



Data Article

The American Customer Satisfaction Index (ACSI): A sample dataset and description

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ABSTRACT

This article provides a sample of survey data collected by the American Customer Satisfaction Index (ACSI). Using on-line sampling and stratified interviewing techniques of actual customers of predominantly large market-share ("large cap") companies, the ACSI annually collects data from some 400,000 consumers residing across the United States for more than 400 companies within about 50 consumer industries.

For this article and the data depository, consumers' perceptions of their experiences with individual companies included within four consumer industries as defined and measured by ACSI – processed food, commercial airlines, Internet service providers, and commercial banks – are included in the dataset. These industries were chosen to represent and illustrate a cross-section of data from differentiated sectors, not because they are representative of the larger economy or larger ACSI dataset per se. The survey items reflect a diverse array of customers' perceptions regarding prior expectations, perceived quality, perceived value, customer satisfaction, complaint behavior, and customer loyalty. These are also the core latent factors modeled in the so-called ACSI model since 1994.

The ACSI model is continuously analyzed using a proprietary and patented Partial Least Squares structural equation

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modeling approach (PLS-SEM). Detailed firm- or brand-level results from the ACSI data are used by individual companies for strategic organizational decision-making and in the aggregate to forecast trends in the U.S. national economy. ACSI data have been analyzed in thousands of peer-reviewed academic and practitioner journal articles.

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Specifications Table

Subject	Business, Management, and Decision Sciences; Marketing
Specific subject area	Survey data of customers' perceptions of experiences with firms, including expectations, quality, value, customer satisfaction, complaint behavior, and customer loyalty.
Type of data	This article describes and includes raw customer survey response data (i.e., perceptions of experiences with firms, including expectations, quality, value, customer satisfaction, complaint behavior, and customer loyalty) as well as respondents' demographic information.
How the data were acquired	The ACSI data were collected through customer surveying. Potential customer-survey respondents were identified via large online panels of U.S. consumers stratified and balanced to match the U.S. Census population demographics. Respondents were asked about their recent purchases across various industries and then matched with the company from which they had actually and recently purchased. The ACSI data collection is continually completed throughout each calendar year for the various industries measured.
Data format	Raw ACSI data (i.e., actual respondent numbers) are included in the dataset for maximum usability and disaggregate numbers.
Description of data collection	Two criteria are used to determine the inclusion or exclusion of customer respondents from the sample. First, the respondent must have purchased from the company for which perceptions of experiences with firms - including expectations, quality, value, customer satisfaction, complaint behavior, and customer loyalty - are measured. Second, the respondent must have purchased "recently" within the established timeframe (i.e., between "current purchase/subscription" and "purchased in the last three years" for different industries and product categories).
Data source location	The original data source location is: The American Customer Satisfaction Index LLC (ACSI) LLC, 3916 Ranchero Dr, Ann Arbor, MI 48108
Data accessibility	The data were collected from consumers in the U.S., across all fifty states (<i>Mendeley Data</i>). https://data.mendeley.com/ Repository name: The American Customer Satisfaction Index (ACSI): A Sample Dataset and Description. Data identification number: Version 1 Direct URL to data: 10.17632/64xbkj2ry5.1
Related research article	F.V. Morgeson III, G.T.M. Hult, S. Mithas, T. Keiningham, C. Fornell. Turning complaining customers into loyal customers: Moderators of the complaint handling–Customer loyalty relationship. <i>J. of Marketing</i> , 84(5) (2020) 79-99. 10.1177/0022242920929029

