

The logo graphic consists of a grid of colored squares (yellow, green, blue) with lines connecting them, suggesting a network or data flow.

# SPANISH INNOVATION INDEX

## 22 REPORT

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Institute for the  
Development of Enterprises  
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# 1. PRESENTATION

**The Spanish Innovation Index (ÍEI, its acronym in Spanish)** is an initiative that arose from a clear commitment to transfer knowledge to society, and in particular to companies. In this first report, corresponding to 2022, we would like to provide the main results from a broad study undertaken by the **Institute for the Development of Enterprises and Markets (INDEM)** from Universidad Carlos III de Madrid (UC3M). For this purpose, it has been supported by collaboration with **Neovantas Consulting**, which has been fundamental for the optimal implementation of this index. Data collected from more than 24,000 consumer responses has been done through the market research company Sigmados.

The ÍEI is elaborated based on **Spanish consumers'** evaluations of the companies, according to a firm's perceived degree of innovativeness. That is ÍEI's added value: providing information from the consumers' perspective, who, as the end receivers of products and services, are in a key position to assess companies' efforts in terms of innovation. This is not a minor issue since this study is made from the perspective of demand, instead of from the perspective of the offer (these methodologies are usually based on the perceptions of managers, experts and even macroeconomic indicators). In this sense, we believe that the ÍEI can be a very useful tool for reflecting on and for analyzing business decisions with respect to their innovation strategy.

The ÍEI is not an isolated initiative by UC3M for Spain, but rather it is within the framework of a coalition of Innovation Indexes developed in diverse countries. This alliance is led by the Norwegian School of Economics (NHH), which was the pioneer in implementing this novel focus ten years ago. Other prestigious universities have joined this initiative, such as

Fordham University in the United States, Aarhus University in Denmark, Karlstad Business School in Sweden, Hanken School of Economics in Finland, Hasselt University in Belgium, and recently, the University of Queensland in Australia and VinUniversity in Vietnam.

The results have enabled us to identify the most innovative companies in Spain from three perspectives: commercial, social and digital:

- ✔ **The Commercial Innovation Index (CII):** measures the level at which consumers assess the company's overall degree of innovation
- ✔ **The Social Innovation Index (SII):** measures consumer perception about the company's contribution to society and the environment
- ✔ **The Digital Innovation Index (DII):** measures the degree to which consumers perceive the company as innovative in its digital solutions

To finalize this initial presentation, we wish to express our gratitude to all of those who directly or indirectly have contributed to helping us make this initiative a reality. Our heartfelt thanks to everyone involved.

Lola and Lluís

## 2. ABOUT THE SPANISH INNOVATION INDEX



The ÍEI encompasses 120 companies from 21 sectors of the Spanish economy, which represent more than 80% of total Spanish household consumption. Scores are calculated following a careful and detailed methodology, which enables different rankings to be elaborated at the sector level as well as for all of Spain.

We start from an academic research model that has been theoretically and empirically validated in other countries. Our model (see Figure 1) is based on the research study "Competing through innovation: Let the customer judge!" that was published in the *Journal of Business Research* (Kurtmollaiev, Lervik-Olsen & Andreassen, 2022, vol. 153, pp. 87-101).

Our research shows that firms engaging in **changes in value creation** for their customers are perceived as being **more innovative**, and consequently they are **more attractive than their competitors**, thereby obtaining **greater customer loyalty**. This is then reflected in a **greater economic impact for the company**.

Customer satisfaction has been a central topic for companies, and will continue being so in the short term. However, research by our partners in the coalition has revealed that customers expect more from companies (a satisfactory experience or a suitable price). Innovative companies are more attractive for consumers, which is why they are preferred over others that limit themselves to improvements in quality. Companies that innovate to provide solutions to their customers have a greater likelihood of staying

in the market **in the mid or long term**. As pointed out by Professor Tor W. Andreassen, leader of this initiative at the global level:

