

A stylized graphic of a lightbulb with a plant growing from the top. The lightbulb is represented by four horizontal bars of decreasing width. The plant has a thin stem and two leaves. The background is dark blue with white speckles, suggesting a starry sky or a night sky.

The
FOUNDATION
of Aii

INTRODUCTION

Peter Drucker, the father of modern management, famously observed:

“ *There is only one valid definition of business purpose: to create a customer. ... Because its purpose is to create a customer, the business enterprise has two—and only these two—basic functions: marketing and innovation. ... Businesses must be able to innovate or else their competitors will render them obsolete.*”¹

Few managers would disagree with Drucker’s profound proclamation. Today we see that across a variety of industries, innovation—often powered by technology—has dramatically shortened the time to obsolescence. But it isn’t simply the addition of more advanced technology, or the increased features and functions available on today’s products and services that have led to the increasing velocity of obsolescence. In fact, the scope of technologically advanced flops—Google Glass, QR Codes, Apple Newton PDA—proves that only customer-perceived innovation drives market performance. Customers must be able to identify and believe that any proposed innovation will result in a tangible improvement in the value they receive.

Given the heightened importance of innovation to business (even country) success, it is not surprising that it is easy to find a number different innovation rankings. To date, all of these rankings rely upon economic indicators such as patent activity, productivity, and R&D spending (e.g., Global Innovation Index, Bloomberg Innovation Index) or self-reports by managers or experts (e.g., Community Innovation Survey, Fast Company World’s Most Innovative). This top-down and inside-out perspective is undeniably valuable, but it neglects the experiences and opinions of innovation recipients, i.e. customers. Ironically, it is customers’ adoption and usage decisions that determine the success of new products and ultimately of innovators themselves.

To date, no large scale, scientifically vetted measure of customer-perceived innovation exists in the United States. The American Innovation Index™ (Aii) has been created to address this glaring need in the US market.

The Aii is an alternative way of assessing firms' innovation efforts. It is a systematic approach that captures customer evaluations and enables the aggregation to the industry and country levels. Such an outside-in, bottom-up approach enriches theoretical knowledge and provides practical information to decision makers in firms and policy makers within the government.

The American Innovation Index (Aii) rests on two assumptions:



According to these assumptions, the Aii is a measure of customers' perceptions of how innovative American companies are. Moreover, the Aii examines the impact of companies' perceived innovativeness on their relative attractiveness in the market and on their customers' loyalty levels.

ABOUT THE AMERICAN INNOVATION INDEX™

Sustainable businesses have three fundamental characteristics: a) they deliver high-quality goods and services, b) they innovate on a regular basis, and c) they launch innovations that trigger active positive emotions. The American Innovation Index (Aii) is the first national ranking of important industries and companies' innovative abilities where the customers determine the level of innovativeness.