Value of the Data

- The ACSI dataset provides scientifically rigorous and practical information to understand how consumers form satisfaction judgments (perceptions) with the brands and companies from which they purchase. The ACSI dataset provides insight into both variable *levels* and *impacts* (effects) involving customer expectations, quality, value, satisfaction, complaint behavior, and loyalty [1–4].
- The ACSI dataset is useful for researchers, managers, and educators who are interested in examining the drivers (antecedents) and outcomes of customer satisfaction, both in general and within the selected industry samples provided [5–10].
- The ACSI dataset can be used by researchers, managers, and educators to better understand the consumer satisfaction formation process as a part of the customer's journey. Researchers can also find interest in the demographic data in the ACSI dataset, allowing for detailed analytics of variable levels and effects across age, education, race, income, gender, and location (zip code) [11–14].
- For educators more specifically, the dataset offers an opportunity to bring in real-world data and accompanying examples related to customer expectations, quality, value, satisfaction, complaint behavior, and loyalty. As such, the data offer a way for educators to break down the customer journey into relevant constructs and teach around each of those constructs as well as the more holistic customer journey [15–18].
- For advanced courses (e.g., multivariate data analysis), the dataset offers a unique opportunity to “play with” the data [19] using specifically PLS-SEM, as most of the thousands of articles (Google Scholar) using ACSI data also use PLS-SEM.

1. Objective

This section briefly describes the reasoning and context behind the generation of the ACSI dataset, including its 15 core questions. In the actual data collection, each question is slightly customized to the company and industry. Additionally, several customer qualifiers are included to ensure quality data. Beyond the core questions, the survey instrument includes demographic questions as well as a breakdown of product and service quality assessments, as applicable to the particular industry. A 10-point scale is used except for questions 12 and 15a/15b, with the endpoints identified for each question in parenthesis.

The ACSI uses the customer interviews as input into a multi-equation econometric model developed by Professor Claes Fornell when he was a distinguished faculty and researcher at the University of Michigan's Ross School of Business (Ann Arbor, Michigan, United States). The ACSI base model is constructed as a cause-and-effect (“causal model”) with latent-factor indexes for the drivers of satisfaction on the left side (customer expectations, perceived quality, and perceived value), customer satisfaction (the ACSI index) in the center, and consequences of satisfaction on the right side (customer complaints and customer loyalty, including customer retention and price tolerance) (see Fig. 1). The actual examination of cause-and-effect analytics assumes multiple time periods, etc.

The right-hand variables are oftentimes modeled as affecting a company's performance financials, either as levels (i.e., a score from 0 to 100 on each variable), changes in variables' scores between time periods, and impacts of the variables (i.e., represented by the arrows in the model). As proven using time series data over 30 years, customer satisfaction is a predictor of stock performance that reliably outperforms the S&P 500 as well as being related to numerous financial performance metrics for companies, such as productivity, market share, revenue, sales growth, cash flows, profitability, return on investment (ROI), cost of capital, stock price, shareholder value, stock market risk, and more.

The latent-factor indexes in the ACSI model, also referred to as constructs, are multivariable components measured by several questions that are weighted within the model. The questions

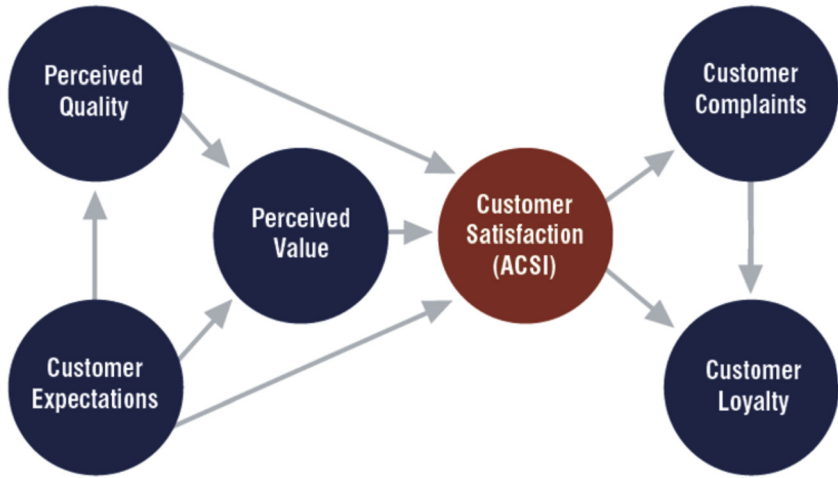


Fig. 1. The ACSI base model.

assess customer evaluations of the determinants of each index. The indexes are reported (after transformation) on a 0–100 scale. The survey and modeling methodology quantifies the strength (i.e., impact) of the effect of the index on the left to the one to which the arrow points on the right. These arrows represent “impacts.” The ACSI model is self-weighting (using PLS-SEM) to maximize the explanation of customer satisfaction (ACSI) on customer loyalty. Looking at the indexes and impacts, researchers, managers, and other users, can determine which drivers of satisfaction, if improved, would subsequently have the most effect on customer loyalty.