*"Quality is a ticket to play. Innovation is a ticket to stay!"*

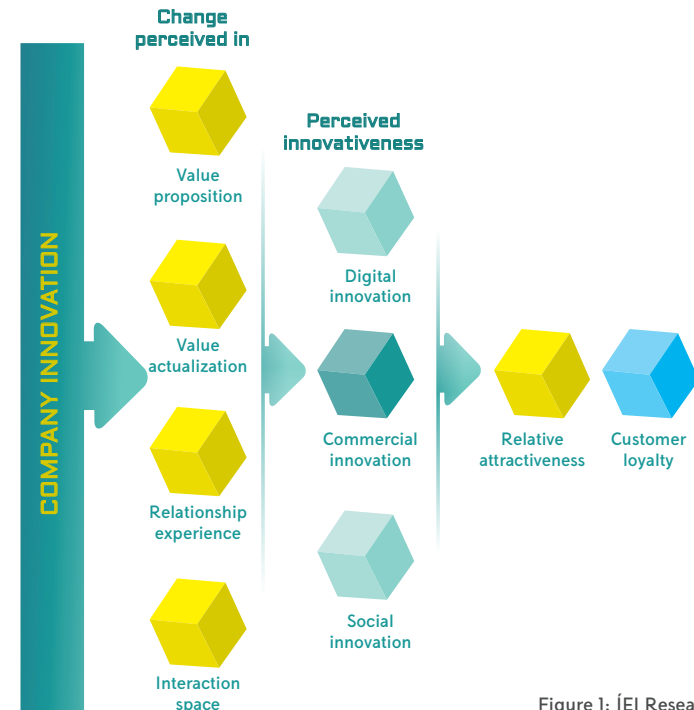


Figure 1: ÍEI Research Model

### 3. THE STUDY'S DATA

**Process to define the companies included in the study:** First, sectors with the largest proportion of household expenditure are defined, for which we use as reference the Spanish Household Budget Survey from the National Statistics Institute (INE). We take 2019 as the year of reference (before the pandemic), and we include the sectors in which Spanish families expend 82.6% of their income. From there, within each sector we chose at least 3 representative companies, whether because of their market share, turnover, relevance for consumers, because they are emergent companies or because they have some innovative element, such as, for example, being a “sharing economy” company.

**Data collection process:** The market research company Sigmados uses its own nationally-representative consumer web-panel. Participants are asked to indicate from a list of companies/brands those that they have used or purchased in the past six months. Following that, they are asked to respond to a questionnaire (that measures each one of the research model variables) up to a maximum of 3 companies/brands. Between 100 and 300 responses are collected for each of the companies.

Data is gathered quarterly (in four waves, in order to cover different periods of the year in which companies have communicated their innovations or have launched new products and services). Finally, we have more than 24,000 customer responses in 2022, corresponding to 120 companies from 21 sectors in the Spanish economy.

**Descriptors:** The data sample is composed of 45% men and 55% women. By age groups, 16.4% are between 16-29 years old, 67.2% are in the 30-59 age range and 15.4% are in the over-60 age group. The average duration of the response is 5.6 minute per company.

**Validation and checks:** The data is cleaned up by Sigmados to ensure that the response quotas per company are covered so that the data is reliable and does not follow a response pattern. For the open questions, a consistency check analysis is also carried out.



íEI



## 4. RESULTS



In the following, we present the results corresponding to 2022 in three different categories, which allow us to analyze the ÍEI scores in different contexts:

**A. ÍEI general:** consists of three rankings (commercial, social and digital) which are carried out on the total of the sample: the 120 companies included in this study (see Section 3). However, in this report, for reasons of space, we only show results for the 25 most innovative companies. (All of the results can be viewed on the ÍEI webpage in the Results tab.)

**B. In the ÍEI disaggregated by sectors,** results are shown grouped in the following way:

- Airlines
- Automobiles
- Banks and financial services
- Beer
- Chain restaurants
- Consumer durables and equipment
- Delivery and shipping services
- E-commerce
- Fashion retailers
- Health insurance
- Hotels and accommodation
- Insurance companies
- Passenger transport
- Providers of electricity, gas, and others
- Relevant food brands
- Social networks
- Specialized stores and by departments
- Streaming services
- Supermarkets
- Technology providers
- Telecommunications

In each case, different indicators are provided, highlighting the reference value (benchmark or mean value) for each one of the sectors analyzed, which enables each company to know what its position is, not only in the general ranking, but also within its own sector.

**C. Sector ranking** gives us an overall view about what the most innovative sectors are, according to consumer perception.

### A. The general ÍEI: the 25 most innovative companies

The first three columns, in the section “Index scores”, show the value calculated for each company for the three indexes on a 100 point scale: Commercial Innovation Index (CII), Social Innovation Index (SII) and Digital Innovation Index (DII). We can observe that Apple is perceived as the most innovative company by consumers in its commercial offer, with an index of 78.4 points.

The following columns, in the section “General ranking”, fluctuate between 1 and 120 (which is the number of companies included in the study), indicating the position of each company for each of the three rankings. Thus, we can see that Apple is also considered by consumers to be the most innovative in digitalization, while it is in 17th position (out of 120) in the social innovation ranking. At the same time, Toyota is perceived as the most innovative company in the social dimension.

Finally, the section “Sector ranking” indicates the position of the company within the specific sector. Thus, for example, IKEA holds the first position in commercial innovation and social innovation within the sector “Specialized stores and by departments”, which gives us a more detailed idea about each company.



