

“How social media communications combine with the purchase decision-making process: A Multi-Criteria-Decision-Aid approach”

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Presentation Outline

- Introduction
- Literature review
- Methodology
- Data analysis
- Results
- Conclusion
- Future directions



Introduction

- This research explores the online purchase decision-making behavior of consumers by introducing a comprehensive approach in addressing the variations of social media platforms in the grocery sector, in Greece.
- Specifically, this work focuses on the effort of supermarket entrepreneurs to best evaluate the effects of social media on the consumer decision-making process.
- The most famous sites, are the Facebook, Twitter, LinkedIn, Instagram, Pinterest YouTube, etc.
- It can be argued that the information produced by the social media tools mirrors to marketing decision-makers the consumers' wants, beliefs, commitment habits and purchasing intention (Qiang and Miller, 2019) as it provides useful insights in the development of marketing strategies.



Objectives

- This research aims to facilitate our understanding of the online consumer purchase behavior and in particular decision-making behavior with the use of social media
- To evaluate the impact of the social media platforms on the behavior of online consumers in the supermarket sector.
- To identify similarities and variations on the purchase decision-making behavior.

Literature Review- purchase decision

- The purchase decision-making process is constructive and is shaped by the consumer and the context of decision making (Bettman, et al., 1998). Hence, it varies across individuals and contexts.
- Relevant researchers (Kotler, 2018; Assael, 1995)have classified consumer purchase behaviour in four categories, based on the buyer's involvement and differences among brands, value of the product and frequency of purchase. (see next table)
- Different products have different levels of complexity



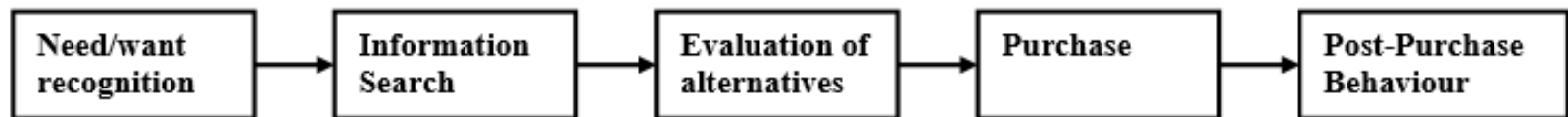
Types of purchase behaviors

Purchase type	Characteristics
Complex Buying Behaviour	High consumer involvement Major differences among brands Expensive product Infrequent purchase More time, information and help required
Dissonance-Reducing Buyer Behaviour	High consumer involvement Little difference among brands Expensive product Infrequent purchase Relatively quick Quick response to a good price
Habitual Buying Behaviour	Low customer involvement Little brand difference Same brand purchase Little search for information about the brand Receive information through media passively
Variety-Seeking Buying Behaviour	Low customer involvement High perceived brand difference A lot of brand switching



Classical purchase decision model

Source: Kotler, 2018; Butler and Peppard, 1998; Engel, Blackwell and Miniard, 1995, p. 95



Literature Review- social media

- Social media marketing takes advantage of social networking to help a company increase brand exposure and broaden customer reach.
- Inevitably, businesses face problems where the message is not reaching their consumers.
- Today the accessibility and transparency of information has profoundly influenced the decision making process (Tucker,2013).



Literature Review- social media

- In business, social media is used **to market products, promote brands, and connect to current customers** (Katsikeas et al.,2019)
- Social media marketing takes advantage of **social networking** to help a company increase **brand exposure** and broaden customer reach.
- Inevitably, businesses face problems where the message is not reaching their consumers
- Today the accessibility and **transparency of information** has profoundly influenced the decision making process (Tucker,2013)

Literature Review- social media

- Businesses and organizations on the web need data to monitor visitors, create targets so that they can see how visitors turn into subscriptions, donations and revenues, and activate the e-commerce monitoring (Misirlis and Vlachopoulou, 2018)
- Therefore, the objectives of the current research is to examine what impact has the use of social media on consumer behavior besides the existing measurement techniques



Literature Review- social media metrics

- **Facebook, Twitter, YouTube, LinkedIn** platforms **instagram** and Snap Chat have the ability to provide data on metrics in ad performance (Vlachopoulou, 2014).
- This information relates to data for CPC (Cost Per Click), CPM (Cost Per Mile), Video Views, CTR (Click Through Rate)
- Social media can be evaluated in phases which are:
 - **Awareness:** Reach, Followers, Likes, Brand mentions, Page Views, Visits
 - **Engagement:** Shares
 - **Customer conversion:** Purchases, Newsletter
 - **Advocate:** Social campaigning, referrals, New influencers