2. Data Description

The files in the Mendeley data repository (10.17632/64xkbj2ry5.1) include a data dictionary using the variable names identified in this section. Every question used in the survey has been identified in this section and every variable name is the same as in the data dictionary in the Excel sheet and in the SPSS file. For more information on the survey questions see, for example, Hult et al. [10,12].

Customer expectations represent a measure of the customer’s anticipation of the quality of a company’s products or services. Expectations represent both the prior consumption experience, which includes some non-experiential information like advertising and word-of-mouth and a forecast of the company’s ability to deliver quality in the future.

- How high did you expect the overall quality of the product/service to be? (Not very high–Very high). This variable is labelled OVERALLX in the dataset.
- How well did you expect the product/service to meet your personal requirements? (Not very well–Very well). This variable is labelled CUSTOMX in the dataset.
- How often did you expect things with the product/service to go wrong? (Not very often–Very often). This variable is labelled WRONGX in the dataset.

Perceived quality is a measure of the customer’s evaluation via his or her recent consumption experience of the quality of a company’s products or services. Quality is measured in terms of both customization, which is the degree to which a product or service meets the customer’s individual needs, and reliability, or the severity/frequency with which things go wrong with the product or service.

- How high has the overall quality of the product/service actually been? (Not very high—Very high). This variable is labelled OVERALLQ in the dataset.
- How well has the product/service actually met your personal requirements? (Not very well—Very well). This variable is labelled CUSTOMQ in the dataset.
- How often have things actually gone wrong with the product/service? (Not very often—Very often). This variable is labelled WRONGQ in the dataset.

Perceived value is a measure of quality relative to the price paid. Although price (value for money) is often very important to the customer's first purchase, it usually has a somewhat smaller impact on satisfaction for repeat purchases.

- Given the quality of the product/service, how would you rate the price you paid? (Not very good—Very good). This variable is labelled PQ in the dataset.
- Given the price you paid for the product/service, how would you rate the quality? (Not very good—Very good). This variable is labelled QP in the dataset.

Customer satisfaction – the so-called ACSI score or index – is calculated as a weighted average of three survey questions that measure different facets of satisfaction with a product or service. ACSI researchers use proprietary software technology and a patented system to estimate the weighting for each question.

- Considering all of your experiences to date with the company/brand, how satisfied are you? (Very dissatisfied—Very satisfied). This variable is labelled SATIS in the dataset.
- Considering all of your expectations, to what extent has the company/brand fallen short of or exceeded your expectations? (Fallen short of expectations—Exceeded expectations). This variable is labelled CONFIRM in the dataset.
- Forget the company/brand you bought for a moment. Imagine an ideal product. How well do you think the company/brand you bought compares with that ideal? (Not very close to ideal—Very close to ideal). This variable is labelled IDEAL in the dataset.

Customer complaints are measured as a percentage of respondents who indicate they have complained to a company directly about a product or service within a specified time frame. This section of the ACSI survey also includes a question about complaint handling, assuming a customer formally complained to the company directly about a product or service within a specified time frame.

- Have you complained about your product/service to the company within the past six months? (Yes—No). This variable is labelled COMP in the dataset.
- How well was the complaint handled? (Handled very poorly—Handled very well). This variable is labelled HANDLE in the dataset.

Customer loyalty is a combination of the customer's intended likelihood to repurchase from the same company in the future, and the likelihood to purchase a company's products or services at various price points (price tolerance). Customer loyalty is the critical component of the model as it stands as a proxy for profitability (and serves as the outcome or antecedent to customer satisfaction and complaint behavior in the ACSI model).