Global Award for Comercial Innovation | Apple  
 Silvia Martin Prat, Communication Director



Marca / Empresa	Index scores			General ranking			Sector ranking		
	CII	SII	DII	CII	SII	DII	CII	SII	DII
Apple	78.4	57.7	82.5	1	17	1	1	2	1
Ikea	75.4	62.1	56.2	2	5	68	1	1	3
Toyota	74.7	71.8	59.8	3	1	52	1	1	2
Amazon	73.0	55.6	78.0	4	31	4	1	3	1
Nike	73.0	53.1	57.9	5	62	58	1	3	3
Samsung	71.8	60.6	78.7	6	9	3	2	1	2
Tiktok	71.4	50.6	72.8	7	82	12	1	5	4
Mercedes-Benz	71.2	54.6	61.0	8	41	47	2	5	1
Zara	70.8	53.6	59.6	9	52	53	2	2	1
Danone	69.4	57.1	36.0	10	22	112	1	1	2
Spotify	69.4	51.8	77.9	11	74	5	2	2	1
Coca-Cola	69.0	48.4	42.7	12	103	105	2	2	1
Sony	69.0	54.8	72.4	13	37	15	3	3	5
ING	69.0	56.4	81.6	14	26	2	1	1	1
Airbnb	68.7	54.7	72.6	15	38	13	1	1	2
El Corte Inglés	68.6	57.8	57.5	16	16	60	2	2	2
Xiaomi/Redmi	67.9	56.7	76.0	17	25	7	4	4	3
Decathlon	67.9	56.0	51.0	18	29	84	3	3	4
Adidas	67.8	52.0	50.1	19	70	88	3	3	4
Primark	67.6	50.4	29.5	20	85	120	4	4	5
Bosch	67.5	61.7	57.4	21	6	61	1	1	3
McDonalds	67.0	50.4	53.4	22	86	75	1	1	3
Netflix	66.7	48.7	74.1	23	100	10	1	1	1
Balay	66.6	66.1	56.5	24	2	65	2	2	4
Ouigo	66.6	64.0	67.7	25	3	30	1	1	3

## B. ÍEI disaggregated by sectors

### ✎ AIRLINES SECTOR

The following reference values are based on the experience of customers who have traveled on the airlines analyzed in the six months prior to conducting the survey. The average scores of the three indexes making up the ÍEI for this sector are:

Commercial Innovation Index - CII: 54.2

Social Innovation Index - SII: 48.3

Digital Innovation Index - DII: 61.2

Brand / Company	Index scores			General ranking			Sector ranking		
	CII	SII	DII	CII	SII	DII	CII	SII	DII
Iberia	58.0	53.2	63.3	70	60	40	1	1	1
Air Europa	53.7	53.0	61.4	93	64	46	2	2	3
Vueling	53.4	48.5	61.7	94	101	44	3	3	2
Ryanair	51.9	38.4	58.4	105	120	57	4	4	4

Iberia's position at the head of the three innovation indexes is noteworthy.



### ✎ AUTOMOBILES SECTOR

The following reference values are based on the experience of consumers who have been users of these car brands during the six months prior to conducting the survey. The average scores of the three indexes making up the ÍEI for this sector are:

Commercial Innovation Index - CII: 62.6

Social Innovation Index - SII: 57.3

Digital Innovation Index - DII: 53.3

Brand / Company	Index scores			General ranking			Sector ranking		
	CII	SII	DII	CII	SII	DII	CII	SII	DII
Toyota	74.7	71.8	59.8	3	1	52	1	1	2
Mercedes-Benz	71.2	54.6	61.0	8	41	47	2	5	1
Volkswagen	61.8	57.2	53.6	47	21	72	3	3	3
Renault	60.6	59.1	53.6	55	11	73	4	2	4
Seat	59.2	54.6	50.0	64	43	90	5	6	6
Peugeot	57.9	53.7	48.0	71	51	93	6	7	8
Ford	57.9	52.8	49.0	73	67	92	7	8	7
Opel	57.4	54.7	51.5	76	40	80	8	4	5

Toyota stands out as the first company in commercial and social/environmental innovation, more than 10 points ahead of second place in this index. At the same time, Mercedes Benz is the only company with a score higher than 60 points in the digital innovation index.



## ✓ BANKS AND FINANCIAL SERVICES SECTOR

The following reference values are based on the experience of customers who have been users of these financial entities in the six months prior to conducting the survey. The average scores of the three indexes making up the ÍEI for this sector are:

Commercial Innovation Index - CII: 51.2

Social Innovation Index - SII: 49.1

Digital Innovation Index - DII: 63.2

Brand / Company	Index scores			General ranking			Sector ranking		
	CII	SII	DII	CII	SII	DII	CII	SII	DII
ING	69.0	56.4	81.6	14	26	2	1	1	1
BBVA	56.2	51.1	68.8	79	78	29	2	3	2
Bankinter	55.9	53.9	66.9	82	49	31	3	2	3
Santander	52.3	48.2	62.8	101	104	41	4	6	5
CaixaBank	50.7	49.6	65.4	108	91	36	5	4	4
Sabadell	46.7	45.0	57.7	112	113	59	6	8	6
Kutxabank	46.5	47.1	57.1	113	108	62	7	7	7
Ibercaja	44.9	49.1	57.0	117	98	63	8	5	8
Unicaja	38.5	41.1	51.1	120	118	83	9	9	9

ING is notable as the first company in the three innovation indexes, significantly ahead in digital innovation.