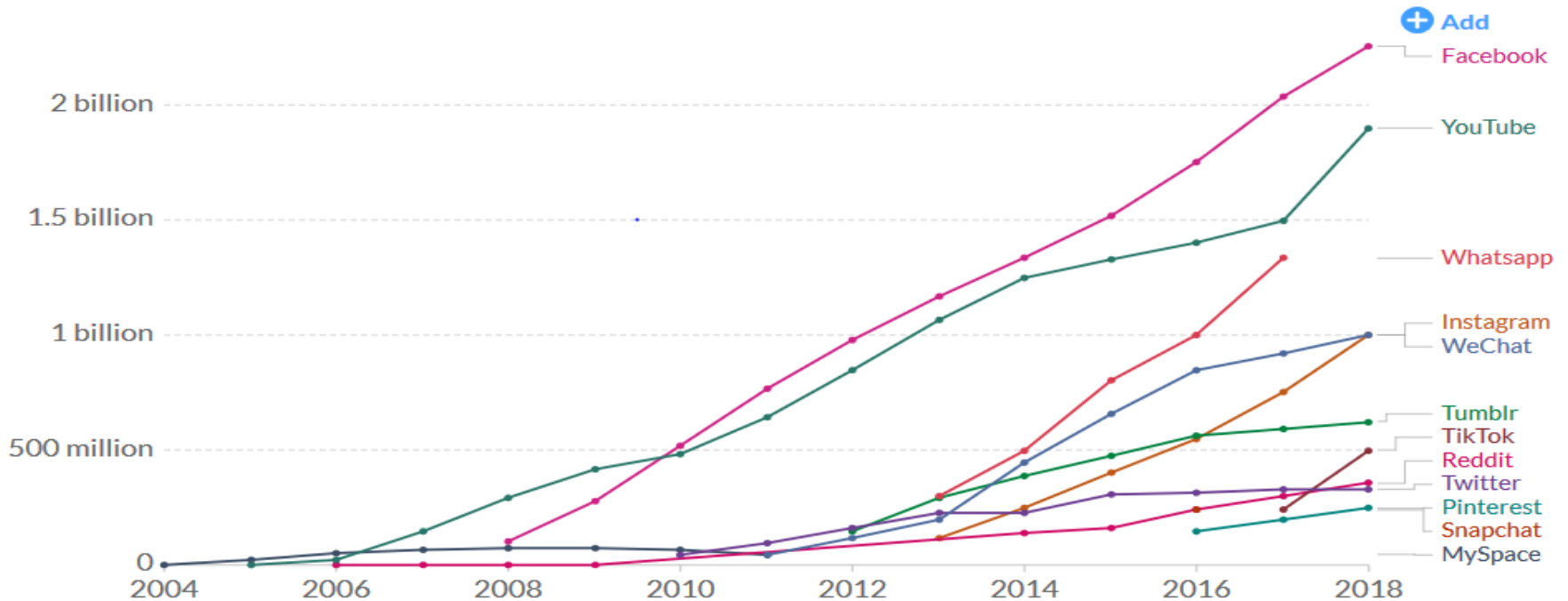


Literature Review- social media metrics

Number of people using social media platforms, 2004 to 2018

Estimates correspond to monthly active users (MAUs). Facebook, for example, measures MAUs as users that have logged in during the past 30 days. See source for more details.

Our World
in Data



Source: Statista and TNW (2019)

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<https://ourworldindata.org/rise-of-social-media>

