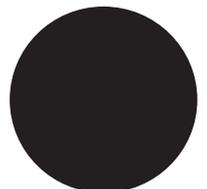


Design:
The Business of
Connecting Supply
to Hidden Demand



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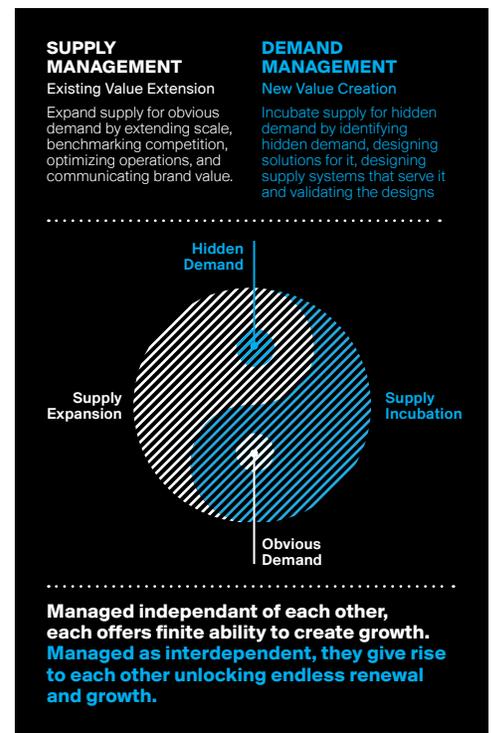
Demand is abundant in the economy but the vast majority of it remains unsupplied because it is hidden beneath the surface of standard business activity. Design Thinking enables businesses to create new value by identifying and supplying for demand that remains hidden.

In 2004 Air New Zealand was competing on the standard terms of the airline industry. Business activities were focused on expansion of scale, industry benchmarking, operational efficiency, and brand communications. The airline was facing increasing pressures from competitors and the global jet fuel price crisis. The market was becoming increasingly saturated with competitors fighting for the right to supply for the same set of obvious, assumed demands of airline travelers. Leadership aspired not only to protect their territory but to expand growth beyond it. In order to do so, they knew they would have to develop the ability to create new forms of value for customers.

How did Air New Zealand emerge from this challenge as a highly profitable, highly differentiated industry leader in customer experience? They shifted their focus to understanding demand in the marketplace that their industry had long been overlooking, then designed new products, services, experiences, and business systems that enabled them to supply for this hidden demand. To manage this undertaking, they relied on Design Thinking.

Eventually obvious demand becomes saturated with supply and yields diminishing returns

The core formula for business growth throughout the last century has been restricted to management of the supply side of the market economy. It casts its focus on internal



organizational systems and processes as well as those of a broader industry to achieve growth through cycles of scale, benchmarking, optimization, and communications.

After years of repeating this cycle, most companies and most industries have become highly sophisticated at it and highly dependent on it. Now, decades after the globalization race began, the global marketplace is becoming increasingly saturated with companies supplying for the same or similar demand. With limited stable markets remaining to extend their supply, entire industries are beginning to sense a cap in the ability of their supply management capabilities to drive growth. Even companies that are not global experience these limits, as their industries saturate globally and as competitors from around the world threaten their business.

This global saturation of businesses supplying for the same obvious demand has sparked a movement of businesses investing in design. Business leaders are now commonly facing the realization that they must learn to create new value for people if they are to renew their organizations and achieve their growth aspirations. For this reason many businesses, including Air New Zealand, have turned their attention upon design.

Design enables businesses to create new value by supplying for 'Hidden Demand'

The lack of clarity, lack of direction, and frustration experienced by companies as they face the challenge of creating new value is powerful evidence of a dramatic imbalance in the market economy. It is evident that business has professionalized its ability to recreate, extend, and communicate value through management of the supply side of the market economy, but at the expense of its ability to identify and create new forms of value by managing the demand side. It seems as if we have come to operate business so disproportionately on a supply management paradigm that we have been blinded to the potential of managing demand.