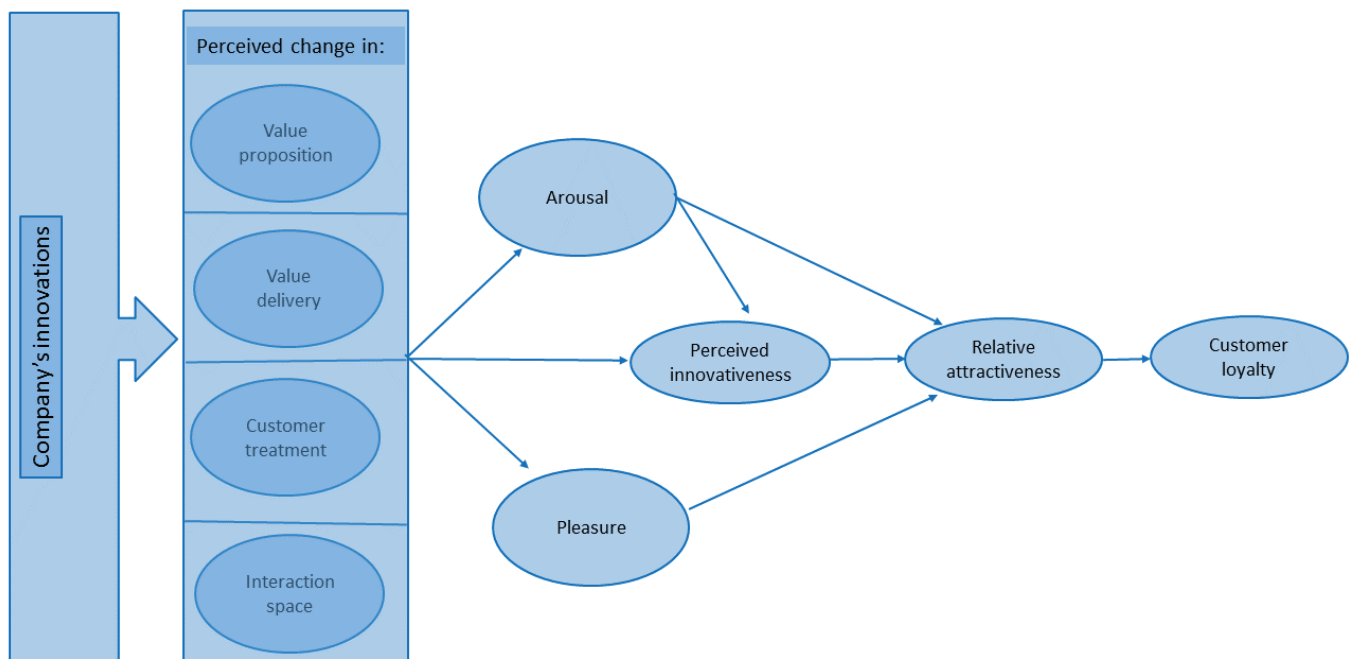
In all, we rank the responses from approximately 37,500 customers covering more than 150 companies in 20 plus industries using a nationally representative sample of US-based consumers.

Our point of departure from other innovation indices is the view that customers—not managers or experts—are the best judges of innovation. In essence, a managerial decision to allocate resources to innovate a company's products or services affects customers' perceptions of the firm's innovativeness. Those firms that customers perceive as more innovative become more attractive than their competitors and as a result are preferred by more customers. By making investments in areas that are appealing to customers, managers can build customer loyalty, thereby increasing firm value.

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The Aii provides two different kinds of insights:

1. A model of the antecedents and consequences of perceived innovativeness;
2. A ranking of US companies by the three main dependent variables in the model:
 - perceived innovativeness
 - relative attractiveness
 - customer loyalty



These two approaches have different purposes. Results from the full model can be used as tool for managers to plan investments in innovation (e.g., where to invest, for whom, what is the likely outcome), while results from the relative performance of companies tracked by the Aii can be used to identify the level of perceived innovativeness, relative attractiveness, and loyalty among companies. As such, it provides an innovation benchmark for companies, and provides data for researchers to investigate the role of innovation on firm and industry, and in the long run— as our efforts are replicated in other markets – country performance.

MODEL DEVELOPMENT VALIDATION

A great deal of theory development and testing went into the development of the Innovation Index prior to its introduction in the US. Initial research and testing began in Norway sponsored by the Center for Service Innovation at the Norwegian School of economics (NHH) in Bergen, Norway (a research program that is funded by the Norwegian Research Council and partner companies).

The conceptual innovation index model is based on an extensive review of the scientific literature, and in-depth interviews with consumers. Preliminary interviews indicated that consumers use salient examples of innovations to form general perceptions of how innovative a firm is. Perceived firm innovativeness is “consumers’ perception of an enduring firm capability that results in novel, creative and impactful ideas and solutions.”² It is a subjective perception based on consumers’ direct and indirect experiences. Direct experiences are those gained through personal interaction with companies’ market offerings over time, whereas indirect experiences result from information received either through word of mouth, word of mouse, or through firm generated communications. Firms need to deliver consistently on both direct and

indirect experiences in order to build a strong perception of firm innovativeness.³

