

Determining Resource Distribution for the Elements of Marketing Communication Mix Using TOPSIS Method

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Abstract

Decisions about marketing communication focused on developing relations between firms and customers bear critical value in today's competition environment. The aim of this study is to determine the priority of an international firm with a powerful position in Turkey's insurance and individual retirement market while allocating resources for life insurance, non-life insurance and individual retirement products from marketing communication budget to elements of marketing communication. In line with this aim of the study, the data acquired through an interview with the marketing manager of the firm were analysed using TOPSIS Method. As a result of the study, the priority of the firm while allocating resources for life insurance, non-life insurance and individual retirement products from marketing communication budget to elements of marketing communication is determined to be advertisement, promotion, public relations and personal selling. This result supports the need for making the society in Turkey conscious about insurance. Insurance and retirement products should be promoted through advertisements and their importance should be emphasized. Also, premium productions should be supported through promotions and reputation of insurance companies should be raised through public relations efforts as well as developing relations with customers through personal selling.

Keywords: Marketing communication, TOPSIS Method, Advertisement, Public relations, Personal selling, Promotion

1. Introduction

Marketing communication tends to inform, persuade and impress target customers. It bears an orientation task to orient customers search for purchasing the right product at the right price from the right place. In today's competitive environment, businesses try to form a strong continuous relation with their customers by informing their target customers about such matters as their products, prices, brands, promotions, sales points, etc. through marketing communication (Jain 2009). In the context of marketing communication, advertisements allow informing customers in a controlled way by buying a place and time in printed and broadcasting media. While "public relations" is a set of activities conducted to achieve goodwill and acceptance between the business and the external world, "personal sales" involves the efforts to persuade customers about the business's products through face-to-face interviews. Promotion is additional precious presentations to create short-term effect in orienting customers to try and then to purchase the product (Masterson & Pickton 2010). Along with advertisements, public relations, personal sales and sales promotion as the main elements of marketing communication mix, today sponsorship, direct marketing and digital marketing are also commonly used (Erdoğan 2014). Marketing communication is an important element while informing the customer about insurance and retirement products both of which have become imperative in terms not only of social life but also of making the society conscious. Insurance and individual retirement firms aim to inform, persuade and impress their customers by explaining both their brands and their products through the elements of marketing communication mix. The aim of this study is to determine the priority of a firm- active apart from Turkey in such countries as France, Italy, Portugal, Slovakia, Greece, Hungary, Romania, Bulgaria, China, Vietnam and Tunisia both in insurance and in retirement branches- while allocating resources to marketing communication mix elements from marketing budget in terms of life, non-life and retirement products in Turkey.

This study focuses only on advertisement, public relations, personal selling and sales promotion elements. The study is comprised of five parts. In the first part, the problem about an international insurance firm's priority of

allocating resources to marketing communication mix elements from marketing budget in terms of life, non-life and individual retirement products in Turkey. In the second part, marketing communication, such elements of marketing communication as advertisement, public relations, personal sales and promotion are explained and the factors in planning marketing communication budget and in resource allocation are presented. In the third part research methodology. In the fourth part, the TOPSIS Method application to determine the firm's priority of allocating resources to marketing communication mix elements from marketing budget in terms of life, non-life and individual retirement products and research findings are explained. The last part involves conclusion and interpretation of the results obtained.

2. Literature Review

2.1 Marketing Communication

Marketing communication is an information network oriented to meeting the market needs. Marketing communication mix elements aim to inform, persuade and impress customers. This aim has an important effect on raising brand value (Sivesan 2013). Marketing communication plays an important role in creating brand awareness and positive image for the brand in customers' mind. Marketing communication constructs the information of customers about a brand and enables development of customer-oriented brand value (Keller 2009). As the main elements of marketing communication mix, as well as advertisement, public relations, personal selling and sales promotion, today sponsorship, direct marketing and digital marketing are commonly used elements (Erdoğan 2014). In this respect, social media is a new mix element of marketing communication. In this network, customers talk to one another about the business and/or product and thus inform each other (Mangold & Faulds 2009). According to Petek and Ruzzier (2013) product life cycle is a determinant factor while determining the promotion mix elements. Advertisement and public relations efforts are emphasized to inform the customer and to promote brand awareness when a product has entered a market. At this stage, while personal selling maintains its impact on distribution channels and supply chain, promotions encourage trying the product. At development stage, continuing advertisement and public relations efforts aim to sustain brand loyalty. While personal selling continues its dominance on distribution channel and supply chain, promotion activities decrease. During maturing period, advertisements go on to emphasize the product in customers' memory and promotions are applied vigorously to attract new customers to the brand. Personal selling sustains its dominance on distribution channel and supply chain. During decline period, the business decreases its advertisement and public relations efforts rapidly while personal selling and promotions are decreased to such a level that will be sufficient to support the product (Ferrell and Artline 2011). This study focuses on advertisement, public relations, personal selling and sales promotion elements.

