

# INNOVATION 2024

## Social Innovation Strategies for Sustainable Growth

Findings, analysis, and comments  
from the Norwegian  
Innovation Index 2023

NHH



The Norwegian Innovation Index



# Introduction

The innovation year of 2023 is marked by three historic events: March 12, 2020, February 24, 2022, and October 7, 2023. External shocks such as the pandemic and war send shockwaves through national, regional, and global economies. Everyone is affected. The question is how to deal with it.

In 2023, we notice disruptions in supply chains, high interest rates, and inflation. The American Consumer Confidence Index has been on a rollercoaster-like downward trend since 2020 (peaking at 101), the lowest in July 2022 (96), and by the end of 2023 in the upper 90s. In Norway, we see the same downward trend. From this, we learn that consumers tighten their belts in their consumption and strictly prioritize what must be bought and what can wait.

“Companies skilled in innovation continue to innovate”

Despite this gloomy backdrop, Norwegian companies have made various innovations. From previous research, we know that companies skilled in innovation continue to innovate – pushing the less adept further back in the queue. In the spectrum of innovations, one finds everything from “moonshots” like GenAI and ChatGPT to everyday innovations like a better-developed online trade and “last mile delivery”. Regardless of the type of innovation, it is always

important to listen to the customer’s voice – how the recipients experience the value of the new solutions for them in their lives and jobs. Any innovation’s goal is to create increased demand, trigger willingness to pay, increase the top line, and contribute to increased firm value.

The Norwegian Innovation Index (NII) answers this question by systematically capturing the customer’s voice. Innovative companies – as perceived by customers – are seen as more attractive than those seen as less innovative. In competitive markets, attractive companies will be chosen more often than less attractive ones. Thus, one has linked the various innovation measures of companies that customers can notice, to choices and economics. For the sixth year, we present findings from the Norwegian Innovation Index – an approach now adopted in ten countries.

Good luck with reading this report where we not only list and rank companies but also link comments to the various indices – commercial, social, and digital innovation indices. In addition, we have created an industry overview. Finally, in the report, we have added some thought-provoking articles that we have developed throughout 2023.

Innovation 2024,

Seidali Kurtmollaiev, Line Lervik-Olsen, Tor W. Andreassen

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# Innovation Year 2023

**This year's Innovation Speech by Innovation Norway was a well-reasoned expression of concern with a hope for a tipping point for Norway and Norwegian enterprises.**

It was Håkon Haugli, CEO of Innovation Norway, who delivered the speech titled "Tipping Point". Haugli's address reflected a sober optimism about an impending tipping point for Norway and Norwegian enterprises.

One of Haugli's greatest concerns was the lack of capital for starting good projects and that fewer young people wanted to become entrepreneurs. He believed there was a need for a new entrepreneurial plan from the Government. He also worried that by 2030 there would be a decrease in the number of working individuals, increasing the pressure on technology in the pursuit of higher productivity. Haugli further pointed out that only a few enterprises and boards had a well-developed strategy for the implementation of artificial intelligence (AI) - something that can enhance the capacity for innovation and free up labor for other tasks.

Here, we think Haugli could have added more force, for example by recommending the government to re-establish a dedicated digitalization minister who could develop a new and updated national strategy for digitalization including AI. The field of artificial intelligence is so extensive and demanding that it deserves full political attention. The climate was Haugli's final

concern. He was optimistic and noted that there were more and larger investments in areas other than oil and gas and that established offshore companies were in the process of turning their production towards renewable energy.

One of Haugli's recurring messages, which we completely agree with, was the need for a better balance between inventions and innovations. Haugli felt that new and useful technology was all well and good, but valueless if not utilized. He turned this into a "greater-focus-on-the-sales-role-in-enterprises-problem", or more colloquially: We need more people from Sunnmøre, i.e., salespeople, in enterprises. I would go a step further and say that our strong technology optimism has given us many new and useful inventions that never became innovations simply because we have neglected research on the commercial side of the invention for a long time.

Haugli's address was a reminder that new products or services do not sell themselves and that the business model is rarely the best possible from day one. It is also not the case that the setup of partnership agreements, composition of the founding team, strategy for attracting external investors, or a marketing plan to ensure that one hits the target group, is ready in a drawer. Someone must research and others must carry out this non-technical work. Economists are good at such things.

Haugli concluded the speech with a spotlight on the importance of capital, knowledge, artificial

intelligence, and climate. He hoped that we can convert solutions for these into new and useful inventions that are utilized. A perfect pass to me was his plea for universities and colleges to achieve "a faster transition from research to invoice". Research-based inventions and decisions are central to successful transformation.





# Commercial-, Social-, and Digital innovation from 2019 to 2023

The Norwegian Innovation Index comprises three indexes: commercial innovations (innovations in the market offering), Social innovations (organization being a “good neighbor” and sustainability issues), and Digital innovations (digital automation of the front-end of the organization). We have collected data since 2019 on all three which gives an interesting overview of developments in these three key innovation areas.



## Commercial innovation

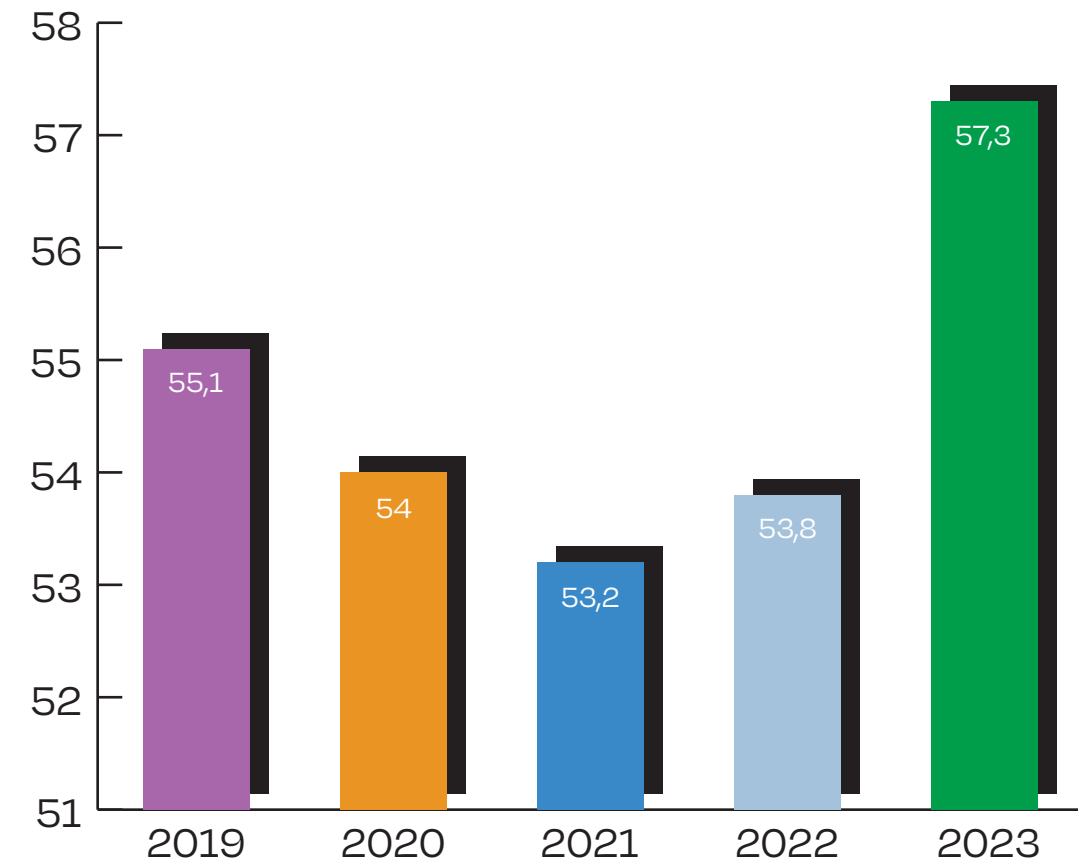
From an initial visual assessment, we observe an overall upward trend in commercial innovations with a slight decline in 2021, which then continues to rise sharply in 2023.

**Initial Growth (2019-2020):** The period from 2019 to 2020 shows a minor decrease in commercial innovations. This could be attributed to several factors, such as market saturation, economic conditions, or a period of consolidation after a previous innovation peak. Since the decline is minimal, it suggests that firms continued to innovate but perhaps with a focus on improving existing offerings rather than introducing innovations.

**Dip in 2021:** The noticeable dip in 2021 could be related to the global economic impact of the COVID-19 pandemic. During this period, companies may have redirected their efforts towards resilience and survival rather than innovation. It's also plausible that with the disruptions in global supply chains, access to new technologies or markets may have been limited, leading to a reduction in innovative activities.

**Recovery and Surge (2022-2023):** There is a significant improvement from 2022 to 2023 in all. A 3.5%-point increase in commercial innovations is partly due to the inclusion of modern digital companies in the index and partly due to improvements by firms, which is remarkable given the backdrop of the pandemic and two wars.

