

## B2B Decision-making Styles Scale

*Hendrik Godbersen & Virginia Gully*

### Citation

Godbersen, H. & Gully, V. (2022). B2B Decision-making Styles Scale. *Zusammenstellung sozialwissenschaftlicher Items und Skalen (ZIS)*. <https://doi.org/10.6102/zis326>

### Terms of use

[CC BY-SA 4.0](#)

## Terms of use



This work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/).

## 1 Overview

### Abstract

This measurement instrument determines procurement decision-making styles in the B2B (business-to-business) sector. 26 items measure seven B2B decision-making styles: perfectionistic and quality conscious buyer, confused and poorly informed buyer, fast and careless buyer, novelty and innovation seeking buyer, habitual and loyal buyer, price conscious buyer, and brand and reputation conscious buyer. The B2B Decision-making Styles Scale can be used to segment industrial markets and to evaluate the decision-making of a specific company and its buying centre regarding its procurement process.

### Keywords

Title: B2B Decision-making Styles Scale

Author: Godbersen & Gully

In ZIS since: 2022

Number of Items: 26

Survey Mode: CASI, paper & pencil; the measurement instrument can be adjusted to serve in CATI, CAPI etc. mode

Processing Time: Approx. 3 to 4 minutes

Reliability of the sub-constructs: Cronbach's alpha = .57 to .88; Dillon-Goldstein's rho = .81 to .91

Validity: Evidence for content and criterion validity

Construct: Procurement decision-making styles of companies

Catchwords: Business-to-business, B2B, decision-making-styles, B2B decision-making styles, procurement, B2B procurement, business decisions, procurement decisions, procurement decision-making styles

Language Documentation: English

Language Items: English

Status of Development: validated

## 2 Instrument

### Instruction

Below, you find some statements about the positions and decisions of your company when it comes to procuring goods and services from its suppliers. Please indicate how much you agree with each statement on a scale from 1 (completely disagree) to 6 (completely agree).

### Items

The items of the measurement instrument are presented in Table 1 and allocated to their respective subscales, representing the B2B (business-to-business) decision-making styles:

- PQCB = Perfectionistic and quality conscious buyer
- CPIB = Confused and poorly informed buyer
- FCB = Fast and careless buyer
- NISB = Novelty and innovation seeking buyer
- HLB = Habitual and loyal buyer
- PCB = Price conscious buyer
- BRCB = Brand and reputation conscious buyer

Table 1

#### *Items and Subscales*

No.	Item	Polarity	Subscale
1	Procuring very good quality is very important for my company.	+	PQCB
2	When purchasing products or services, my company attempts to get the very best or perfect choice.	+	PQCB
3	My company normally attempts to buy the best overall quality.	+	PQCB
4	My company puts special efforts into choosing the very best quality products or services.	+	PQCB
5	My company's standards and expectations for product or service purchases are very high.	+	PQCB
6	My company takes the time to carefully purchase the best option.	+	PQCB

7	Suppliers that do the most advertising are usually very good choices for my company.	+	CPIB
8	There are so many suppliers to choose from that the buying agents in my company get often confused.	+	CPIB
9	Sometimes it is hard for my company to choose which suppliers to buy from.	+	CPIB
10	The more information my company receives about products or services, the harder it is for the buying agent to choose the best option.	+	CPIB
11	All the information my company gets on different products or services confuses the buying agents.	+	CPIB
12	When purchasing products or services, my company does not give so much thought or care.	+	FCB
13	In my company, procurement is done very quickly, buying the first product or service or from the first supplier that seems good enough.	+	FCB
14	My company should plan its procurement more carefully than it usually does.	+	FCB
15	My company buys impulsively.	+	FCB
16	My company makes thoughtless purchases that it later regrets.	+	FCB
17	My company usually has the very newest products or services available.	+	NISB
18	My company keeps its inventories up-to-date with the upcoming product or service novelties.	+	NISB
19	My company is keen on buying novelty products or services.	+	NISB
20	My company has favourite suppliers it buys from over and over.	+	HLB
21	Once my company finds a suitable supplier, it holds on to it.	+	HLB
22	My company buys from the same suppliers each time it undergoes purchasing activities.	+	HLB
23	My company searches carefully to find the best value for the money it spends.	+	PCB
24	My company carefully monitors how much it spends.	+	PCB

25	My company considers that the well-known national and international suppliers are the best to buy from.	+	BRCB
26	My company prefers to buy from the best-selling suppliers.	+	BRCB

---

### Response specifications

Generally, it is possible to use any form of rating scale to measure the B2B decision-making styles. However, it is advised to either use a six-step rating scale or a continuous rating scale from 0 to 100. The poles of the scale are labelled “completely disagree” and “completely agree”.

### Scoring

The arithmetic mean of the items of every subscale serves as the value for the respective B2B decision-making style. This means:

- Perfectionistic and quality conscious buyer (PQCB) = mean of items 1 to 6
- Confused and poorly informed buyer (CPIB) = mean of items 7 to 11
- Fast and careless buyer (FCB) = mean of items 12 to 16
- Novelty and innovation seeking buyer (NISB) = mean of items 17 to 19
- Habitual and loyal buyer (HLB) = mean of items 20 to 22
- Price conscious buyer (PCB) = mean of items 23 and 24
- Brand and reputation conscious buyer (BRCB) = mean of items 25 and 26

It should be noted that every dimension of the measurement instrument represents a B2B decision-making style, which could, but do not need to be, mutually exclusive. Thus, a score for every subscale has to be calculated and a general scale score, covering all of the 26 items, does not make sense. It is advised to use forced ratings to avoid missing values, especially with regard to the last four B2B decision making styles as they are represented by only three or two items. If forced ratings are not possible, listwise deletion or any form of imputation is possible, keeping the respective positive and negative aspects in mind.

### Application field

The B2B Decision-making Styles Scale can be used to segment business-to-business markets. It can also be used to assess the decision-making of specific companies and their buying centres with regard to procurement processes.

The B2B Decision-making Styles Scale, as described here, can be applied in online and written questionnaires. However, slight modifications of the instruction allow the use of the instrument in other modes, such as personal or phone interviews.

### 3 Theory

Consumer buying behaviour and the segmentation of consumer markets are widely researched. Amongst others, approaches can be found with regard to the consumers' lifestyles (e.g. Burns & Harrison, 1979; Douglas & Urban, 1977; Villani & Lehmann, 1975) and consumer decision-making characteristics (e.g. Darden & Reynolds, 1971; Sproles & Kendall, 1986; Stephenson & Willet, 1969; Westbrook & Black, 1985). To the best of our knowledge, such approaches do not exist for B2B markets (business-to-business markets). Segmentation approaches and, therewith, the research of buying behaviour within the B2B sector are primarily focused on "hard facts", such as geographic, "demographic", situational, organisational and buying centre related characteristics of companies (e.g. Abratt, 1993; Shapiro & Bonoma, 1984; Weinstein, 2004).