- The next time you seek to buy a new product/service, how likely is it you will buy the same brand again? (Not very likely—Very likely). This variable is labelled REPUR in the dataset.
- Let us now imagine that the company raises its prices. If other companies remain at the same prices, how much could the company raise its price before you definitely would not choose it again? This variable is labelled HIGHTOL in the dataset.
- Let us now imagine that the company lowers its prices. If other companies remain at the same prices, how much must the company lower its price before you would definitely choose it again? This variable is labelled LOWPTOL in the dataset.

3. Demographic and Segmentation Variables

The ACSI dataset we have made available for analyses includes a number of what we call demographic and segmentation variables. These include:

- An industry categorization with a variable name of INDUSTRY. This particular dataset includes all consumers who responded relative to the companies operating in four industries: 1001="Processed Food (Nondurables)"; 3003="Commercial Airlines (Transportation)"; 3013="Internet Service Providers (Telecommunications)"; and 5001="Commercial Banks (Finance)."
- The year from which the consumer responses were collected is included as a YEAR variable, albeit we include only one year (2015) given the proprietary nature of the data. ACSI data are collected continuously every day/month. The general structure of the data remains robust (e.g., parameter estimates) across years but levels changes year-by-year to some degree, which is a limitation of the data in the sense that we are only able to include 2015 data and for only 4 of the 47 ACSI industries.
- The AGE variable includes the actual age of the respondent in years (e.g., 27, 50, 55).
- The EDUCAT variable specifies the formal education of the respondent as: 1=Less than high school; 2=High school; 3=Some college or associate degree; 4=College graduate; and 5=Post-graduate.
- The next set of questions (i.e., HISPANIC and RACE_1 to RACE_5) identify – as self-identification by the respondent – the race of the consumer who responded to the survey. The initial survey item is a yes/no question asking if the respondent is of Hispanic origin (Yes if they are of Hispanic origin and No if they are not). The next question in the survey is a multiple response-answer question; it is included as one question in the survey but coded into five variables in the dataset (i.e., RACE_1, RACE_2, RACE_3, RACE_4, and RACE_5). Each of the RACE variables in the dataset has the same coding (i.e., 1="White"; 2="Black/African-American"; 3="American Indian/Alaskan Native"; 4="Asian"; 5="Native Hawaiian or Pacific Islander"; and 6="Other Race"). This means that the survey is created such that a consumer who responds can identify more than one race for themselves.
- The INCOME variable asks the respondent about their income in ranges: 1="Under \$20K"; 2="\$20K to \$30K"; 3="\$30K to \$40K"; 4="\$40K to \$60K"; 5="\$60K to \$80K"; 6="\$80K to \$100K"; 7="\$100K or More."
- The ACSI survey uses the classical 1="Male" and 2="Female" for the GENDER question and variable. This classification stays consistent with the original survey from 1994, albeit the ACSI continue to evaluate this demographic variable and others for more inclusive ways of obtaining the most appropriate representation of each respondent.
- Lastly, the ACSI dataset includes a ZIPCODE identifier. The respondent's zip code allows the ACSI to ensure broad-based representation of consumers in the United States and allows for stratifying the sample to achieve such generalizable data.

4. Experimental Design, Materials and Methods

The ACSI data collection is conducted via a standardized consumer survey using Likert-type scale items. The survey is modified only slightly across the measured consumer industries (and related companies) to best describe and capture consumer experiences in those industries. The survey questions are asked in logical order consistent with the flow of the customer journey (i.e., beginning with the prior expectations items and ending with future repurchase intention).

Importantly, the core questions and model variables remain consistent in each questionnaire (e.g., overall expectations, expectations customization, expectations reliability, overall quality, customization quality, reliability quality, quality given price, price given quality, overall satisfaction, confirmation of expectations, comparison to ideal, customer complaints, and repurchase intention).

