UNC Insights Series: Innovation

Interviews with:
Sridhar Balasubramanian, Chris Bingham, Arvind Malhotra, Atul Nerkar, and Ron Williams
UNC Kenan-Flagler Business School
Introduction

Innovation, in its simplest form, is the introduction of something new: an idea, product, process, method, or a device. Business innovation manifests itself in many ways: product innovation (a new or improved product or service), process innovation (a new or improved manufacturing, technology, or distribution service), or organizational innovation (a new management structure or use of human resources). Innovation meets new needs – or old needs in new ways – and is fundamental to ongoing business success. As the world’s needs change, successful organizations must innovate in order to meet, and anticipate, their customers’ needs.

In the pages that follow, UNC Kenan-Flagler Business School faculty discuss how innovation contributes to a company’s success, why doing what is most effective can be so difficult, and what steps to take to overcome obstacles and employ innovation advantageously.

They explore:

- The concept of innovation, its importance to business, and its various types.
- Challenges organizations face when they embrace innovation and ways to overcome these challenges.
- How different organizations approach innovation.
- How to build a culture of innovation and innovate effectively.

The UNC Insight Series

The UNC Insights Series features insights from UNC Kenan-Flagler professors on a variety of business topics, including innovation, leadership, strategy, and change. The complete interviews are available as podcasts and as individual, edited written articles by request.

UNC Kenan-Flagler Business School faculty excel in both teaching and research, and are fully immersed in the challenges of the business world. Their expertise extends beyond the classroom through their work in corporate and entrepreneurial settings, service on company boards, and consulting stints with organizations around the world. By bringing their real-world experience and research into the classroom, they help to create truly exceptional learning experiences for executives.
Why Innovate?

Companies need to innovate relentlessly to survive *and thrive*, says professor Sridhar Balasubramanian. The competitive nature of the business world and the increasingly global nature of business are major factors driving the need for innovation. And many companies need to expand their definition of who they consider to be in their competitive set, he advises.

"Today you produce a product, you try to patent it, but within six months some company in Asia has produced something pretty close, and they worked around your patents as well," Balasubramanian says. Only those organizations that “constantly challenge what they do, challenge themselves to come up with new and different ways of doing things, and constantly improve on things that they already do will survive in this new globally competitive market.”

Customer expectations are another important reason for companies to innovate. "Customers today have very little patience with products that are old," he says. "Baby boomers think of a product that has been around for, say, 30 years as tried and tested. Generation Y members think of that product as tired. Innovation cycles are becoming rapidly shorter, which means that companies have to be on their toes constantly, turning out new products, new services and, often, new solutions, because customers today don’t want just a product or a service. Gen Y customers want companies that solve their problems."

“Innovation” has become somewhat of a buzzword, says professor Arvind Malhotra. He views “sustainable differentiation” as a more useful focus. Companies need to think through how they can *sustainably differentiate* themselves in the marketplace to compete. He defines “sustainably” as “having an edge over your competition over time so that you are seen in the marketplace as superior.” This sustainable differentiation is imperative because competition is ever present and a firm must constantly “trump the competition.”

Professor Atul Nerkar suggests that many companies pursue innovation for similar reasons: a desire to gain a competitive advantage, to avoid staleness, and to improve society. While these reasons are valid, he stresses that innovation is important because “it’s connected directly to profits and value creation.” Innovation should be at the heart of most companies because it can create value both for the organization and society, he says.
Why Is Innovation Difficult?

Many companies find it difficult to embrace innovation, often due to organizational culture, says professor Chris Bingham. They are limited by change-averse behaviors that have become institutional. He narrows the reasons for this to four major causes.

- **Bad ideas:** “Most new ideas are bad,” says Bingham, with “studies citing between 60 to 95 percent of new products failing.”

- **Short-term pain:** “Change can be difficult and often damaging in the short term. When you engage in a change, things are often going to get worse before they get better.” He cautions that the short-term pain caused by change creates the potential for a “performance trough” and the possibility of lower performance can be a significant deterrent. “The prospect of things getting worse before they get better holds a lot of people back from changing and innovating,” he says.

- **Listening dilemma:** Although conventional wisdom would say *listen to your customers,* “when it comes to innovation, by listening to your customers, you’re just going to give them more of the things that they already desire,” Bingham says. Studies show “when a new technology enters, very rarely is the incumbent in the position of power ... because new technologies often relate to new customers who value a different bundle of attributes.” So while listening to your customers is imperative, do not rely upon it as the only way to recognize new opportunities in the marketplace.

