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ANALYSIS OF CORRESPONDENCE BETWEEN NOKIA MOBILE PHONES' AESTHETIC CHARACTERISTICS, FUNCTIONAL FEATURES AND PRICE LEVELS IN IRAN MARKET

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ABSTRACT:

NOKIA is the first company that has continually presented Mobile Phone (MP) devices in Iran market. Although there are some other famous brands, NOKIA's place is still at the top of this quickly growing market. To clarify the design approach caused NOKIA's great success in such a market, this research aims to analyze the relations between aesthetic characteristics and the functional features of the existing models of NOKIA's MP in Iran market in respect to their price levels. Moreover, the Iranian users are investigated to firstly know how much NOKIA MP models

have covered their favorites and then specify the aesthetic characteristics and functional features of their favorite MPs. The outcomes of this research eventually address the characteristics of Nokia's design approach that are contributing to her success in Iran market and may help NOKIA better satisfy Iranian users to keep or rather expand her domain in Iran market.

1. INTRODUCTION

NOKIA has been assigned as 'the number one cell phone manufacturer in the world' in Q3 2003 published statistics according to In-Stat/MDR (2003). The statistics of Q3 2005 presented in Table 1 show NOKIA has still remained in the same place. Since the last decade, when the first generation of NOKIA's MPs was introduced in Iran's growing telecom market, NOKIA has been always at the top of this market. NOKIA holds the major stake 51.9 percent of the local MP market in Iran (Iran News, 25.09.2005). "N- (Nokia) considers the Iranian market 'very important' and cares for the need of Iranian consumers in its segmentation strategies", said Timo Toikkanen, the company sales department vice president for the Middle East and Africa (Iran News, 25.09.2005). The theme of this research reflects the potentials of the local designers/researchers emerging in Iran in order to be effectively involved in such a design research project, as mentioned above, intended to focus on Iranian users' needs.

Rank	Vendor	Q3 2005		Q3 2004		Growth
		Shipments, mln.	Share	Shipments, mln.	Share	%
1	Nokia	66.6	32.0%	51.4	29.4%	29.6%
2	Motorola	38.7	18.6%	23.3	13.3%	66.1%
3	Samsung	26.8	12.9%	22.7	13.0%	18.1%
4	LG Electronics	15.5	7.4%	11.8	6.7%	31.4%
5	Sony Ericsson	13.8	6.6%	10.7	6.1%	29.0%
	Others	46.9	22.5%	55.0	31.4%	-14.7%
	Total	**208.3**	**100.0%**	**174.9**	**100.0%**	**19.1%**
Source: IDC (2005)						

Table 1: Worldwide mobile phone shipments in Q3 2005.

Considering the highly effects of the aesthetic particulars like style identification and product form on a brand characteristics and hence its success (Chen, et all, 2003), to expand the reason of NOKIA's such a long lasting success, this research is planed to study the issue from Design point

of view through analyzing the variety of aesthetic characteristics and functional features, which NOKIA offers in Iran market in different price levels. Thus, this research intends to find out what meaningful relationships are between functional and aesthetical aspects of NOKIA MPs in a price level. The results of such an analysis could be also applied when designing a new model MP specified for a definite price ranges. For illustrating how much NOKIA MP models have covered Iranian users' favorites and also for defining the new possible design directions for NOKIA in Iran market, an investigation is done on the Iranian users of NOKIA MPs. The obtained data and information from the investigation are used in the final analytical step of research.

2. OUTLINE

This research aims to accomplish an analytical study on the relation between the aesthetic characteristics and functional features of NOKIA MP models in respect to their price levels in Iran market. Accordingly, it has made an essay to reach the following objectives:

I) To classify the MP models introduced by NOKIA in Iran market, considering their aesthetic characteristics and functional features into the main groupings.

II) To draw the relation between the resulted groupings of aesthetic characteristics and functional features and the models' price ranges.

III) To Investigate NOKIA MPs' Iranian users' favorite aesthetics characteristics and required functional features.

IV) To compare the Iranian MPs users' favorites with the resulted groupings of aesthetic characteristics and functional features.

