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Designing an Interpretative Structural Model (ISM) of Fear Appeal Based Advertising in Selected Insurance Companies

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A B S T R A C T

Objective: The performance of advertising with a fear appeal is negatively framed, warning against the non-use or application of a specific good or service, which may entail various risks including financial, social, and safety hazards for individuals.

Methodology: The objective of this study is to design an interpretive structural model of fear appeal-based advertising in selected insurance companies. The research method is descriptive and inferential. The research population includes marketing professionals, experts, elites, managers, and employees of insurance companies. The data collection tools are library research and interviews. For data analysis, the Interpretive Structural Modeling (ISM) method was utilized in the MICMAC software. This study examined the presentation of a fear appeal-based advertising model in selected insurance companies, resulting in the extraction of the final model.

Findings: Based on the interpretive structural modeling technique, a 22-component model of fear appeal-based advertising in selected insurance companies has been designed.

Conclusion: According to the designed model, 5 consecutive levels are shown. By making changes to the variables at the lowest level, desirable results and outcomes can be observed in the upstream impact factors. Perceived benefits, peer groups, and advertising influence were identified at the lowest level and as the most influential components. Changing these three components can manage the higher level of the model and direct it towards increasing the effectiveness of marketing based on fear appeal for profitability.

Keywords: *Interpretive Structural Model, Advertising, Fear Appeal, Selected Insurance Companies*

1 Introduction

Given that the advertising industry is considered a solution for the economy, it is necessary to make predictions for its effectiveness (Sahafzadeh & Haghighi, 2023; Zhang et al., 2022). Advertising is a form of communication aimed at persuading the audience to purchase or perform a series of activities, providing information about products, services, etc., to the audience (Martins et al., 2018). For years, advertising has been a powerful communication tool for promoting products and achieving goals such as increasing sales and profitability, or enhancing brand image (Kim & Jun, 2016). Some marketing tactics, like price promotions, have short-term effects, while others, like advertising, have both short-term and long-term effects and are vital as a communication system for companies (Peres et al., 2023; Rejeb et al., 2020). Today, every company must advertise its products to inform customers about these products, increase its sales, gain market value, and earn fame in the industry. Creative advertising techniques are communication tools that a company or other businesses use to attract attention, engage minds, create emotions, and change public perception. Every business spends significant amounts on advertising its products or productions, but this expense only leads to success when the best advertising techniques are used for promoting the product. Many producers or service providers increase the likelihood of their advertising investment return by using common and proven advertising methods (Baumol et al., 2011; Molaie, 2016).

Appeals can generally be divided into three categories: logical appeal, emotional/emotive appeal, and moral appeal. Emotional appeals, which drive individuals to a stir and movement of a sensory experience, are called emotional message appeals. These appeals can cause the stimulation of positive emotions like love, humanity, pride, success, humor, and pleasure, and negative emotions such as fear, guilt, and shame, leading people to undertake or avoid certain actions. The goal of advertising with emotional appeals is to create and establish a connection between the message subject and the target audience. Such advertisements are likely to be better understood by the audience, more memorable, and more engaging. Advertising strategies include: simplicity, repetition in posting or repeating homogeneous elements, exaggeration about special features, distortion and familiarization, providing logical justification, creating a sense of need, evoking emotions, creating a sense of joy and humor, creating a sense of fear, using the credibility of famous people, referring to the benefits of going along with the majority of society, keeping up with the times, and abstractness, metaphorical expression, symbolic expression, and the formation and connection of new phenomena. Further examination of fear appeal strategy reveals: the main variables that influence the use of this strategy can be named as the target market, their needs and shortages, and the culture of the customer (Ahmadinejad, 2019). Some researchers believe that fear appeals can successfully increase the impact of advertisements on consumer interest, engagement, recall, persuasion, and effective behavior change. Fear appeals are commonly used in many types of marketing communications such as marketing products, services, ideas, etc. They are often used to help people help themselves (Young et al., 2019). As a result, the arousal of fear is a key emotional outcome of warning communications, measuring the level of fear, worry, and anger involved. Few advertisements examine positive appeals in social marketing advertisements, i.e., appeals that are embedded with a positive element that expresses the message in an optimistic manner. The results of previous studies show that fear appeals are effective; however, fear appeals can produce two competitive responses, such as self-protective reactions and defensive responses. The use of fear-inducing messages is one of the challenging topics in advertising. Some experts believe that this method is not practical and correct and may disillusion customers about the product and brand, but another group of experts believes that fear-inducing messages can easily attract the audience's attention to the advertisement and by creating a sense of fear in the audience, they can be encouraged to take action (Mataji Nimvari et al., 2021). However, despite the effectiveness of fear appeal in designing advertising messages, especially in the field of insurance, most advertising campaigns of insurance companies in the country do not use this appeal. While in the advertisements of insurance companies, especially in Western and developed countries, this appeal is widely used. This indicates the importance of the issue and the negligence in this matter, in which insurance companies can also use this method in their advertisements to create fear in customers and the consequences of not using their services. Finally, based on the content mentioned in this research, we seek to answer the question of how the presentation of a fear appeal-based advertising model in selected insurance companies is?