Firms have responded to our call from 2022: *"To only cut costs and increase productivity is unlikely to overcome the growth challenge. Companies must find new growth pockets that can ensure long-term success."*



## Social Innovation

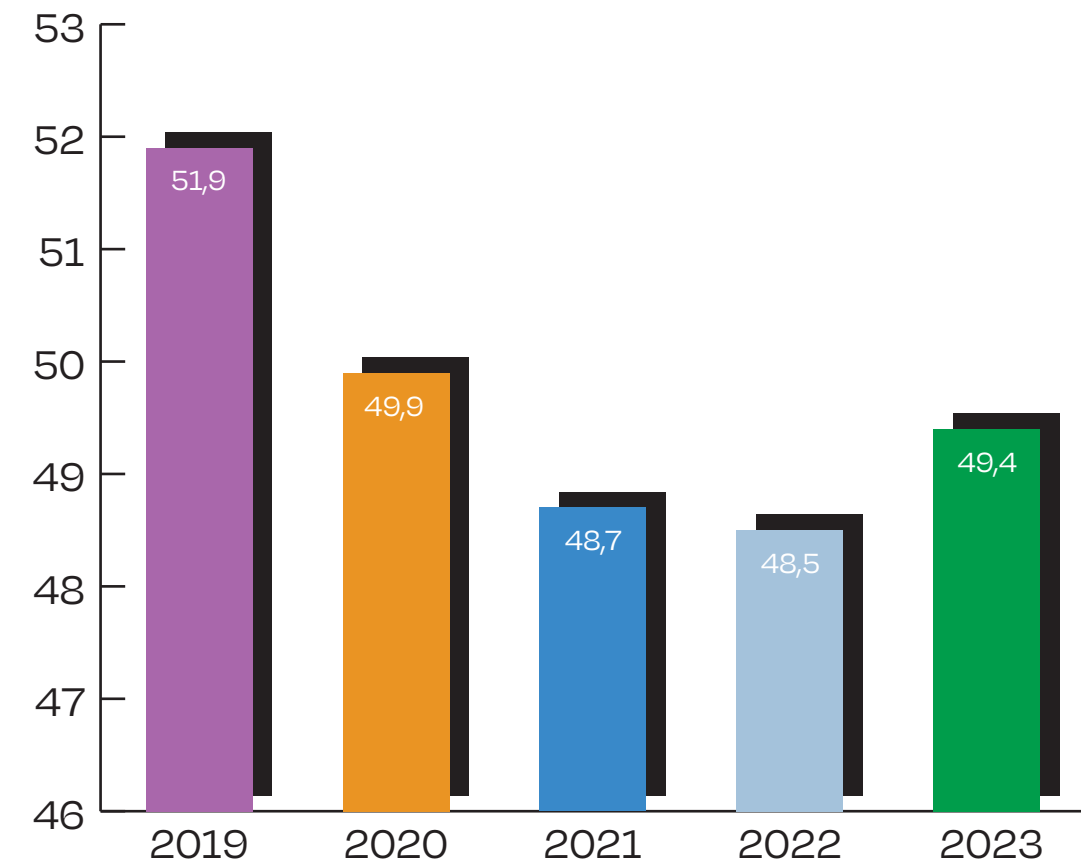
We can see a change of tide in the social innovation index as it makes a turn for the better – still from low numbers. From 2022 to 2023 we see a small improvement. Any change for the better in this index must be celebrated as it is an area of utmost importance for firms to transition into more sustainability. Especially since it is an area that easily might lose out when money is tight.

**Peak in 2019:** The graph starts at its highest point in 2019, indicating that firms were actively engaging in social innovations at that time. This could reflect a strong initial commitment to corporate social responsibility and sustainability, possibly driven by societal pressures, consumer demands, or favorable policies encouraging sustainable practices.

**Decline from 2020 to 2021:** There is a noticeable decline from 2019 to 2021. The onset of the COVID-19 pandemic in 2020 likely played a significant role in this reduction. Firms may have prioritized immediate economic survival over social initiatives, especially when faced with operational and financial challenges. This downturn also suggests that social innovation might be more susceptible to economic downturns as compared to commercial innovations, possibly due to perceived direct costs or a focus on internal restructuring during crises.

**Stabilization from 2021 to 2023:** From 2021 onwards, the graph indicates a stabilization of social innovation efforts. This could imply that firms started to recover from the immediate impacts of the pandemic and began to reinvest in social innovation initiatives. However, the stabilization also suggests that the rate of new social innovation adoption has slowed down, perhaps reaching a new equilibrium where firms balance their economic objectives with social commitments.

Considering the ongoing conflicts in Ukraine and the Middle East, social innovation can serve as a platform for Norwegian firms to demonstrate leadership in fostering a more sustainable and equitable global community. It is an opportunity to align business practices with the broader societal values that condemn conflict and seek to build a more peaceful and sustainable world. Firms that navigate these complexities successfully may not only enhance their reputations but also contribute to the greater good beyond their immediate business interests.



## Digital innovation

Finally, the positive trend in digital innovations – automating the front end of the firm – is upheld. The pattern follows the development of online shopping and the expansion of the multi-channel business model. Still, about 80 percent of shopping is done in physical stores.

### Growth Despite the Pandemic (2019-2020):

The graph indicates a rise in digital innovation during the early phase of the pandemic. This surge likely reflects the rapid adoption of digital technologies as firms transitioned to remote work and sought to maintain customer engagement through digital channels. The pandemic accelerated digital transformation as businesses were compelled to innovate quickly to adapt to the new normal of restricted physical interactions.

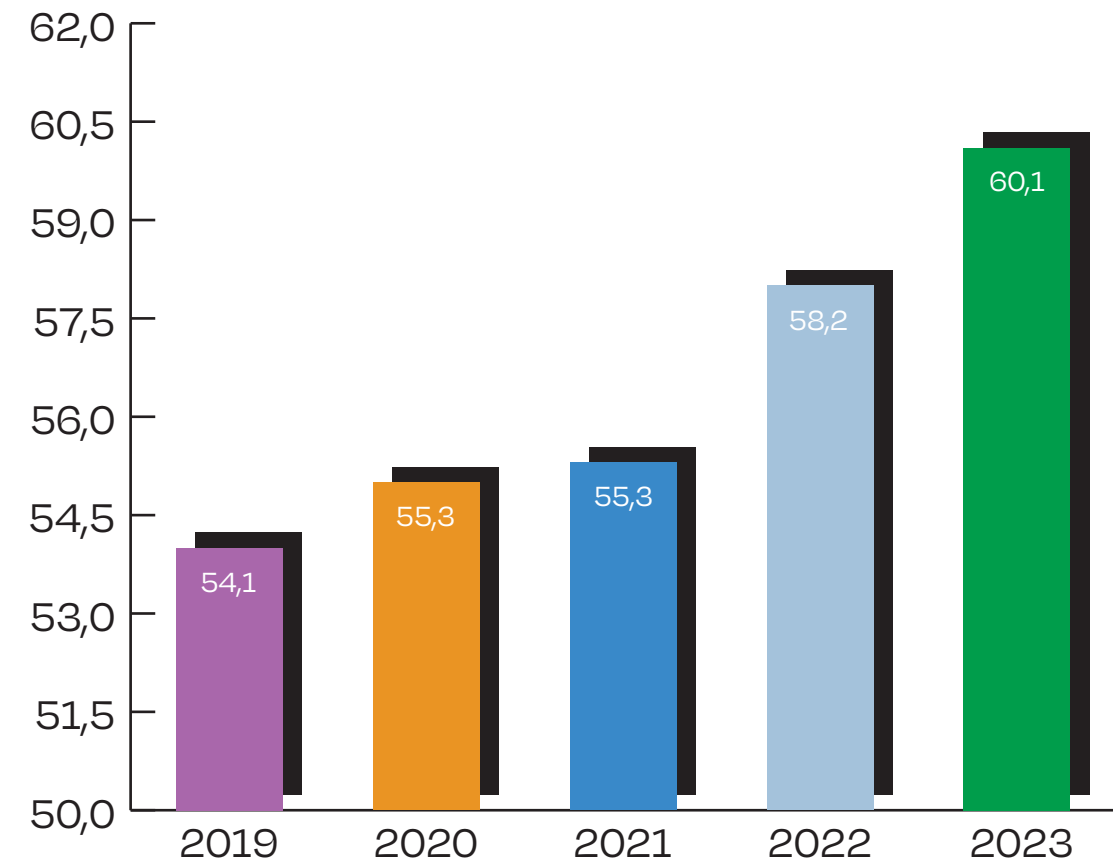
### Stabilization and Incremental Growth (2020-2022):

Following the initial spike, there is a period of stabilization and modest growth. This could suggest that after the urgent push for digital solutions in 2020, firms shifted towards refining and integrating these technologies into their regular operations. It also reflects the ongoing need for digital customer interfaces in a world where physical distancing has become more common.