## ✓ BEER SECTOR

The following reference values are based on the experience of consumers of these beer brands in the six months prior to conducting the survey. The average scores of the three indexes making up the ÍEI for this sector are:

Commercial Innovation Index - CII: 59.8

Social Innovation Index - SII: 52.4

Digital Innovation Index - DII: 37.0

Brand / Company	Index scores			General ranking			Sector ranking		
	CII	SII	DII	CII	SII	DII	CII	SII	DII
Estrella Galicia	62.1	51.3	36.1	43	77	111	1	4	4
Mahou	61.3	50.9	38.6	50	79	107	2	5	1
Damm	60.4	53.4	35.9	56	54	113	3	1	5
Cruzcampo	59.0	53.4	37.9	65	55	108	4	2	2
San Miguel	56.3	53.2	36.6	78	58	110	5	3	3

Perceptions in this category are very similar for all of the brands. We can highlight the low values in digital innovation, since implementing the digital dimension for this type of product is more complex.

## CHAIN RESTAURANTS SECTOR

The following reference values are based on the experience of consumers at these restaurant chains during the six months prior to conducting the survey. The average scores of the three indexes making up the ÍEI are:

Commercial Innovation Index - CII: 63.3

Social Innovation Index - SII: 50.6

Digital Innovation Index - DII: 53.2

Brand / Company	Index scores			General ranking			Sector ranking		
	CII	SII	DII	CII	SII	DII	CII	SII	DII
McDonalds	67.0	50.4	53.4	22	86	75	1	3	3
BurgerKing	65.0	53.9	56.3	29	48	66	2	1	2
Telepizza	62.9	50.8	58.9	41	80	56	3	2	1
Foster's Hollywood	58.5	47.3	44.1	68	107	102	4	4	4

The scores for the restaurants are in general quite homogeneous. McDonald's holds first place in commercial innovation, Burger King in social innovation and Telepizza in digital innovation.

## CONSUMER DURABLES AND EQUIPMENT SECTOR

The following reference values are based on the experience of consumers that have been users of these brands during the six months prior to conducting the survey. The average scores of the three indexes making up the ÍEI for this sector are:

Commercial Innovation Index - CII: 65.5

Social Innovation Index - SII: 61.9

Digital Innovation Index - DII: 60.3

Brand / Company	Index scores			General ranking			Sector ranking		
	CII	SII	DII	CII	SII	DII	CII	SII	DII
Bosch	67.5	61.7	57.4	21	6	61	1	2	3
Balay	66.6	66.1	56.5	24	2	65	2	1	4
Siemens	64.4	59.3	60.8	33	10	49	3	4	2
LG	63.5	60.7	66.7	38	8	32	4	3	1



Spanish Award for Social Innovation | Balay  
Fernando Alonso, Balay brand Director

This sector shows similar values for each of the indexes. Bosch is at the top of the ranking in commercial innovation, Balay leads in social innovation and LG in digital innovation. This sector is considered to be the most innovative in the social dimension (61.9 points). Additionally, this sector is the only one with average values over 60 points in the three indexes.

## ✓ DELIVERY AND SHIPPING SERVICES SECTOR

The following reference values are based on the experience of customers who have been users of these delivery and shipping services during the six months prior to conducting the survey. The average score of the three indexes making up the ÍEI for this sector are:

Commercial Innovation Index - CII: 54.2

Social Innovation Index - SII: 51.6

Digital Innovation Index - DII: 54.7

Brand / Company	Index scores			General ranking			Sector ranking		
	CII	SII	DII	CII	SII	DII	CII	SII	DII
Glovo	60.4	53.2	66.2	57	61	35	1	1	1
Nacex	52.2	51.9	53.1	103	71	76	2	2	2
Correos	52.1	50.4	47.7	104	84	96	3	4	4
DHL	51.9	50.7	51.9	106	81	78	4	3	3

Glovo, as an emergent company in this market, stands out at the top spot in the three innovation rankings for this sector.

## ✓ E-COMMERCE SECTOR

The following reference values are based on the experience of consumers that have been users or who have engaged in transactions on these e-commerce sites, during the six months prior to conducting the survey. The average scores of the three indexes making up the ÍEI for this sector are:

Commercial Innovation Index - CII: 65.5

Social Innovation Index - SII: 53.0

Digital Innovation Index - DII: 71.6

Brand / Company	Index scores			General ranking			Sector ranking		
	CII	SII	DII	CII	SII	DII	CII	SII	DII
Amazon	73.0	55.6	78.0	4	31	4	1	3	1
Wallapop	66.2	62.5	69.9	26	4	22	2	1	3
Zalando	64.8	57.2	69.4	31	20	26	3	2	5
Aliexpress	62.5	46.2	70.8	42	110	20	4	4	2
Idealista	61.2	43.4	69.7	51	116	24	5	5	4

Amazon stands out as the company ranked first in commercial and digital innovation, while Wallapop, followed by Zalando, leads in social innovation.