IJIMOB
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2 Methods and Materials

2.1 Study Design

This research employs ranking and sequencing processes using the Interpretive Structural Modeling (ISM) method. ISM or Interpretive Structural Modeling is a method for designing the pattern of complex and multiple relationships among variables of a phenomenon. This method is a type of structural analysis based on the interpretive paradigm. Its goal is also to identify relationships between the underlying variables of a multifaceted and complex phenomenon and is suitable for management studies and social sciences. Designing an interpretive structural model (ISM) is a method for examining the effect of each of the variables on other variables; this design is a comprehensive approach for assessing the relationship and is used for the development of the model framework to make the overall objectives of the research feasible. In this method, effective and fundamental factors are first identified, and then, using the presented method, the relationships between these factors and the way to achieve progress through these factors are presented. The ISM method analyzes the relationship between indicators by breaking down the criteria into several different levels. The interpretive structural model can determine the relationship between indicators that are single or collectively dependent on each other. The ISM method can be used for the analysis of the relationship between the characteristics of several variables defined for a problem. The ISM method can be used for the analysis of the relationship between the characteristics of several variables defined for a problem.

The research population includes university professors, marketing professionals, experts, elites, managers, and employees of insurance companies. The criteria for experts to enter the interview included the following:

Managers and deputies of selected insurance companies

Faculty members who had a long history of teaching related courses, including marketing, etc.

Faculty members who had research experience in the field of advertising and considered this field among their research interests.

2.2 Data Collection

There are various tools and methods for collecting data, each suitable for a specific type of data. Each data collection method has its strengths and weaknesses. Therefore, the use of multiple methods has the advantage of complementing each other and providing more accurate data. The following methods were used for collecting the necessary information: 1- Document and record review: Also, other information in the field of subject literature, determining the theoretical framework, and indicators were used from the available resources in the library containing books, journals, theses, and scientific reports. 2- Interview: Interviewing is a common technique or tool for collecting research data that has increasingly received attention with the expansion of qualitative and mixed (quantitative and qualitative) approaches in recent years. The interview is a common tool for collecting information through direct verbal interaction between the interviewer and the interviewee.

2.3 Data Analysis

The interpretive structural model analyzes the relationship between indicators at several different levels, based on data analyzed through the coding process grounded in the systematic design theory of Strauss and Corbin (1998). Coding is an analytical process in which data are conceptualized and connected to form a theory. Data analysis in this process does not occur separately from collection and sampling.

The design of the interpretive structural model (ISM) is a method for examining the effect of each of the variables on other variables; this design is a comprehensive approach for assessing the relationship and is used for the development of the model framework to enable the overall objectives of the research.

Table 1

Notation of Identified Indicators

Research Components	Identified Indicators
C1	Advertising Influence
C2	Peer Groups
C3	Perceived Profitability
C4	Personality Traits
C5	Psychological Effect

IJIMOB
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C6	Principles of Advertising
C7	Economic Conditions
C8	Political Conditions
C9	Entertainment
C10	Sociocultural Conditions
C11	Specialization
C12	Profitability
C13	Environmental Advertising
C14	Message Appeal
C15	Technology and Communication
C16	Positive Experience
C17	Advertising Message Content
C18	Creating a Competitive Environment
C19	Purchase Intention
C20	Word-of-Mouth Advertising
C21	Brand Management
C22	Competitive Advantage

3 Findings and Results

The first step in interpretive structural modeling is to calculate the internal relationships of the indicators. The experts' viewpoints are used to reflect the internal relationships among the indicators. The matrix obtained at this stage shows which variables affect and are affected by which other variables.