2.1.1. Advertisement

Advertisements are a communication tool functioning through coordination with other marketing elements aiming to convince customers (Kocabaş & Elden 2004) and to inform them about the existence of the business, its brand identity and price (Milgrom & Roberts 1986) and its suppliers (Gherasim 2012). Petley (2002) states that the prerequisites of an advertisement are a product to be advertised, a significant market potential for that product and competition among businesses. On the other hand, he emphasizes that advertisement cost is supposed to be sustained at a certain level and the public should be at a certain education level to grasp the advertisement message. Batra et al. (2009) explain the three critical tasks of advertisement plans as determining advertisement aims and target population, designing advertisement message and determining media strategies. Tipper et al. (1920) state that advertisements should be used instead of more costly personal selling efforts or to support them with a view to boosting selling and raising profitability. Hackley (2005) regards advertisements as the contact point with customers in brand management process and consider them to be crucial in giving business shareholders, sale force, business employees and suppliers confidence and morale. He, on the other hand, emphasizes that business becomes more powerful with advertisements in terms of financial credibility and competitive stand. Armstrong (2010) advocates that advertisements can reinforce customer loyalty to a brand if they contain themes that will prevent customers to switch to rival products.

Mooij (2010) reveals that advertisements are affected and shaped by reflections of cultural values and states that an advertisement's effect rises and becomes more useful for the business when customers' values and those reflected in the advertisement are coherent. Therefore, he points out that global brands are supposed to approach cultural elements meticulously in their advertisements. Moreover, Mohan (1989) emphasizes that handling cultural subjects in advertisements is effective on social values and life styles. Gulas and Weinberger (2006), on the other hand, state that using humour in advertisements might be crucial in raising brand awareness in

customers but add that there are few success examples of using humour in advertisements of insurance or financial investment advertisements that involve high risks and require extensive assessment. Different advertisement types emerge every single day. TV, radio, newspaper, magazine, open air and social media advertisements are used actively in product promotion. While collective advertisements are conducted through TV, radio and/or web sites, direct mail advertisements, telephone and/or e-mails also allow individualized advertisements (Green 2012). Compared with traditional advertisement channels, new media channels develop rapidly. In the context of new media channels, internet and mobile advertisements have become an effective source of conveying the messages of businesses to customers (Stafford & Faber 2005, Hughes & Fill 2007).

2.1.2. Public Relations

“Public relations” means planning the business activities to form and sustain good-will and mutual understanding between a business and its environment (Ali 2002). L’Etang (2008) states that numerous elements interact with one another in public relations activities. According to this view, the elements in this interaction process are the business’s approach in public relations activities, gathering information about matters that might be important for the public, determining the problems of the public, resistance to lobby interference, public services, diplomacy, democratic education, forming the connection of the business with the subject, identity formation and communication laws. Stacks and Michaelson (2010) states that certain applications that stand out in public relations applications are corporate communication, relations with the public, customers, employees, financial institutions, government and media, monitoring public events and strategic communication. Vercic et al. (2001) advocate that public relations can be assessed in four dimensions namely executive, operational, reflective and educational dimensions. In terms of executive aspect, it is acknowledged that “public relations” is comprised of strategies developed to form relations with the groups in the public with a view to gaining public trust and/or developing mutual understanding. Executive view presents the relation between this role of public relations and the business mission and strategy. Operational dimension takes formulation of communication plans and assessments about communication process into account. Reflective dimension encompasses two things: analysis of changing standards and values of the public to achieve coherence between the standards and values of the business about social responsibility and achieving agreement among the organizational members on the subject. Educational dimension emphasizes training the business members about communication to meet public expectations. The role of educational dimension of public relations is about attitudes and behaviours of organizational members and in this process, in-business groups are focused on.

Bowen et al. (2010) state that “public relations” is effective in the business’s sustaining continuity of the business, forming close relations with its environment, understanding the public concerns and collaborating with the public, forming a close tie with its employees, strengthening its positive image by taking on responsibilities and excusing faults. Grunewald et al. (2008) emphasize the importance of public relations and advertisement in convincing customers. According to them, while advertisement ensures control on information by paying for this purpose, public relations publish information free on newspaper, radio and television but do not have full control. They say that the media tools on which public relations have full control on are brochures, annual bulletins or reports, films and other promotion tools. Wright and Hinson (2014) reveal that social media lead to striking changes in public relations applications and add that blogs, social and other developing media are effective on public relations applications.

