the front end of development; it needs to be more plant for projects that need more thought and more work when they come in.

**JE:** So adapting the development process for stretch projects is important. What other roles do business leaders play in making design innovation successful?

**PW:** It’s an ad hoc set of things. There isn’t a general process that all successful leaders follow. One thing they do is to create project champions or team members that stay with the project through development and commercialization. The more innovative a project is, the less proof there will be that it’s going to work. Yet, as it goes through the process of development and commercialization, more and more proof is asked at every step of the way. You need a line of people who understand the idea deeply and who can defend it to manage this tendency. So a persistent team is one thing that helps these projects succeed.

**JE:** The stories about A.G. Lafley at P&G are stories of personal involvement. He made sure that he himself was trained in design; he demanded that his leaders learn about it; he spent time, he gave voice. Is that typical of successful companies?

**PW:** Every company that I know of that does design well understands the difference between competency and awareness. What companies frequently do is make everyone aware of design and think that doing so is going to lead to competency. It doesn’t.

**JE:** Can you say more about that? Say you have a general manager of a business unit that is facing the challenge of
Managers know that any new innovation introduces conflicts with the market and the users, but they don’t deal with it explicitly.

PW: They need a deeper awareness. I use the lens metaphor: a general manager needs to look at innovation through four lenses, and they tend to look at it through two, at best. One lens is the offering lens: what can you offer that you think will make a difference in the world? This is a topic that design frequently looks at: the product, the object itself, the environment it will operate in, the messages it will convey, the services associated with it. The second lens, which design also addresses, is the user lens. This includes personas and scenarios and use cases. Both of these are things that design teams focus on.

The lenses that innovation teams and executives frequently forget to manage are the activity lens and the lens of the value web. The activity lens deals with how the company operates. It can both enable and constrain innovation. I’ve adopted Michael Porter’s activity system framework as a way of prototyping or sketching what an operating model might be. The fourth lens is the business model lens, and I use value webs as a way of developing early sketches of business models.

I sometimes use a Venn diagram to describe this, with four overlapping circles: the offering in the middle, with the use case, the operating model, and the business model all overlapping one another. In simple terms, there are four questions: What should we make? Who is it for? How are we going to do it? And why are we going to do it? Those are the dumb, simple questions that any entrepreneur knows to ask, but they often get forgotten or obscured in big companies.

Let me explain that in a little more depth. When big companies think about what to make, they usually think in terms of their existing product lines and ask, “Should we expand it? What’s the competition doing? What’s our factory capacity and how do we run more things through it?” In the backs of their minds, they have the customer and the user there somewhere, but they don’t really make them visible. Similarly, when a large company addresses the operating model for an innovation, it looks at how it currently operates. Managers know that any new innovation introduces conflicts with the market and the users, but they don’t deal with it explicitly.

The lens diagram puts together activity systems, value webs, offerings, and use cases in a dashboard that executives can use to manage their business and to help them figure out which projects they should undertake in the coming year.

Think back to the case of the music industry before Napster. The industry knew what its business model was; it knew how it operated. It had to create so many stars every year and market them; the stars gave up the rights to their music in exchange for becoming famous, and they used that fame to make money through live concerts. The users were the retailers and the buyers of music, and the offering was discs and the retail experience. The music industry developed talent, designed stores, and packaged discs; the value web and the operating systems of the industry were all tuned to that. Executives in the industry knew that people were sharing music, but they weren’t doing it very much because it was hard.

Napster came along and changed that by making it easy for people to share music. At first, the music industry didn’t look at Napster in a systemic way; they just thought the kids were stealing their music, so they sued them. You always know an industry’s not doing well when it’s suing its customers.

Apple looked at the problem more holistically. They not only made it technically easier to share music, but they also addressed digital rights management and made it legal to share music. In other words, they looked at the value web. From the user perspective, they made it easy by creating an MP3 player that interfaced easily with music-sharing software called iTunes.

Apple changed the business model so that people were selling music for less money, which was better than no money, which is what the industry was getting when kids were sharing music on Napster. They changed the offerings from albums to single songs and to downloads instead of discs. They obliterated the retail channel entirely. What Apple did was look at a combination of changes that needed to be made to the activity system and the value web, as well as to the offering.

JE: That’s hard, especially when you’re disrupting your own value chain.