The self-interactive structural matrix is formed from the dimensions and indicators of the study and their comparison using four states of conceptual relationships. The information obtained based on the interpretive structural modeling method is summarized, and the final self-interactive structural matrix is formed.

Table 2

Structural Self-Interactive Matrix (SSIM)

	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16	C17	C18	C19	C20	C21	C22
C1		V	V	V	V	V	V	V	V	V	X	O	O	O	O	O	V	V	V	O	O	V
C2			V	V	V	V	V	V	V	V	O	O	O	O	O	O	O	O	O	O	O	V
C3				V	V	V	V	V	V	V	V	O	O	O	O	V	V	V	V	O	O	V
C4					V	V	V	V	V	V	O	O	O	O	O	O	O	O	O	O	O	V
C5						V	V	V	V	V	O	O	O	O	O	V	V	O	O	V	O	V
C6							V	V	A	A	O	O	O	O	O	O	O	O	O	O	O	A
C7								V	V	X	O	O	O	O	O	O	O	O	O	O	O	X
C8									V	X	O	O	O	O	O	O	O	V	V	O	V	V
C9										V	O	O	O	O	O	O	O	O	O	O	O	V
C10											O	O	O	O	O	O	O	V	V	O	O	A
C11												O	O	V	V	O	V	O	O	O	O	O
C12													O	V	O	A	A	A	A	O	V	O
C13														O	V	A	A	O	O	O	O	O
C14															V	A	V	A	A	A	A	O
C15																X	A	A	A	A	A	O
C16																	X	V	V	V	V	O
C17																		V	V	V	V	O

IJIMOB
E-ISSN: 3041-8992

C18																			X	O	V	O	
C19																				O	X	O	
C20																					V	O	
C21																						O	
C22																							

The reachability matrix is obtained by converting the self-interactive structural matrix into a binary matrix of zero and one. In the reachability matrix, the entries of the main diagonal are set to one. Therefore, the reachability matrix using the ISM technique is presented in Table 3.

Table 3

Reachability Matrix of Identified Indicators

	1 : c	2 : c	3 : c	4 : c	5 : c	6 : c	7 : c	8 : c	9 : c	10 :	11 : c	12 :	13 :	14 :	15 :	16 :	17 :	18 :	19 :	20 :	21 :	22 :
1 : c1	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1	1	0	0	1
2 : c2	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1
3 : c3	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1	1	0	0	1
4 : c4	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1
5 : c5	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	1	1	0	0	1	0	1
6 : c6	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1
7 : c7	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
8 : c8	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	1	1
9 : c9	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
10 : c10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
11 : c11	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	1	0
12 : c12	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
13 : c13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14 : c14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
15 : c15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
16 : c16	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1	1	1	1	1	0
17 : c17	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	1	1	1	1	0
18 : c18	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	1	0
19 : c19	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	1	0	0	1	0
20 : c20	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0
21 : c21	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0
22 : c22	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0

After obtaining the initial accessibility matrix, by introducing transitivity in the relationships between variables, the final accessibility matrix is obtained. This is a square matrix where each entry is one when an element has access to another element at any length and zero otherwise. The method of obtaining the accessibility matrix uses Euler's theory, where the adjacency matrix is added to the unit matrix. Then, this matrix is raised to the power of n if the entries of the matrix do not change. Therefore, secondary relationships must be controlled, meaning if A leads to B and B leads to C, then A should lead to C. That is, if based on secondary relationships, direct effects should have been considered but in practice have not occurred, the table must be corrected to also show the secondary relationship. The final accessibility matrix of the identified indicators is presented in Table 4.

IJIMOB
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Table 4

Final Accessibility Matrix of Identified Indicators

	.	1 : c	2 : c	3 : c	4 : c	5 : c	6 : c	7 : c	8 : c	9 : c	10 :	11 : c	12 :	13 :	14 :	15 :	16 :	17 :	18 :	19 :	20 :	21 :	22 :
▶	1 : c1	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1	1	0	0	1
	2 : c2	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1
	3 : c3	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1	1	0	0	1
	4 : c4	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1
	5 : c5	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	1	1	0	0	1	0	1
	6 : c6	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1
	7 : c7	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	8 : c8	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	1	1
	9 : c9	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	10 : c10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
	11 : c11	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	1	0
	12 : c12	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	13 : c13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	14 : c14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
	15 : c15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	16 : c16	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1	1	1	1	1	0
	17 : c17	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	1	1	1	1	0
	18 : c18	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	1	0
	19 : c19	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	1	0	0	1	0
	20 : c20	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0
	21 : c21	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0
	22 : c22	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0

To determine the relationships and level the criteria, the output set and the input set for each criterion must be extracted from the reachability matrix.