### Significant Increase in 2023:

The significant rise in 2023 could be indicative of several factors converging. As the acute phase of the pandemic wanes, firms may be investing more confidently in long-term digital initiatives. The ongoing conflicts, emphasizing the need for energy security and economic resilience, could further push firms towards digital solutions that optimize resource use and enable agile responses to market changes.

The trend in digital innovation as depicted in the graph reflects a complex interaction of global crises, demographic shifts, and technological advancements. It underscores the resilience and adaptability of firms as they navigate uncertainties and capitalize on the transformative potential of digital technologies. The substantial increase in 2023 suggests that organizations are not only recovering from the pandemic's disruptions but also proactively preparing for a future where digital front ends are integral to business strategy and operations.



# Commercial Innovations

## Ranking top 25 performers 2023

From an initial visual assessment, we observe an overall upward trend in commercial innovations with a slight decline in 2021, which then continues to rise sharply in 2023.

The provided image showcases a ranking of organizations or brands based on their commercial innovations, as indexed in the Norwegian Innovation Index 2023. The rankings are quantified by scores, with benchmarks indicating that scores from 100 to 74 are very good, scores from 74 to 65 are good, and scores below 64 are increasingly problematic. Here is an interpretation and commentary on the ranking:

**Tesla's Top Position (84.3):** Tesla leads the ranking with a score that classifies it as very good. This is indicative of Tesla's strong value proposition in terms of innovation, particularly in the electric vehicle (EV) market, which aligns with Norway's aggressive push towards sustainability and green technology. Tesla's position reflects customer recognition of its efforts to deliver cutting-edge technology and a unique customer experience.

**High Scores for Tise and Vipps:** Both Tise.com and Vipps also fall within the very good category but with a significant gap from Tesla, suggesting Tesla's distinct lead in innovation perception.

Tise.com, a marketplace for second-hand goods, and Vipps, a mobile payment service, likely score well due to their contributions to convenience and the promotion of a circular economy, which resonates with Norwegian values of sustainability and digitalization.

**Diverse Industries in the Top Ten:** The presence of companies from various sectors, including retail (IKEA), hospitality (Airbnb), energy (Tibber), and online marketplaces (finn.no), indicates a broad-based innovation culture in Norway. It suggests that commercial innovation is not confined to any single sector but is a widespread priority across different types of businesses.

**The Significance of Digital Platforms:** The high ranking of digital platform companies such as Oda, Dr. Dropin, and Farmasiet.no underscores the critical role of digital innovation in value delivery and customer interaction. Their business models, which emphasize accessibility and user-friendliness, reflect a strong alignment with customer needs in the digital age.

**Scores on the Cusp:** Organizations like Sbanken, Netflix, and Foodora have scores that are at the lower end of 'good,' indicating potential areas for improvement in their innovation strategies. This might also reflect a highly competitive environment where even small differentiations in innovation can have a significant impact on customer perception.

**Scores Close to Problematic:** Scores below 64, such as those of Onecall and Flytoget, are considered increasingly problematic. This suggests that while these firms may be innovating, there is a gap between their efforts and customer recognition or satisfaction. It could also mean that these companies are in highly competitive sectors where innovation is rapid, and customer expectations are continually escalating.

**Reflection of Market Dynamics:** The scores reflect dynamic market conditions where customer expectations are constantly evolving. Firms need to continuously adapt and refine their value propositions to maintain or improve their standings.

**Implications for Strategy:** Firms with lower scores will need to investigate the causes—whether it's due to a slower pace of innovation, failure to effectively communicate their innovations to customers, or perhaps innovations that are not sufficiently customer-centric.

In conclusion, the rankings highlight the importance of continual innovation and the need for companies to stay aligned with consumer expectations and societal values, particularly in a forward-thinking market like Norway. For firms, this index can serve as a reflection of their current innovation strategies and an impetus to drive further developments that resonate with their customers and the broader market trends.



## Commercial Innovations

### Ranking top 25 performers 2023

From an initial visual assessment, we observe an overall upward trend in commercial innovations with a slight decline in 2021, which then continues to rise sharply in 2023.

| Ranking | Organizations/Brands                | 2023 |
|---------|-------------------------------------|------|
| 1       | Tesla                               | 84,3 |
| 2       | Tise.com                            | 76,6 |
| 3       | Vipps                               | 73,0 |
| 4       | Oda                                 | 72,1 |
| 5       | IKEA                                | 70,9 |
| 6       | Airbnb                              | 70,1 |
| 7       | Tibber                              | 69,9 |
| 8       | finn.no                             | 68,6 |
| 9       | Hyre                                | 67,6 |
| 10      | Dr Dropin                           | 65,9 |
| 11      | Easee                               | 64,6 |
| 12      | Farmasiet.no                        | 64,1 |
| 13      | Onecall                             | 63,7 |
| 14      | Sbanken                             | 62,6 |
| 15      | Komplett                            | 62,1 |
| 16      | Netflix                             | 61,3 |
| 17      | Ice                                 | 61,1 |
| 18      | Foodora                             | 61,1 |
| 19      | Nordic Choice                       | 61,0 |
| 20      | Stormberg                           | 60,9 |
| 21      | Fjellsport                          | 60,2 |
| 22      | OBOS                                | 60,2 |
| 23      | Bilia (Volvo, BMW, Toyota og Lexus) | 60,0 |
| 24      | Flytoget                            | 59,6 |
| 25      | Norwegian                           | 59,6 |

### Comparing Top-25 Performers 2022 versus 2023

The first thing one notices is the change in the top 25 listings from 2022 to 2023. New digital enterprises are entering at the top with new business models and pushing the "old" ones down the list. Additionally, many of the "de-thrown" scored lower in 2023.

| Ranking | Organizations/Brands                | 2022 | Organizations/Brands                | 2023 |
|---------|-------------------------------------|------|-------------------------------------|------|
| 1       | IKEA                                | 73,2 | Tesla                               | 84,3 |
| 2       | Airbnb                              | 71,4 | Tise                                | 76,6 |
| 3       | Sbanken                             | 68,2 | Vipps                               | 73,0 |
| 4       | finn.no                             | 65,1 | Oda                                 | 72,1 |
| 5       | Netflix                             | 63,8 | IKEA                                | 70,9 |
| 6       | Onecall                             | 62,2 | Airbnb                              | 70,1 |
| 7       | Toyota                              | 61,4 | Tibber                              | 69,9 |
| 8       | Komplett                            | 61,0 | finn.no                             | 68,6 |
| 9       | Stormberg                           | 60,9 | Hyre                                | 67,6 |
| 10      | Nordic Choice                       | 60,4 | Dr. Dropin                          | 65,9 |
| 11      | Telenor Mobil                       | 59,9 | Easee                               | 64,6 |
| 12      | Norwegian                           | 59,8 | Farmasiet.no                        | 64,1 |
| 13      | NRK                                 | 59,8 | Onecall                             | 63,7 |
| 14      | Tine                                | 59,5 | Sbanken                             | 62,6 |
| 15      | Altibox                             | 59,1 | Komplett                            | 62,1 |
| 16      | Zalando                             | 59,0 | Netflix                             | 61,3 |
| 17      | Bilia (Volvo, BMW, Toyota og Lexus) | 57,9 | Ice                                 | 61,1 |
| 18      | DNB                                 | 57,4 | Foodora                             | 61,1 |
| 19      | Coop Obs!                           | 57,4 | Nordic Choice                       | 61,0 |
| 20      | Kiwi                                | 56,6 | Stormberg                           | 60,9 |
| 21      | Sparebank1                          | 56,4 | Fjellsport                          | 60,2 |
| 22      | Telia                               | 55,6 | OBOS                                | 60,2 |
| 23      | Q-meieriene                         | 55,5 | Bilia (Volvo, BMW, Toyota og Lexus) | 60,0 |
| 24      | TV2                                 | 55,4 | Flytoget                            | 59,6 |
| 25      | SparebankenVest                     | 55,1 | Norwegian                           | 59,6 |

# Social Innovations

**The Social Innovation Index reflects the degree to which customers view firms' innovation activities as beneficial to society and the environment. A high score on this index means that customers perceive a company as a driver of positive social and environmental change.**

The provided image showcases a ranking of organizations or brands based on their social innovations in 2023. The rankings are quantified by scores, with benchmarks indicating that scores from 100 to 75 are very good, scores from 74 to 65 are good, and scores below 64 are increasingly problematic. Here is an interpretation and commentary on the ranking.

Despite Norway's reputation for emphasizing sustainable development, customers do not seem to be impressed by their firms' social innovations. In 2023, the average score on the Social Innovation Index remains much lower than the average scores on the Commercial Innovation Index (by 7.9 points) and the Digital Innovation Index (by 10.7 points). The comparison of respective positions on the rankings is even more striking: whereas firms in second place on the Commercial Innovation Index and the Digital Innovation Index have scores of 76.6 and 82.7, respectively, the corresponding number is merely 66.6 for the Social Innovation Index. Whereas a firm with a score below 55 occupies already 10th place on the Social Innovation Index, such a score

appears only in 49th place on the Commercial Innovation Index and 63rd place on the Digital Innovation Index. A score below 64 on the Social Innovation Index belongs to a firm in third place.