2.1.3. Personal Selling

Businesses convey their assets to distribution channels and to the target customers through sales representatives (Yükselen 2010). The aim of personal selling is informing customers about a product and services and to convince them to purchase by using interpersonal communication (Finley 2013). Shannahan et al. (2013) emphasize that as a system that ensures interaction between customer and sales representative in the context of relational selling, personal selling serves business aims effectively. In this system, in return for selling effort of sales representative, customer experiences the purchasing process concurrently. In terms of corporate communication perspective, personal selling affects the interaction between customer and sales representative and the exchange relation between them. The selling process also ensures organizational learning. Entering an interacting with the customer, the sales representative has the opportunity of planning his/her next selling depending on his/her sales experience and observations. Ferrell and Hartline (2011) state that while personal selling, as one of the elements of integrated marketing communication, has more importance in selling especially industrial products, advertisement, public relations and promotion are required more in selling consumer goods. They also add that, parallel to this; personal selling also exists in many forms. Personal selling can be more complex for some products; therefore, in a longer process, a personal relation is required to be developed between the business and sales representative. They assess personal selling as a flawless form

compared with the other elements of marketing communication mix because it allows direct communication with customers and detailed information transfer about the business and its products. Despite this advantage of personal selling, they determine its high cost per customer in terms of both money and time as the biggest disadvantage of personal selling. Moreover, Uslu (2007) points out that since personal selling is through face-to-face communication, the number of customers that could be accessed to in a certain period of time is limited. On the other hand, they also emphasize that unsatisfactory presentations of sales representatives could damage the brand and product image.

Buehrer et al. (2007) state that accurate strategies for education and motivation are required to be developed and applied for businesses to raise proficiency of sales representatives. Blythe (2005), on the other hand, remarks that training for personal sales representatives differentiates. He adds that if the products involve complex and technical features, high-value orders are to be met in industrial market where there are professional buyers, costs are high and sales representatives are inexperienced, then long-term training is required, but, on the other hand, if products are simple, consumer market is the setting, low-value orders are in question, costs are low and sales representatives are experienced, then short-term training might be adequate. He also emphasizes the necessity of determining and applying motivation plans for personal sales representatives besides an appropriate salary system. He points out that motivation plans should be determined according to Maslow's hierarchy of needs and thus meeting the basic needs of personal sales representatives in this way, the plans should be in accordance with the need for earning respect and fulfilling the feeling of belonging. Personal selling has the power to guide purchasing behaviours of customers and to raise profitability of the business in today's competitive environment (Wang et al. 2012). Williams and Spiro (1985) attribute success in personal selling to the ability of personal sales representatives to develop a communication style appropriate for individual customer features and to their customer-focused understanding. McClaren (2013), emphasizing the importance of making and applying ethical decisions in sales management and process, states that business culture, tendency of sales representatives and the business towards sales ethics and making ethical decisions are the crucial elements in making such decisions.

2.1.4. Promotion

Promotion is encouragement and rewards presented to customers to make them purchase a product instantly. Because promotions have effect on purchasing in a very short time, brand executives are more inclined to promotion efforts to raise their selling amounts (Kotler 2003). Crowe and Higgins (1997) define the focus of promotion as strategic tendency for success, progress, development and achieving the desired goal. Belch and Belch (2003) state that promotions can be assessed in two different categories: customer and trade. Customer-based sales promotions aim the final users of a good or service. These promotions could be coupons, samples, discounts, rewards, raffles and point-of-sale materials. Trade-based sales promotions aim retailers, wholesalers and distributors as marketing intermediaries. Involving product delivery, price agreements and competitions for sales quotas, these promotions aim raising product promotion and stock level of a business. Omotayo (2011) defines sales promotion as a communication tool to develop customer loyalty by raising brand awareness in customers. Odunlami and Ogunsiji (2011) emphasize that sales promotion is effective on developing the business performance and increasing sales. They add that businesses should take the value provided by sales promotions into account and raise their effective and productive sales promotions. They explain the importance of these efforts in brand awareness and purchasing amounts. Sriram and Kalwani (2007), advocating that promotion has a positive effect on the benefit presented to customers and customers are inclined to such products that sustain promotion efforts, state that promotion is beneficial to the business and therefore is supposed to be invested in more by businesses