- **Core rigidity:** Things that made organizations successful in the past are often exploited to the point where they are no longer useful, says Bingham, hampering innovation and, in some cases, leading to an organization’s demise. In a very real sense, core competencies can become core rigidities.
Bingham points to automobile maker Chrysler as an example of an organization that allowed a core competency to turn into a detrimental core rigidity. Chrysler established itself as a truck/minivan/SUV powerhouse manufacturing successful vehicles such as the Dodge Ram, Dodge Caravan/Plymouth Voyager, and Dodge Durango. With each successful vehicle introduction, Chrysler grew its share of the pickup, minivan, and SUV markets. Unfortunately, as the price of gas rose, these larger gas-guzzling vehicles fell out of favor with many consumers, and sales declined. While other automobile manufacturers reacted by retooling their plants to manufacture more fuel-efficient vehicles, Chrysler clung to its core competency – now a core rigidity – and continued to exploit their heavy truck and SUV capabilities, leading to financial troubles for the automobile manufacturer.

Professor Malhotra also warns about that pitfalls of core rigidities, explaining how many companies fall victim to the “the inertia of success.” He cautions that “once you get good at something, the tendency is to do more of that. You get into a rut of doing it slightly better, building a better mousetrap.” He differentiates between exploitation and exploration as organizational behavior choices, with exploitation providing instant gratification and short-term rewards and adhering to an “if it ain’t broke, don’t fix it” mantra. Exploration, on the other hand, has a longer-term focus and prepares for that time in the future when things are broken and different ideas are needed.

Professor Nerkar states that some of the challenges companies face in becoming more innovative are due to basic human nature. “The normal state of organizations and all human beings is just to be inert.” As a consequence, he asserts, companies cannot expect innovation to occur naturally, and successful companies must actively work to create a culture that encourages innovation.
What Are the Approaches to Innovation?

Companies can choose a variety of different paths to become more innovative. Professor Balasubramanian cites the successful companies, Apple and Samsung, which have demonstrated two entirely different, yet successful, approaches to innovation.

Apple’s current iteration of the iPhone incorporates many changes from the original, yet Apple kept the core identity of the iPhone intact. Balasubramanian points out that Apple’s approach centers on the concept of “let’s look at the product, let’s refine it, let’s make is more jewel-like, let’s put in some more functionality, but let’s keep the soul of the product the same.”

In contrast, Samsung’s radically different approach involves having scores of phones that are quite distinct in order to saturate the market. He elaborates further that the Samsung approach involves a “let’s do a lot of things in order to overwhelm the customer with choice” mentality. Each approach works in its own way, and both Apple and Samsung continue to successfully innovate within the same market space.

Professor Balasubramanian also advocates a business model approach to innovation that is becoming more common – “frugal innovation” or “innovation on a shoestring.” In a down economic cycle, companies tend to reduce spending, often cutting investment in research and development. These cuts can sometimes lead to unexpected innovations, as companies explore opportunities for efficiency. He notes that frugal innovation can result in “a lot of new ideas about how to do things more simply.”

In addition, many new products and solutions are now coming from developing economies to more industrialized economies. This is known as reverse innovation, or trickle-up innovation. Balasubramanian points to the creation of the Tata Nano, a car sold for approximately $2,500. Surprisingly, this car was built by Tata Motors, the world’s eighth-largest motor vehicle manufacturer, which produces luxury vehicles such as Jaguar and Land Rover. Rather than taking a more expensive model and simply cheapening it, the company had to “challenge everything that goes into the car and design the car from the ground up.”

Professor Malhotra also highlights the different paths an organization can take toward becoming more innovative, separating product and service innovation from business model innovation, “which is changing the whole game entirely,” he says. As an example of the latter, he cites Amazon, a cutting-edge company that is not so much
about building better bookstores as it is about capturing the wallet share and the mind share of customers over the long run by changing the way products are perceived in the marketplace.

Professor Malhotra proposes another business model approach to innovation that embraces what he describes as the “fail fast, fail often, and learn from failure and embrace failure” philosophy. He believes that truly innovative companies are not fearful of failure and follow a venture capitalist portfolio approach to innovation. “Venture capitalists treat different companies in exploration as set-up experiments in their portfolio and realize that 70 percent of them will fail, but they will learn from them and have enough diversified bets to ensure successes are part of the failures,” he says.