It, however, appears plausible that companies and their buying centres, like consumers, show typical decision-making processes with regard to their procurement processes. Furthermore, it also makes sense to assume that understanding companies and buying centres in their decision-making can contribute more to understanding and predicting their behaviour than just focussing on the afore-mentioned "hard facts", which can be seen as rather "superficial" with regard to making procurement decisions. Thus, we argue that the approach of consumer decision-making types and, therewith, the respective measurement instruments can be transferred from consumer markets to B2B markets, if adjusted accordingly.

Against this backdrop, we defined seven B2B decision-making styles, which are characterised as follows:

- The perfectionistic and quality conscious buyer represents an organisation that constantly and deliberately searches for the best quality products, spending a considerable amount of its time and effort in due diligence and information gathering, to make educated decisions. Since these companies seek to purchase the most perfect choices, their expectations on product excellence and superiority are very high. This makes product quality the most outstanding purchase criterion used in their decision-making. This pursuit of perfectionism goes hand in hand with the company's competitive strategies, which will only be satisfied by products that are differentiable from the rest through high quality. In this sense, only exceptional products will catch this firm's attention, leaving fairly good offers of a lower quality out of the company's choice spectrum.
- The confused and poorly informed buyer represents a company that is overwhelmed by the amount of information it receives from different suppliers and products, making the decision-making process difficult, slow, with a lot of hesitation, uncertainty and insecure decisions. This excess of information confuses the firm and produces doubt on to what extent each offer can satisfy the demands of the company. Additionally, this type of buyer has normally poor to none information sources, and therefore tends to rely on advertising stimuli to make decisions.



- The fast and careless buyer, unlike the perfectionistic and quality conscious buyer, does not plan the procurement process, nor invests time and effort in the buying decision. Such a company settles for the first supplier or product that appears to be sufficient. Since expectations on product performance and attributes are not very high, it makes quick and impulsive purchases. Occasionally, these thoughtless decisions present economic consequences that the firm regrets.
- The novelty and innovation seeking buyer represents a company that is very much into innovative and ground-breaking products, which play with the limits of the established technology. For this reason, its choice spectrum will only include novelty products. Such a company will direct a significant amount of its resources to purchase products within the latest trends because it is important to such a firm to maintain an up-to-date status of its inventories and portfolios.
- The habitual and loyal buyer represents a company whose buying behaviour is marked by its preference and loyalty toward its already existing suppliers. For each purchase situation, the company recurrently chooses its known and favourite suppliers because these satisfy the demands of the company fairly well. Since the company has experience with these suppliers, it has certainty that the business relationship will work, and that the products bought will meet the expectations.
- The price conscious buyer represents a company that usually tries to procure the best choice for the lowest possible price. In other words, it is interested in achieving the best value for money. Such a firm usually seeks for low prices, but does not neglect that the product still needs to provide some utility. The company dedicates resources into budgeting activities that will help to carefully plan and monitor its expenses.
- The brand and reputation conscious buyer represents a company that uses the reputation and popularity of a supplier's brand as the main purchase criterion. Such a company considers only well-known brands in its choice spectrum and, therefore, does not spend much time or research efforts on analysing the real quality or value behind the offer. Furthermore, since the focus of such a company is set on reputation and the brand, the price is of lower relevance in the final purchase decision.

Based on the afore-described characterisation of the B2B decision-making styles, it can be assumed that these decision-making styles can predict companies' expectations on service quality, price level, price value and price transparency of their suppliers.

It is assumed that the expectation on service quality is positively affected by the following B2B decision-making style: perfectionistic and quality conscious buyer. A negative effect is expected for the following B2B decision-making styles: confused and poorly informed buyer, and fast and careless buyer. No effect on the expectations on service quality is expected for the following B2B decision-making styles: novelty

and innovation seeking buyer, habitual and loyal buyer, price conscious buyer, and brand and reputation conscious buyer.

It is assumed that the expectation on the price level is positively affected by the following B2B decision-making style: confused and poorly informed buyer, fast and careless buyer, habitual and loyal buyer, and price conscious buyer. For the following B2B decision-making styles no effect on the expectation on the price level is assumed: perfectionistic and quality conscious buyer, novelty and innovation seeking buyer, and brand and reputation conscious buyer.

Positive effects on the expectation on price value are hypothesised for the following B2B decision-making styles: perfectionistic and quality conscious buyer, habitual and loyal buyer, and price conscious buyer. Negative effects on the expectation on price level can be assumed for the following B2B decision-making style: confused and poorly informed buyer. The following B2B decision-making styles should have no effect on expectation on price level: fast and careless buyer, novelty and innovation seeking buyer, and brand and reputation buyer.

With regard to the expectation on price transparency, positive effects can be assumed for the following B2B decision-making styles: perfectionistic and quality conscious buyer, habitual and brand loyal buyer, and price and conscious buyer. Negative effects on the expectation on price transparency can be hypothesised for the following B2B decision-making style: confused and poorly informed buyer. The following B2B decision-making styles should have no effect on the expectation on price transparency: fast and careless buyer, novelty and innovation seeking buyer, and brand and reputation conscious buyer.

## 4 Scale development

### Item generation and selection

As described in the theory section, it appears plausible that consumers decision-making styles can be transferred to the decision-making of companies. Against this backdrop, we based the development of the B2B Decision-making Styles Scale on the Consumer Styles Inventory, developed by Sproles and Kendall (1986). The Consumer Styles Inventory consists of 40 items over eight dimensions. We focused only on seven dimensions because the five items of the “recreational, hedonistic consumer” cannot be applied to the B2B context, as buying centres and procurement managers do not purchase goods and services for their own (emotional) benefits but for the (rational) purpose of their employer. We reformulated the remaining 35 items of the afore-mentioned measurement instrument so that they can be applied in a B2B setting by not referring to the individual consumer but to the respective employer of the respondent. For instance, our first item “Procuring very good quality is very important for my company.” derives from Sproles and Kandall's (1986) original item “Getting very good quality is very important to me.”

To empirically refine the measurement instrument, we applied a principal component analysis with varimax rotation and determined Cronbach's alpha for the resulting components, using the R packages psych (Revelle, 2022) and psy (Falissard, 2022). We could extract 8 components with an eigenvalue larger than 1 (cf. Table 2).