## ▼ FASHION RETAILERS SECTOR

The following reference values are based on the experience of customers that have purchased these brands of clothing and sports shoes, in the six months prior to conducting the survey. The average scores of the three indexes making up the ÍEI for this sector are:

Commercial Innovation Index - CII: 68.2

Social Innovation Index - SII: 52.5

Digital Innovation Index - DII: 51.3

Brand / Company	Index scores			General ranking			Sector ranking		
	CII	SII	DII	CII	SII	DII	CII	SII	DII
Nike	73.0	53.1	57.9	5	62	58	1	3	3
Zara	70.8	53.6	59.6	9	52	53	2	1	1
Adidas	67.8	52.0	50.1	19	70	88	3	4	4
Primark	67.6	50.4	29.5	20	85	120	4	5	5
Mango	61.8	53.5	59.2	46	53	54	5	2	2

## ▼ HEALTH INSURANCE SECTOR

The following reference values are based on the experience of consumers who have been users of these health insurance companies during the six months prior to conducting the survey. The average scores of the three indexes making up the ÍEI for this sector are:

Commercial Innovation Index - CII: 53.8

Social Innovation Index - SII: 52.9

Digital Innovation Index - DII: 54.4

Brand / Company	Index scores			General ranking			Sector ranking		
	CII	SII	DII	CII	SII	DII	CII	SII	DII
Sanitas	57.0	54.5	60.8	77	44	48	1	2	1
DKV	55.5	56.4	55.0	84	27	69	2	1	2
Adeslas	52.9	50.5	50.4	97	83	86	3	3	4
Asisa	50.0	50.1	51.2	110	88	82	4	4	3

Sanitas stands out as it is ranked first in commercial innovation and digital innovation. DKV holds first place in social innovation.



Zara is noteworthy as it heads two rankings: digital innovation and social innovation. Nike holds first place in commercial innovation. This sector ranks first in the sectorial ranking for commercial innovation (a 68.2 average sector score).

Spanish Award for Commercial Innovation | Zara  
Francisco Galán, Responsible of in-Store Technology, Inditex

## ✓ HOTELS AND ACCOMMODATION SECTOR

The following reference values are based on the experience of consumers that have been users of these hotel chains or the tourist accommodation intermediaries included in this category, during the six months prior to conducting the survey. The average scores of the three indexes making up the ÍEI for this sector are:

Commercial Innovation Index - CII: 62.9

Social Innovation Index - SII: 57.2

Digital Innovation Index - DII: 65.4

Brand / Company	Index scores			General ranking			Sector ranking		
	CII	SII	DII	CII	SII	DII	CII	SII	DII
Airbnb	68.7	54.7	72.6	15	38	13	1	5	2
Booking	64.7	53.3	75.0	32	57	8	2	6	1
Iberostar	62.1	61.1	61.9	44	7	43	3	1	4
Meliá	61.9	58.4	62.4	45	14	42	4	3	3
Barceló	60.3	57.5	60.7	58	18	50	5	4	5
NH	59.8	58.4	60.1	61	13	51	6	2	6

This sector combines hotels with tourist accommodation intermediaries. Airbnb leads the ranking in commercial innovation and Booking holds the top spot for digital innovation. Iberostar tops the list for social innovation.

## ✓ INSURANCE COMPANIES SECTOR

The following reference values are based on the experience of consumers that have been users of these insurance companies in the six months prior to conducting the survey. The average scores of the three indexes making up the ÍEI for this sector are:

Commercial Innovation Index - CII: 55.9

Social Innovation Index - SII: 54.7

Digital Innovation Index - DII: 54.5

Brand / Company	Index scores			General ranking			Sector ranking		
	CII	SII	DII	CII	SII	DII	CII	SII	DII
Mutua Madrileña	64.0	58.9	63.4	36	12	39	1	1	1
Mapfre	59.0	56.1	56.5	66	28	64	2	2	2
Allianz	57.5	55.9	56.2	75	30	67	3	3	3
Generali	54.3	54.2	53.0	90	47	77	4	5	6
Zurich	54.1	54.7	54.7	91	39	70	5	4	4
SantaLucía	53.8	52.9	47.9	92	65	95	6	7	8
Catalana Occidente	52.5	53.1	50.8	99	63	85	7	6	7
Axa	52.4	51.8	53.5	100	73	74	8	8	5

It is worthy of note that Mutua Madrileña leads in this sector for the three innovation indexes, followed in the three categories by Mapfre and Allianz respectively. The average values for the three indexes are very similar, between 54 and 56 points.

## ✓ PASSENGER TRANSPORT SECTOR

The following reference values are based on the experience of passengers of diverse ground transport services during the six months prior to conducting the survey. The average scores of the three indexes making up the ÍEI for this sector are:

Commercial Innovation Index - CII: 54.2

Social Innovation Index - SII: 53.7

Digital Innovation Index - DII: 55.5

Brand / Company	Index scores			General ranking			Sector ranking		
	CII	SII	DII	CII	SII	DII	CII	SII	DII
Ouigo	66.6	64.0	67.7	25	3	30	1	1	3
Uber	63.7	54.5	70.5	37	45	21	2	6	1
Cabify	60.1	55.1	69.3	59	34	27	3	3	2
AVE	55.2	52.9	59.1	87	66	55	4	7	5
Alsa	55.2	52.2	54.6	88	69	71	5	8	6
Bolt	55.2	57.4	66.3	89	19	34	6	2	4
Metro	52.8	54.8	47.3	98	36	98	7	5	7
Renfe Cercanías	45.7	50.1	45.6	115	89	99	8	9	8
Autobuses públicos	45.0	54.9	39.5	116	35	106	9	4	9
Consortios de Taxi	42.1	40.7	35.0	119	119	117	10	10	10