**Tise.com Top Position (77.5).** Although a newcomer to this year's list of innovative firms, Tise.com – a digital circular economy company - has taken the ranking by storm. Based on the score alone, the firm is in a league of its own. This success may be a result of Tise's incorporation of sustainability as the backbone of its business model which follows the principles of the circular economy and helps reduce resource usage and waste. The firm's approach of not just doing sustainability, but also living it can be encouraging for customers to perceive the firm's innovations as authentic and promoting social good.

**Tesla and Stormberg Maintaining Top Positions.** Both Tesla and Stormberg – an active leisure clothing company - maintain their placement within the top three most socially innovative firms. Tesla has a strong association with a transition to cleaner energy through the reduction of car emissions, but customers may also perceive the company's initiatives such as free charging for certain car models as socially responsible in unstable times. In turn, Stormberg has a long history of focusing on ethical production and promoting sustainability through, for example, their use of recycled materials, safe use of chemicals, and collaboration with Halden prison on clothing repair.

**Customers' high sensitivity to social innovation.** Traditionally, the Social Innovation Index has demonstrated a high sensitivity of customers to firms' innovation activities (and even more, the lack thereof). This year is no exception, as the comparison of the rankings for 2023 and 2022 shows that many firms struggle with maintaining relatively stable positions. This reflects the increasing expectations customers have for the sustainability of business practices, emphasizing the need for transforming corporate social responsibility from a side activity or firefighting into an integral part of organizational identity.

**Success factors for social innovation.** This year's ranking suggests that one of the most potent ways of succeeding with social innovation is combining a climate focus with a focus on local impact, as customers tend to value innovative solutions that address climate change issues and support local communities. Some of the most successful companies achieve this by building their business models on the ideas of circular economy. Importantly, the active integration of digital technology into novel solutions that ensure and stimulate sustainable behavior is arguably one of the most potent ways of improving customers' opinions of firms as "good neighbors".

“Innovation for social good is the way to a customer's heart and society's future.”



## Social Innovations

### Ranking top 25 performers 2023

The Social Innovation Index reflects the degree to which customers view firms' innovation activities as beneficial to society and the environment. A high score on this index means that customers perceive a company as a driver of positive social and environmental change.

| Ranking | Organizations/Brands               | 2023 |
|---------|------------------------------------|------|
| 1       | Tise.com                           | 77.5 |
| 2       | Tesla                              | 66.6 |
| 3       | Stormberg                          | 60.4 |
| 4       | IKEA                               | 59.3 |
| 5       | Hyre                               | 57.8 |
| 6       | finn.no                            | 57.7 |
| 7       | Tibber                             | 57.3 |
| 8       | Bilia(Volvo, BMW, Toyota og Lexus) | 55.3 |
| 9       | Nordic Choice                      | 55.3 |
| 10      | Oda                                | 54.9 |
| 11      | Ruter                              | 54.8 |
| 12      | Vipps                              | 54.8 |
| 13      | Easee                              | 54.7 |
| 14      | Lyse                               | 54.6 |
| 15      | Sparebank1                         | 54.3 |
| 16      | Onecall                            | 54.1 |
| 17      | Eviny                              | 53.5 |
| 18      | Flytoget                           | 53.1 |
| 19      | Scandic                            | 52.9 |
| 20      | VY Tog                             | 52.5 |
| 21      | Bergen kommune                     | 52.2 |
| 22      | NRK                                | 51.9 |
| 23      | Posten                             | 51.7 |
| 24      | OBOS                               | 51.6 |
| 25      | Telenor Mobil                      | 51.3 |

### Comparing Top-25 Performers 2022 versus 2023

In addition to the described general trends, it is noteworthy that companies associated with transportation/logistics and housing/hospitality are somewhat overrepresented on the list of Top-25 performers. These companies belong to industries to which customers can easily relate and that can readily demonstrate the positive effects of social innovations.

| Ranking | Organizations/Brands               | 2022 | Organizations/Brands               | 2023 |
|---------|------------------------------------|------|------------------------------------|------|
| 1       | Tesla                              | 64,5 | Tise.com                           | 77,5 |
| 2       | Stormberg                          | 63,2 | Tesla                              | 66,6 |
| 3       | Toyota                             | 60,1 | Stormberg                          | 60,4 |
| 4       | Nordic Choice                      | 59,7 | IKEA                               | 59,3 |
| 5       | IKEA                               | 58,7 | Hyre                               | 57,8 |
| 6       | SparebankenVest                    | 58,1 | finn.no                            | 57,7 |
| 7       | Oda                                | 56,4 | Tibber                             | 57,3 |
| 8       | Sparebank1                         | 55,8 | Bilia(Volvo, BMW, Toyota og Lexus) | 55,3 |
| 9       | Sbanken                            | 55,4 | Nordic Choice                      | 55,3 |
| 10      | OBOS                               | 55,3 | Oda                                | 54,9 |
| 11      | Hyre                               | 55,3 | Ruter                              | 54,8 |
| 12      | Vipps                              | 55,2 | Vipps                              | 54,8 |
| 13      | Bilia(Volvo, BMW, Toyota og Lexus) | 55,2 | Easee                              | 54,7 |
| 14      | Onecall                            | 54,1 | Lyse                               | 54,6 |
| 15      | Lyse                               | 53,9 | Sparebank1                         | 54,3 |
| 16      | finn.no                            | 53,4 | Onecall                            | 54,1 |
| 17      | Gjensidige                         | 53,3 | Eviny                              | 53,5 |
| 18      | NRK                                | 52,8 | Flytoget                           | 53,1 |
| 19      | Thon                               | 52,7 | Scandic                            | 52,9 |
| 20      | Nor-way Bussekspress               | 52,2 | VY Tog                             | 52,5 |
| 21      | Scandic                            | 52,2 | Bergen kommune                     | 52,2 |
| 22      | Airbnb                             | 52,1 | NRK                                | 51,9 |
| 23      | Tibber                             | 51,8 | Posten                             | 51,7 |
| 24      | Farmasiet.no                       | 51,8 | OBOS                               | 51,6 |
| 25      | Ruter                              | 51,8 | Telenor Mobil                      | 51,3 |

# Digital Innovations

**The Digital Innovation Index measures customers' experiences of the company's digital innovations of the customer front, as opposed to the digitalization of production and administrative tasks. Many refer to this area as intelligent automation.**

More specifically, digital innovation is measured by three questions in this survey. These questions reflect customers' perceptions of the extent to which a company offers products and services that are digital, if the customers use digital technologies when making use of the company's products and services, and to what extent the customer associate the company with advanced use of digital technologies. It is the average of these three questions that constitute the digital innovation score.

Based on the 2023 survey, persistent dedication, digital nativity, and digital transformation are essential for companies to capture customers' attention regarding their digital innovations. The key to how these companies are perceived in terms of digital innovations lies in their customer centricity. This is illustrated by the range of scores on digital innovations, which vary from 68.8 to 84.1 among the top 25 companies.

## **Persistent dedication to customer-centricity**

Tesla, the digital innovation winner, exemplifies a company that is persistently dedicated to innovations and enhancing the customer experience through innovative solutions, such as the touchscreen and individualized customer service. This suggests that despite being physical products, Tesla cars offer a more digital experience through their accompanying app compared to other vehicles. On a side note,

Tesla's digital innovations proved to be a crucial means of social innovation, as they utilized their services' digital features to extend the battery life, allowing people to safely navigate and escape the destructive tornado Irma in 2017 (Tesla Boosts Car Battery Power During Irma, Raising Questions of Control - The New York Times (nytimes.com)). With an impressive score of 84.1 points, Tesla slightly outperforms the digital-born companies Vipps and Tise, who also achieve strong scores of 82.7 and 79.7 points, respectively. These top three companies, representing the automotive industry, payment services, and mobile marketplace, collectively emphasize that for innovative and digital-born companies to reap the benefits of their investments, persistent dedication to customer-centricity is a prerequisite.

## **Digital-born companies**

On a decent 5 place achieving 79.3 points, we find Sbanken previous winner of digital innovation. Although, born-digital, Sbanken is a typical example of an organization where customer centricity has been at the core of the business model from the very beginning, and where digital solutions are a means to enhance the customer experience. Sbanken is closely followed by AirBnB (78.6 points), Oda (78.5 points), Tibber (78.4 points), Netflix (77.3), and Hyre (72.3 points), representing various industries such as online booking, online grocery shopping, utilities, streaming and car rental respectively. While the customer experience has always remained central to these business models, the level of success has varied over the years: AirBnB and Tibber, for example, have encountered challenges along the way as they navigated the complexities of meeting customer needs and expectations.