Digital Shoppers in Greece

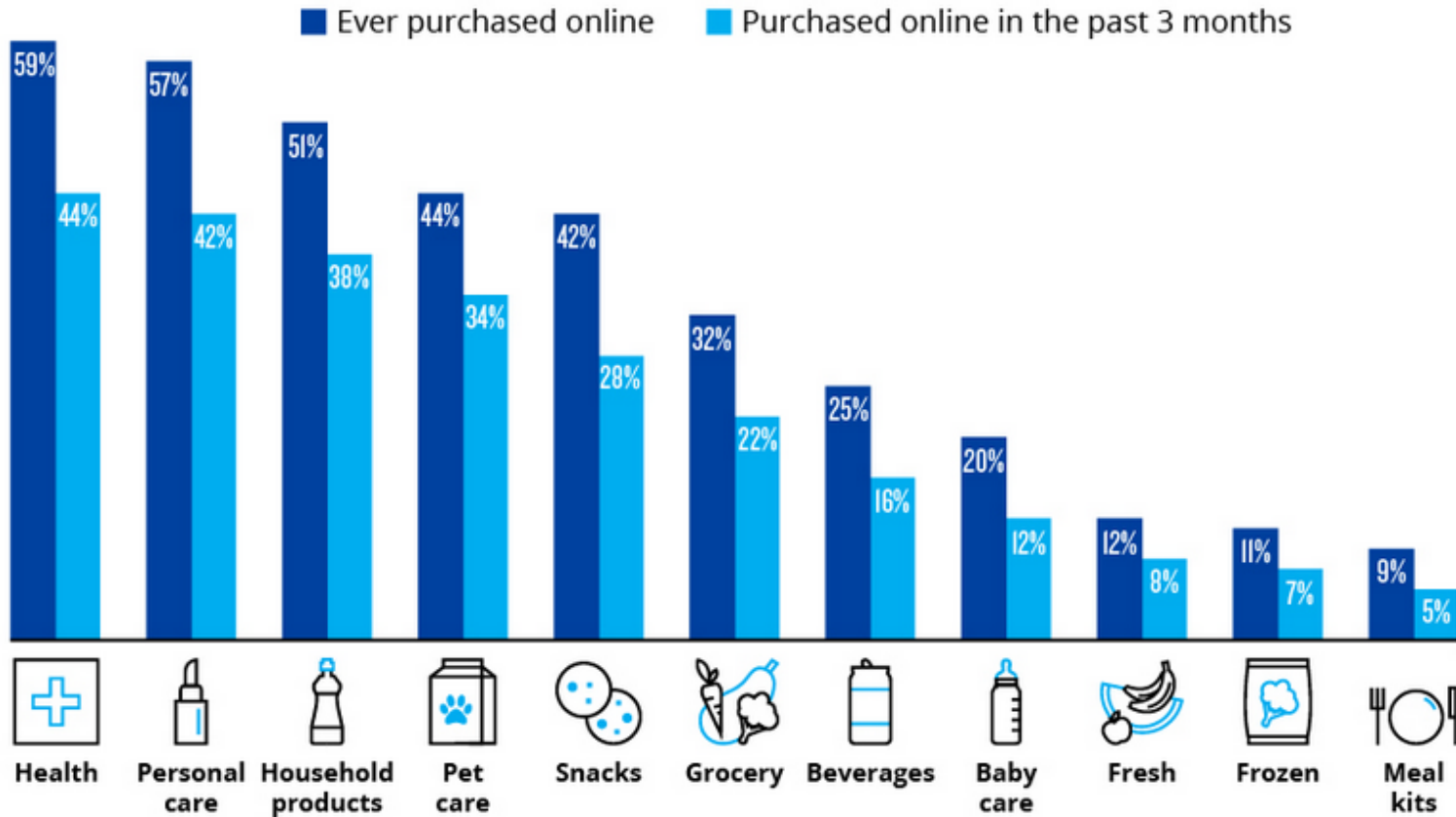
- Online supermarkets serve mainly the major urban centers. IELKA 2018 ([Research Institute of Retail Consumer Goods](#))
- The profile of these consumers is aged 25 to 40 young family men with young children, young couples, living in large urban centers, 67% of sales involve food and drink, with 50% being food and 17% drinking.
- 33% relate to non-food with main categories home cleaners (17%), baby care products (11%) and non-food. and personal care and hygiene products (5%)

Digital Shoppers in Greece

- IELKA 2018 The social networking sites most used by supermarket shoppers include Facebook (89%), YouTube (53%), Twitter (30%), Pinterest (29%) and Instagram (28%).
- It is important to note that members of different generations use social media in a different way. For example, Millennials use YouTube, Instagram and Snapchat more strongly than other generations.
- While adoption of social media may be slow, more than half (56%) of the respondents said they would like to see a change in the way they are used. Supermarket shoppers interact with their main food store in one or more digital platforms.

Digital Shoppers

What types of products are shoppers buying online today?



Source: Nielsen, Digital Shopping Fundamentals, 2017

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Previous studies that used the methodology of PROMETHEE mainly in the Agriculture and food sector

YEAR	AUTHORS	SECTOR	Topic
2002	Baourakis et al.	Agriculture	Performance of Greek Agricultural enterprises
2005	Kalogeras et. Al	Agriculture	Performance of Greek Agricultural enterprises
2006	Michailidis and Chatzitheoridis	Tourism	Ranked three tourism destination located in Central Macedonia with respect to tourist recourses
2006	Polyzos and Arambantzis	Tourism	Regional tourism development. They examined mainland characteristics
2009	Andreopoulou et. al	Agriculture	Assessment and optimization of e-commerce websites of fish culture sectors
2010	Zopounidis	Tourism	Comparative study of tourist performance at country level
2011	Andreopoulou and Koutroumanidis	Agriculture	Optimization of e-commerce websites for rural production using multicriteria analysis
2013	Tsekouropoulos et. al	Agriculture	Multicriteria ranking of agricultural SMEs websites
2017	Koutroumanidis et. al	Agriculture	A multicriteria analysis of productivity of agricultural regions of Greece

Research Methodology

- The **population** and **sample** comprises of entrepreneurs who have established organizations in the specified sector
- Qualitative analysis (**10 – ten interviews**, with entrepreneurs –different supermarket stores) were performed in order to examine the criteria and common social media characteristics
- The data were analyzed with the use of multicriteria decision-aid analysis and the software of PROMETHEE II



PROMETHEE MODEL

1. Define the actions
(alternatives)

2. Define the criteria

	g_1	g_2	g_3	...
	w_1	w_2	w_3	...
a	$g_1(a)$	$g_2(a)$	$g_3(a)$...
b	$g_1(b)$	$g_2(b)$	$g_3(b)$...
c	←			→
...	...			