Table 2

*Principal Component Analysis of the initially analysed 35 Items – Eigenvalues (N = 314)*

Component	Eigenvalue	Component	Eigenvalue	Component	Eigenvalue
1	6.85	13	0.81	25	0.42
2	5.33	14	0.73	26	0.41
3	1.88	15	0.69	27	0.39
4	1.57	16	0.68	28	0.34
5	1.38	17	0.64	29	0.32
6	1.29	18	0.62	30	0.31
7	1.20	19	0.59	31	0.30
8	1.07	20	0.54	32	0.28
9	0.99	21	0.51	33	0.26
10	0.96	22	0.49	34	0.25
11	0.91	23	0.46	35	0.22
12	0.85	24	0.45		

Table 3 shows the loadings, communalities and Cronbach's alpha for the items and components. Following Comrey and Lee (1992), loadings (substantially) lower than .55 can be regarded as rather poor. Subsequently, we eliminated six items.

The item “My company usually chooses the more expensive supplier brands.” had to be inverted due to the inverse loadings of the other items of the respective component. Then, when recalculating the loadings without the six eliminated items, mentioned above, the loading of the inverted item dropped substantially to .35 so that this item, too, was eliminated.

Furthermore, component eight with two items was eliminated because of a poor Cronbach's alpha of .40, following Hair, Page and Brunsveld (2019) who consider a minimum threshold for Cronbach's alpha at .60. The elimination of this component is also supported by the content of the two respective items, which appear to be inconsistent and might be even considered contradictory (“To get variety, my company buys from different suppliers and chooses different brands.” and “My company purchases as much as possible at discount prices.”).

Table 3

### Principal Component Analysis of the Initially Analysed 35 Items – Loadings, Communalities (h<sup>2</sup>) and Cronbach's Alpha (N = 314)

Item	Dimension in the Consumer Decision-making Styles Instrument	Perfectionistic and quality conscious buyer	Confused and poorly informed buyer	Past and careless buyer	Novelty and innovation seeking buyer	Habitual and loyal buyer	Price conscious buyer	Brand and reputation conscious buyer	Component 8	h <sup>2</sup>	Cronbach's alpha
Procuring very good quality is very important for my company.	Perfectionistic, high quality conscious consumer	.78	-.10	-.08	-.11	.15	.06	.13	.18	.71	.88
When purchasing products or services, my company attempts to get the very best or perfect choice.	Perfectionistic, high quality conscious consumer	.69	-.05	.18	.16	.17	-.13	.06	.13	.61	
My company normally attempts to buy the best quality.	Perfectionistic, high quality conscious consumer	.82	-.02	-.09	.07	.07	.02	.09	.10	.71	
My company puts special efforts into choosing the very best quality products or services.	Perfectionistic, high quality conscious consumer	.79	-.06	-.06	.14	.04	.00	.08	.04	.66	
My company's standards and expectations for product or service purchases are very high.	Perfectionistic, high quality conscious consumer	.74	-.11	-.11	.07	.02	-.02	.16	.01	.63	
My company takes the time to carefully purchase the best option.	Impulsive, careless consumer	.67	.00	-.14	.35	-.07	.17	.11	.07	.65	
Suppliers that do the most advertising are usually very good choices for my company.	Brand conscious, price equals quality consumer	-.69	.59	.27	.27	.12	.18	.03	.09	.54	.81
There are so many suppliers to choose from that the buying agents in my company get often confused.	Confused by overchoice consumer	-.21	.73	.27	.06	.04	-.01	.09	.07	.47	
Sometimes it is hard for my company to choose which suppliers to buy from.	Confused by overchoice consumer	.03	.70	.07	-.10	.07	.02	.02	.00	.52	
The more information my company receives about products or services, the harder it is for the buying agent to choose the best option.	Confused by overchoice consumer	-.06	.73	.22	.13	-.01	.16	.10	-.01	.64	
All the information my company gets on different products or services confuses the buying agents.	Confused by overchoice consumer	.10	.66	.37	-.05	-.03	.10	.05	.03	.54	
When purchasing products or services, my company does not give so much thought or care.	Perfectionistic, high quality conscious consumer	-.30	.25	.60	-.04	.11	.11	.00	-.60	.49	
In my company, procurement is done very quickly, buying the first product or service or from the first supplier that seems good enough.	Perfectionistic, high quality conscious consumer	-.17	.38	.56	.06	.03	.21	.19	.01	.57	.77
My company should plan to procurement more carefully than it usually does.	Impulsive, careless consumer	-.01	.18	.56	-.09	.05	.00	.24	.02	.47	
Decision Making Styles: My company buys impulsively.	Impulsive, careless consumer	-.05	.20	.72	.05	-.07	.03	.03	-.04	.58	
My company makes thoughtless purchases that it later regrets.	Impulsive, careless consumer	-.16	.36	.61	.06	.03	.18	.11	.05	.57	
My company usually has the very newest products or services available.	Novelty (fashion) conscious consumer	.29	.05	.06	.70	-.15	.09	.06	-.04	.62	
My company keeps its inventories up-to-date with the upcoming product or service novelties.	Novelty (fashion) conscious consumer	.29	.05	-.04	.76	.10	-.10	.08	.04	.70	
My company is keen on buying novelty products or services.	Novelty (fashion) conscious consumer	.10	.05	.71	-.05	-.04	.04	.22	.07	.57	.85
My company has favorite suppliers it buys from over and over.	Habitual, brand-loyal consumer	.09	.04	.08	.50	.78	.08	.14	.12	.66	
Once my company finds a suitable supplier, it holds on to it.	Habitual, brand-loyal consumer	.22	.16	.00	.01	.47	-.10	.21	-.10	.59	
My company buys from the same suppliers each time it undergoes purchasing activities.	Habitual, brand-loyal consumer	.01	.07	.05	.08	.48	.12	.13	.01	.51	
My company usually chooses the more expensive supplier brands.	Brand conscious, price equals quality consumer	.08	.38	.05	.06	.13	.66	.05	.05	.61	
My company searches carefully to find the best value for the money it spends.	Price conscious, value for money consumer	.45	.01	-.25	.33	.01	-.32	-.06	.19	.68	
My company carefully monitors how much it spends.	Impulsive, careless consumer	.42	.04	.36	.21	.05	-.56	-.07	.12	.47	.57
My company considers that the well-known national and international suppliers are the best to buy from.	Brand conscious, price equals quality consumer	.21	.11	.13	.29	.05	.07	.47	.03	.62	
My company prefers to buy from the best selling suppliers.	Brand conscious, price equals quality consumer	.06	.13	.11	.24	.13	.22	.54	.09	.55	
To get variety, my company buys from different suppliers and chooses different brands.	Novelty (fashion) conscious consumer	.09	.20	-.17	.16	.06	.16	.07	.65	.58	
My company purchases as much as possible at discount prices.	Price conscious, value for money consumer	.10	-.03	.10	-.04	.01	-.16	.17	.88	.54	
Specialized suppliers offer the best products or services for my company.	Brand conscious, price equals quality consumer	.37	-.04	.02	.02	.21	.07	.50	.11	.53	.40 excluded due to low loadings
A product or service does not need to be perfect, or the best, to satisfy the demands of my company.	Perfectionistic, high quality conscious consumer	-.28	.29	.34	-.15	.11	.26	.19	.21	.46	
My company considers that the higher the price of a product or service, the better its quality.	Brand conscious, price equals quality consumer	-.10	.46	.07	.30	.26	.43	.07	.18	.56	
Product appearance is very important for my company.	Novelty (fashion) conscious consumer	.34	.00	.30	.34	.23	.19	.27	.14	.48	
The lower price products or services are usually my company's choice.	Price conscious, value for money consumer	-.26	-.11	.48	.07	.05	-.25	.17	.37	.55	
My company changes suppliers on a regular basis.	Habitual, brand-loyal consumer	-.04	.21	.15	-.05	-.42	.20	-.28	.41	.53	