Lack of or less persistent dedication to customer centricity can also be the reason why other digital-born companies score lower on digital innovation, such as finn.no (76.1 points), Farmasiet.no (75.7 points) and Zalando (71.3 points). These companies represent diverse industries such as online marketplace, pharmacies, and retail apparel. The born-digital companies seem to divide into two groups, one with top scores and one group with decent but slightly lower scores. However, what sets the top scores apart from other born-digital companies? Companies that span various sectors. Does the key difference lie in their unique offerings and innovative approaches tailored to their specific industries? The digital experience and the nature of services provided can contribute to the differences among born-digital companies on the list. More experienced companies have had the opportunity to refine their offerings, while variations can also arise from the distinction between hedonic and utilitarian services. The distinction between hedonic and utilitarian services can lead to variations among born-digital companies because they cater to different customer needs and preferences. Hedonic services focus on enjoyment and entertainment, while utilitarian services prioritize practicality. These differing approaches can influence digital innovation scores as well as the customer experience. Lower scores on digital innovation for these companies can also reflect more focus on upstream innovations rather than downstream innovations, that customers experience in their interactions with the companies.

## **Digital transformation**

Digital companies appear to outperform

hybrid organizations such as Sparebanken 1 (72.1 points), DnB (70.6 points), and public services like Skatteetaten (69 points), which have undergone some degree of digital transformation. It raises the question of whether the digitalization efforts have truly reached customers and positively impacted their experience. It is possible that these changes primarily focus on productivity and efficiency, rather than directly influencing the customer experience. It also raises the possibility that these organizations may be more product-centric rather than customer-centric, making it challenging to implement necessary organizational changes and enhance innovation and customer-centric capabilities.

## **Market situation**

The remaining companies that we find among top 25 that are not commented upon are and Foodora (73.6), Ice (73.2), Altibox (71.7), Talkmore (71.5), Zalando (71.3), T-We (71.1), Easee (70.2), Telenor Mobil (70.1), Except Foodora on 14 places, all are found in the lower end of the top 25 list although they have decent scores. The reasons can be many. First of all, they represent diverse industries ranging from restaurant services, broadband services, streaming services, mobile phone services, and e-commerce apparel retailers – so one common denominator can be difficult to identify. One possible reason could be that each company may face unique challenges within their respective industries, such as strong competition, market saturation, or changing customer preferences. The dynamic nature of the digital landscape also demands continuous innovation and adaptation. Despite their lower rankings, these companies still showcase a solid digital performance. However, they may not rank as high as their competitors due to specific challenges and industry dynamics they



## Digital Innovations

### Ranking top 25 performers 2023

The Digital Innovation Index measures customers' experiences of the company's digital innovations of the customer front, as opposed to the digitalization of production and administrative tasks. Many refer to this area as intelligent automation.

| Ranking | Organizations/Brands | 2023 |
|---------|----------------------|------|
| 1       | Tesla                | 84.1 |
| 2       | Vipps                | 82.7 |
| 3       | Tise                 | 79.7 |
| 4       | Sbanken              | 79.3 |
| 5       | Airbnb               | 78.6 |
| 6       | Oda                  | 78.5 |
| 7       | Tibber               | 78.4 |
| 8       | Netflix              | 77.3 |
| 9       | Hyre                 | 77.2 |
| 10      | Komplett             | 76.7 |
| 11      | finn.no              | 76.1 |
| 12      | Farmasiet.no         | 75.5 |
| 13      | Foodora              | 73.6 |
| 14      | Ice                  | 73.2 |
| 15      | Sparebank1           | 73.1 |
| 16      | Altibox              | 71.7 |
| 17      | Talkmore             | 71.5 |
| 18      | Zalando              | 71.3 |
| 19      | T-We                 | 71.1 |
| 20      | DNB                  | 70.6 |
| 21      | Norwegian            | 70.3 |
| 22      | Easee                | 70.2 |
| 23      | Telenor Mobil        | 70.1 |
| 24      | Skatteetaten         | 69.0 |
| 25      | Onecall              | 68.8 |

### Comparing Top-25 Performers 2022 versus 2023

When comparing scores on digital innovation from 2022 to 2023, the following observations can be made:

Despite its focus on innovation and customer centricity, Tesla, the winner of the digital innovation award in 2023, scored lower (84.1 points) compared to the 2022 winner, Sbanken (86 points). However, overall Tesla is the company with the greatest increase from 2022 to 2023. Interestingly, Sbanken experienced a substantial decrease in score from 2022 to 2023, dropping from 86 to 79.3 points. This notable decline is the biggest dip among the top 25 companies. This dramatic decrease could potentially be attributed to the recent acquisition of Sbanken by DnB, a bank with a contrasting culture in terms of both digital innovation and customer centricity. After Sbanken, Netflix seems to be the company with the greatest decline in digital innovation scores, which is a bit surprising given Netflix focus on customer focus and innovation.

Both DnB, the bank, and Skatteetaten, the public service, experienced a decline in their digital innovation scores. This is particularly surprising in the case of DnB, considering the bank's acquisition of Sbanken, a bank with a strong digital foundation. This raises questions about whether this acquisition may not have been the optimal path for the future of Sbanken.

Vipps, which is ranked second on the list, showed a moderate improvement by increasing its score from 81.5 points in 2022 to 82.7 points in 2023. This highlights the company's commitment to digital innovation that would affect the customers' experience. Additionally, other companies such as AirBnB, Hyre, ODA, Tibber, Farmasitet, Foodora and One Call also made advancements in their digital innovation scores during the same period. Collectively, these companies are receiving recognition by their customers for the strides they have made in digital solutions for the customers.

## Digital Innovations

Comparing Top-25 Performers 2022 versus 2023 cont.:

| Ranking | Organizations/Brands | 2022 | Organizations/Brands | 2023 |
|---------|----------------------|------|----------------------|------|
| 1       | Sbanken              | 86.0 | Tesla                | 84.1 |
| 2       | Vipps                | 81.5 | Vipps                | 82.7 |
| 3       | Netflix              | 81.1 | Tise.com             | 79.7 |
| 4       | Tesla                | 79.5 | Sbanken              | 79.3 |
| 5       | finn.no              | 78.4 | Airbnb               | 78.6 |
| 6       | Komplett             | 78.0 | Oda                  | 78.5 |
| 7       | HBO                  | 77.2 | Tibber               | 78.4 |
| 8       | Airbnb               | 77.1 | Netflix              | 77.3 |
| 9       | Hyre                 | 76.5 | Hyre                 | 77.2 |
| 10      | DNB                  | 76.4 | Komplett             | 76.7 |
| 11      | SparebankenVest      | 76.2 | finn.no              | 76.1 |
| 12      | Oda                  | 76.1 | Farmasiet.no         | 75.5 |
| 13      | Tibber               | 75.6 | Foodora              | 73.6 |
| 14      | Sparebank1           | 75.5 | Ice                  | 73.2 |
| 15      | Altibox              | 75.3 | Sparebank1           | 73.1 |
| 16      | Farmasiet.no         | 74.7 | Altibox              | 71.7 |
| 17      | T-We                 | 73.8 | Talkmore             | 71.5 |
| 18      | Ice                  | 73.7 | Zalando              | 71.3 |
| 19      | Telenor Bredbånd     | 73.4 | T-We                 | 71.1 |
| 20      | Zalando              | 73.2 | DNB                  | 70.6 |
| 21      | Talkmore             | 72.9 | Norwegian            | 70.3 |
| 22      | Skatteetaten         | 72.3 | Easee                | 70.2 |
| 23      | NetOnNet             | 72.2 | Telenor Mobil        | 70.1 |
| 24      | Foodora              | 72.1 | Skatteetaten         | 69.0 |
| 25      | Norwegian            | 71.5 | Onecall              | 68.8 |

## Industry findings – consolidated 2023

| Industry                        | Commercial innovations | Social Innovations | Digital Innovations | Relative attractiveness |
|---------------------------------|------------------------|--------------------|---------------------|-------------------------|
| Airlines                        | 54,1                   | 45,9               | 64,0                | 57,4                    |
| Car dealership                  | 66,5                   | 57,0               | 63,5                | 63,9                    |
| Banking & Payments              | 58,2                   | 49,1               | 73,4                | 59,8                    |
| Broadband                       | 54,9                   | 46,1               | 68,9                | 54,4                    |
| Clothing & Textiles             | 56,6                   | 47,0               | 48,8                | 57,0                    |
| Utilities                       | 58,2                   | 52,1               | 65,4                | 55,0                    |
| Electronic retailing            | 56,3                   | 46,1               | 63,2                | 57,9                    |
| Furniture stores                | 59,2                   | 49,7               | 43,6                | 57,2                    |
| Governmental monopolies         | 51,5                   | 48,2               | 56,2                | 59,4                    |
| Grocery                         | 54,9                   | 45,9               | 41,7                | 56,1                    |
| Hotels & Dwellings              | 60,8                   | 52,4               | 62,3                | 59,6                    |
| Insurance claims                | 55,3                   | 49,8               | 63,3                | 60,5                    |
| Newspapers                      | 54,4                   | 45,3               | 61,0                | 59,5                    |
| Online second-hand marketplaces | 72,6                   | 67,6               | 77,9                | 69,9                    |
| Pharmacies & Health             | 58,8                   | 48,4               | 56,4                | 57,5                    |
| Sports stores retailing         | 55,8                   | 45,7               | 47,5                | 58,8                    |
| Streaming services              | 59,3                   | 45,3               | 74,2                | 57,1                    |
| Telecom                         | 60,0                   | 50,4               | 70,3                | 62,4                    |
| Transport & Logistics           | 55,2                   | 51,2               | 65,1                | 55,6                    |
| TV                              | 56,0                   | 48,9               | 63,2                | 58,1                    |