- Accessibility Set (row elements, outputs or influences): Variables that can be reached through this variable.
- Prerequisite Set (column elements, inputs or susceptibilities): Variables through which this variable can be reached.

The output set includes the criterion itself and the criteria that are influenced by it. The input set includes the criterion itself and the criteria that influence it. Then the bidirectional relationships of the criteria are determined.

Table 5

Input and Output Sets (Influences) for Each Variable

	Output
C1	C1-C2-C3-C4-C5-C6-C7-C8-C9-C10-C11-C12-C13-C14-C15-C16-C17-C18-C19-C20-C21-C22
C2	C1-C2-C3-C4-C5-C6-C7-C8-C9-C10-C11-C12-C13-C14-C15-C16-C17-C18-C19-C20-C21-C22
C3	C1-C2-C3-C4-C5-C6-C7-C8-C9-C10-C11-C12-C13-C14-C15-C16-C17-C18-C19-C20-C21-C22
C4	C4-C5-C6-C7-C8-C9-C10-C11-C12-C13-C14-C15-C16-C17-C18-C19-C20-C21-C22
C5	C4-C5-C6-C7-C8-C9-C10-C11-C12-C13-C14-C15-C16-C17-C18-C19-C20-C21-C22
C6	C6-C7-C8-C9-C10-C11-C12-C13-C14-C15 -C18-C19-C20-C21-C22
C7	C6-C7-C8-C9-C10-C11-C12-C13-C14-C15 -C18-C19-C20-C21-C22
C8	C6-C7-C8-C9-C10-C11-C12-C13-C14-C15 -C18-C19-C20-C21-C22
C9	C9-C11-C12-C14-C15 -C18-C19-C20-C21-C22
C10	C6-C7-C8-C9-C10-C11-C12-C13-C14-C15 -C18-C19-C20-C21-C22
C11	C9-C11-C12-C14-C15 -C18-C19-C20-C21-C22
C12	C12 -C18-C19-C21
C13	C6-C7-C8-C9-C10-C11-C12-C13-C14-C15 -C18-C19-C20-C21-C22
C14	C9-C11-C12-C14-C15 -C18-C19-C20-C21-C22
C15	C9-C11-C12-C14-C15 -C18-C19-C20-C21-C22
C16	C4-C5-C6-C7-C8-C9-C10-C11-C12-C13-C14-C15-C16-C17-C18-C19-C20-C21-C22

IJIMOB
E-ISSN: 3041-8992

C17	C4-C5-C6-C7-C8-C9-C10-C11-C12-C13-C14-C15-C16-C17-C18-C19-C20-C21-C22
C18	C12 -C18-C19-C21
C19	C12 -C18-C19-C21
C20	C9-C11-C12-C14-C15 -C18-C19-C20-C21-C22
C21	C12 -C18-C19-C21
C22	C9-C11-C12-C14-C15 -C18-C19-C20-C21-C22