3. Define model preferences

Social Media and consumer buying decision process

CRITERIA: Need Recognition, Information. Alternatives, Purchase Decision, Post-purchase

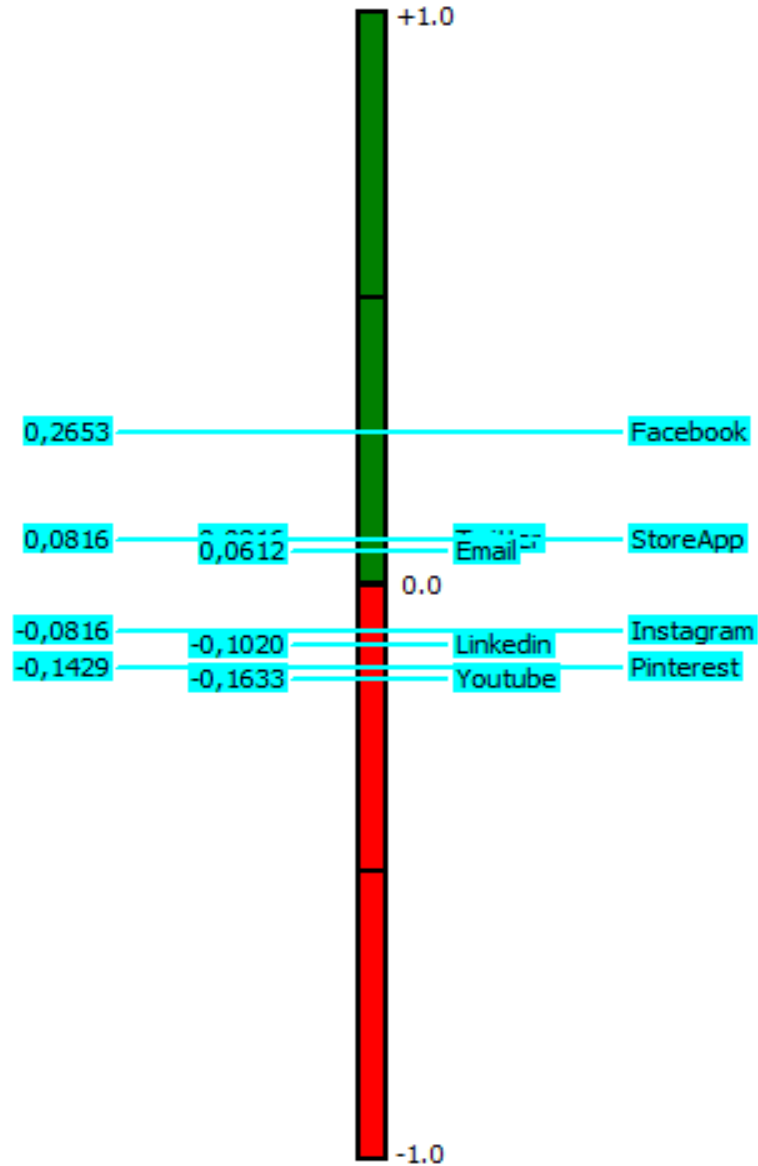
ACTIONS:

- Facebook
- Youtube
- StoreApp
- Instagram
- Email
- Pinterest
- Twitter
- Linkedin