## Industry findings – companies 2023

| Electronics | Commercial Innovations | Social Innovations | Digital Innovations | Relative Attractiveness |
|-------------|------------------------|--------------------|---------------------|-------------------------|
| Elkjøp      | 54,3                   | 45,7               | 56,5                | 56,0                    |
| Power       | 52,5                   | 44,0               | 56,3                | 52,9                    |
| Average     | 53,4                   | 44,9               | 56,4                | 54,5                    |

| Utilities      | Commercial Innovations | Social Innovations | Digital Innovations | Relative Attractiveness |
|----------------|------------------------|--------------------|---------------------|-------------------------|
| Easee          | 64,6                   | 54,7               | 70,2                | 53,6                    |
| Eviny          | 55,1                   | 53,5               | 62,7                |                         |
| Fjordkraft     | 52,9                   | 47,1               | 59,6                | 51,7                    |
| Hafslund Strøm | 52,8                   | 49,8               | 59,6                | 50,6                    |
| Lyse           | 58,6                   | 54,6               | 67,0                | 60,2                    |
| NorgesEnergi   | 53,8                   | 47,9               | 60,1                | 54,6                    |
| Tibber         | 69,9                   | 57,3               | 78,4                | 59,3                    |
| Average        | 58,2                   | 52,1               | 65,4                | 55,0                    |

| Transportation & logistics | Commercial Innovations | Social Innovations | Digital Innovations | Relative Attractiveness |
|----------------------------|------------------------|--------------------|---------------------|-------------------------|
| Flytoget                   | 59,6                   | 53,1               | 65,8                | 67,7                    |
| Foodora                    | 61,1                   | 46,7               | 73,6                | 53,0                    |
| GoAhead                    | 47,4                   | 46,4               | 53,4                | 45,8                    |
| Hyre                       | 67,6                   | 57,8               | 77,2                | 65,7                    |
| Ruter                      | 53,7                   | 54,8               | 67,9                | 55,2                    |
| SJ                         | 51,3                   | 49,1               | 57,9                | 52,3                    |
| Skyss                      | 50,1                   | 48,7               | 60,9                | 50,8                    |
| VY Tog                     | 50,8                   | 52,5               | 63,9                | 53,9                    |
| Average                    | 55,2                   | 51,2               | 65,1                | 55,6                    |

| Insurance  | Commercial Innovations | Social Innovations | Digital Innovations | Relative Attractiveness |
|------------|------------------------|--------------------|---------------------|-------------------------|
| Fremtind   | 53,3                   | 46,9               | 60,3                | 58,5                    |
| Gjensidige | 56,0                   | 50,7               | 63,8                | 62,4                    |
| If         | 57,3                   | 50,1               | 63,9                | 62,2                    |
| Storebrand | 55,6                   | 50,7               | 65,2                | 58,9                    |
| Tryg       | 54,3                   | 50,4               | 63,2                | 60,5                    |
| Average    | 55                     | 50                 | 63                  | 60                      |

| Sports stores | Commercial Innovations | Social Innovations | Digital Innovations | Relative Attractiveness |
|---------------|------------------------|--------------------|---------------------|-------------------------|
| Fjellsport    | 60,2                   | 49,3               | 67,8                | 65,3                    |
| Intersport    | 52,5                   | 44,3               | 37,4                | 56,1                    |
| Sport1        | 53,8                   | 46,4               | 38,9                | 57,2                    |
| XXL           | 56,5                   | 42,9               | 45,8                | 56,7                    |
| Average       | 56                     | 46                 | 47                  | 59                      |

| Telecom       | Commercial Innovations | Social Innovations | Digital Innovations | Relative Attractiveness |
|---------------|------------------------|--------------------|---------------------|-------------------------|
| Ice           | 61,1                   | 49,7               | 73,2                | 63,0                    |
| Onecall       | 63,7                   | 54,1               | 68,8                | 64,9                    |
| Talkmore      | 58,4                   | 49,5               | 71,5                | 62,6                    |
| Telenor Mobil | 59,4                   | 51,3               | 70,1                | 63,2                    |
| Telia         | 57,2                   | 47,4               | 68,2                | 58,0                    |
| Average       | 60                     | 50                 | 70                  | 62                      |

## Industry findings – companies 2023

| Hotels and dwellings | Commercial Innovations | Social Innovations | Digital Innovations | Relative Attractiveness |
|----------------------|------------------------|--------------------|---------------------|-------------------------|
| Airbnb               | 70,1                   | 50,8               | 78,6                | 65,6                    |
| Nordic Choice        | 61,0                   | 55,3               | 61,1                | 58,5                    |
| OBOS                 | 60,2                   | 51,6               | 56,9                | 56,4                    |
| Scandic              | 55,9                   | 52,9               | 57,8                | 57,3                    |
| Thon                 | 56,9                   | 51,2               | 57,1                | 60,1                    |
| Average              | 61                     | 52                 | 62                  | 60                      |

| Groceries  | Commercial Innovations | Social Innovations | Digital Innovations | Relative Attractiveness |
|------------|------------------------|--------------------|---------------------|-------------------------|
| Coop Extra | 50,9                   | 44,0               | 39,5                | 53,2                    |
| Coop Mega  | 49,9                   | 44,3               | 37,1                | 55,3                    |
| Coop Obs!  | 56,7                   | 47,8               | 45,5                | 58,3                    |
| Coop Prix  | 45,5                   | 40,3               | 34,9                | 45,1                    |
| Kiwi       | 59,5                   | 49,0               | 31,0                | 58,3                    |
| Meny       | 54,6                   | 45,0               | 39,1                | 62,8                    |
| Rema 1000  | 53,3                   | 43,6               | 37,5                | 53,3                    |
| Spar       | 51,3                   | 44,5               | 32,2                | 51,9                    |
| Average    | 53                     | 45                 | 37                  | 55                      |

| Broadband        | Commercial Innovations | Social Innovations | Digital Innovations | Relative Attractiveness |
|------------------|------------------------|--------------------|---------------------|-------------------------|
| Altibox          | 56,8                   | 46,7               | 71,7                | 58,4                    |
| Telia (internet) | 53,0                   | 45,6               | 66,0                | 50,3                    |
| Average          | 55                     | 46                 | 69                  | 54                      |

| Pharmacies & Health | Commercial Innovations | Social Innovations | Digital Innovations | Relative Attractiveness |
|---------------------|------------------------|--------------------|---------------------|-------------------------|
| Apotek1             | 53,1                   | 47,2               | 60,3                | 58,5                    |
| Dr Dropin           | 65,9                   | 50,0               | 63,8                | 62,4                    |
| Vitus               | 52,2                   | 47,9               | 63,9                | 62,2                    |
| Average             | 57                     | 48                 | 65,2                | 58,9                    |

| Car Dealerships                     | Commercial Innovations | Social Innovations | Digital Innovations | Relative Attractiveness |
|-------------------------------------|------------------------|--------------------|---------------------|-------------------------|
| Bilia (Volvo, BMW, Toyota og Lexus) | 60,0                   | 55,3               | 55,1                | 65,4                    |
| MøllerGruppen                       | 55,2                   | 49,2               | 51,4                | 57,9                    |
| Tesla                               | 84,3                   | 66,6               | 84,1                | 68,5                    |
| Average                             | 66                     | 57                 |                     |                         |

| Furniture Stores | Commercial Innovations | Social Innovations | Digital Innovations | Relative Attractiveness |
|------------------|------------------------|--------------------|---------------------|-------------------------|
| Bohus            | 54,2                   | 45,0               | 39,6                | 58,5                    |
| IKEA             | 70,9                   | 59,3               | 51,2                | 60,4                    |
| Skeidar Living   | 52,6                   | 44,8               | 39,8                | 52,7                    |
| Average          | 59                     | 50                 |                     |                         |

| Banks & Payment | Commercial Innovations | Social Innovations | Digital Innovations | Relative Attractiveness |
|-----------------|------------------------|--------------------|---------------------|-------------------------|
| DNB             | 56,2                   | 47,1               | 70,6                | 54,7                    |
| Danske Bank     | 48,2                   | 41,5               | 65,7                | 50,8                    |
| Nordea          | 52,1                   | 46,2               | 68,7                | 54,9                    |
| Sbanken         | 62,6                   | 50,7               | 79,3                | 65,5                    |
| Sparebank1      | 57,1                   | 54,3               | 73,1                | 61,1                    |
| Vipps           | 73,0                   | 54,8               | 82,7                | 71,9                    |
| Average         | 58                     | 49                 |                     |                         |