.On the other hand, Jedidi et al. (1999) argue that businesses are generally inclined to shift to sales promotions due to high advertisement costs. They also emphasize that while advertisements have long-term positive effects on brand value, sales promotion cannot create the same long-term positive effect. Moreover, they point out that decreasing the price regularly has a long-term negative effect on brand profitability. Kwok and Uncles (2002), reveals in his study to determine the effect of cultural differences on sales promotion performance that cultural differences have no significant effect on customers' attitudes towards sales promotion. Determining effective and productive sales promotion activities is critical for business management. First, the brand manager should determine a general promotion directive that should include the annual expenditure, income, profit target of the brand, certain discounts the number of annual promotion activities. Then, the sales manager should distribute the target amounts determined by the brand manager to each account. Afterwards, the marketing manager should detail the promotion plans within certain periods in accordance with product group and promotion type. Such promotion plans developed upon these elements are crucial in raising the business profit to maximum and increasing the customer income. The final stage entails finalizing the promotion plan by discussing with the

accounting manager the sum that will be transferred to each promotion type (Oracle, 2006).

2.2. Budget of Marketing Communication

While planning marketing communication budget, various methods are used. West et al. (2014) argue that business culture is crucial in determining marketing communication budget as well as being effective on all business activities. In this context, a market-oriented culture focuses on such activities that will enable the business to achieve its goals and gain a competitive advantage. In businesses in which such a culture prevails, rival strategies are traced meticulously while determining the marketing communication budget and a competition-oriented model is preferred. In a culture in which a hierarchic structure is adopted, leadership style, best management and coordination are focused on. In businesses where this culture dominates, in order to keep the order, policies, rules and procedures are followed hierarchically and sales percentages and cost-based models are used in marketing communication budget decisions. In clan-type businesses, importance is given to internal structure and forming an environment tightly-locked with strong personal ties. In businesses where such a culture prevails, instead of depending on operational processes, marketing communication budget planning is conducted through bargaining and agreements. Businesses with an entrepreneurial spirit focused on creativity and innovation are inclined to orientation. In such businesses, decentralization and employee empowerment are important. While determining marketing communication budget, models based on operational process are adopted. Also, Cheong et al. (2013), in their study to determine advertisement and promotion budgets under conditions that change short-term, emphasize that decentralization level is important. In this context, associating the business size, profitability, brand value, brand type and price and the effect of marketing and finance department with decentralization level in budgeting while planning marketing communication budget, they reveal that this relation is important in budget size and allocation.

Low and Mohr (1999) emphasize the points marketing managers should take into account while doing rational allocation out of marketing communication budget as follows: the main thing to do is using brand team approach. In this context, executives from different departments should work together while deciding upon marketing communication budget and while planning marketing communication budget, they should be ready for semi-annual and trimester potential changes. Results obtained in accordance with strategic aims should be exposed to analysis through comparison with previous programs. As well as being long-term focused, overall performance assessments should be done. Also, Kotler (2000) states that even among businesses in the same industry, different elements in marketing communication mix could be emphasized in terms of their characteristics and due to limited budget opportunity and therefore one element could be more preferable than another. Percy (2008) states the factors in resource allocation for marketing communication mix elements from marketing budgets of businesses as product features, market location, business performance and rival strategies. For example, if products of a company are purchased frequently, then advertisements are more important than other marketing communication mix elements. However, if the location of a business in the market is poor, in order to make customers buy instantly and thus to raise business income, promotions become more effective. Also, rival strategies should be responded. On the other hand, Odabaşı and Oyman (2012) list the factors in determining the total resource to be allocated for marketing communication mix elements from marketing budgets as budgeting approach of the business, profit rate, product features, location of the product in life cycle, aims, budgeting period, business resources, rival strategies, distribution policies, economic conditions and market structure.

3. Research Methodology

The aim of this study is to determine the priority of an international firm with a powerful position in Turkey's insurance and individual retirement market while allocating resources for life insurance, non-life insurance and individual retirement products from marketing communication budget to elements of marketing communication by using TOPSIS Method. In the study, the marketing manager of the firm was interviewed with a view to determining allocating resources for life insurance, non-life insurance and individual retirement products from marketing communication budget to elements of marketing communication mix. During the interview, the elements of marketing communication mix were limited to advertisement, public relations, personal selling and promotion. Depending on this limitation, six criteria were determined to determine the order of resource distribution to these four alternatives from the budget. These criteria are cost (CST), demographic characteristics of the target market (DCTM), product features (PF), the stage of the product on the life curve (SPLC), corporate reputation (CR) and rival strategies (RS).