After the just described refinement of the B2B Decision-making Styles Scale through principal component analysis, we confirmed the allocation of the items to their respective components by determining their loadings (see Section Item analyses) and tested the adequacy of our measurement instrument by determining Cronbach's alpha, Dillon-Goldstein's rho and the average variance extracted (see Section Reliability), using the R package plspm (Sanchez, 2013).

## Samples

The B2B Decision-making Styles Scale was applied in an online survey between 30 October 2020 and 7 March 2021. Ad-hoc sampling was used to recruit the participants through online procurement forums, email and social media, mainly LinkedIn. In total, 473 people responded to the questionnaire, with, eventually, 314 fully answered questionnaire resulting. These fully answered questionnaires were used

for the analysis. At the start of the questionnaire the company demographics were measured. Socio-demographic variables of the respondents were not collected, as not the individual decision-making styles but the companies' decision-making styles in procurement processes were evaluated. The headquarters of the participants' companies are based in Africa (1.91%), Asia (14.33%), Australia and Oceania (.96%), Europe (40.13%), Latin America (23.89%), Middle East (4.78%), and North America (14.01%). 53.19% of the participating companies have an international scope, 22.29% a national scope, 8.92% a regional scope and 15.61% a local scope. The size of the participating companies varied from small to large firms, with 15.61% having 1 to 9, 4.46% 10 to 19, 9.87% 20 to 49, 14.33% 50 to 249 and 55.73% 250 or more employees.

### Item analyses

We used R (R Development Core Team, 2017) and the R package *plspm* (Sanchez, 2013) to determine the loadings of the items on their constructs. The results are presented in Table 4. The majority of the loadings is higher than .70; and no item loads below .60 on its construct. Against this backdrop, the loadings and, therewith, the structure of our measurement instrument can be considered satisfactory.

Table 4

*Loadings of the Items on Their Respective Constructs (N = 314)*

No.	Constructs and items	Loadings
<b>Perfectionistic and quality conscious buyer</b>		
1	Procuring very good quality is very important for my company.	.79
2	When purchasing products or services, my company attempts to get the very best or perfect choice.	.79
3	My company normally attempts to buy the best overall quality.	.83
4	My company puts special efforts into choosing the very best quality products or services.	.81
5	My company's standards and expectations for product or service purchases are very high.	.79
6	My company takes the time to carefully purchase the best option.	.75
<b>Confused and poorly informed buyer</b>		
7	Suppliers that do the most advertising are usually very good choices for my company.	.71

8	There are so many suppliers to choose from that the buying agents in my company get often confused.	.83
9	Sometimes it is hard for my company to choose which suppliers to buy from.	.60
10	The more information my company receives about products or services, the harder it is for the buying agent to choose the best option.	.83
11	All the information my company gets on different products or services confuses the buying agents.	.78
<hr/>		
<b>Fast and careless buyer</b>		
12	When purchasing products or services, my company does not give so much thought or care.	.72
13	In my company, procurement is done very quickly, buying the first product or service or from the first supplier that seems good enough.	.83
14	My company should plan its procurement more carefully than it usually does.	.61
15	My company buys impulsively.	.73
16	My company makes thoughtless purchases that it later regrets.	.72
<hr/>		
<b>Novelty and innovation seeking buyer</b>		
17	My company usually has the very newest products or services available.	.81
18	My company keeps its inventories up-to-date with the upcoming product or service novelties.	.89
19	My company is keen on buying novelty products or services.	.71
<hr/>		
<b>Habitual and loyal buyer</b>		
20	My company has favourite suppliers it buys from over and over.	.76
21	Once my company finds a suitable supplier, it holds on to it.	.84
22	My company buys from the same suppliers each time it undergoes purchasing activities.	.68
<hr/>		
<b>Price conscious buyer</b>		

23	My company searches carefully to find the best value for the money it spends.	.92
24	My company carefully monitors how much it spends.	.91
<b>Brand and reputation conscious buyer</b>		
25	My company considers that the well-known national and international suppliers are the best to buy from.	.64
26	My company prefers to buy from the best-selling suppliers.	.96

### Item parameters

Table 5 shows the descriptive statistics for each item as well as their weight and the corrected item scale correlation for their respective construct.

Table 5

*Arithmetic Mean (M), Standard Deviation (SD), Kurtosis (K) and Skewness (S) of the Items, and Weight (W) and Corrected Item Scale Correlation (r) of the Items for Their Respective Constructs (N = 314)*

No.	Constructs and items	M	SD	K	S	W	r
<b>Perfectionistic and quality conscious buyer</b>							
1	Procuring very good quality is very important for my company.	5.12	1.02	4.38	-1.24	.17	.76
2	When purchasing products or services, my company attempts to get the very best or perfect choice.	4.90	1.02	4.16	-0.96	.24	.72
3	My company normally attempts to buy the best overall quality.	4.92	1.15	3.79	-1.05	.23	.79
4	My company puts special efforts into choosing the very best quality products or services.	4.89	1.16	3.39	-0.97	.20	.76
5	My company's standards and expectations for product or service purchases are very high.	4.94	1.04	3.01	-0.79	.22	.73
6	My company takes the time to carefully purchase the best option.	4.90	1.12	3.90	-1.03	.20	.70
<b>Confused and poorly informed buyer</b>							