## Industry findings – companies 2023

| Newspapers        | Commercial Innovations | Social Innovations | Digital Innovations | Relative Attractiveness |
|-------------------|------------------------|--------------------|---------------------|-------------------------|
| Aftenposten       | 53,7                   | 47,6               | 58,8                | 65,5                    |
| Dagens Næringsliv | 54,9                   | 44,6               | 60,5                | 60,3                    |
| VG                | 54,6                   | 43,7               | 63,9                | 52,7                    |
| Average           | 54                     | 45                 | 61                  | 60                      |

| Clothing & Textiles | Commercial Innovations | Social Innovations | Digital Innovations | Relative Attractiveness |
|---------------------|------------------------|--------------------|---------------------|-------------------------|
| Cubus               | 51,4                   | 45,0               | 39,6                | 51,6                    |
| Dressmann           | 54,5                   | 43,7               | 36,2                | 59,3                    |
| H&M                 | 57,8                   | 41,9               | 46,7                | 51,7                    |
| Stormberg           | 60,9                   | 60,4               | 50,2                | 61,6                    |
| Average             | 56                     | 48                 | 43                  | 56                      |

| Online shopping | Commercial Innovations | Social Innovations | Digital Innovations | Relative Attractiveness |
|-----------------|------------------------|--------------------|---------------------|-------------------------|
| Farmasiet.no    | 64,1                   | 48,5               | 75,5                | 62,7                    |
| finn.no         | 68,6                   | 57,7               | 76,1                | 69,9                    |
| Komplett        | 62,1                   | 48,7               | 76,7                | 64,9                    |
| Oda             | 72,1                   | 54,9               | 78,5                | 66,7                    |
| Tise            | 76,6                   | 77,5               | 79,7                | 69,9                    |
| Zalando         | 58,4                   | 44,0               | 71,3                | 60,7                    |
| Average         | 67                     | 55                 | 76                  | 66                      |

| Steaming services | Commercial Innovations | Social Innovations | Digital Innovations | Relative Attractiveness |
|-------------------|------------------------|--------------------|---------------------|-------------------------|
| Netflix           | 61,3                   | 44,1               | 77,3                | 58,6                    |
| T-We              | 57,4                   | 46,5               | 71,1                | 55,5                    |
| Average           | 59                     | 45                 | 74                  | 57                      |

| TV      | Commercial Innovations | Social Innovations | Digital Innovations | Relative Attractiveness |
|---------|------------------------|--------------------|---------------------|-------------------------|
| NRK     | 56,9                   | 51,9               | 64,2                | 63,2                    |
| TV2     | 55,1                   | 45,9               | 62,2                | 53,0                    |
| Average | 56                     | 49                 | 63                  | 58                      |

| Governmental monopolies | Commercial Innovations | Social Innovations | Digital Innovations | Relative Attractiveness |
|-------------------------|------------------------|--------------------|---------------------|-------------------------|
| NAV                     | 43,2                   | 42,0               | 58,9                | 46,0                    |
| Bergen kommune          | 50,8                   | 52,2               | 51,6                |                         |
| Posten                  | 55,1                   | 51,7               | 60,1                | 64,0                    |
| Skatteetaten            | 53,7                   | 47,7               | 69,0                |                         |
| Vinmonopolet            | 54,6                   | 47,5               | 41,3                | 68,3                    |
| Average                 | 51                     | 48                 |                     |                         |

| Airlines  | Commercial Innovations | Social Innovations | Digital Innovations | Relative Attractiveness |
|-----------|------------------------|--------------------|---------------------|-------------------------|
| Norwegian | 59,6                   | 47,6               | 70,3                | 58,4                    |
| SAS       | 50,2                   | 42,8               | 63,6                | 57,9                    |
| Widerøe   | 52,6                   | 47,3               | 58,2                | 56,0                    |
| Average   | 54                     | 46                 | 64                  | 57                      |

# Innovation Capability And Firm Value

**Customer satisfaction and the ability to innovate both contribute to increased stock price development. With sufficient satisfaction, the ability to innovate contributes more.**

Should I invest in measures that increase customer satisfaction, or should I invest in measures that boost perceived innovation capability? This is a classic leadership question. The answer is: yes, to both if there is rich access to funds. If the resources are scarce and customer satisfaction is sufficient, focus on increased innovation capability.

A new study\* from our Innovation Index partners in the USA uncovers an important relationship between customers' perceptions of a firm's innovation capability and its financial performance. The study, which spanned from 2018 to 2022 and encompassed 123 publicly traded companies across 20 industries, shows with clarity the economic significance of customer viewpoints, which are often overlooked in traditional measurements of innovation.

In an era where services make up the majority of countries' GDP, the study challenges the traditional, production-centric measures for innovation, such as patents and R&D activities. The study offers a new approach, focusing on how customers perceive corporate innovation, an important but little-researched area in both management and scientific literature.

The analyses, based on data from the American Innovation Index (Aii) at Fordham University, show a strong, positive correlation between customer-perceived corporate innovation and abnormal stock returns (i.e., the difference between a stock's actual return and expected return). For every five-point increase in a firm's Aii score, there is a corresponding average increase of 2.8 billion dollars in shareholder value for the companies in the study.

Additionally, it highlights a similar positive relationship between changes in customer satisfaction, based on data from the American Customer Satisfaction Index (ACSI). Both paths to stock price development are therefore important.

From this, we can learn that leaders should include customers' perceptions of the company's various innovations. Secondly, companies should actively measure customer perceptions and respond with strategic innovations that align with what customers value. Thirdly, effective marketing strategies are necessary to showcase innovation work and improve customer perceptions of a company's innovation. Apple is a good example of this – especially in connection with the launch of new products and services. Finally, investing in innovative measures has a unique ability to improve customer perceptions and thus the company's performance.

Based on this study, investors are encouraged to include customer perceptions of innovation

in their decision-making processes. How innovative are the individual companies perceived by their customers? This factor acts as a possible indicator of companies poised for superior economic performance. CEOs and CFOs should take note of the importance of innovations on customers' perceptions of the company and more extensively adopt an "outside-in" perspective in their thinking and measurement.

The study also contributes to an increased understanding of the role of innovation in driving economic growth and financial efficiency. By aligning management focus and investor analysis with customer perceptions of innovation, companies can open new avenues for growth and competitive advantage. This approach not only provides an opportunity for improved financial returns but should also promote a culture of customer-centric innovations, which are crucial for long-term success in today's dynamic and global market landscape.

\*Customer Perceptions of Firm Innovativeness and Market Performance: A Nation-level, Longitudinal, Cross-Industry Examination, Forthcoming in the Journal of Service Research

Timothy Keiningham, Lerzan Aksoy, Alexander Buoye, An Yan, Forrest V. Morgeson III, PhD, Gina Woodall, Bart Larivière



# GenAI: A Disruption in the Making

**GenAI, like GPT-4, will not replace businesses, but those that fail to adopt the technology will be threatened by those that do.**

Businesses often experience external shocks such as pandemics, wars, or technology, and it takes time before leaders understand how to adapt. The ChatGPT and GPT-4 shock that we are now facing will threaten the existence of well-established companies across many industries.

OpenAI launched an AI-based text generator, ChatGPT, on November 30, 2022. Just three months after its launch, it had more than 100 million users and about 13 million daily users. This is compared to Instagram, which took nearly a year to reach 10 million users.

The use and spread of ChatGPT and GPT-4 are likely to threaten the existence of businesses in established markets such as cloud solutions, digital marketing, and e-commerce. Even companies like GOOGLE, Amazon, and Microsoft will be threatened. GOOGLE has already established a crisis management team for fear of losing USD 160 billion in advertising and search revenues. Microsoft has invested USD 10 billion in OpenAI and has agreed to use ChatGPT in the Bing search engine. We have yet to hear from Amazon.

Other businesses will adopt the technology and incorporate it into their market offerings to become more attractive in the market. Consider customer service. A McKinsey analysis shows that the technology will strengthen the value proposition and increase operating results in the apparel, fashion, and luxury sectors by between

150 and 275 billion dollars.

The disruption process, which is the beginning of the end for businesses, occurs when successful businesses fail because they continue to make the choices that drove their previous success. This is often due to the complexity of changing the business model and the organization that has specialized in the efficient production and delivery of current solutions, uncertainty about which technology will break through, and costs that arise when new solutions “steal” revenues from the old ones.

Today, it is more important than ever to take the ChatGPT technology shift seriously. The mobile industry would wait out the situation when Apple launched the iPhone in 2007, and companies like Ericsson, Sony, LG, BlackBerry, HTC, Motorola, and Nokia disappeared from the market. What we must remember is that ChatGPT, unlike the iPhone, is not limited to one industry. The technology can be used by everyone, everywhere.