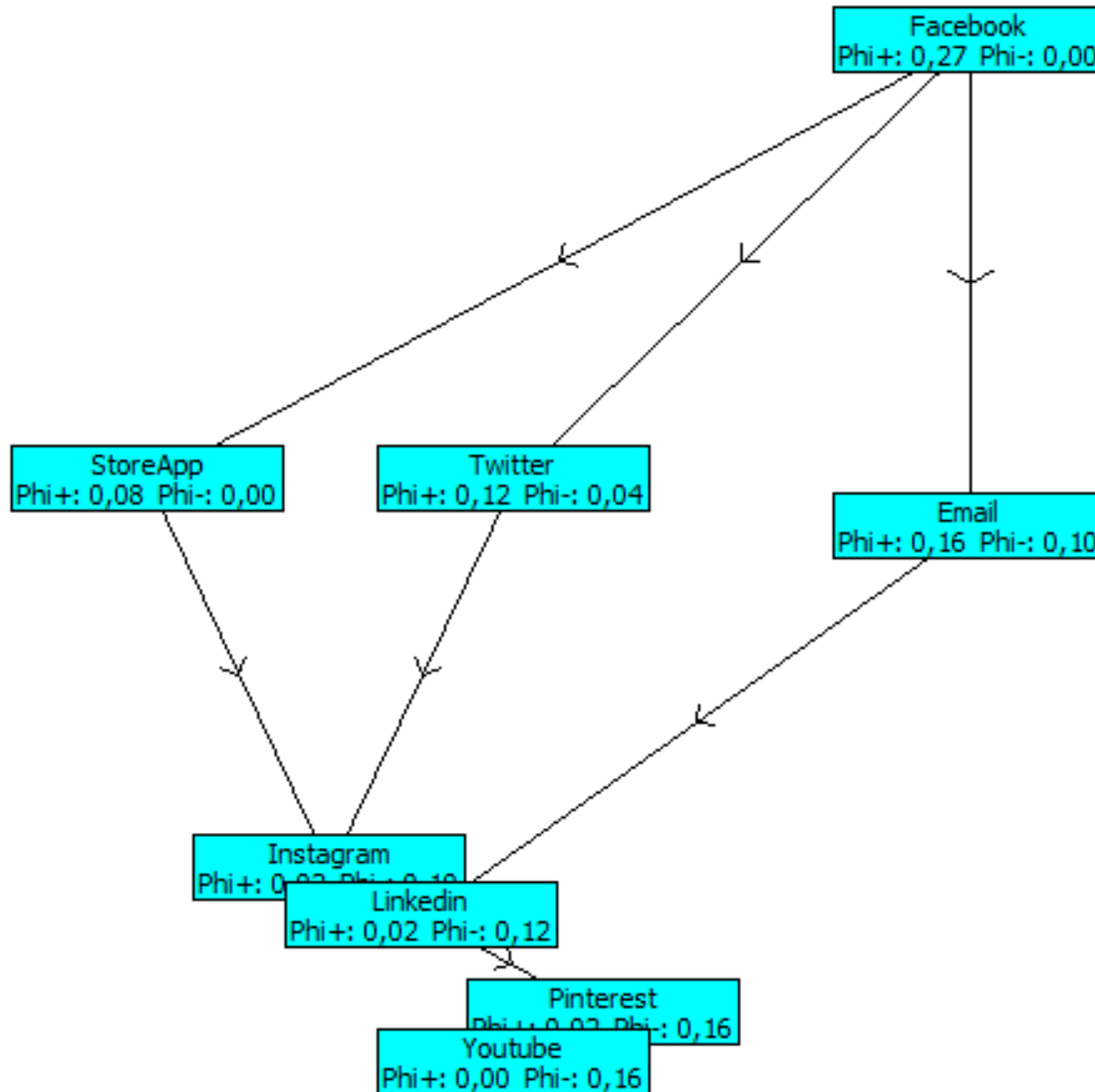
Define the Model preferences

- The preference weight was set equal to “1”
- The preference function was set to "usual" for ease of use
- The threshold level was set to “absolute”
- The actions criteria were measured on a five-point qualitative scale (very low, low, moderate, high, very high)