PW: Of the four things—the offering, the users you serve, the value web, and the activity system—the activity system is the hardest thing to change.

JE: What is the connection between strategy made at the executive level and the design process? How does strategy inform the design process, and how can strategy be informed by the design process?

PW: Great question. I think that’s where the product portfolio comes in. To me, the four lenses of value web, activity systems, offering, and use case are the bridge between the portfolio and the individual innovation projects.

A portfolio should include projects of different scale and different timing, but also with different levels of exploration. It should have a small number of leap projects, a larger
number of jump projects, and a whole bunch of step projects. Step projects should be done fast and with agility and without much complication. The jump projects will take more time and involve more risk, and the leap projects are almost a mystery, with a potentially large enough gain to be worth the inherent ambiguity.

Any company needs a balance of these things. An operating unit manager might say, “Gee Mr. CEO or Mr. COO, my portfolio is weak; I’ve got too many jump projects going and I’m soft on step projects. So this year I’m going to pay more attention to step projects.” Or they could say, “We’re doing fine for the next three years, but I don’t have anything that I’m confident will let us win five years from now. So I’m going to start two leap projects to see if I can spur something big.”

JE: Once they decide to take the risks inherent in leap projects and jump projects, what do leaders do that increase their chances of success?

PW: They show up at key times at the meetings where the projects are getting discussed. They put personal involvement into the underlying values. Lafley was famous for visiting customers whenever he went into a new city, especially in other countries. Before he went to the hotel, his staff took him either to a home or to a store to look around, to observe what people were actually doing when they were doing their laundry and home cleaning. If you want to get your staff to believe that customers and users are important, spend some time with those customers.

Jamshyd Godrej, the CEO of Godrej Industries in Mumbai, will spend a day with innovation teams reviewing projects, discussing businesses they’re not in and markets that may not exist. He is very involved in the early stages, when teams are in the conceptual exploration stages.

JE: When he’s doing this, he’s not only emphasizing that it’s important to him but he’s also learning enough about the domain so that he can make good decisions in areas that may not be within the core business.

PW: Hackett at Steelcase would review new ideas and ask for the use case. People would tell him, “Well, we’ve found that people want more chairs like this.” He’d say, “That sounds like a ‘Steelcase happy thought.’ Go back and tell us what the users really want, because I don’t think they want chairs; they’re after something else.”

At BP, they used design to get a better understanding of users, to imagine what business new opportunities might be emerging. In our study with them, we looked at how people in emerging markets use energy and how this was affecting their lives. The goal was not to get people to use more energy but to understand how they could live a better life. BP had faith that as the communities developed and as they lived a better life, they would naturally use more energy. Wealthier people use more energy.

BP also had other initiatives to make energy use more efficient. We were trying to understand people who are just below middle class in China. What we discovered was that they all had little businesses running in their houses—not to the same extent as in India, but to a large extent. They had fax machines and typewriters or cheap computers or cameras to help them with their businesses, but the things they had weren’t very good.

We ended up proposing that they build community centers in these villages where people could meet and share information and also have access to a good fax machine and a good copier and a good scanner and a good printer and good computers, all of which were shared. Cumulatively, it saved people money and gave them better services but, by the way, it was also a good place to buy fuel pellets to keep their homes warm.

JE: This seems like a good example of strategy informing design, and then design informing strategy. BP’s strategy to engage China informed the design process—it gave clarity about the segments to focus on, for example; and the design process helped inform strategy—it led to the distribution strategy for fuel pellets, in this case.

PW: There was no alternative way of doing this kind of work. We couldn’t just ask people what they wanted. They might have asked for better fax machines or better copiers or more customers, but they wouldn’t have asked for a community center. A market research study would have focused on better, cheaper fax machines and copiers.

JE: We talked about some of the leadership qualities required for success. What are the attributes of the person who’s responsible for driving design?

PW: Claudia Kotchka at P&G was very effective. She had Lafley’s trust. She understood that she had to guide people down roads even though they didn’t know where they were going to end up. She had to have a great sense of humor and sensitivity to the presidents of the divisions so that she could cajole them into doing something that Lafley was ordering them to do, but that they didn’t really want to do. She had to give guidance to the consultants so that we could pull out of our quivers what was relevant to them and leave alone things that didn’t make sense for them. She had to be willing to explore approaches and processes that made partial sense and let some of them grow and kill others quickly.