The prediction is clear: ChatGPT will not replace businesses, but businesses that fail to adopt the technology will largely be replaced by those that do.



# Innovation Strategies to Win in 2024

The past few years have been characterized by uncertainty and rapid changes. From the COVID-19 pandemic to the conflict in Ukraine, and to the technological advancements represented by OpenAI, our global landscape has been dramatically reshaped. In an era marked by digital revolution, environmental concerns, and economic uncertainty, business leaders must understand and adapt to new trends. One such trend is the demographic shift modern societies are experiencing - an aging population that presents both challenges and opportunities for innovation.

In the following, we offer five areas that each represent significant innovation opportunities for 2024 and beyond.

## Digital Transformation and Automation:

Digital transformation is not just a trend; it's a necessity. According to a report from McKinsey, COVID-19 has accelerated the digitization of customer and supply chain interactions with companies by several years. For older customers, this means providing solutions that simplify their digital interactions. Companies like Apple and Google, for example, have introduced user-friendly interfaces and accessibility features like voice commands and font size adjustments. A growing debate is the digital divide, especially among older people who

either cannot or do not want to engage digitally with everything and everyone. This is essential to include the aging portion of the population in the digital economy.

## Sustainability and Ethical Responsibility:

Sustainability goes beyond environmental conservation; it also includes human capital. An example of this is Unilever's "Sustainable Living Plan," which focuses not only on environmental impact but also on improving the health and well-being of millions. It also highlights the need for economic adjustment, such as reducing the tax burden on labor compared to capital or wealth. This is not just an ethical stance but also a smart business strategy. By investing in people, you build a stronger and more resilient workforce. It can also be a catalyst for consumer preferences, as an increasing proportion of consumers (77%, according to a Nielsen report) are more inclined to buy from companies with strong social and environmental commitments.

## Flexible Business Models:

The pandemic has underscored the importance of having a flexible business model with a comprehensive online solution and home delivery. One aspect of this is the sharing economy, popularized by Airbnb and Uber. These models offer not only alternatives to traditional services but also promote more sustainable resource utilization. For older populations, this could mean access to services and products

without the full costs of ownership. According to PwC, the sharing economy could reach a global value of \$335 billion by 2025. This illustrates the enormous potential for businesses that embrace such models, not just to reduce costs, but also to increase the accessibility of their services.

## Security and Privacy:

With increasing digitization, companies must prioritize cybersecurity and data protection. In 2023, many businesses were exposed to real cyberattacks, putting a significant strain on employees and, in some cases, on the company's finances. Older consumers, who may be less familiar with digital technology, are particularly vulnerable to online scams and data breaches. Therefore, businesses must invest in robust security systems and proactively inform and educate all their customers about the importance of privacy.

## Mental Health and Well-being:

Finally, in a world that is becoming increasingly aware of mental health, it's important for companies to consider how their products and services can promote well-being, dialogue, and interaction. Among young people, social media and digital overload are a significant source of anxiety and loneliness. Among the elderly, loneliness, and a lack of social interaction with different age groups seem to be becoming the new public health issue. This can include everything from providing mental health

support through apps and services to developing community initiatives that promote social inclusion and engagement.

Looking ahead, the key to success lies in understanding and adapting to realities. By combining technological innovation with a deep understanding of social and ethical responsibilities, businesses can create a more inclusive, sustainable, and profitable future. As always, innovations begin with a deep understanding of factors that affect customers directly or indirectly. Innovations that take an "outside-in" perspective rather than the traditional "inside-out" are more often successful. The reason is that such businesses innovate in areas that customers perceive as valuable - which triggers increased demand and willingness to pay.



# What is the Norwegian Innovation Index?

**The Norwegian Innovation Index (NII) is the world's first customer-based ranking of innovative companies**

The Norwegian Innovation Index (NII) was created in 2016 by researchers at the Norwegian School of Economics (NHH) and DIG (Digital Innovation for Sustainable Growth). This index is the first in the world to assess innovative companies based on feedback from their customers. Traditionally, we have relied on financial figures and expert opinions to evaluate innovation, but NII considers what matters – the customers' perception.

Instead of looking at figures that impact the entire economy, NII addresses what real customers think. This is crucial because customers are the ones who financially support businesses by purchasing their products and services. The research team at NHH has developed a new way of assessing innovation. They look not only at what companies claim they do but also at what customers think about how companies create value through innovation.

This approach is so unique that it has been adopted in several other countries such as Finland, Sweden, Denmark, Belgium, Spain, Australia, and the USA. In each of these countries, a significant business school and research group work together. They also collaborate with consulting firms to help businesses apply the NII method. Together we call ourselves The Innovation Index Coalition (IIC).

NII consists of three indices: a commercial innovation index that looks at innovations in what businesses offer to the market (market offerings), a social innovation index that evaluates sustainability and how businesses impact the society around them (if they are a

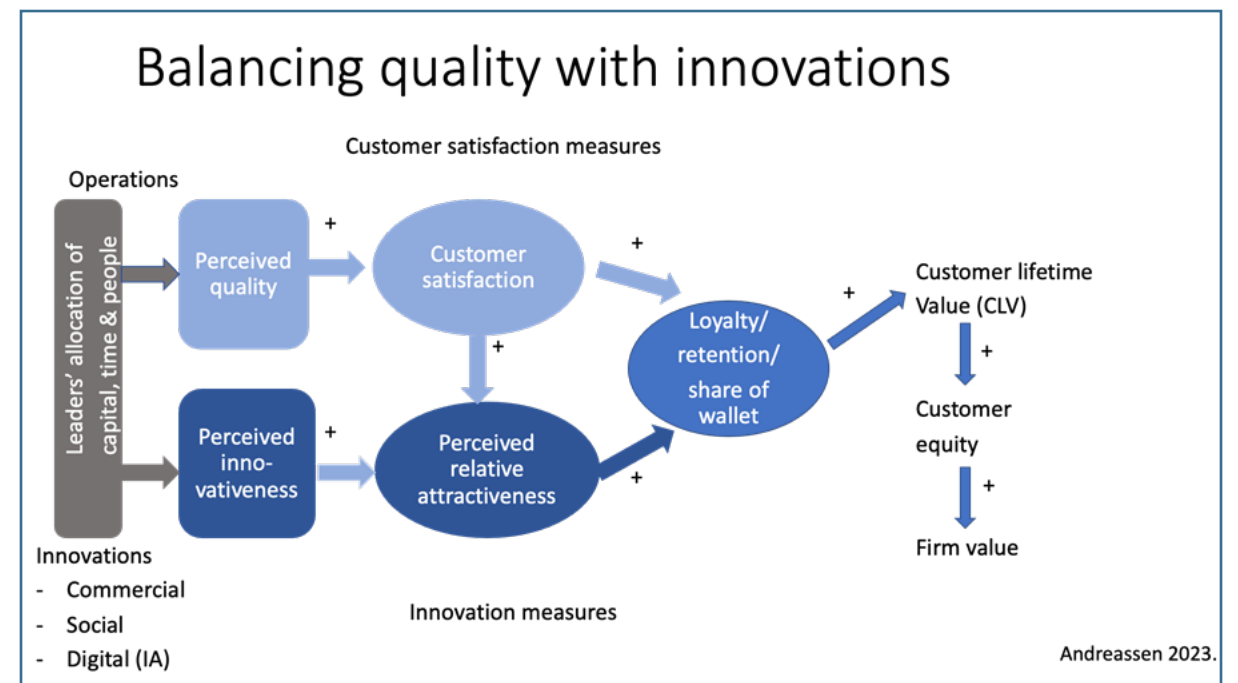
good neighbor), and a digital innovation index that looks at the automation of the customer interface. All of this is assessed from the customers' perspective.

NII also deals with important topics such as innovation and sustainability, how businesses can adapt to an aging population, and the smart use of technology to better assist customers. What makes NII so special is that it focuses on what customers think, feel, and experience about innovation, and how this affects their choices and thus the companies' position, market attractiveness, and ultimately the value of the company as determined in the stock market or through acquisitions. The results from NII are presented on our websites, and we also host an annual "Innovation 202x" conference where we discuss the findings and honor the most innovative companies in the three areas.

NII gives us the ability to closely analyze how customers in three different segments – young, middle-aged, and older – respond to the innovations of various companies, and to look at entire industries. Countries themselves may not be innovative, but individual companies can be. It is also important to remember that it is the customers who can truly judge whether an innovation is successful or not.

So, NII is a valuable way to measure innovation. It incorporates customers' perceptions of how value creation occurs, giving us a much more holistic assessment of how Norwegian companies work with innovation.

It is important to note that while the quality of offered goods and services is the ticket to the market, innovations are the ticket to stay in the market. The interplay is shown in the figure.



Source: Andreassen 2023 – Modern Value Creation