For more information on the survey questions see, for example, Hult et al. [10,12]. For this brief section on the experimental design, materials, and methods, we have included Table 1 to summarize the basic descriptive statistics (i.e., variables, sample sizes, minimum and maximum values for a variable, means, and standard deviations, as applicable). Table 2 provides a correlation matrix between the 12 core Likert-type variables in the ACSI dataset (i.e., SATIS, CONFIRM, IDEAL, OVERALLX, CUSTOMX, WRONGX, OVERALLQ, CUSTOMQ, WRONGQ, PQ, QP, and REPUR). Figs. 2-5 provide the parameter estimates (PLS-SEM) between the latent variables in the traditional ACSI model.

To conduct consumer interviews using the ACSI questionnaires, large commercial Internet panels are used. Invitations to participate in the survey are sent via email to members of these Internet panels. Potential respondents are screened for actual and recent experiences with the ACSI-measured companies, and then included or excluded based on their screening responses.

As a historical note, while all data is collected digitally today, ACSI data were initially conducted through random-digit-dial and computer-assisted telephone interviewing to landline telephones (1994-2009), and then transitioned to a mixed-method approach collecting data both online and via telephone (2009-2014). Since 2015, the Internet method is used (including the 2015 dataset which accompanies this article).

Table 1
Descriptive statistics of the ACSI dataset.

Variable	n	Minimum	Maximum	Mean	Std Dev
INDUSTRY	8239	N/A	N/A	N/A	N/A
INDUSTRY 1001	1968	N/A	N/A	N/A	N/A
INDUSTRY 3003	1479	N/A	N/A	N/A	N/A
INDUSTRY 3013	2287	N/A	N/A	N/A	N/A
INDUSTRY 5001	2505	N/A	N/A	N/A	N/A
YEAR	8239	N/A	N/A	N/A	N/A
SATIS	8232	1	10	7.81	2.097
CONFIRM	8196	1	10	7.05	2.261
IDEAL	8163	1	10	7.14	2.341
OVERALLX	7904	1	10	8.26	1.665
CUSTOMX	7982	1	10	8.26	1.737
WRONGX	7914	1	10	7.70	2.389
OVERALLQ	8031	1	10	8.09	1.868
CUSTOMQ	8031	1	10	8.05	1.997
WRONGQ	7987	1	10	7.75	2.506
PQ	7969	1	10	7.40	2.218
QP	7977	1	10	7.62	2.151
COMP	7962	0	1	N/A	N/A
HANDLE	1371	1	10	6.32	2.941
REPUR	7827	1	10	7.79	2.433
HIGHTOL	5278	0	26	21.82	24.945
LOWPTOL	1072	0	26	35.03	30.420
AGE	8239	18	90	43.60	15.072
EDUCAT	8154	1	5	3.59	1.018
HISPANIC	8094	0	1	N/A	N/A
RACE_1	8077	1	6	N/A	N/A
RACE_2	170	2	6	N/A	N/A
RACE_3	28	3	6	N/A	N/A
RACE_4	7	4	6	N/A	N/A
RACE_5	4	5	6	N/A	N/A
INCOME	7610	1	7	N/A	N/A
GENDER	8156	1	2	N/A	N/A
ZIPCODE	8239	N/A	N/A	N/A	N/A

Table 2
Correlations of key ACSI variables.

	SATIS	CONFIRM	IDEAL	OVERALLX	CUSTOMX	WRONGX	OVERALLQ	CUSTOMQ	WRONGQ	PQ	QP	REPUR
SATIS	1.00											
CONFIRM	.783	1.00										
IDEAL	.810	.748	1.00									
OVERALLX	.505	.422	.506	1.00								
CUSTOMX	.615	.516	.580	.707	1.00							
WRONGX	.351	.333	.339	.412	.462	1.00						
OVERALLQ	.832	.719	.758	.572	.666	.384	1.00					
CUSTOMQ	.837	.725	.761	.525	.658	.373	.865	1.00				
WRONGQ	.598	.573	.524	.328	.420	.536	.599	.627	1.00			
PQ	.824	.727	.744	.436	.540	.327	.716	.730	.519	1.00		
QP	.860	.742	.771	.477	.580	.344	.768	.776	.556	.894	1.00	
REPUR	.820	.716	.777	.461	.548	.289	.752	.758	.525	.737	.769	1.00

Note: The correlation in each cell in Table 2 is significant at the $p<0.01$ level (two-tailed).