Table 6

Input and Output Sets (Susceptibilities) for Each Variable

	Input
C1	C1-C2-C3
C2	C1-C2-C3
C3	C1-C2-C3
C4	C1-C2-C3-C4-C5 –C16-C17
C5	C1-C2-C3-C4-C5 –C16-C17
C6	C1-C2-C3-C4-C5 –C6-C7-C8-C10-C13-C16-C17
C7	C1-C2-C3-C4-C5 –C6-C7-C8-C10-C13-C16-C17
C8	C1-C2-C3-C4-C5 –C6-C7-C8-C10-C13-C16-C17
C9	C1-C2-C3-C4-C5 –C6-C7-C8-C9-C10-C11-C13-C14-C15-C16-C17-C20-C22
C10	C1-C2-C3-C4-C5 –C6-C7-C8-C10-C13-C16-C17
C11	C1-C2-C3-C4-C5 –C6-C7-C8-C9-C10-C11-C13-C14-C15-C16-C17-C20-C22
C12	C1-C2-C3-C4-C5 –C6-C7-C8C9-C10-C11-C12-C13-C16-C17-C18-C19-C20-C21-C22
C13	C1-C2-C3-C4-C5 –C6-C7-C8-C10-C13-C16-C17
C14	C1-C2-C3-C4-C5 –C6-C7-C8-C9-C10-C11-C13-C14-C15-C16-C17-C20-C22
C15	C1-C2-C3-C4-C5 –C6-C7-C8-C9-C10-C11-C13-C14-C15-C16-C17-C20-C22
C16	C1-C2-C3-C4-C5 –C16-C17
C17	C1-C2-C3-C4-C5 –C16-C17
C18	C1-C2-C3-C4-C5 –C6-C7-C8C9-C10-C11-C12-C13-C16-C17-C18-C19-C20-C21-C22
C19	C1-C2-C3-C4-C5 –C6-C7-C8C9-C10-C11-C12-C13-C16-C17-C18-C19-C20-C21-C22
C20	C1-C2-C3-C4-C5 –C6-C7-C8-C9-C10-C11-C13-C14-C15-C16-C17-C20-C22
C21	C1-C2-C3-C4-C5 –C6-C7-C8C9-C10-C11-C12-C13-C16-C17-C18-C19-C20-C21-C22
C22	C1-C2-C3-C4-C5 –C6-C7-C8-C9-C10-C11-C13-C14-C15-C16-C17-C20-C22

Table 7

Intersection of Inputs and Outputs of Research Indicators

Variable	Intersection
C1	C1-C2-C3
C2	C1-C2-C3
C3	C1-C2-C3
C4	C4-C5-C16-C17
C5	C4-C5-C16-C17
C6	C6-C7-C8-C10-C13
C7	C6-C7-C8-C10-C13
C8	C6-C7-C8-C10-C13
C9	C9-C11-C14-C15-C20-C22
C10	C6-C7-C8-C10-C13
C11	C9-C11-C14-C15-C20-C22
C12	C12-C18-C19-C19-C21
C13	C6-C7-C8-C10-C13

IJIMOB
E-ISSN: 3041-8992

C14	C9-C11-C14-C15-C20-C22
C15	C9-C11-C14-C15-C20-C22
C16	C4-C5-C16-C17
C17	C4-C5-C16-C17
C18	C12-C18-C19-C19-C21
C19	C12-C18-C19-C19-C21
C20	C9-C11-C14-C15-C20-C22
C21	C12-C18-C19-C19-C21
C22	C9-C11-C14-C15-C20-C22

For variable C_i, the accessibility set (outputs or influences) includes the variables that can be reached through variable C_i. The prerequisite set (inputs or susceptibilities) includes the variables through which variable C_i can be reached.

After determining the accessibility and prerequisite sets, the intersection of the two sets is calculated. The first variable for which the intersection of the two sets equals the accessibility set (outputs) will be the first level. Therefore, the first-level elements will have the most influence in the model. After determining the level, the criterion whose level has been determined is removed from all sets, and the input and output sets are formed again, and the level of the next variable is determined.

Table 8

Determining the First Level in the ISM Hierarchy

Variable	Level
C1	1
C2	1
C3	1
C4	2
C5	2
C6	3
C7	3
C8	3
C9	4
C10	3
C11	4
C12	5
C13	3
C14	4
C15	4
C16	2
C17	2
C18	5
C19	5
C20	4
C21	5
C22	4