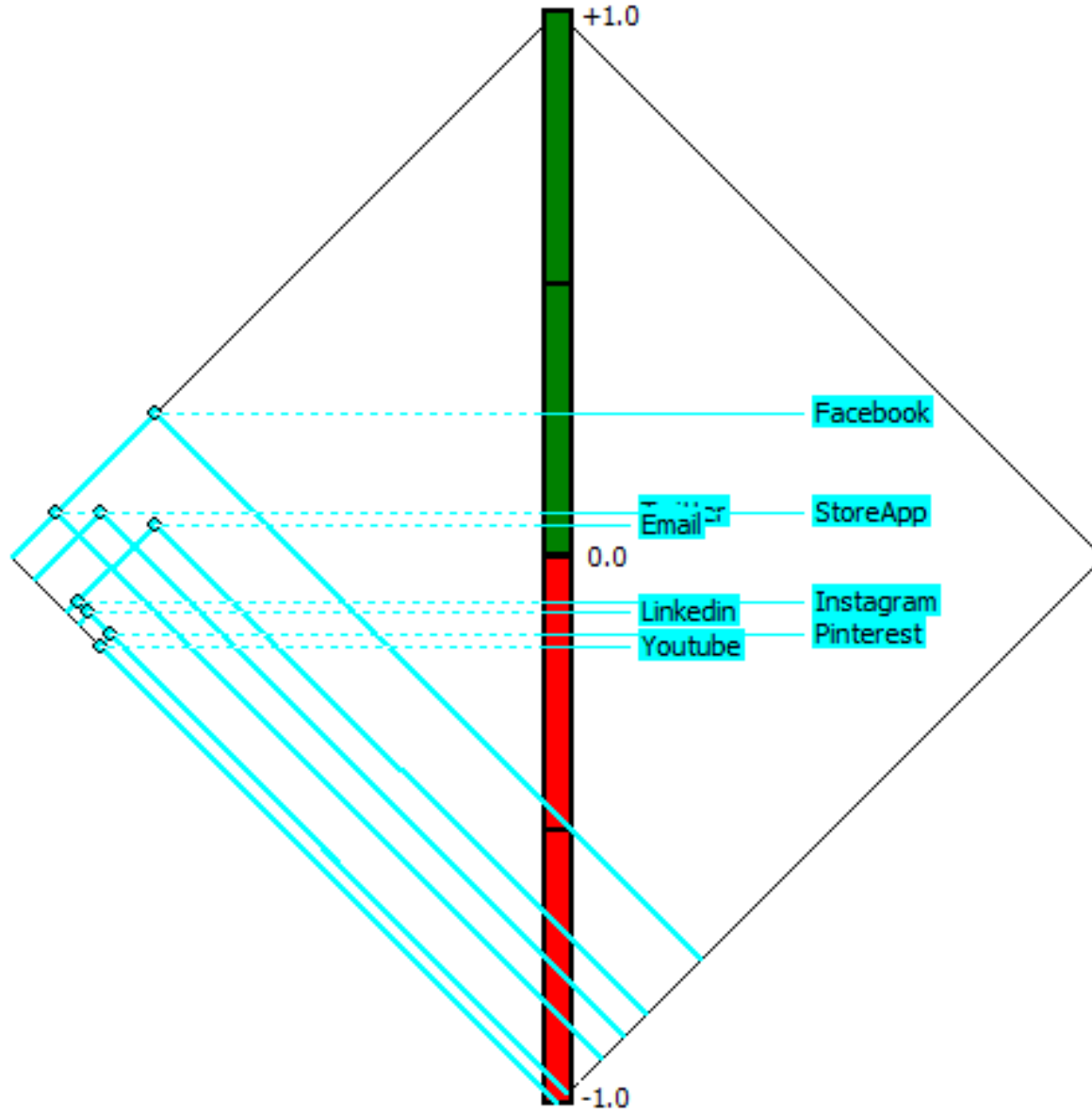
Social Media-rankings



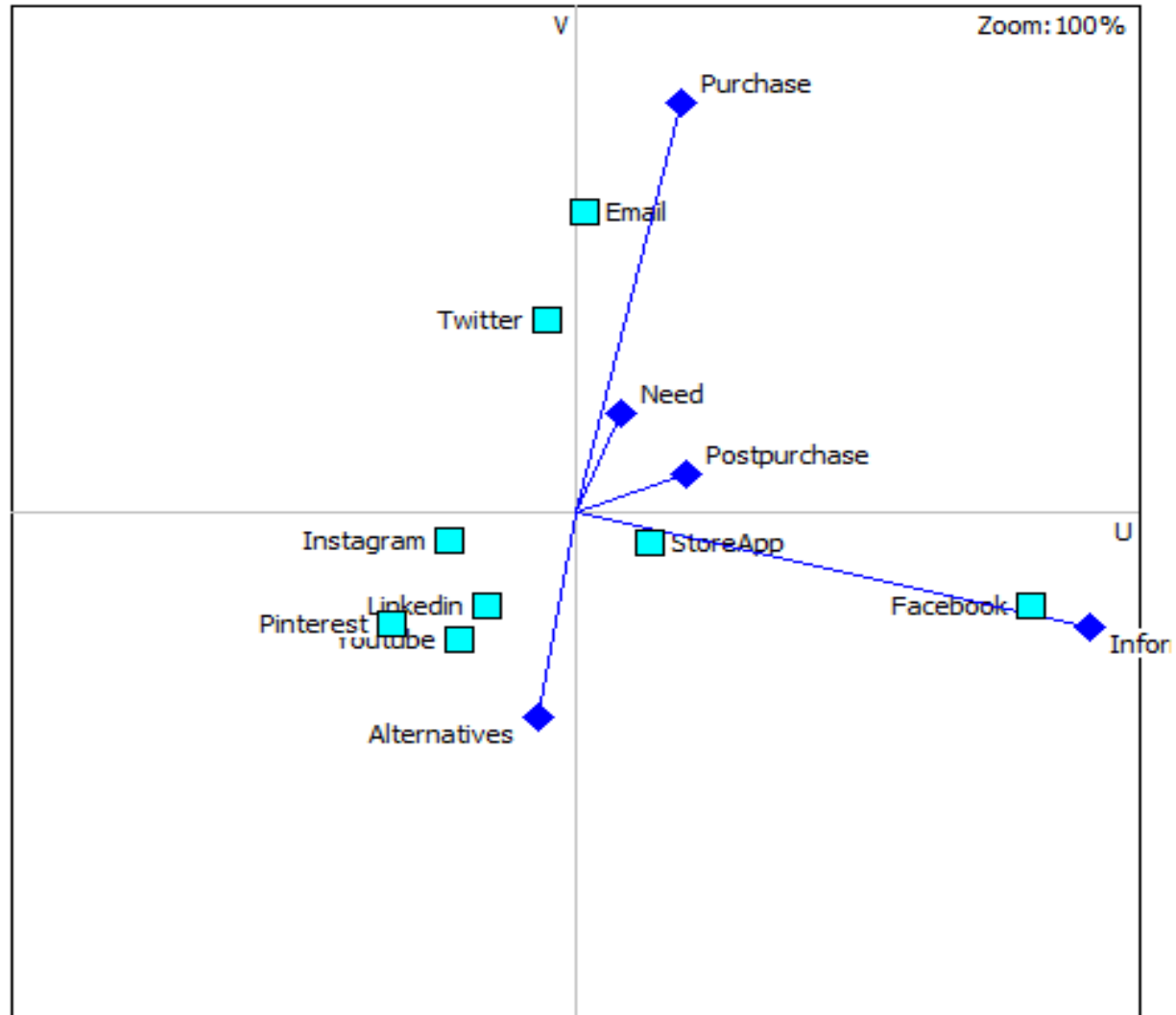
Social Media-rankings: Network View