Spanish Award for Digital Innovation | Cabify  
Irene Recio, Global Head of Public Relations

Ouigo stands out as a new entrant in the Spanish market, ranked first in commercial and social innovation. We can also highlight the “sharing economy” companies in this category, such as Uber, first in digital innovation, followed by Cabify.

[indicedeinnovacion.uc3m.es](http://indicedeinnovacion.uc3m.es)



**SPANISH INNOVATION INDEX**

The **ÍEI** is **unique** because it measures innovation taking into account **the consumers' point of view**, which differentiates it from other indices that consider the perspective of entrepreneurs, expert opinions or macroeconomic indicators.

## PROVIDERS OF ELECTRICITY, GAS, AND OTHERS SECTOR

The following reference values are based on the experience of consumers who have been users of these electricity and gas providers during the six months prior to conducting the survey. The average scores of the three indexes making up the ÍEI for this sector are:

Commercial Innovation Index - CII: 50.5

Social Innovation Index - SII: 47.2

Digital Innovation Index - DII: 47.9

Brand / Company	Index scores			General ranking			Sector ranking		
	CII	SII	DII	CII	SII	DII	CII	SII	DII
Repsol	56.1	49.6	51.8	80	92	79	1	1	1
Cepsa	52.3	43.7	43.6	102	115	104	2	6	6
Iberdrola	51.0	49.5	51.4	107	95	81	3	3	2
BP	50.3	49.5	45.4	109	94	100	4	2	4
Endesa	48.7	45.5	49.7	111	111	91	5	4	3
Naturgy	44.6	45.3	45.3	118	112	101	6	5	5

It is noteworthy that Repsol holds first place in the three innovation indexes. Also drawing attention is the fact that none of the firms score more than 50 points in social innovation.

## RELEVANT FOOD BRANDS SECTOR

The following reference values are based on consumers' experience with the respective food brands in the six months prior to conducting the survey. The average scores of the three indexes making up the ÍEI for this sector are:

Commercial Innovation Index - CII: 64.1

Social Innovation Index - SII: 51.9

Digital Innovation Index - DII: 36.3

Brand / Company	Index scores			General ranking			Sector ranking		
	CII	SII	DII	CII	SII	DII	CII	SII	DII
Danone	69.4	57.1	36.0	10	22	112	1	1	2
Coca-Cola	69.0	48.4	42.7	12	103	105	2	5	1
Nestlé	65.6	54.3	35.1	27	46	116	3	3	5
Casa Tarradellas	61.4	47.8	33.2	49	106	118	4	6	6
Campofrio	60.9	54.6	35.3	53	42	115	5	2	4
El Pozo	58.3	48.9	35.6	69	99	114	6	4	3

Danone stands out as the first brand in commercial and social innovation. Coca-Cola holds first place in digital innovation, although the scores for this index are all below 43 points.

**In this sector, as with the beer sector, digitalization is more difficult to implement (or not so necessary) compared to other sectors who base their business model on technology and on digitalization.**

## ✓ SOCIAL NETWORKS SECTOR

The following reference values are based on the experience of consumers who have been users of these social networks in the six months prior to conducting the survey. The average scores of the three indexes making up the ÍEI for this sector are:

Commercial Innovation Index - CII: 63.5

Social Innovation Index - SII: 49.3

Digital Innovation Index - DII: 73,0

Brand / Company	Index scores			General ranking			Sector ranking		
	CII	SII	DII	CII	SII	DII	CII	SII	DII
Tiktok	71.4	50.6	72.8	7	82	12	1	5	4
Spotify	69.4	51.8	77.9	11	74	5	2	2	1
Instagram	65.1	51.7	73.6	28	75	11	3	3	3
YouTube	64.3	51.6	76.6	34	76	6	4	4	2
Linkedin	63.0	51.8	71.0	40	72	18	5	1	6
Twitter	56.0	43.1	72.5	81	117	14	6	7	5
Facebook	55.7	44.8	66.4	83	114	33	7	6	7

This category displays variability among the different brands: Tiktok is in first place in commercial innovation and Spotify leads in digital innovation. LinkedIn heads social innovation, although all scores in this index are below 52 points.