In a similar fashion, “most business innovations come from a series of small experiments that are successful and others that are unsuccessful.” He points to how companies like Amazon, Google, and Apple conduct many small experiments that will result in many small failures – combined with “the capacity to fail fast and move on to the next thing.” In these companies, failures are treated as learning opportunities. “It’s important to have a lot of experiments, to learn from them, and to learn to absolve failure and embrace it,” he says. “It’s important for the experiments to be transparent and that the learning from any failures be made equally transparent.”

Professor Nerkar also supports the portfolio approach toward innovation, stating that successful innovation is “about ensuring that you do not put all your eggs in one basket.” He asserts that “it’s not about throwing money at R&D. It’s about how well you manage that portfolio of R&D.” He suggests that successfully innovative companies are places “where value creation occurs through the portfolio management of resources.”

Where Do Innovations Come From?

The research of professor Ron Williams reveals that the leaders of innovative companies believe everyone in the company has a role in innovation, not just the R&D department. “Almost anyone within the organization can identify opportunities, and then it’s a sorting process to bring it forward,” Williams finds. He points to
Amazon as accepting innovative ideas from throughout the company and relying on the sorting out process to determine which ideas have “the potential to deliver the most revenue and the most profit and have the best chance of success over time.”

Professor Williams also discovered that the companies that successfully innovate also recognize the need to conscientiously manage key resources, such as people and money, differently to allow innovation. He emphasizes that these resources need to be managed “in such a way that they provide flexibility for people within the organization to innovate, and therefore, it doesn’t have to boxed into something like the R&D organization.”

Professor Bingham supports the democratization of innovation as companies begin to embrace ideas from a variety of sources. Seeking and incorporating the ideas and opinions of people who are outside different business units or the company can contribute to innovation.

“I think having outsiders is critically important in order to move away from the dominant paradigms and models and policies and procedures that organizations have had,” he says. “The more times that you’re interacting with other teams in your organization and, frankly, other organizations outside of your own, you’re able to see and borrow best practices.”

Professor Bingham points to Toyota’s creation of the Prius automobile. Instead of selecting a leader from the top engineers in the firm to head this innovative new project, Toyota chose a younger executive from a completely different division that had almost no experience in this area. He said that Toyota put the younger executive in charge for the very reason that “they did not want him to be biased by experiences of the past.”

Professor Malhotra also urges companies to be “open to ideas from outside – learning from other companies, learning from customers, learning from suppliers.” He suggests that “the more you let your system be open to learning from outside, the more you will learn from experiments done by others in their ecosystems.”
How Is A Culture of Innovation Created?

The culture of an organization has a significant impact on its ability to innovate. Organizations must actively foster a culture that encourages innovation to remain competitive. Professor Balasubramanian identifies three organizational components that need to be developed and managed carefully in order to build and foster a corporate culture of innovation.

- **Motivation** – Are people motivated to be innovative? This is where leadership comes in. Is the leader a champion for innovation? Are they lighting the fire inside people about the need to change, about the desire to change, and are they getting the team rolling in that direction?

- **Opportunity** – Managers need to create the time, space, and tools for employees to gather and think about change.

- **Ability** – Managers need to be able to make the change happen.

Any one of these three components can become a bottleneck, preventing any progress on the other two, he says. “It’s very important for organizations to step back and say, ‘Which of these are really blocking the innovation process, and how do we open up these bottlenecks and let innovation flow through the pipeline?’ ”

How Can An Organization Innovate Effectively?

Professor Bingham points to specific behaviors that organizations can use to innovative effectively.

1. **Make the unfamiliar familiar.** “What you need to do is help people make the cognitive transition from what they know to what’s unknown,” he says. For example, when Thomas Edison introduced electric light, he used the same wattage as gas lights, which “helped people to tie back to what was familiar and known to them” even though the electric lights could have created much more light. Amazon uses the “shopping cart” and “check out” terminology to mimic a customer’s traditional shopping experience in e-commerce transactions.
2. **Make things simpler and more accessible.** “When you’re innovating, you want to think about how you can compete, not by being better on that core dimension, but by being different,” says Bingham. “That often requires being simpler and more efficient.” He cites CVS pharmacy’s successful introduction of MinuteClinic. CVS can’t provide the full suite of medical services available at a doctor’s office or hospital, but it can provide services that are in high demand, like checkups, vaccinations, and strep tests.