Design Thinking and similar strategic design practices enable businesses to manage hidden demand efficiently, enabling the creation of new value. Design Thinking focuses externally, on the people a business intends to serve, as well as the natural settings in which they perform activities. This enables businesses to specify new demand, then design and configure business systems to realize the growth and profit opportunities of supplying it.

Design is the business of connecting supply to 'Hidden Demand'

The impact of design in business has been restricted by its framing in design terms. Design activities become dramatically more clear to traditional business people when they are framed in terms more in line with standard business knowledge. For example, core to the designer is the term 'design

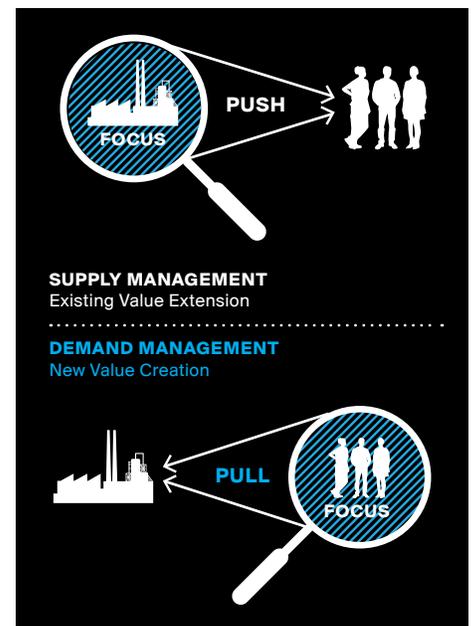
principle'. By simply calling it a demand principle, its meaning connects in the business environment. This simple shift in language reminds us all of something we know - that successful businesses effectively supply for demand. By identifying principles of hidden demand, we are provided with a strong foundation for designing a business and system that creates new value for people.

A few key objectives must be met on a strategic design project. Let's consider them in business terms rather than design terms:

Identification and specification of hidden demand is achieved by applying observational techniques and social sciences to understand people and their behavior in the natural settings in which they perform activities, to identify their unmet needs. The findings are organized into detailed, actionable descriptions of demand that was previously hidden. These are called demand principles. Designers often call these design principles and refer to this phase of work as design research.

For Air New Zealand, a key demand principle was uncovered by watching parents with young families during the flight boarding process. Families with young children avoid eye contact with other passengers as they move to their seats, meanwhile, passengers hold their breath as young children walk by in hopes that they are not the unlucky neighbor of a child. Angst overtakes not only the families with children but passengers throughout the airplane. Everyone is concerned about the intrusion that a child might cause them in a confined space for an extended time with minimal options for making them comfortable. The entire airline industry was operating on the assumption that young families who could afford to travel simply did not, but this finding effectively surfaced demand that the industry had overlooked for years. It exposed opportunities to create solutions that supplied for the needs of parents with young children and all other passengers in the process.

Designing solutions for demand is the act



of generating, configuring and envisioning solutions for people based on the demand principles. The solutions often extend throughout the overall experience of interacting with a company, its products, its services and various touch points to improve the relevance and fit into the daily lives of customers and potential customers. In this stage delightful, optimized customer experiences are envisioned. Designers refer to this as user experience design.

Air New Zealand facilitated idea generation sessions where employees and consultants collaboratively focused on creating and developing ideas that solved for discovered demand. One idea that emerged was *SkyCouch*, a coach seat and service proposition that could be configured to meet the needs of a family. Countless sketches of ideas were developed based on ideas that served the demand principles well. To further explore them, a dedicated design lab called Hanger 9 was established. Ideas were then prototyped as quickly as possible to gain a detailed sense of how they would best serve the newly discovered demand.

Designing a supply system is a business configuration activity. It considers a business to be a modular system that can adapt to serve demand, rather than a rigid, unchangeable supply structure. In this stage a business is envisioned and configured that enables a company to supply the improved product, service and overall experience that was envisioned in the designing for demand stage. Designers call this business design or business model design.

The airline industry has allocated seats on an individual basis for many years but *SkyCouch* required that they be purchased in blocks of three, the number of seats needed to unlock the improved experience that had been designed. This posed an operational problem, such a system did not exist and therefore needed to be designed from scratch. To accomplish this, the Air New Zealand team generated ideas of how to solve for this challenge then developed low fidelity prototypes of both the back end and front end systems.