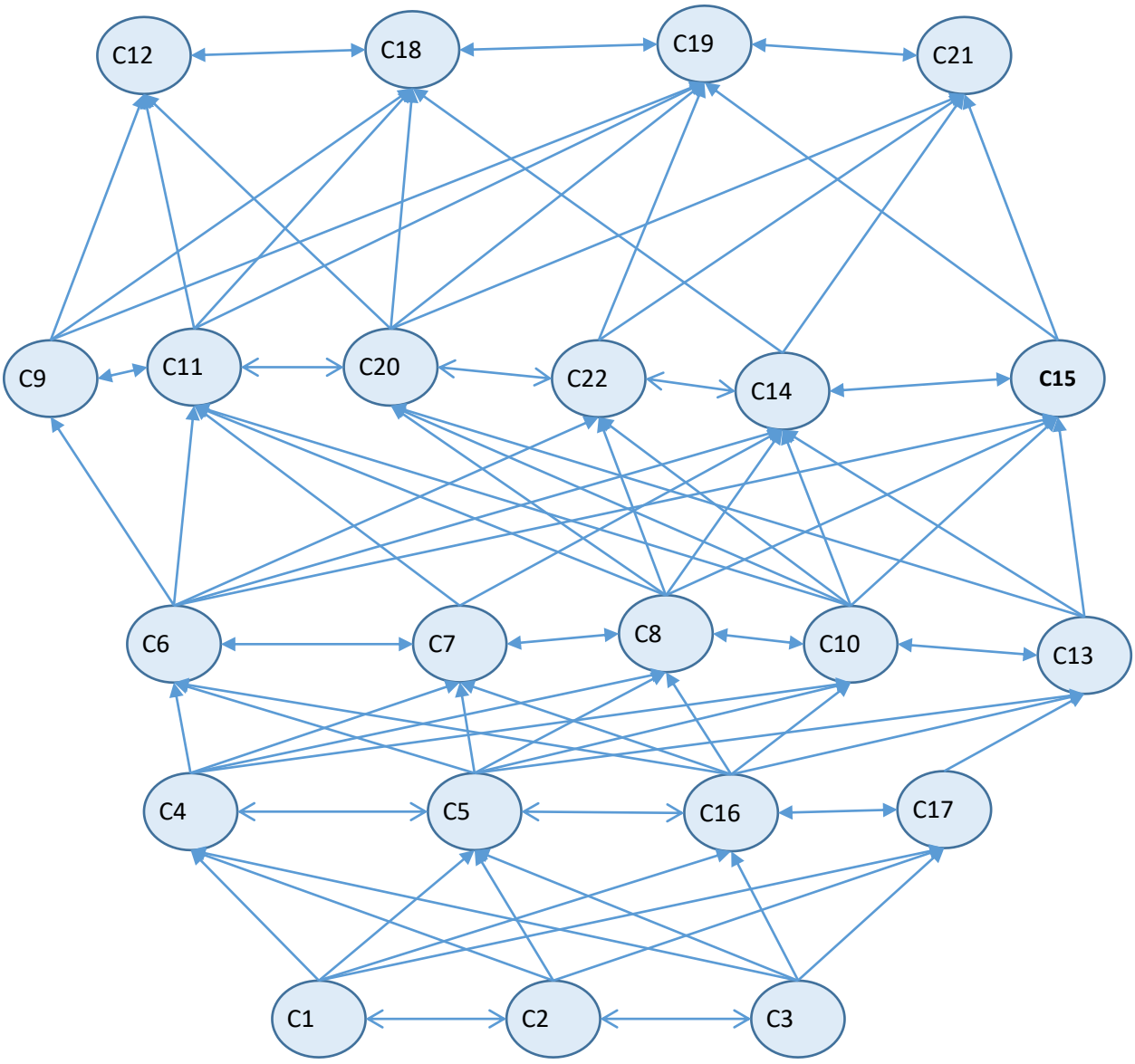
Therefore, variables C1-C2-C3 are first-level variables. After identifying the first-level variable(s), these variable(s) are removed, and the input and output sets are calculated without considering the first-level variables. The common set is identified, and variables for which their intersection equals the input set are selected as second-level variables.

IJIMOB
E-ISSN: 3041-8992

Variables C4-C5-C16-C17 are second-level variables. Variables C6-C7-C8-C10-C13 are third-level variables. Variables C9-C11-C14-C15-C20-C22 are fourth-level variables. Variables C12-C18-C19-C21 are fifth-level variables. The final pattern of the identified variables' levels is shown in Figure 1. In this diagram, only significant relationships of elements at each level on the elements of the lower level and also significant internal relationships of elements of each row are considered.

Figure 1

Basic Model Developed with the ISM Method



In the ISM model, the mutual relationships and influences between criteria and the relationship of criteria at different levels are well demonstrated, which facilitates a better understanding of the decision-making space by managers. To determine the key criteria, the influence and dependency of the criteria in the final accessibility matrix are formed.

Based on the influence and dependency of the variables, a coordinate system can be defined and divided into four equal parts. In this research, a group of variables fell into the driving subgroup; these variables have high influence and low dependency. In the next category, dependent variables are those that are essentially outcomes of the product development process and are less likely to be the basis for other variables.