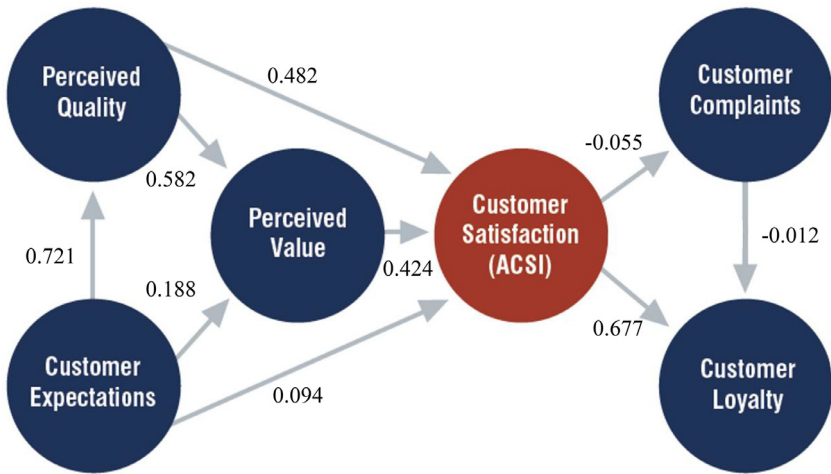


Fig. 2. Commercial airlines.

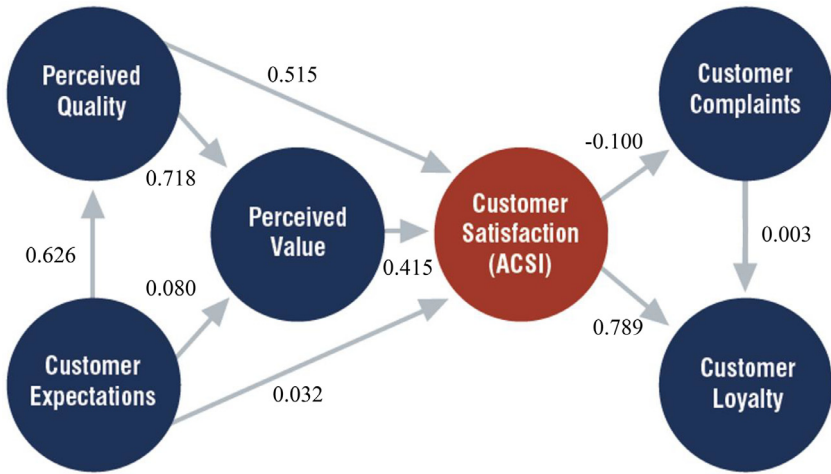


Fig. 3. Commercial banks.

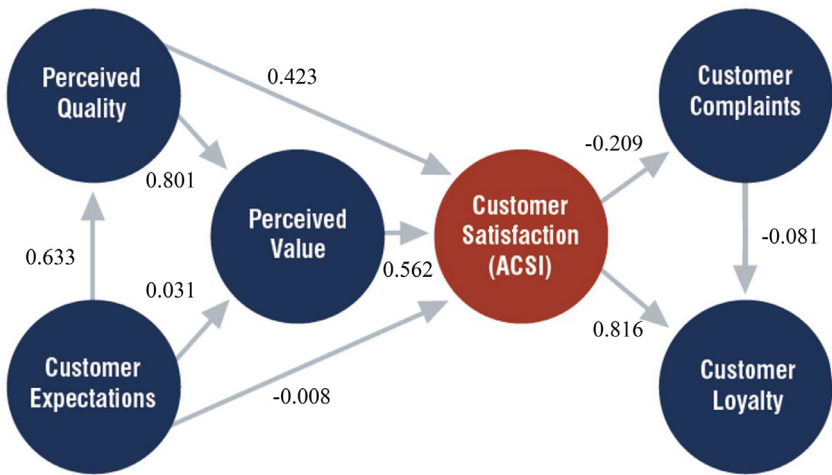


Fig. 4. Internet service providers.