## ✓ SPECIALIZED STORES AND BY DEPARTMENTS SECTOR

The following reference values are based on the experience of customers who have made purchases from these stores during the six months prior to conducting the survey. The average scores of the three indexes making up the ÍEI for this sector are:

Commercial Innovation Index - CII: 67.4

Social Innovation Index - SII: 56.4

Digital Innovation Index - DII: 54.8

Brand / Company	Index scores			General ranking			Sector ranking		
	CII	SII	DII	CII	SII	DII	CII	SII	DII
Ikea	75.4	62.1	56.2	2	5	68	1	1	3
El Corte Inglés	68.6	57.8	57.5	16	16	60	2	2	2
Decathlon	67.9	56.0	51.0	18	29	84	3	3	4
Media Markt	63.4	52.7	61.6	39	68	45	4	5	1
Leroy Merlin	61.5	53.4	47.9	48	56	94	5	4	5

IKEA is noteworthy as it is in first place for commercial innovation as well as social innovation, while Media Markt is the leader in digital innovation.



## ✓ STREAMING SERVICES SECTOR

The following reference values are based on the experience of consumers who have been users of these streaming services during the six months prior to conducting the survey. The average scores of the three indexes making up the ÍEI for this sector are:

Commercial Innovation Index - CII: 61.2

Social Innovation Index - SII: 49.4

Digital Innovation Index - DII: 71.7

Brand / Company	Index scores			General ranking			Sector ranking		
	CII	SII	DII	CII	SII	DII	CII	SII	DII
Netflix	66.7	48.7	74.1	23	100	10	1	4	1
Disney	64.2	49.6	69.8	35	93	23	2	2	4
HBO	58.7	50.1	71.9	67	87	17	3	1	2
PrimeVideo	55.5	49.4	70.9	85	96	19	4	3	3

Netflix is in the first position for both commercial and digital innovation. For social innovation, HBO leads, and it is the only company that has a score higher than 50 points in this index.

## ✓ SUPERMARKETS SECTOR

The following reference values are based on the experience of users of these supermarkets in the six months prior to conducting the survey. The average scores of the three indexes making up the ÍEI for this sector are:

Commercial Innovation Index - CII: 57.3

Social Innovation Index - SII: 53.0

Digital Innovation Index - DII: 43.5

Brand / Company	Index scores			General ranking			Sector ranking		
	CII	SII	DII	CII	SII	DII	CII	SII	DII
Lidl	65.0	55.2	47.4	30	33	97	1	3	3
Alcampo	59.9	57.9	43.7	60	15	103	2	1	4
Mercadona	59.6	48.2	32.3	62	105	119	3	5	6
Carrefour	57.9	56.7	50.0	72	23	89	4	2	2
Hiperacor	55.5	53.2	50.3	86	59	87	5	4	1
Día	45.9	46.5	37.5	114	109	109	6	6	5

Lidl is first in commercial innovation, Alcampo heads social innovation, while Hiperacor tops the digital innovation ranking.

## TECHNOLOGY PROVIDERS SECTOR

The following reference values are based on the experience of consumers who have been users of diverse products of these technology brands, in the six months prior to conducting the survey. The average scores of the three indexes making up the ÍEI for this sector are:

Commercial Innovation Index - CII: 66.6

Social Innovation Index - SII: 56.5

Digital Innovation Index - DII: 75.2

Brand / Company	Index scores			General ranking			Sector ranking		
	CII	SII	DII	CII	SII	DII	CII	SII	DII
Apple	78.4	57.7	82.5	1	17	1	1	2	1
Samsung	71.8	60.6	78.7	6	9	3	2	1	2
Sony	69.0	54.8	72.4	13	37	15	3	6	5
Xiaomi/Redmi	67.9	56.7	76.0	17	25	7	4	4	3
Lenovo	61.1	56.7	74.8	52	24	9	5	3	4
Huawei	60.7	55.4	69.7	54	32	25	6	5	7
Asus	57.6	53.7	72.3	74	50	16	7	7	6

Apple notably ranks first in commercial and digital innovation (not only at the sector level but also in the general ranking), while Samsung stands out as the leader in social innovation.

Users consider this category as the most innovative in the digital dimension, with an average score of more than 75 points.

## TELECOMMUNICATIONS SECTOR

The following reference values are based on the experience of consumers who have been users of these brands operating in the telecommunications sector, in the six months prior to conducting the survey. The average scores of the three indexes making up the ÍEI for the sector are:

Commercial Innovation Index - CII: 55.2

Social Innovation Index - SII: 49.2

Digital Innovation Index - DII: 65.5

Brand / Company	Index scores			General ranking			Sector ranking		
	CII	SII	DII	CII	SII	DII	CII	SII	DII
Movistar	59.4	49.2	69.0	63	97	28	1	2	1
Vodafone	53.3	48.5	63.9	95	102	37	2	3	2
Orange	53.0	50.0	63.7	96	90	38	3	1	3

We can highlight Movistar, leading in both commercial and digital innovation. Orange ranks first in social innovation.



### C. Sector ranking

The interpretation of the following table is similar to the previous ones. In the first section titled "Index scores", we can see the mean scores of the three indexes in each sector on a scale of 100 points. The second section, titled "Ranking", indicates the ordinal position of each sector for each of the indexes. Thus, we can see how the sector "Fashion retailers" is perceived by consumers as having the most innovative commercial offer, the sector "Consumer durables and equipment" is perceived as the most innovative in the social and environmental dimension, and the sector "Technology providers" is seen as the most innovative one in the digital dimension.