3. **Pace progress.** Rather than wait until the market forces a company to change, some firms develop an internal rhythm that drives change. Intel, for instance, comes out with a new chip every 18 months. Pixar produces a full-length feature film every 18 months. “Pacing keeps their employees in sync and moving forward in a coordinated manner,” Bingham says.

4. **Add diversity.** Adding age and background diversity to teams can nurture innovation by increasing the number and range of ideas. It also creates task conflict, which helps better ideas rise to the surface. Depersonalizing the selection process allows the organization to become more objective in choosing the best idea without the baggage of ego, ownership, or politics.

5. **Understand needs.** Dig deep to better understand fundamental needs, Bingham advises. While some needs might seem obvious, more fundamental needs often are driving behaviors and decisions. It might take more time to diagnose, but these fundamental needs can be extremely valuable in unlocking opportunities to innovate. “People buy a product to fill a need,” he says. “If you understand that need, you’ll be able to innovate more effectively.”

“That’s where relying on experts comes in, because an expert can actually, in my opinion, teach people to be innovative. We cover tools and techniques and frameworks that we share, which managers can take from programs to work Monday morning and then start thinking differently by applying these tools and frameworks. Absolutely, people can learn to be innovative.”

- Professor Sridhar Balasubramanian
About the Experts

Sridhar Balasubramanian is a professor of marketing, the Roy & Alice H. Richards Bicentennial Distinguished Scholar, and associate dean of the MBA Program at UNC Kenan-Flagler. He is a widely published and cited researcher. His research and teaching interests are in the areas of marketing strategy and technology strategy, customer focus, innovation and growth strategy, services design and marketing, e-commerce, green and sustainable market strategy, game theory, and the management of competition. He specializes in bringing the tools and concepts of market-focus and customer-focus into other functional areas, including the management of the human resource function.

Chris Bingham is an associate professor of strategy and entrepreneurship at UNC Kenan-Flagler. His research interests revolve around organizational learning, adaptation, growth, innovation, and strategic decision making in entrepreneurial firms and firms in dynamic markets. He has studied how firms develop alliance, acquisition, product development, and internationalization capabilities in high-tech industries. Currently he is studying the process of accelerated learning in the context of seed accelerators. He teaches in UNC Executive Development programs and graduate business courses at UNC Kenan-Flagler.

Arvind Malhotra is an associate professor of strategy and entrepreneurship and the T.W. Lewis Scholar at UNC Kenan-Flagler. The impact of social media on business, open innovation approaches in innovation tournaments and collaborative communities, and virtual teams are areas of research for him. His research projects include studying methods successful brands use to leverage social media for creating a loyal customer base; successful open-innovation organizational and extra-organizational structures; adoption of innovative technology-based services, such as wireless, by consumers and organizations; and management of knowledge in extra-organizational contexts.

Atul Nerkar is a professor of strategy and entrepreneurship and associate dean of the MBA for Executive Programs. His research focuses on how technology, innovation, and entrepreneurship affect business and corporate strategy. He studies research productivity in organizations and the evolution of technological capabilities in the context of the pharmaceutical, chemical, and optical disc industries. His current research examines the drivers of R&D success in the pharmaceutical, chemical, and...
optical disc industries. In particular, he focuses on firms’ patent portfolios and the evolutionary process underlying their development.

**Ron Williams** is an adjunct professor at UNC Kenan-Flagler, where he teaches in the MBA and Executive Development programs, specializing in entrepreneurship and innovation. He leads executive workshops centered on a customer-led view of strategy and organization for companies facing volatile and uncertain disturbances across the business landscape. He has held management positions in IBM in sales, marketing, and consulting. His primary role was to lead the development of sales strategies for new technologies, focused on customer value creation.
About The University of North Carolina Kenan-Flagler Business School

Consistently ranked one of the world’s best business schools, UNC Kenan-Flagler Business School is known for its extraordinary learning experiences and innovative research and for developing results-driven leaders who use business as an engine for global change. UNC Kenan-Flagler prepares people at every stage of their careers to manage successfully in the global business environment through its five MBA programs (full-time residential, Evening and Weekend Programs for Executives, global OneMBA®, and online MBA@UNC), Master of Accounting, undergraduate business, PhD, non-degree Executive Development, and the UNC Business Essentials certificate program. Its Frank Hawkins Kenan Institute of Private Enterprise helps business and government tackle problems with impact on society through its operations at UNC and in Bangkok.

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