3.1. The TOPSIS Methodology

TOPSIS is one of the useful Multi Attribute Decision Making (MCDM) techniques that are very simple and easy

to implement. The popular method for solving MCDM problems is the TOPSIS (technique for order performance by similarity to idea solution) which was first developed by Hwang and Yoon (1981). The TOPSIS bases upon the concept that the optimal alternative should have the shortest distance from the positive ideal solution and the farthest distance from the negative idea solution (Benitez et al., 2007). The positive ideal solution is a solution that maximizes the benefit criteria and minimizes the cost criteria, whereas the negative ideal solution maximizes the cost criteria and minimizes the benefit criteria (Wang & Chang, 2007; Wang & Elhag, 2006; Wang & Lee, 2007; Lin et al., 2008). The optimal alternative is the closest to the ideal solution and the farthest from the negative ideal solution. Alternatives in TOPSIS are ranked based on “the relative similarity to the ideal solution”, which avoids having the same similarity for both ideal and negative ideal solutions. Wu and Chuang (2013), in their study conducted in food industry, analysed the most appropriate relation between the intermediaries to increase the mutual profit by using TOPSIS Method. Using this method, Fan et al. (2011) analysed the factors effective on customers’ purchasing insurance products from banks that are subject to cross-selling. In this study, TOPSIS Method facilitated decision making Kabir and Hasin (2012) also used TOPSIS to determine the service quality main dimensions of the websites used by travel establishments. Using this method, Dündar et al. (2007) listed the websites of e-stores according to their design, product variety, customer services and information diversity criteria. Kim et al. (2011), also using this method, revealed the criteria in customers’ automobile preferences. Çınar (2010) used this method in solving decision problems of a bank while choosing site of establishment.

The TOPSIS method is expressed in a succession of six steps as follows:

1. Establish a decision matrix for alternative performance. The structure of the matrix can be expressed as follows:

$$\begin{matrix}
 & C_1 & C_2 & \dots & C_j & \dots & C_n \\
 \begin{matrix} A_1 \\ A \\ \cdot \\ A_i \\ \cdot \\ A_m \end{matrix} & \begin{bmatrix} x_{11} & x_{12} & \dots & x_{1j} & \dots & x_{1n} \\ x_{21} & x_{22} & \dots & x_{2j} & \dots & x_{2n} \\ \cdot & \cdot & \dots & \cdot & \dots & \cdot \\ x_{i1} & x_{i2} & \dots & x_{ij} & \dots & x_{in} \\ \cdot & \cdot & \dots & \cdot & \dots & \cdot \\ x_{m1} & x_{m2} & \dots & x_{mj} & \dots & x_{mn} \end{bmatrix} & (1)
 \end{matrix}$$

where A_1, A_2, \dots, A_m are possible alternatives ($i=1,2,\dots,m$) among which decision makers have to choose, C_1, C_2, \dots, C_n are criteria or attributes ($j=1, 2,\dots,n$) with which alternative performance are measured, x_{ij} is the rating of alternative A_i with respect to criterion C_j .

2. Calculate the normalized decision matrix $R = [r_{ij}]_{m \times n}$. The normalized value r_{ij} is calculated as

$$r_{ij} = \frac{x_{ij}}{\sqrt{\sum_{j=1}^n x_{ij}^2}} \quad i=1, 2, \dots, m \text{ and } j=1, 2, \dots, n. \quad (2)$$

3. Construct the weighted normalized decision matrix. Assume a set of weights for each criteria w_j for $j = 1, \dots, n$. Multiply each column of the normalized decision matrix by its associated weight. The weighted normalized value v_{ij} is calculated as

$$v_{ij} = w_j r_{ij} \quad i=1, 2, \dots, m \text{ and } j=1, \dots, n \quad (3)$$

where w_j is the weight of the i -th attribute or criterion, and $\sum_{j=1}^n w_j = 1$

4. Determine the positive ideal (A^+) and negative ideal (A^-) solutions. The A^+ and A^- are defined in terms of the weighted normalized values, as shown in Eqs. (4) and (5), respectively:

Positive ideal solution:

$$A^+ = \{v_1^+, \dots, v_n^+\} = \left\{ \left(\max v_{ij} \mid i \in I \right), \left(\min v_{ij} \mid i \in J \right) \right\} \quad (4)$$

Negative ideal solution:

$$A^- = \{v_1^+, \dots, v_n^+\} = \left\{ \left(\min v_{ij} \mid i \in I \right), \left(\max v_{ij} \mid i \in J \right) \right\} \quad (5)$$

where I is associated with benefit criteria, and J is associated with cost criteria.