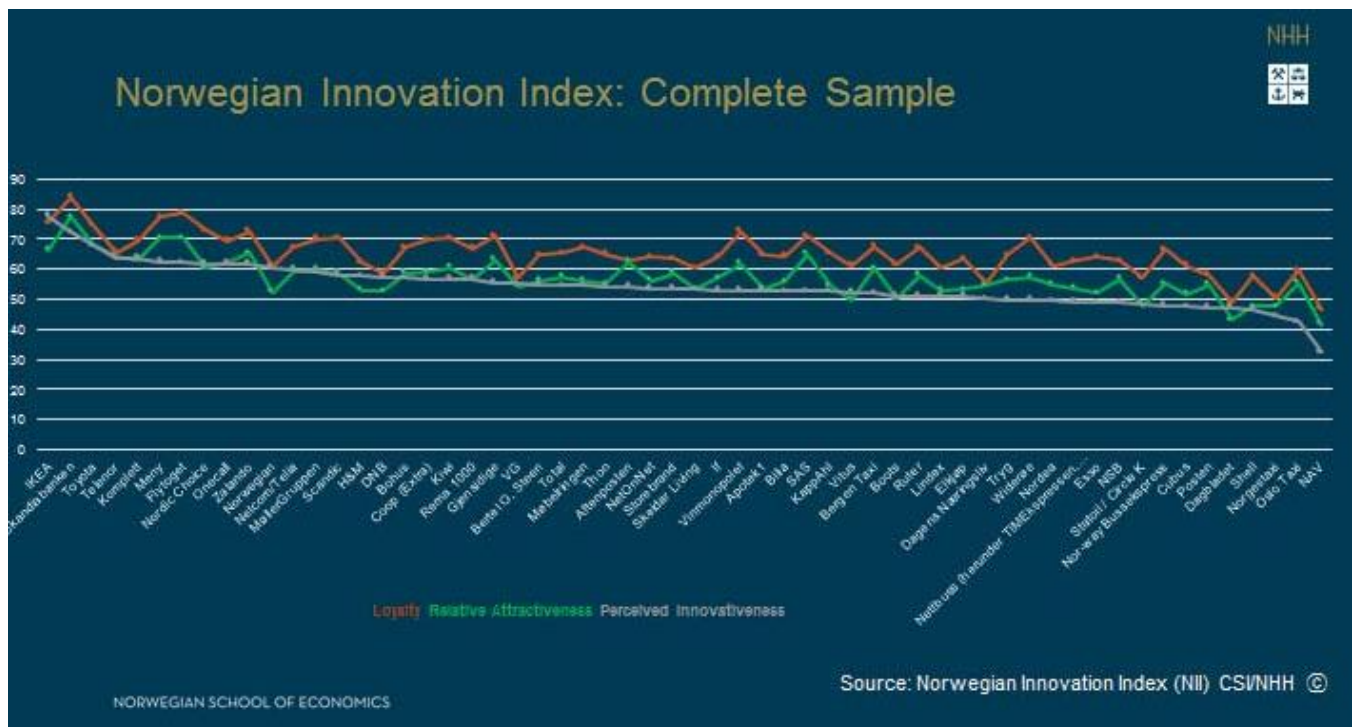
In general, firms tend to be perceived as more innovative when they are capable of delivering observable, novel and creative solutions on a regular basis with a significant market impact, at a fast and consistent rate over time.⁴ Exactly what solutions a firm needs to innovate on depends on what cues consumers use when they form their perception of that firm’s innovativeness. These cues may be of two types: “mechanics”, which are related to physical artifacts and facilities, and “humanics”, which are related to the human interaction.⁵ To identify and cover the range of possible cues, the researchers at NHH reviewed relevant literature and conducted dozens of consumer interviews. Based on the analysis, they defined four categories of perceived changes that are observable to customers:

1. innovation in value proposition
2. innovation in value delivery
3. innovation in customer treatment
4. innovation in interaction space.