Social Media-rankings



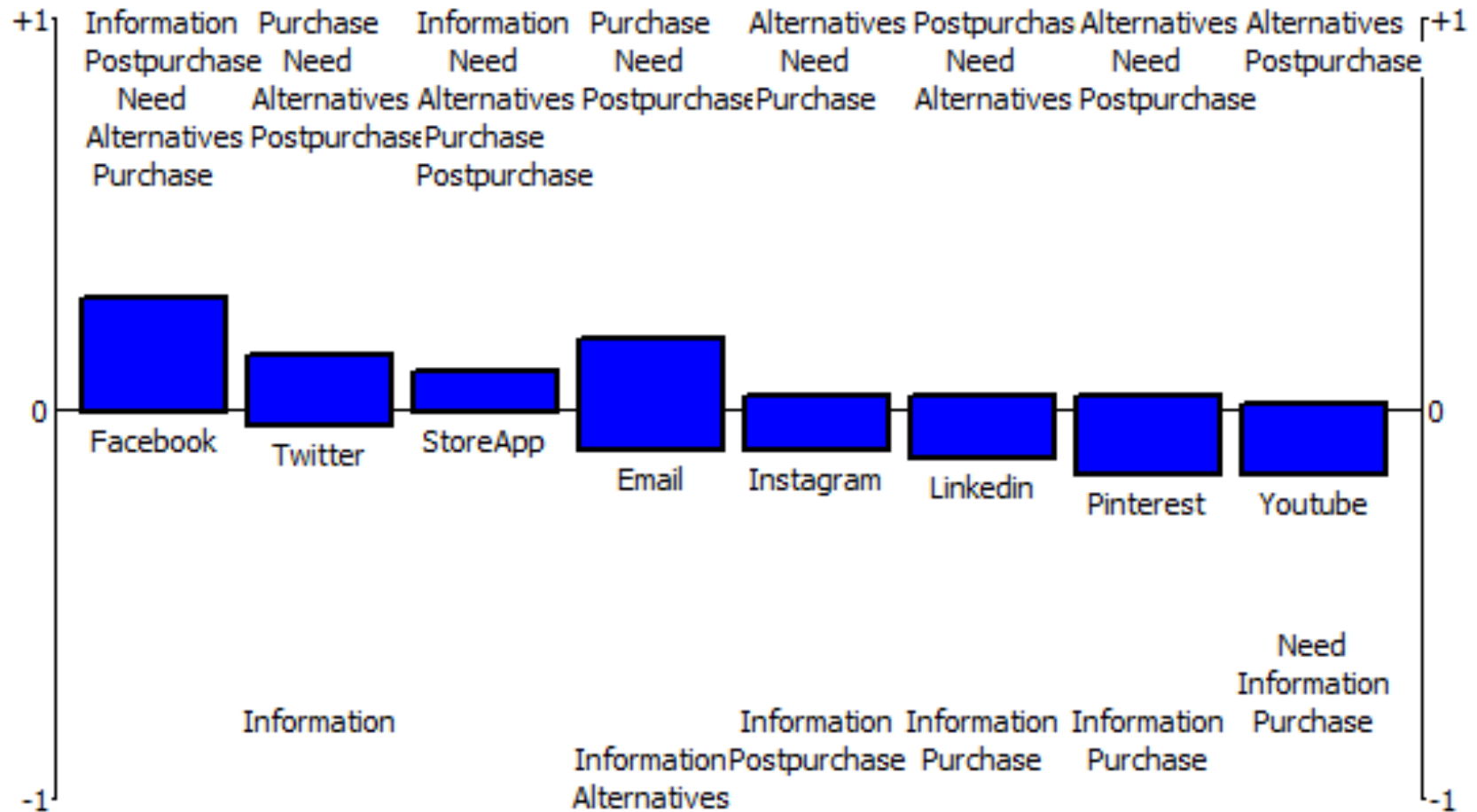
DIGITAL MRK: PROMETHEE GAIA PLANE AND PREFERENCE FLOWS