7	Suppliers that do the most advertising are usually very good choices for my company.	2.87	1.48	2.31	0.48	.27	.62
8	There are so many suppliers to choose from that the buying agents in my company get often confused.	2.71	1.41	2.61	0.61	.32	.76
9	Sometimes it is hard for my company to choose which suppliers to buy from.	3.25	1.32	2.16	-0.03	.16	.53
10	The more information my company receives about products or services, the harder it is for the buying agent to choose the best option.	2.83	1.47	2.26	0.42	.30	.76
11	All the information my company gets on different products or services confuses the buying agents.	2.52	1.33	2.86	0.74	.26	.70
<b>Fast and careless buyer</b>							
12	When purchasing products or services, my company does not give so much thought or care.	1.97	1.25	4.04	1.32	.29	.60
13	In my company, procurement is done very quickly, buying the first product or service or from the first supplier that seems good enough.	2.72	1.54	2.24	0.58	.38	.72
14	My company should plan its procurement more carefully than it usually does.	3.66	1.52	2.02	-0.07	.17	.57
15	My company buys impulsively.	2.16	1.33	3.10	1.03	.24	.65
16	My company makes thoughtless purchases that it later regrets.	2.44	1.43	2.95	0.89	.27	.65
<b>Novelty and innovation seeking buyer</b>							
17	My company usually has the very newest products or services available.	4.08	1.28	2.47	-0.33	.39	.69
18	My company keeps its inventories up-to-date with the upcoming product or service novelties.	4.32	1.39	2.88	-0.72	.53	.76
19	My company is keen on buying novelty products or services.	3.78	1.46	2.21	-0.28	.30	.59
<b>Habitual and loyal buyer</b>							
20	My company has favourite suppliers it buys from over and over.	4.41	1.26	3.10	-0.69	.40	.61



21	Once my company finds a suitable supplier, it holds on to it.	4.63	1.15	3.02	-0.68	.57	.58
22	My company buys from the same suppliers each time it undergoes purchasing activities.	3.79	1.30	2.56	-0.20	.32	.59
<b>Price conscious buyer</b>							
23	My company searches carefully to find the best value for the money it spends.	5.08	1.12	4.58	-1.35	.56	.80
24	My company carefully monitors how much it spends.	5.15	1.10	4.61	-1.40	.53	.78
<b>Brand and reputation conscious buyer</b>							
25	My company considers that the well-known national and international suppliers are the best to buy from.	4.12	1.38	2.57	-0.48	.30	.64
26	My company prefers to buy from the best-selling suppliers.	3.88	1.36	2.30	-0.19	.84	.60

The corssloadings of the Items on the constructs are represented in Table 6.

Table 6

*Crossloadings of the Items (N = 314)*

No.	Constructs and items	1	2	3	4	5	6	7
<b>Perfectionistic and quality conscious buyer (1)</b>								
1	Procuring very good quality is very important for my company.	.79	-.17	-.22	.34	.25	.35	.17
2	When purchasing products or services, my company attempts to get the very best or perfect choice.	.79	-.16	-.29	.37	.21	.51	.15
3	My company normally attempts to buy the best overall quality.	.83	-.12	-.23	.35	.22	.41	.18
4	My company puts special efforts into choosing the very best quality products or services.	.81	-.13	-.22	.39	.19	.41	.16
5	My company's standards and expectations for product or service purchases are very high.	.79	-.26	-.32	.31	.13	.37	.11

6	My company takes the time to carefully purchase the best option.	.75	-.12	-.29	.45	.06	.56	.09
<b>Confused and poorly informed buyer (2)</b>								
7	Suppliers that do the most advertising are usually very good choices for my company.	-.08	.71	.48	.20	.19	-.05	.35
8	There are so many suppliers to choose from that the buying agents in my company get often confused.	-.26	.83	.54	.06	.12	-.18	.27
9	Sometimes it is hard for my company to choose which suppliers to buy from.	-.07	.60	.34	.04	.12	-.08	.20
10	The more information my company receives about products or services, the harder it is for the buying agent to choose the best option.	-.12	.83	.50	.15	.12	-.18	.36
11	All the information my company gets on different products or services confuses the buying agents.	-.20	.78	.49	-.02	.07	-.23	.25
<b>Fast and careless buyer (3)</b>								
12	When purchasing products or services, my company does not give so much thought or care.	-.29	.42	.72	-.08	.11	-.35	.14
13	In my company, procurement is done very quickly, buying the first product or service or from the first supplier that seems good enough.	-.25	.55	.83	.03	.12	-.31	.30
14	My company should plan its procurement more carefully than it usually does.	-.14	.41	.61	-.01	.13	-.18	.25
15	My company buys impulsively.	-.20	.38	.73	.00	.05	-.23	.18
16	My company makes thoughtless purchases that it later regrets.	-.30	.52	.72	-.10	.02	-.34	.18
<b>Novelty and innovation seeking buyer (4)</b>								
17	My company usually has the very newest products or services available.	.39	.13	.01	.81	.23	.22	.34
18	My company keeps its inventories up-to-date with the upcoming product or service novelties.	.43	.08	-.07	.89	.20	.36	.30

19	My company is keen on buying novelty products or services.	.28	.10	-.02	.71	.07	.23	.24
<b>Habitual and loyal buyer (5)</b>								
20	My company has favourite suppliers it buys from over and over.	.13	.10	.08	.16	.76	.02	.10
21	Once my company finds a suitable supplier, it holds on to it.	.25	.13	.06	.20	.84	.12	.23
22	My company buys from the same suppliers each time it undergoes purchasing activities.	.08	.14	.15	.13	.68	.02	.24
<b>Price conscious buyer (6)</b>								
23	My company searches carefully to find the best value for the money it spends.	.53	-.16	-.34	.35	.07	.92	-.00
24	My company carefully monitors how much it spends.	.49	-.20	-.39	.28	.09	.91	-.04
<b>Brand and reputation conscious buyer (7)</b>								
25	My company considers that the well-known national and international suppliers are the best to buy from.	.28	.21	.15	.35	.18	.11	.64
26	My company prefers to buy from the best-selling suppliers.	.11	.39	.29	.30	.23	-.06	.96

## 5 Quality criteria

### Objectivity

The B2B Decision-making Styles Scale is designed as an online or written questionnaire; however, it can be adjusted to personal or phone interviews with relative ease. When the measurement instrument is applied in its online or written version, a high degree of objectivity is indicated as the researcher cannot personally influence the participants during the collection of data.

When we collected the data for the development of the B2B Decision-making Styles Scale, we only provided our participants with a link to an online questionnaire and did not directly interfere when they answered this online questionnaire. This reduction of our personal involvement in the data collection process was meant to secure a high degree of objectivity.