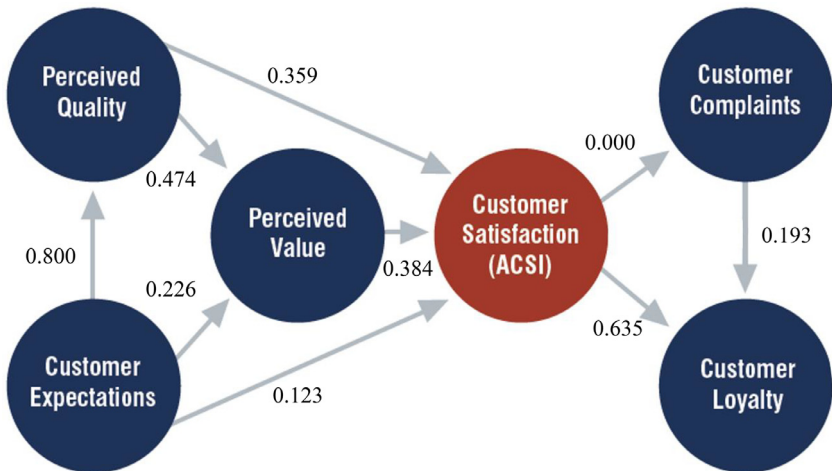


Fig. 5. Processed foods.

The raw ACSI data is collected using a variety of common consumer survey quality control procedures. In addition to screening respondents for actual and recent purchase with the company for which interviewing is being conducted, respondents are required to complete a “CAPTCHA” test to prevent automated bots from completing the survey. In addition, prior to analysis and final inclusion in the sample, the data is cleaned and both overly “fast” and “slow” responders (both indicative of poor attention to the survey items) are eliminated. Finally, straight-line responses, where very little to no variance across survey items exists, are eliminated from the sample prior to analysis.

In summary regarding the design, materials, and methods, we believe that research on customer expectations, (product and service) perceived quality, perceived value, customer satisfaction, customer complaints (and complaint handling), and customer loyalty are probably always going to be constructs entrenched in both consumer behavior and marketing strategy. These constructs are part of the customer journey – and perhaps should be measured at each node and activity link within the customer journey. As such, future research (and teaching as well as

managerial strategizing and decisions) depend on the understanding of the linkages we present in the traditional ACSI model. These linkages (and parameter estimates reported in [Figs. 2-5](#)) can serve as benchmarks for future research on these customer journey metrics.

Ethics Statements

The ACSI team responsible for the surveying of customers of companies in the United States (and around the world) adhered to all industry-standard ethical considerations during the data collection process. In addition, consumer panels are used for the data collection and, as such, the customers (i.e., respondents) have opted in to receive these types of surveys.

As the American Customer Satisfaction Index (ACSI) is not currently a university affiliated entity, the data collection does not fall under the now commonly used university-based “Human Research Protection Programs” and the so-called university-based “Institutional Review Boards.” However, at its founding, the ACSI was formed at the University of Michigan’s Ross School of Business in the early 1990s, and adhered to IRB criteria in place at the time. Since 2012, the ACSI has been a private research entity not affiliated with a university.

Nevertheless, participation in the ACSI survey is completely voluntary and respondents were aware of the participation process and their ability to end participation at any time during the data collection process. The respondent data are fully anonymized and any potential identifying information related to a specific survey respondent was dealt with in strict confidence.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data Availability

[The American Customer Satisfaction Index \(ACSI\): A Sample Dataset and Description \(Original data\)](#) (Mendeley Data).

CRediT Author Statement

Forrest V. Morgeson III: Conceptualization, Formal analysis, Writing – review & editing; **G. Tomas M. Hult:** Conceptualization, Methodology, Writing – review & editing, Visualization; **Udit Sharma:** Methodology, Validation; **Claes Fornell:** Software, Resources, Data curation, Funding acquisition.