5. Calculate the separation measures, using the m-dimensional Euclidean distance. The separation of each alternative from the ideal solution (D_i^+) is given as

$$D_i^+ = \sqrt{\sum_{j=1}^n (v_{ij} - v_j^+)^2}, \quad i=1, \dots, m. \quad (6)$$

Similarly, the separation of each alternative from the negative-ideal solution (D_i^-) is as follows:

$$D_i^- = \sqrt{\sum_{j=1}^n (v_{ij} - v_j^-)^2}, \quad i=1, \dots, m. \quad (7)$$

6. Calculate the relative closeness to the ideal solution. The relative closeness of the alternative (A_i) with respect to (A^+) is defined as follows:

$$C_i = \frac{D_i^-}{D_i^+ + D_i^-}, \quad i=1, \dots, m. \quad (8)$$

$$D_i^- \geq 0 \text{ and } D_i^+ \geq 0, \text{ clearly, } C_i \in [0,1]$$

Rank the preference order. For ranking alternatives using this index, we can rank alternatives in decreasing order. The basic principle of the TOPSIS method is that the chosen alternative should have the “shortest distance” from the positive ideal solution and the “farthest distance” from the negative ideal solution. The TOPSIS method introduces two “reference” points, but it does not consider the relative importance of the distances from these points.

3.2. Research Findings

Table 1 shows the decision matrices composed of four alternatives and six criteria in determining the priority of an international firm also active in Turkey’s insurance and individual retirement market while allocating resources for life insurance, non-life insurance and individual retirement products from marketing communication budget to elements of marketing communication using TOPSIS method.

Table 1: Decision matrices

For life insurance products	CST	DCTM	PF	SPLC	CR	RS
Advertisement	100	80	80	85	90	85
Public Relations	80	80	80	90	90	85
Personal Selling	80	80	70	90	90	85
Promotion	90	80	75	85	90	80

For non-life insurance products	CST	DCTM	PF	SPLC	CR	RS
Advertisement	100	80	80	85	90	85
Public Relations	80	80	80	90	90	85
Personal Selling	80	80	70	80	90	85
Promotion	90	80	75	90	90	80

For individual retirement products	CST	DCTM	PF	SPLC	CR	RS
Advertisement	100	80	80	85	90	85
Public Relations	80	80	80	90	90	85
Personal Selling	80	80	70	80	90	85
Promotion	90	80	75	85	90	80

After arranging the decision matrices for life, non-life and individual retirement products, using equation (2) normalized decision matrices $R = [r_{ij}]_{m \times n}$ are formed. Normalized decision matrices for each product are shown in Table 2.

Table 2: The normalized decision matrices

For life insurance products	CST	DCTM	PF	SPLC	CR	RS
Advertisement	0.5688	0.5	0.5238	0.4855	0.5	0.5073
Public Relations	0.4551	0.5	0.5238	0.5141	0.5	0.5073
Personal Selling	0.4551	0.5	0.4583	0.5141	0.5	0.5073
Promotion	0.5119	0.5	0.4911	0.4855	0.5	0.4775

For non-life insurance products	CST	DCTM	PF	SPLC	CR	RS
Advertisement	0.5688	0.5	0.5238	0.4996	0.5	0.5073
Public Relations	0.4551	0.5	0.5238	0.5290	0.5	0.5073
Personal Selling	0.4551	0.5	0.4583	0.4702	0.5	0.5073
Promotion	0.5119	0.5	0.4911	0.4996	0.5	0.4775

For individual retirement products	CST	DCTM	PF	SPLC	CR	RS
Advertisement	0.5688	0.5	0.5238	0.4855	0.5	0.4722
Public Relations	0.4551	0.5	0.5238	0.5141	0.5	0.4722
Personal Selling	0.4551	0.5	0.4583	0.5141	0.5	0.4722
Promotion	0.5119	0.5	0.4911	0.4855	0.5	0.4444

Using the weights belonging to the criteria “cost (CST), demographic characteristics of the target market (DCTM), product features (PF), the stage of the product on the life curve (SPLC), corporate reputation (CR) and rival strategies (RS)” determined for life, non-life and individual retirement products, the weighted normalized decision matrices are obtained through equation (3). The weighted normalized decision matrices obtained as a result of multiplying the elements of normalized decision matrices with their weights are shown in Table 3.