For approaching the above objectives, this research involves five main phases (Fig. 1). In phase 1, first, the existing NOKIA MP models in Iran market are collected, as the samples for analysis, and their specifications are gathered. Then, the required aesthetic and function items for classifying the samples are determined. In phases 2 and 3 the samples are clustered based on the determined items, namely their aesthetic characteristics and functional features. The correspondences between the groupings of the samples resulted from phases 2 and 3 and the various price ranges are analyzed in phase 4. Phase 5 involves a fieldwork down through the regular and predefined questionnaire investigating the Iranian NOKIA MP users' favorite aesthetic

and functional features. Then the results of analyzing the data derived from the questionnaires have been compared with the outcomes of the pervious phases. This comparison would make it clear how much the existing NOKIA models in Iran market could satisfy and cover the Iranian users' needs and favorites.

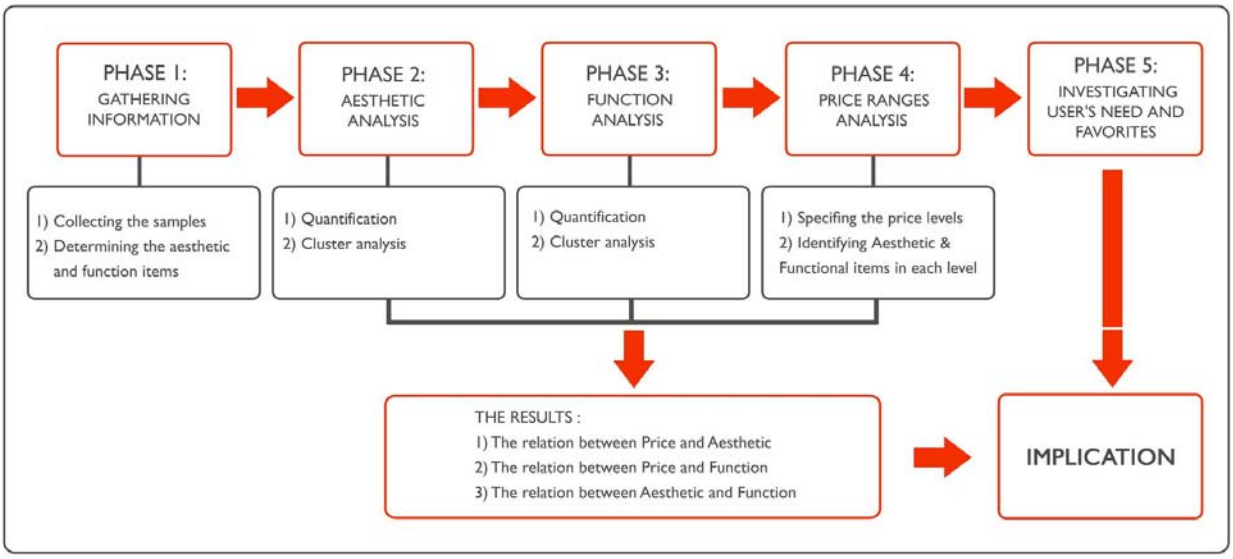

Figure 1: The overview of the research process.

3. METHOD

3.1. PHASE 1: GATHERING INFORMATION

In this phase, first, 77 models of NOKIA MPs have been considered the samples. These samples don't involve the old-fashioned NOKIA MP models that are not currently being presented in Iran market. Some new MP models that would be introduced or launched until summer 2007 in Iran market, for instance NOKIA 6300, are added to the samples.

The required items for describing the samples' forms and aesthetic characteristics are mainly decided on the basis of the aesthetic elements and partly derived from the careful observation of the samples' formal variety, discussion and brainstorming fulfilled during several meetings of the

authors. As the result, 33 items which are in 3 major groups including keys, surface and body are designated for the aesthetic analysis of the samples. (Table 2).

The items of functional features are derived from all available MP specifications presented in NOKIA official website and GMS arena (2007) website. The finalized items are 31 alternatives about size, display, ring tones, memory, data, features and battery (Table 3).