To secure the objectivity of the B2B Decision-making Styles Scale, the following aspects are advised:

- (1) When applying the scale in a questionnaire, the instructions, the presented order of the items (or a randomisation of the items) and the labelling of the scale poles ("completely disagree" and "completely agree"), presented in the Section 2 Instrument, should be followed.
- (2) When analysing the data, scoring of the subscales should be realised by calculating the arithmetic mean of all of the items of one subscale, i.e. B2B decision-making style, for each participant (cf. Section 2 Instrument).
- (3) When interpreting the results, the results of our study, i.e. the arithmetic means of the B2B decision-making styles, should serve as general benchmarks (cf. Section Descriptive statistics), as we have covered a broad range of companies from multiple international regions (cf. Section Samples). However, it should be noted that it might be fruitful to develop refined benchmarks in particular industries through future research.

### Reliability

We determined Cronbach's alpha, Dillon-Goldstein's rho and the average variance extracted (AVE) to test the adequacy of our measurement instrument (Table 7). The respective values can be considered satisfactory with the lowest values for Cronbach's alpha of .57, Dillon-Goldstein's rho of .81 and AVE of .52.

Table 7

*Adequacy of the Measurement Instrument - Cronbach's Alpha, Dillon-Goldstein's Rho and Average Variance Extracted (AVE) (N = 314)*

Construct	Cronbach's alpha	Dillon-Goldstein's rho	AVE
Perfectionistic and quality conscious buyer	.88	.91	.63

Confused and poorly informed buyer	.81	.87	.57
Fast and careless buyer	.78	.85	.52
Novelty and innovation seeking buyer	.74	.85	.66
Habitual and loyal buyer	.65	.81	.58
Price conscious buyer	.81	.91	.84
Brand and reputation conscious buyer	.57	.82	.67

---

### Validity

Indications for **content validity** can be drawn from a comparison of the B2B decision-making styles, described in the theory section, and the items allocated to these subconstructs, as described in the Section Item analysis. We regard it a fair assumption that the items reflect their respective B2B decision-making style well, which should be exemplified by the perfectionistic and quality conscious buyer.

The following items reflect the perfectionistic and quality conscious buyer:

- (1) Procuring very good quality is very important for my company.
- (2) When purchasing products or services, my company attempts to get the very best or perfect choice.
- (3) My company normally attempts to buy the best overall quality.
- (4) My company puts special efforts into choosing the very best quality products or services.
- (5) My company's standards and expectations for product or service purchases are very high.
- (6) My company takes the time to carefully purchase the best option.

These items are reflected in the characterisation of the perfectionistic and quality conscious buyer (also cf. theory section):

- The perfectionistic and quality conscious buyer represents an organisation that constantly and deliberately searches for the best quality products, spending a considerable amount of its time and effort in due diligence and information gathering, to make educated decisions. Since these companies seek to purchase the most perfect choices, their expectations on product excellence and superiority are very high. This makes product quality the most outstanding purchase criterion used in their decision-making. This pursuit of perfectionism goes hand in hand with the company's competitive strategies, which will only be satisfied by products that are differentiable from the rest through high quality. In this sense, only exceptional products will catch this firm's attention, leaving fairly good offers of a lower quality out of the company's choice spectrum.

It should be noted that the number of our factors, i.e. B2B decision-making styles, deviates from the number of factors Sproles and Kendall (1986) developed as consumer decision-making styles. Furthermore, our allocation of items to these factors does not entirely match the one of Sproles and Kendall (1986). Subsequently, our characterisation of B2B decision-making styles is not entirely identical to the description of consumer decision-making styles by Sproles and Kendall (1986). An explanation for this can be found in the fundamental differences that underly the behaviour and objectives of consumers and businesses. According to the theory of economics, consumers strive after maximising their utilities, whilst companies strive after maximising their profits (e.g. Mankiw & Taylor, 2017). The consumers' utilities can be linked to emotions and the businesses' orientation on profits can be linked to rather rational decision-making. This difference between consumer and business decision making is also reflected in our factors, i.e. B2B decision-making styles. For instance, we could not replicate the recreational, hedonistic shopper or the impulsive shopper, Sproles and Kendall (1986) found (cf. Section Item generation and selection). This deviation from the Consumer Styles Inventory is plausible, as the two mentioned consumer styles are strongly associated with emotions, which do not fit into the predominantly rational "logic" of businesses.

To test the **criterion validity** of our measurement instrument, we examined the effects the B2B decision-making styles have on the expectations on service quality, price level, price value and price transparency, which are hypothesised in the theory section. The operationalisation of the expectations on service quality was based on the SERVQUAL approach by Parasuraman et al. (1988). To measure the expectations on price level, price value and price transparency, we adopted the price image scale, developed by Zielke (2006), to the B2B environment.

Figure 1 represents the results of our plspm analysis regarding the effects of the B2B decision-making styles on service quality. The results match all of the hypothesised effects, described in the theory section, with the exception of the effect of a brand and reputation conscious buyer on service quality.

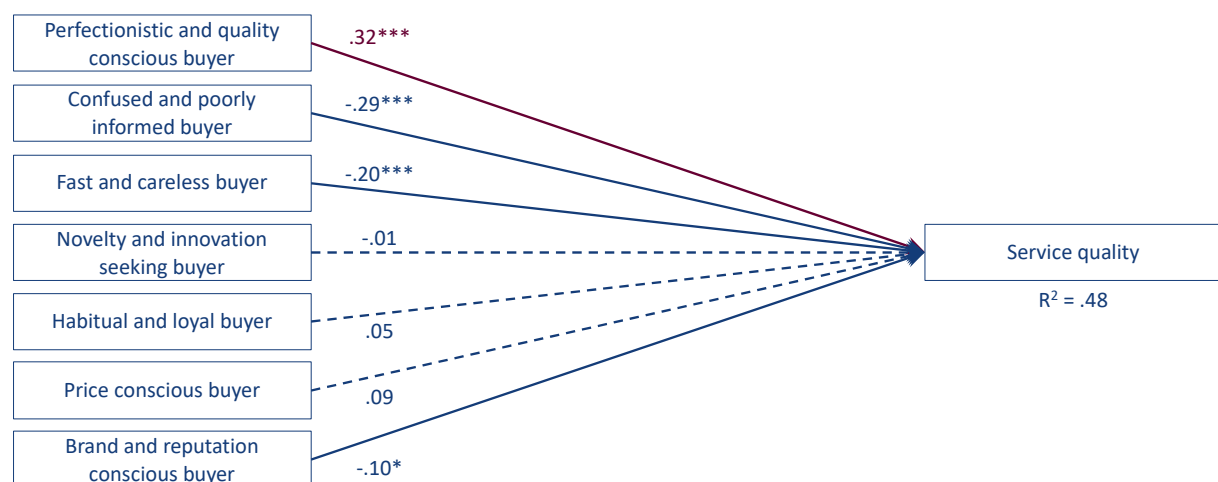


Figure 1: Effects of the B2B decision-making styles on the relevance of service quality with path coefficients, significance level (\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ ) and  $R^2$  ( $N = 314$ )

Figure 2 represents the results of our plspm analysis regarding the effects of the B2B decision-making styles on price level. The results match all of the hypothesised effects, described in the theory section, with the exception of the effect of a novelty and innovation seeking buyer on price level.