Table 3: The weighted normalized decision matrices

For life insurance products	CST	DCTM	PF	SPLC	CR	RS
<i>Weights</i>	0.408	0.136	0.102	0.204	0.069	0.081
Advertisement	0.2321	0.0068	0.0534	0.0990	0.0345	0.0411
Public Relations	0.1857	0.0068	0.0534	0.1049	0.0345	0.0411
Personal Selling	0.1857	0.0068	0.0467	0.1049	0.0345	0.0411
Promotion	0.2089	0.0068	0.0501	0.0990	0.0345	0.0387

For non-life insurance products	CST	DCTM	PF	SPLC	CR	RS
<i>Weights</i>	0.408	0.081	0.069	0.136	0.204	0.102
Advertisement	0.2321	0.0405	0.0361	0.0679	0.102	0.0517
Public Relations	0.1857	0.0405	0.0361	0.0719	0.102	0.0517
Personal Selling	0.1857	0.0405	0.0361	0.0639	0.102	0.0517
Promotion	0.2089	0.0405	0.0339	0.0679	0.102	0.0487

For individual retirement products	CST	DCTM	PF	SPLC	CR	RS
Weights	0.408	0.081	0.069	0.204	0.136	0.102
Advertisement	0.2321	0.0405	0.0361	0.099	0.068	0.0482
Public Relations	0.1857	0.0405	0.0361	0.1049	0.068	0.0482
Personal Selling	0.1857	0.0405	0.0316	0.1049	0.068	0.0482
Promotion	0.2088	0.0405	0.0339	0.099	0.068	0.0453

The positive ideal (A^+) and negative ideal (A^-) solutions are determined using Equations (4) and (5). The results are shown in Table 4.

Table 4: Positive ideal and negative ideal solutions

Solutions for life insurance products	CST	DCTM	PF	SPLC	CR	RS
Positive ideal (A^+)	0.2321	0.0068	0.0534	0.1049	0.0345	0.0411
Negative ideal (A^-)	0.1857	0.0068	0.0467	0.0990	0.0345	0.0387

Solutions for non-life insurance products	CST	DCTM	PF	SPLC	CR	RS
Positive ideal (A^+)	0.2321	0.0405	0.0361	0.0719	0.102	0.0517
Negative ideal (A^-)	0.1857	0.0405	0.0316	0.0639	0.102	0.0487

Solutions for individual retirement products	CST	DCTM	PF	SPLC	CR	RS
Positive ideal (A^+)	0.2321	0.0405	0.0361	0.1049	0.068	0.0482
Negative ideal (A^-)	0.1857	0.0405	0.0316	0.0990	0.068	0.0453

The separation of each alternative solution is calculated using Equations (6) and (7). The final results are shown in Table 5.

Table 5: Resultant of D_i^+ and D_i^-

Solutions for life insurance products	Advertisement	Public Relations	Personal Selling	Promotion
D_i^+	0.0059	0.0464	0.2136	0.0243
D_i^-	0.0469	0.009244	0.006369	0.0225

Solutions for non-life insurance products	Advertisement	Public Relations	Personal Selling	Promotion
D_i^+	0.004	0.0464	0.0473	0.0238
D_i^-	0.0469	0.009654	0.00299	0.0237

Solutions for individual retirement products	Advertisement	Public Relations	Personal Selling	Promotion
D_i^+	0.0059	0.0464	0.0464	0.0243
D_i^-	0.0467	0.00796	0.006574	0.02321

The result of the ranking of approaches is derived using Equations (8) (Table 6). The first alternative is considered as the best maximization of expected benefits.

Table 6: The weighted normalized decision matrices

For life insurance products	Advertisement (C ₁)	Public Relations (C ₃)	Personal Selling (C ₄)	Promotion (C ₂)
C_i	0.8883	0.16613	0.0290	0.4808
Rank	1	3	4	2

For non-life insurance products	Advertisement (C ₁)	Public Relations (C ₃)	Personal Selling (C ₄)	Promotion (C ₂)
C_i	0.9214	0.1722	0.0595	0.4989
Rank	1	3	4	2

For individual retirement products	Advertisement (C ₁)	Public Relations (C ₃)	Personal Selling (C ₄)	Promotion (C ₂)
C _i	0.8878	0.1464	0.1241	0.485
Rank	1	3	4	2

From Table 6, this study decided the TOPSIS was following $C_1 > C_3 > C_4 > C_2$. In other words, the priority of an international firm also active in Turkey's insurance and individual retirement market while allocating resources for life insurance, non-life insurance and individual retirement products from marketing communication budget to elements of marketing communication is determined as advertisement (C₁), promotion (C₂), public relations (C₃) and personal selling (C₄). This result supports the need for making the Turkish society conscious about insurance. Insurance and retirement products should be promoted through advertisements and their importance should be emphasized. Moreover, premium productions should be supported through promotions, reputation of insurance companies should be raised through public relations efforts and relations with customers should be enhanced through personal selling. In this study, the priority in allocating resource to marketing communication elements by using TOPSIS is reported in Figure 1.