To operationalize these dimensions, researchers in Norway used a multi-step process that tested constructs and measures initially in focus groups and later in field tests with large survey samples. The first wave of survey tests covered four industries of immediate relevance to Norwegian consumers, consisting of retailing, banking, telecommunications, and the postal service. Following testing and refinement, NHH conducted a baseline study where they surveyed 5,812 consumers, covering 58 companies from 19 industries.

Since 2016, Norwegian Innovation Index data has been collected annually. The number of companies has been expanded to include a broader range of industries, reflecting a greater share of Gross Domestic Product. Additionally, information on companies in emerging areas (such as the sharing economy), which often represent smaller market share firms, is collected to gain insight into new business models.

The results thus far demonstrate a strong, positive relationship between perceived innovativeness and relative attractiveness, as well as relative attractiveness and customer loyalty. The figure below presents the scores for perceived innovativeness, relative attractiveness, and customer loyalty from the 2016 NII for 58 companies. While innovativeness is important in driving loyalty, the NII found exceptions in industries with little or no competition, where behavioral loyalty (i.e., intentions to repurchase) can be high despite low relative attractiveness and low perceived innovativeness.



The American Innovation Index™ applies the model developed at NHH, although the U.S. market presents unique challenges. Due to the larger size of the economy, the U.S. survey covers nearly 200 companies. The companies were selected primarily because they are leaders in the top spending categories in the U.S. and have large b2c markets. We did not include small businesses or non-profits, although these will be covered in future efforts. We consciously chose to assess companies rather than brands because we believe innovation is a corporate characteristic – innovation efforts internally should ultimately be recognized downstream among all brands and divisions.

An important feature of the Aii is the inclusion of metrics to capture both “**customer-focused innovation**” and “**social innovation**”. One captures the degree to which companies innovate in order to provide direct benefits to customers. The other captures the degree to which companies innovate to benefit society and environment, which is an indirect benefit to consumers who wish to deal with socially innovative companies. In the U.S., there is a debate about the social benefits and costs of “disruptive” companies that succeed through technology innovation. Thus, it is valuable for companies to look at both metrics together. Ideally, customers of an innovative company would believe its innovations contribute broadly to helping society, not causing harm. Much depends on how a company designs its business and communicates what it does – for example, one person might think a company like Amazon puts small companies out of business, while another might believe Amazon creates new businesses and enables existing small businesses with e-commerce capabilities.

CONCLUSION

As Drucker aptly observed, firms must innovate or die. Clearly, the rise in technology driven innovation has resulted in the large scale, rapidly paced “creative destruction” touted by Joseph Schumpeter.

But innovations absent tangible benefits for customers are exercises in futility. Customers are the ultimate judges of innovation. Therefore, innovation success must be gauged by its impact on customers, and ultimately, on society.

The American Innovation Index™ is the only scientifically vetted, national measure of customers’ perceptions of innovation in the US. It provides both an innovation benchmark for companies, and a measure of the health of the US economy based upon firm, industry, and national performance.

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About Rockbridge Associates, Inc.

Rockbridge is an outcome-based research firm that has been leading Fortune 500 and mid-sized firms on their innovation and marketing strategy for over two decades.

Rockbridge is built on the core belief that for us to succeed, we must help our clients succeed. This belief is at the heart of everything we do. It's why we take the time to understand the challenges our clients are facing, and is why we design solutions with the sole purpose of discovering insights that drive business outcomes.

Our executive team has received numerous accolades for their thought leadership in customer experience and loyalty research, as well as technology adoption and innovation. We are marketing research innovators, having written more influential books, produced more award-winning scientific research, and presented at more industry forums than comparable research firms.

We have studied technology adoption in our National Technology Readiness Survey (NTRS) since 1999. Using the survey, we have developed the TechQual™/Technology Readiness Index, a groundbreaking metric for explaining and predicting consumer behavior for innovative products and services, which has been used to study technology issues by academics and consultants in more than 40 countries.

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