JE: Is there generally a partner like that in firms that have been able to grow the design competence?

If you want to get your staff to believe that customers and users are important, spend some time with those customers.
PW: There is. I hadn’t thought of that before, but the CEO or the president has to say, “We’re going in this direction guys. Be involved.” But they can’t manage the whole process, so they need a lieutenant whom they trust and who is trusted within the company, someone who, when they speak, is viewed as speaking for the company and the president, not just for themselves.

JE: One of the things designers have to learn to do is to communicate. What do executives have to do to make themselves better able to hear the really new ideas?

PW: They need to be able to look at the way value can be created or lost in new ways. Designers are good at looking at problems in a broader way, and they are famous for not taking the problems as given. It used to drive clients crazy when they hired designers, because the clients thought they knew exactly what they wanted and designers challenged that. But now, as the economy shifts from an economy of scale to an economy of choice, what designers used to be hated for—rethinking the problem, not taking it as given—is what they hire us for.

JE: That’s progress. At a cognitive level, people are more open to challenging assumptions these days. But they have to listen, as it were, through a different filter. How do they get there?

PW: It’s different in different companies and at different points in the development path. John Seely Brown tells a wonderful story of a copier that was supposed to be so easy to use that even a chimpanzee could use it. The human factors design teams were telling the senior execs that it was, in fact, too hard to use. But when the senior execs would go down to the development lab, the engineers would say, “No, here’s how you use it.” They thought they saw that it was easy to use.

What John’s crew did was create a video of pairs of people trying to duplex a copy. There was video of the room they were in and of the control panel they were touching to try to make it work. And there was a clock in the corner. Two hours in, the two guys who were trying to duplex a copy had their sleeves rolled up, their shirttails were out, and you could hear them saying, “Well maybe if we unplug it and open the door and then close it . . .” They had tried everything. It turned out that one of them was Allen Newell, the Nobel Prize–winning physicist, and the other was one of his colleagues at Carnegie Mellon.

That video stopped the launch of the copier and led the team to a design with different levels of controls depending on how much the user knew. John once told me that, as far as he could tell, there were only two things that had resonance in a boardroom: one was spreadsheets and the other was stories. That leaves PowerPoint presentations out in the cold.

To me, the core of design is the principle of abstraction. Jobs didn’t think of creating a better MP3 player, he abstracted the problem and asked how people might better enjoy music. Sam Farber at OXO didn’t want to design a better potato peeler; he wanted to help people enjoy cooking and the experience of creating a nice kitchen. Howard Shultz didn’t try to sell better coffee; he tried to sell an experience.

That abstraction, to me, is the key to design.

Another key to design is making innovation a way of learning. Normally, companies think they have to know what they’re going to do before they start making anything, but prototyping “early and often” is a way of thinking, not just a way of testing. You can take this method of prototyping and abstraction and apply it to the value web and activity systems, as well.

JE: I think those are important: abstraction and making to learn. Are there other key principles?

PW: Yes. Visualization: visualizing the problem; visualizing the solution. Words are an abstract representation system and they’re imperfect. People will carry on a conversation, get into an argument, and then come to an agreement. Sometimes, in the process, a prototype will get made, and you’ll hear people say, “Oh, I didn’t know that’s what you meant.” Making prototypes early on is important, not only as a way of communicating and sharing ideas but as a way of having new ideas. Making the prototype causes you to think of new ideas.

You can prototype the activity system and the value web, as well, and this causes you to think of the activity system and value web differently. It also gives you ideas about the product.

One thing I’m having wild success with is getting executives to plan a competitor to their business based on the Maker movement and a web-based and systems-based approach. The participants have a lot of fun, and then they realize how easy it is. They go back into their own company and create a defense against that start-up. All of a sudden, they’re less encumbered by things they thought were rules and laws they had to follow. They notice that the start-up could ignore all those rules and just do it.

I’ve tried this with shoe companies, credit unions—all sorts of companies. I had the board of one of the largest credit unions in the country plan a credit union that Facebook would run. They were laughing and laughing, and then all of a sudden, they realized that it was a really good idea. And Facebook has more legitimacy being a credit union than even the credit union does.

That’s what design does for you, whether you like it or not: it makes you think about the world of possibilities in an entirely new—and often very uncomfortable—way.
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