In this analysis, variables are divided into four groups: autonomous, dependent, linking (intermediate), and

IJIMOB
E-ISSN: 3041-8992

independent. Autonomous: Autonomous variables have low dependency and guiding power; these criteria generally separate from the system because they have weak connections with the system. A change in these variables does not cause a serious change in the system. According to the Micmac model, variables C4-C5-C6-C7-C8-C9-C10-C11-C12-C13-C16-C17-C20-C22 are autonomous. Dependent: Dependent variables have strong dependency and weak guidance; these variables generally have high susceptibility and low impact on the system. In this research, variables C15-C14-C12-C21-C19-C18 are dependent. Independent: Independent variables have low dependency and high guidance, in other words, high impact and low susceptibility are characteristics of these variables. Variables C1-C2-C3 have the highest level of impact. Linking: Linking or intermediate variables have high dependency and high guiding power, meaning the impact and susceptibility of these criteria are very high, and any small change on these variables causes significant changes in the system. According to the Micmac model, there are no linking variables in this research.

4 Discussion and Conclusion

Marketing strategy is a blend of tactics and psychological motivations. Advertising aims not to make customers aware of the ubiquity and importance of coding, but rather to instigate internal doubt and fear of missing out for individuals. Given that customers tend to limit their loss of position in the technology world, this marketing strategy proves useful. The goal of the present study was to provide an interpretive structural model of fear appeal-based advertising in selected insurance companies. This research utilized the Interpretive Structural Modeling (ISM) method. In this method, the underlying indicators of the topic under study are first identified, and then the relationships between these factors and the way to achieve progress through these factors are presented. This research was conducted with a hybrid approach, starting with a review of thematic literature, leveraging past research, and identifying a number of factors affecting the model of fear appeal-based advertising in selected insurance companies in the insurance industry. The initial conceptual model was extracted with a deductive (quantitative) approach and then completed inductively (qualitatively). Based on the interpretive structural modeling technique, a 22-component model of fear appeal-based advertising in selected insurance companies has been designed.

According to the designed model, 5 consecutive levels are shown. By making changes to the variables at the lowest level, desirable results and outcomes can be observed in the upstream impact factors. Perceived benefits, peer groups, and advertising influence were identified at the lowest level and as the most influential components. Changing these three components can manage the higher level of the model and direct it towards increasing the effectiveness of marketing based on fear appeal for profitability.

Advertising content, positive experience, psychological effect, and personality traits are at a higher level. After the first level, the second level refers to the specialized principles of advertising. In creating more effective advertising, fundamental principles must be adhered to. Understanding the media preferred by customers, timing, and use of characters that appeal to the insurance company's audience are all considered emotional and personality principles effective in marketing based on fear appeal.

Environmental advertising, cultural conditions, political conditions, economic conditions, and advertising principles are at the third level. As identified in the previous steps, the basic principles were understanding customers and creating advertisements based on their emotions and psychological and behavioral characteristics. This level refers to environmental factors and external marketing rules. The content of the message must be consistent with the cultural, economic, and political conditions of the society.

Model strategies were placed at the fourth level. Using technology to increase pleasure and comfort and entertain audiences and customers can lay the groundwork for the popularity of insurance and word-of-mouth advertising among the customer community. The more pleasure a customer derives from advertisements, the more they will mention this experience to their peers, creating a positive cycle among customers. Customer loyalty increases, ultimately reaching the next level, which is the ultimate goal of any marketing technique's framework.

Brand management, purchase intent, creating a competitive environment, and ultimately profitability are the final outcomes of the proposed model. With digitalization becoming ubiquitous and the use of social media sharing, it's not surprising that people fear missing out on events experienced by their acquaintances. Fear-filled attractions can increase the customer's fear, which in turn can increase the likelihood of acquiring a product recommended by close friends or family members. There is a positive and significant relationship between fear and the likelihood of purchase.

IJIMOB
E-ISSN: 3041-8992

Ultimately, the marketing strategy involves creating advertisements from popular topics and associating them with one's brand. Therefore, identifying customers and matching environmental conditions and making the product or service appear important and scarce can all increase the intent to purchase and profitability in the insurance industry. Given the results obtained from the research, the following practical recommendations are proposed:

Identifying customer needs and paying attention to their emotional characteristics;

Specializing fear-based marketing based on specific product characteristics;

Creating a research and development team to localize fear-based marketing based on the temporal and spatial conditions of customers;

Using up-to-date technologies like artificial intelligence to increase the efficiency of fear-based marketing.

Authors' Contributions

All authors have contributed significantly to the research process and the development of the manuscript.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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Declaration of Interest

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Ethical Considerations

In this research, ethical standards including obtaining informed consent, ensuring privacy and confidentiality were observed.

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