Validation of the designs reduces risk and prepares the designs for introduction into the company's supply management machine, where it can eventually be scaled and optimized. It is achieved through iterative cycles of rapid prototyping and testing of the designs. Prototypes are tested in real or simulated contexts with real users to validate that the designed user experience satisfies the demand principles and that the business system enables the designed user experience.

In this stage, Hanger 9 was converted into a scaled prototype of the interior of a Boeing 787. This space was used to simulate flight

experiences for actual users, to gather accurate feedback on how well the solutions they had designed positively impacted the experiences of users. The space enabled Air New Zealand to test, observe, measure, improve and validate the designs of seating services, experiences and business operations including *SkyCouch* and the newly designed seating allocation system. Most importantly, they were able to do so prior to the new designs passing staunch FAA approval requirements and without incurring the cost of retrofitting an airplane or rolling out massive software system implementation. Armed with validating feedback from testing of the prototypes, the implementation teams were able to make strong, aligned decisions as they began converting the prototypes into reality.

Design delivers differentiated, scalable growth opportunities

The outputs of strategic design are products, services, and experiences that are highly relevant, highly differentiated, and highly scalable. They are low risk because they are constructed on a firm foundation of demand knowledge, assuring their relevance with customers. They are highly differentiated because the demand that is known internally likely remains unknown to competitors which then enables unique and differentiated forms of brand communication. They are highly scalable because the first supplier has a head start in the race to scale supply for the newly discovered demand globally.

From the moment it was launched, *SkyCouch* was a hit with young families but it also became a valuable differentiator for other groups such as business travelers and couples without children. With exclusive rights to the patent, no



competitor could offer the same experience. Air New Zealand is now looking to scale the offering beyond its own fleet by licensing the innovative design to other airlines.

Businesses capable of extending supply for obvious demand while also creating new value by supplying for hidden demand are capable of endless renewal and growth

Design enables companies to create new value efficiently by managing hidden demand as a source of renewal that feeds the existing capability present in most organizations to scale and optimize supply once it is operational. Supply and demand are the yin and yang of the market economy. When managed independent of each other, each experiences finite ability to create growth

THE BOTTOM LINE

Design Thinking empowers businesses to create new value by uncovering and supplying for demand that remains hidden. It enables businesses to achieve heightened and sustainable levels of growth, profit, differentiation, agility, and innovation.

and prosperity. Managed as interdependent, supply management and demand management give rise to each other unlocking renewal and growth in the economy while enabling companies to achieve heightened and sustainable levels of growth, profit, differentiation, agility, and innovation.

Unprecedented wealth, prosperity, and access to goods and services have been ushered in by the professionalization of supply management. One of the next great opportunities for business is the professionalization of demand management through strategic design.

Idea in Brief / Business has professionalized its ability to recreate, extend and communicate value through management of the supply side of the market economy, but at the expense of its ability to identify and create new forms of value by managing the demand side. Design enables businesses to create new value by identifying and supplying for demand that remains hidden.

To harness the power of design to manage demand, an organization must focus on four key objectives:

Identify and specify hidden demand.

Learn to discover and specify demand that remains hidden to the competition.

Design for demand. Develop and envision solutions that solve for the newly specified demand and improve the experience of the desired audience.

Design supply systems that serve demand. Envision an operational business system that would enable the improved experience to be delivered consistently and repeatedly.

Validate the design. Prototype and test the design in real or simulated contexts with real users to validate that the designed user experience satisfies the demand principles, and that the business system enables the designed user experience.

Supply and demand are the yin and yang of the market economy. When managed independent of each other, each experiences finite ability to create growth and prosperity. Managed as interdependent, supply management and demand management give rise to each other unlocking endless renewal and growth in the economy while enabling companies to achieve heightened and sustainable levels of growth, profit, differentiation, agility, and innovation.

Author's Note / Design Thinking, Human Centered Design, User Centered Design, and Business Design are all essentially different names for the same strategic application of design to achieve business growth.