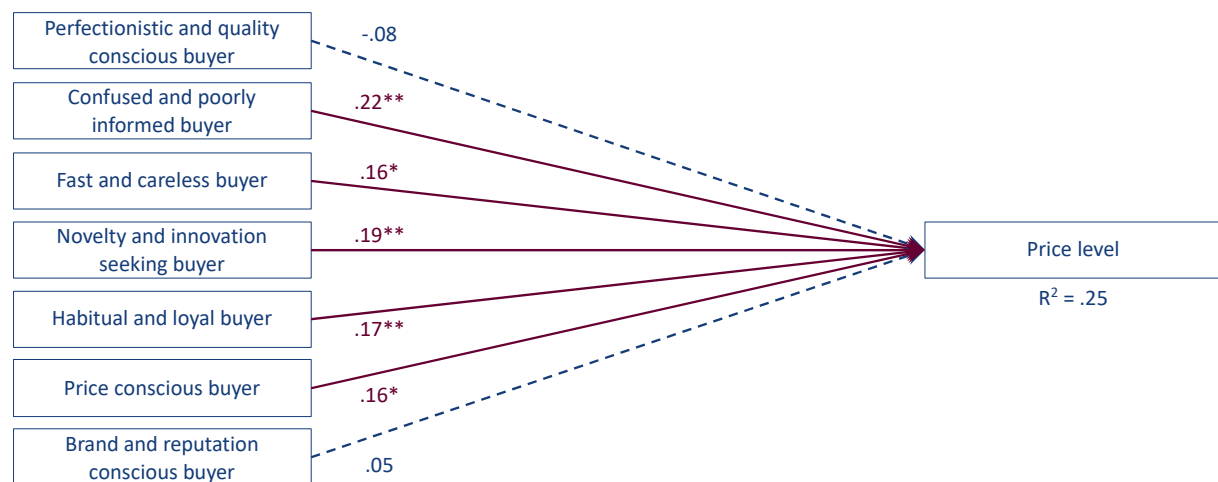


Figure 2: Effects of the B2B decision-making styles on the relevance of the price level with path coefficients, significance level (\*p < .05; \*\*p < .01; \*\*\*p < .001) and  $R^2$  (N = 314)

Figure 3 represents the results of our plspm analysis regarding the effects of the B2B decision-making styles on price value. The results match all of the hypothesised effects, described in the theory section, with the exception of the effect of a brand and reputation conscious buyer on price value.

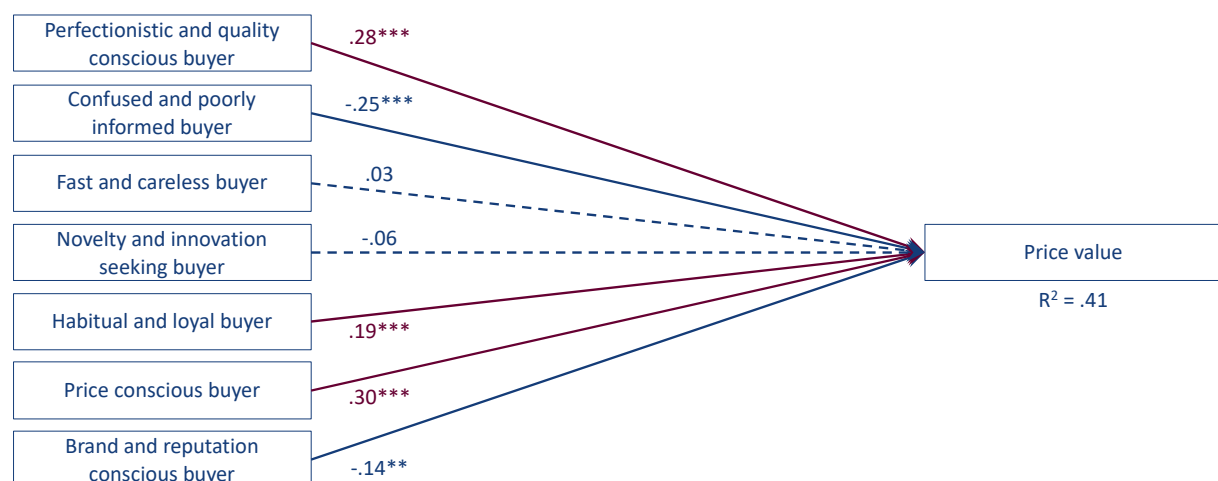


Figure 3: Effects of the B2B decision-making styles on the relevance of the price value with path coefficients, significance level (\*p < .05; \*\*p < .01; \*\*\*p < .001) and  $R^2$  (N = 314)

Figure 4 represents the results of our plspm analysis regarding the effects of the B2B decision-making styles on price transparency. The results match all of the hypothesised effects, described in the theory section.