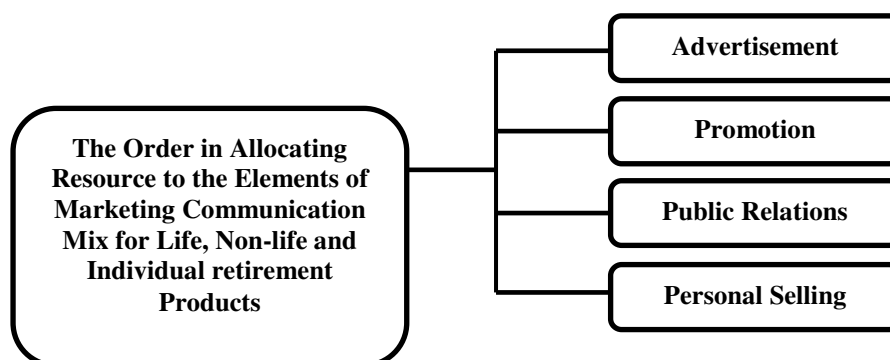


Figure 1. Marketing Communication Mix Elements

4. Conclusion & Suggestions

According to the results of a research conducted on 3000 people in various cities by Nielsen in the name of Association of the Insurance and Reinsurance Companies of Turkey (2009), it was revealed that the Turkish society is determinist. In the research, it was seen that one third of the participants consider training for developing insurance conscious in elementary school curriculum important. It was also determined that the participants have a positive attitude towards insurance but are neutral towards insurance companies in terms of trust. Moreover, it was found that women are more sensitive to health and earthquake risks and therefore studies for women to enhance insurance conscious are required. It was determined that male participants are more determinist and less sensitive to risks than female ones. On the other hand, in a study by BNP Paribas Cardif (2012) on eight countries including Turkey to determine customer tendencies in insurance, it was revealed that emotional tendencies are more important in the perspective of Turkish people to insurance. Contrary to the individualistic perspective of other societies, Turkish people express themselves with the groups they exist in and so consider the family as the first criterion as assurance. It was concluded that such an approach also affects attitudes towards insurance and retirement products.

It is crystal clear that the determinist stance of Turkish people affects their attitudes and behaviours towards insurance sector. Also, the fact that no conscious has been developed about insurance is negative for the development of insurance sector. Not only for the development of the sector but also for community development, Turkish Insurance Sector should raise its efforts to make the society more conscious about the importance of insurance and insurance companies. In this study, it is aimed to determine the priority of an

international firm also active in Turkey's insurance and individual retirement market while allocating resources to elements of marketing communication used while making the society conscious. For this purpose, the priority of the firm while allocating resources for life insurance, non-life insurance and individual retirement products from marketing communication budget to elements of marketing communication is determined. Firstly, the criteria for the priority of allocating resources for life insurance, non-life insurance and individual retirement products to elements of marketing communication are determined as the order of cost, demographic characteristics of the target market, product features, the stage of the product on the life curve, corporate reputation and rival strategies. Later, using TOPSIS Method, these criteria are weighed one by one for each product and the order of priority of allocating resource is tried to be determined depending on each weight.

As a result of the analyses, the priority of allocating resources for life insurance, non-life insurance and individual retirement products from marketing communication budget to elements of marketing communication is determined as advertisement, promotion, public relations and personal selling. These results support the fact that insurance companies should first make the society conscious about insurance companies. Firstly, the importance of insurance, products and companies should be promoted through advertisements so that insurance conscious can be developed in the society. Subsequently, programs supporting premium production should be emphasized. Public relations activities will be useful in turning the neutral stance of the society towards the companies into a positive one. Finally, personal selling should be used for enhancing customer relations and boosting company profitability. By this way, the society's demand for and conscious about insurance can be achieved and raised. In the future studies, taking the other marketing communication elements into account, more detailed studies can be conducted. Furthermore, since the difference in insurance conscious and demand level in different societies will differentiate the investments to marketing communication elements, comparisons involving these differences can be analysed in the future studies.

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