Sector	Index scores			Ranking		
	CII	SII	DII	CII	SII	DII
Fashion retailers	68.2	52.5	51.3	1	11	17
Specialized stores and by department	67.4	56.4	54.8	2	5	11
Technology providers	66.6	56.5	75.2	3	4	1
E-commerce	65.5	53.0	71.6	4	8	4
Consumer durables and equipment	65.5	61.9	60.3	5	1	9
Relevant food brands	64.1	51.9	36.3	6	13	21
Social networks	63.5	49.3	73.0	7	17	2
Chain restaurants	63.3	50.6	53.2	8	15	16
Hotels and accommodation	62.9	57.2	65.4	9	3	6
Automobiles	62.6	57.3	53.3	10	2	15
Streaming services	61.2	49.4	71.7	11	16	3
Beer	59.8	52.4	37.0	12	12	20
Supermarkets	57.3	53.0	43.5	13	9	19
Insurance companies	55.9	54.7	54.5	14	6	13
Telecommunications	55.2	49.2	65.5	15	18	5
Airlines	54.2	48.3	61.2	16	20	8
Passenger transport	54.2	53.7	55.5	17	7	10
Delivery and shipping services	54.2	51.6	54.7	18	14	12
Health insurance	53.8	52.9	54.4	19	10	14
Banks and financial services	51.2	49.1	63.2	20	19	7
Providers of electricity, gas, and others	50.5	47.2	47.9	21	21	18



ÍEI 2023, group of award winners



**Network Innovation Index**  
 Tor W. Andreassen, Norwegian Innovation Index; Lola Duque, Spanish Innovation Index; Hellen Sondergaard, Danish Innovation Index; Luis Santamaría, Spanish Innovation Index



**NHH and UC3M agreement**  
 Tor W. Andreassen, Norwegian Innovation Index; Lola Duque, Spanish Innovation Index



ÍEI 2023, panel of Spanish award winners



ÍEI 2023, presidential table

Juan José Vaquero, vice-rector of Scientific Policy at UC3M; Ignacio García Fenoll, general deputy director of Innovation Coordination at the Ministry of Science and Innovation; Rosa Rodríguez, dean of School of Social Sciences and Law at UC3M; Juan Manuel García, director of the Department of Business Administration at UC3M and José Luis Cortina, president of Neovantas.

## 5. APPENDIX

### A. More about the entities involved

#### uc3m

#### INDEM

The Institute for the Development of Enterprises and Markets (INDEM) seeks to be a bridge between the university and the real world: a link between its members and the business and social world, committed to promoting and disseminating research applied to making business activity more efficient and effective. INDEM's endeavors have a special emphasis on business innovation.

INDEM is composed of more than 60 researchers: the majority from the UC3M Department of Business Administration, with others coming from other Universidad Carlos III de Madrid departments (Economics and Statistics) as well as other prestigious international universities.

#### NEOVANTAS consulting

Neovantas is an international management consultancy and is a strategic partner of UC3M in implementing the ÍEI. Neovantas works to accelerate change through advanced analytics, understanding the cognitive mechanisms behind the data.

Its experimental methodology ensures results that narrow the gap between intention and behavior in a sustainable way over time.



After creation of the Norwegian Innovation Index (developed by the researchers Tor W. Andreassen, Line Lervik-Olsen and Seidali Kurtmollaiev from the Norwegian School of Economics), other countries have implemented an analogous index that uses this same methodology; among them: the United States (Fordham University's Gabelli School of Business), Denmark (Aarhus University), Sweden (Karlstad Business School), Belgium (Hasselt University) and Finland (Hanken School of Economics). Recently, Australia (University of Queensland) has joined the coalition. The entities making up this coalition of Innovation Indexes work in a coordinated way on research topics and to disseminate results.



## SIGMADOS

The leading Spanish market research and demographic research company, selected after a painstaking public tender process for consumer data collection.

## B. About those heading the ÍEI



### Lola C. Duque

Associate (Titular) Professor of Marketing in the Department of Business Administration at Universidad Carlos III de Madrid. She holds a BA in Business Administration (Universidad Nacional de Colombia), an MSc in Business and Economics (Universidad Pompeu Fabra), and a PhD in Management from the Universidad de Barcelona. Her main research areas are services marketing and consumer welfare. Lola currently teaches various subjects in the area of marketing in undergraduate and graduate degree programs, and is one of the persons leading the Spanish Innovation Index initiative.



### Lluís Santamaría

Associate Professor of Accounting in the Department of Business Administration at Universidad Carlos III de Madrid. Lluís holds a PhD in Business Administration and a BA in Business and Economics from the Universidad Autónoma de Barcelona (Spain). His chief areas of research are: management of innovation and accountancy information systems. In his research he examines aspects of corporate governance, management of innovation, technological cooperation and comparative institutional analysis. Lluís currently teaches financial and management accounting.

For more in-depth information about ÍEI,  
you can visit our webpage

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