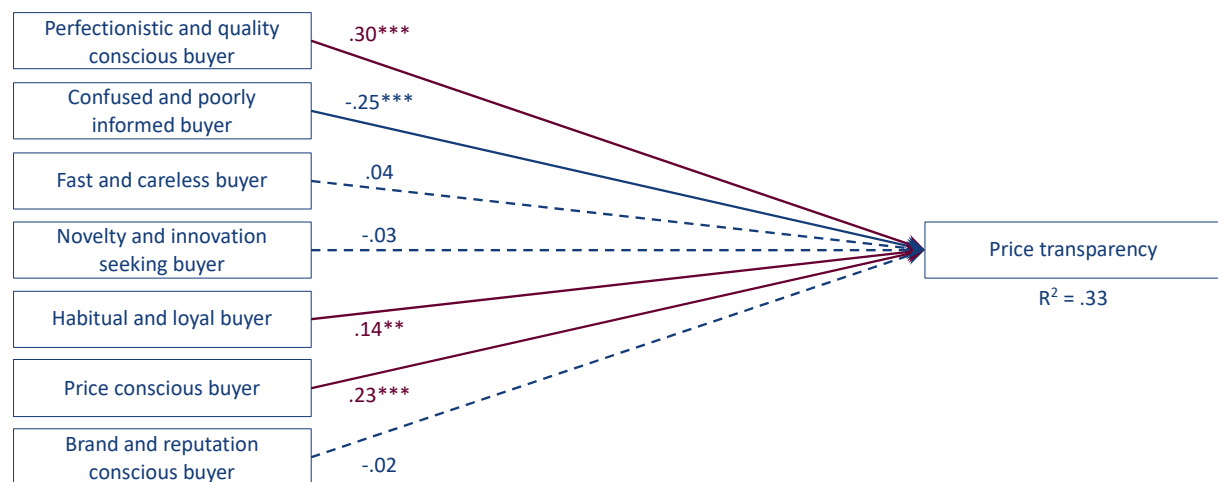


Figure 4: Effects of the B2B decision-making styles on the relevance of the price transparency with path coefficients, significance level (\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ ) and  $R^2$  ( $N = 314$ )

In summary, 25 of the 28 hypothesised effects could be confirmed, indicating a satisfactory criterion validity of the B2B Decision-making Styles Scale.

### Descriptive statistics (norming)

The descriptive statistics of the examined constructs are represented in Table 8.

Table 8

Descriptive statistics of the constructs on a scale from 1 to 6 ( $N = 314$ )

Construct	Min.	Max.	M	SD
Perfectionistic and quality conscious buyer	1.17	6.00	4.95	0.86
Confused and poorly informed buyer	1.00	5.60	2.83	1.06
Fast and careless buyer	1.00	5.60	2.59	1.03
Novelty and innovation seeking buyer	1.00	6.00	4.06	1.12
Habitual and loyal buyer	2.00	6.00	4.28	0.94
Price conscious buyer	1.00	6.00	5.11	1.02
Brand and reputation conscious buyer	1.00	6.00	4.00	1.15



The correlation matrix of the subscales is represented in Table 9.

Table 9

*Correlation Matrix of the Subscales (\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ ) (N = 314)*

Construct	1	2	3	4	5	6
Perfectionistic and quality conscious buyer (1)						
Confused and poorly informed buyer (2)	-.19***					
Fast and careless buyer (3)	-.32***	.63***				
Novelty and innovation seeking buyer (4)	.45***	.13*	-.04			
Habitual and loyal buyer (5)	.20***	.17**	.13*	.19***		
Price conscious buyer (6)	.55***	-.19**	-.38***	.33***	.07	
Brand and reputation conscious buyer (7)	.24***	.35***	.27***	.39***	.25***	.03

## 6 Literature and data sources

### Contact details

Prof. Dr. Hendrik Godbersen  
FOM University of Applied Sciences, Study Centre Stuttgart  
Rotebühlstr. 121, 70178 Stuttgart, Germany  
hendrik.godbersen@fom.de

### References

- Abratt, R. (1993). Market Segmentation Practices of Industrial Marketers. *Industrial Marketing Management*, 22, 79–84. [https://doi.org/10.1016/0019-8501\(93\)90033-4](https://doi.org/10.1016/0019-8501(93)90033-4)
- Burns, A. C., & Harrison, M. C. (1979). A Test of the Reliability of Psychographics. *Journal of Marketing Research*, 16(1), 32–38. <https://doi.org/10.1177/002224377901600105>
- Comrey, A.L., & Lee, H.B. (1992). *A First Course in Factor Analysis* (2<sup>nd</sup> ed.). Lawrence Erlbaum.
- Darden, W. R., & Reynolds, F. D. (1971). Shopping Orientations and Product Usage Rates. *Journal of Marketing Research*, 8(4), 505–508. <https://doi.org/10.1177/002224377100800416>
- Douglas, S. P., & Urban, C. D. (1977). Life-Style Analysis to Profile Women in International Markets: Can the same segmentation strategies be used? *Journal of Marketing*, 41(3), 46–54. <https://doi.org/10.1177/002224297704100305>
- Falissard, B. (2022). *Package ‘psy’, Various Procedures Used in Psychometrics*. Available at: <https://cran.r-project.org/web/packages/psy/psy.pdf>.
- Hair, J. F., Page, M., & Brunsveld, N. (2019). *Essentials of business research methods* (4th ed.). Routledge. <https://doi.org/10.4324/9780429203374>
- Mankiw, N.G. & Taylor, M.P. (2017). *Economics* (4th ed.). Cengage Learning.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing*, 64(1), 12–40.
- R Development Core Team (2017): *A Language and Environment for Statistical Computing*. Vienna: R Foundation for Statistical Computing. Available at: <https://www.Rproject.org/>.
- Revelle, W. (2022). *Package ‘psych’, Procedures for Psychological, Psychometric, and Personality Research*. Available at: <https://cran.r-project.org/web/packages/psych/psych.pdf>.
- Sanchez, G. (2013): *PLS Path Modeling with R*. Berkeley: Trowchez Editions. Available at: [http://www.gastonsanchez.com/PLS\\_Path\\_Modeling\\_with\\_R.pdf](http://www.gastonsanchez.com/PLS_Path_Modeling_with_R.pdf).
- Shapiro, B. P., & Bonoma, T. V. (1984). How to Segment Industrial Markets. *Harvard Business Review*, 104–110.
- Sproles, G. B., & Kendall, E. L. (1986). A Methodology for Profiling Consumers’ Decision-Making Styles. *The Journal of Consumer Affairs*, 20(2), 267–279. <https://doi.org/10.1111/j.1745-6606.1986.tb00382.x>

- Stephenson, R. P., & Willet, R. P. (1969). Analysis of Consumers' Retail Patronage Strategies. In P. R. McDonald (Ed.), *Marketing Involvement in Society and Economy* (pp. 316–322). American Marketing Association.
- Villani, K. E. A., & Lehmann, D. R. (1975). *An Examination of the Stability of AIO Measures*. Marketing: The Challenges and the Opportunities, 484– 488.
- Weinstein, A. (2004). *Handbook of Market Segmentation: Strategic Targeting for Business and Technology Firms* (3rd ed.). Routledge. <https://doi.org/10.4324/9780203862483>
- Westbrook, R. A., & Black, W. C. (1985). A Motivation-Based Shopper Typology. *Journal of Retailing*, 61(1), 78–103.
- Zielke, S. (2006). Measurement of Retailers' Price Images with a Multiple-Item Scale. *The International Review of Retail, Distribution and Consumer Research*, 16(3), 297–316.