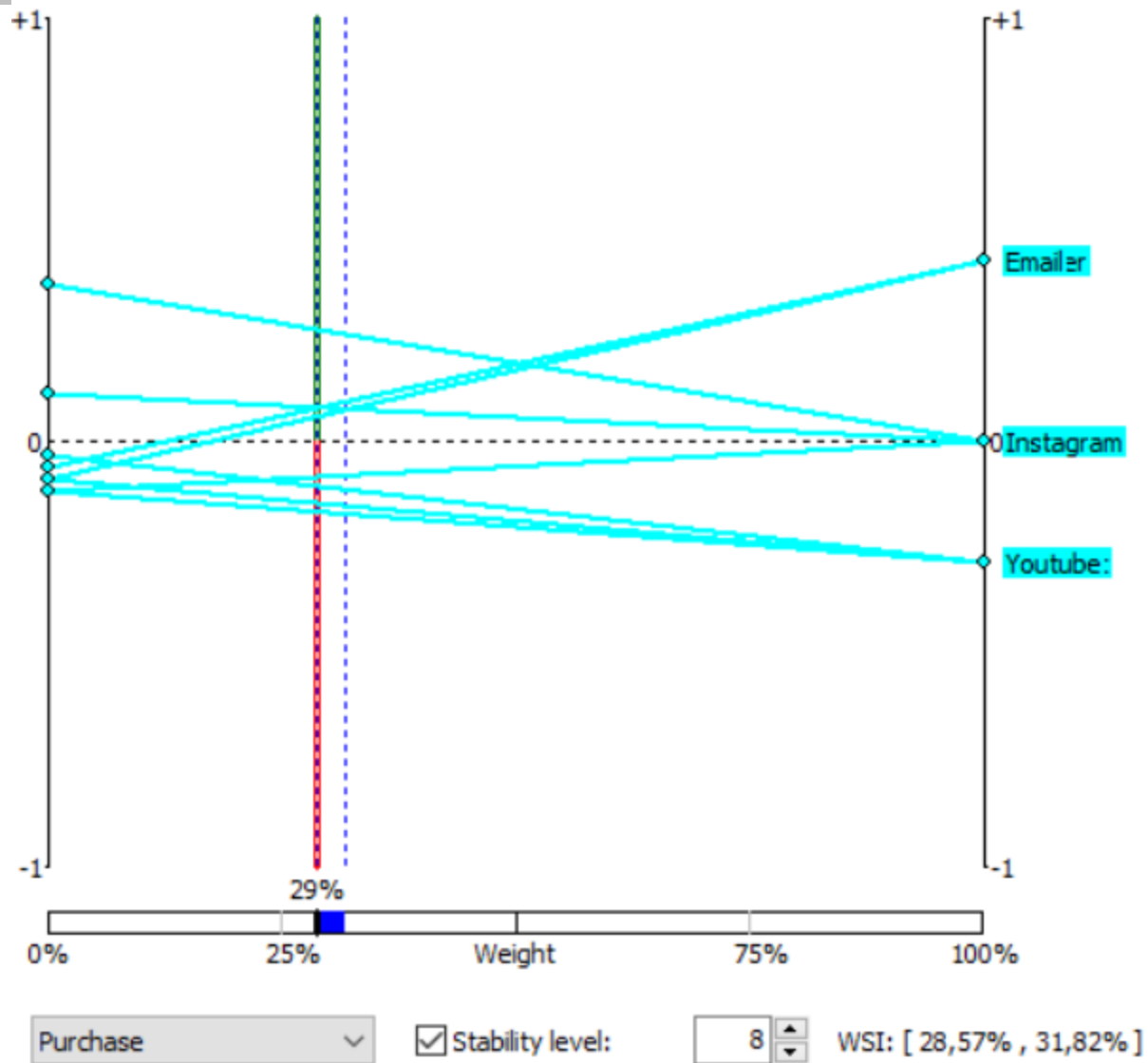
DIGITAL MRK: PROMETHEE GAIA PLANE AND PREFERENCE FLOWS

Rank	action		Phi	Phi+	Phi-
1	Facebook		0,2653	0,2653	0,0000
2	Twitter		0,0816	0,1224	0,0408
3	StoreApp		0,0816	0,0816	0,0000
4	Email		0,0612	0,1633	0,1020
5	Instagram		-0,0816	0,0204	0,1020
6	Linkedin		-0,1020	0,0204	0,1224
7	Pinterest		-0,1429	0,0204	0,1633
8	Youtube		-0,1633	0,0000	0,1633

DIGITAL MRK: RAINBOW and Preference Flows



Visual Stability intervals



Concluding remarks

- The evaluations for the relative importance of the impact of social media on the consumer buying decision process were addressed.
- We found that the most important criteria that affect the consumer buying decision process are the use of facebook, twitter and store app. These actions have greater impact on the criteria of “information search”, “purchase” and “post purchase behavior”.
- Furthermore, the use of instagram, linkedin, pinterest and youtube, have stronger influence on the criterion of “evaluation of alternatives”
- The applied methodology is a useful planning and management tool for the crafting of more successful digital marketing strategies for businesses.

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