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References

- [1] E.W. Anderson, C. Fornell, D.R. Lehmann, Customer satisfaction, market share, and profitability: findings from Sweden, *J. Market.* 58 (3) (1994) 53–66.
- [2] C. Fornell, M.D. Johnson, E.W. Anderson, J. Cha, B.E. Bryant, The American customer satisfaction index: nature, purpose, and findings, *J. Market.* 60 (4) (1996) 7–18.

- [3] C. Fornell, S. Mithas, F.V. Morgeson III, M.S. Krishnan, Customer satisfaction and stock prices: high returns, low risk, *J. Market.* 70 (1) (2006) 3–14.
- [4] C. Fornell, F.V. Morgeson III, The economic and statistical significance of stock returns on customer satisfaction, *Market. Sci.* 28 (5) (2009) 820–825.
- [5] C. Fornell, F.V. Morgeson III, G.T.M. Hult, Stock returns on customer satisfaction do beat the market: gauging the effect of a marketing intangible, *J. Market.* 80 (5) (2016) 92–107.
- [6] C. Fornell, F.V. Morgeson III, G.T.M. Hult, D. VanAmburg, *The Reign of the Customer: Customer-Centric Approaches to Improving Satisfaction*, Palgrave MacMillan, London, United Kingdom, 2020.
- [7] C. Fornell, R.T. Rust, M.G. Dekimpe, The effect of customer satisfaction on consumer spending growth, *J. Market. Res.* 47 (1) (2010) 28–35.
- [8] G.T.M. Hult, F.V. Morgeson, 10 ways to boost customer satisfaction, *Harv. Bus. Rev.* (2023) <https://hbr.org/2023/01/10-ways-to-boost-customer-satisfaction>.
- [9] G.T.M. Hult, F.V. Morgeson, The American Customer Satisfaction Index (ACSI): a sample dataset and description, *Mendeley Data* (2023) V1, doi:10.17632/64xkbj2ry5.1.
- [10] G.T.M. Hult, F.V. Morgeson, N.A. Morgan, S. Mithas, C. Fornell, Do managers know what their customers think and why? *J. Acad. Mark. Sci.* 45 (1) (2017) 37–54.
- [11] G.T.M. Hult, F.V. Morgeson III, U. Sharma, C. Fornell, Customer satisfaction and international business: a multidisciplinary review and avenues for research, *J. Int. Bus. Stud.* 53 (October) (2022) 1695–1733.
- [12] G.T.M. Hult, P.N. Sharma, F.V. Morgeson III, Y. Zhang, Antecedents and consequences of customer satisfaction: Do they differ across online and offline purchases? *J. Retail.* 95 (1) (2019) 10–23.
- [13] C.S. Katsikeas, N.A. Morgan, L. Leonidou, G.T.M. Hult, Assessing performance outcomes in marketing, *J. Market.* 80 (2) (2016) 1–20.
- [14] N.A. Morgan, L.L. Rego, The value of different customer satisfaction and loyalty metrics in predicting business performance, *Market. Sci.* 25 (5) (2006) 426–439.
- [15] F.V. Morgeson III, G.T.M. Hult, S. Mithas, T. Keiningham, C. Fornell, Turning complaining customers into loyal customers: Moderators of the complaint handling–customer loyalty relationship, *J. Market.* 84 (5) (2020) 79–99.
- [16] F.V. Morgeson III, S. Mithas, Does E-government measure up to E-Business? Comparing end-user perceptions of US federal government and E-business websites, *Public Adm. Rev.* 69 (4) (2009) 740–752.
- [17] F.V. Morgeson III, D. VanAmburg, S. Mithas, Misplaced trust? Exploring the structure of the e-government–citizen trust relationship, *J. Public Adm. Res. Theory* 21 (2) (2011) 257–283.
- [18] F.V. Morgeson III, P.N. Sharma, U. Sharma, G.T.M. Hult, Partisan bias and citizen satisfaction, confidence, and trust in the U.S. Federal Government, *Public Manag. Rev.* 24 (12) (2021) 1933–1956.
- [19] L.L. Rego, N.A. Morgan, C. Fornell, Reexamining the market share–customer satisfaction relationship, *J. Market.* 77 (5) (2013) 1–20.