SURFACE	KEYS	BODY
• Steel surfaces	• Num-Pad Column (Close to eachother)	• foldable Door
• Metallic part	• Num-Pad Row (Close to eachother)	• sliding Door
• Textile finishing	• Call / Function Keys (vertical-inside)	• single body
	• Call / Function Keys (seprate)	• (Upper Corners) low cruve
	• Navigatio keys + Display (in a group)	• (Upper Corners) curve
	• Navigatio keys + Num Pad (in a group)	• (Upper Corners) Highly curve
	• joystick / Navigation Keys	• Up / Down Body curve Unsymetry
	• navigation key format (square)	• Left / right Body Curve Unsymetry
	• Num keys formation (straight)	• innovative Forms
	• Key-Pad shape (square)	• innovative content
	• Key-Pad shape (trapezoid)	• Unsymmetrical Keys Position (Y axis)
		• Front Camera
		• (vertical Lines) Curve / Arc
		• (Upper Horizontal Line) Curved line
		• (Upper Horizontal Line) Arc
		• (Lower Horizontal Line) Curved line
		• (Lower Horizontal Line) Curved line
		• Num-Pad Frame
		• Display unit Frame

Table 2: The items of aesthetic analysis.

Physical properties	Connecting methods	Alarming Modes	Functional Aspects	accessories
• Body Color variation	• IR	• Poly phonic ringer	• Battery (Talk) ±4h	• VGA camera
• Display size	• Bluetooth	• Real tone/Mp3/ACC	• Battery (standby) ±300h	• Mega Pixel Camera
• Color Display	• USB port	• Monophonic	• Phone-book amount limitation	• Radio
• Weight +120gr	• Internet Browser	• Vibration	• Call-Record limitation	• Mp3 Player
	• GPRS		• Turn-able display	• Voice command
	• HSCSD		• Built-in Memory	• Built-in speaker
	• EDGE		• Additional Memory	
	• 3G			
	• W-LAN			

Table 3: The items of function analysis.

3.2. PHASE 2: AESTHETIC ANALYSIS

In phase 2, the samples in respect to their aesthetic characteristics are analyzed on the basis of the aesthetic resulted items from phase 1. The used method for the analysis is Quantification Theory Type III (see note 1). Then, to draw the groupings of the samples in terms of the items, the method of Cluster Analysis is applied. In order to give the valid names to the resulted clusters, the frequency of the items in the context of the samples belonging to each cluster is used. Considering the position of each cluster in the graph, the general domain of NOKIA in the market can be indicated.

3.3. PHASE 3: FUNCTION ANALYSIS

In this phase, the samples are quantified and clustered on the basis of the items of functional features resulted from Phase 1 by using the same methods of analysis used in phase 2. The given name to each cluster is based on the frequency of functional features in the context of the samples belonging to the cluster. The variations and separations of functional feature are presented into the graph of distribution of the MP models.

3.4. PHASE 4: PRICE RANGES ANALYSIS

In this phase, first, all of the samples in respect to their price in the market are divided into 5 price ranges including:

a) Cheap (up to 1,000,000 Rls)

b) Cheap-Medium (from 1,000,000 to 2,000,000 Rls)

c) Medium (from 2,000,000 to 3,000,000 Rls)

d) Medium-Expensive (from 3,000,000 to 4,000,000 Rls)

e) Expensive (more than 4,000,000 Rls)

The samples are labeled on the basis of their price ranges. Putting the labels of the price ranges of the samples in the graphs resulted from phases 2 and 3 can show the distributions of the various price ranges in the different areas of the graphs. The frequencies of the price ranges in

each cluster can make it clear whether there is any conjunction of the price ranges and aesthetic characteristics and/or functional features.

3.5. PHASE 5: INVESTIGATION

This phase involves an investigation of the Iranian users of NOKIA MPs in which the information are obtained through the regular and predefined questionnaire. The original version of the questionnaire in Persian language is shown in Figure 2. It contains the face sheet, a question about the subject's current and previous MP models, a question about the favorite functional features which should selected among the offered choices and the final question about the ideal aesthetic characteristics and favorite forms of MP in a same way as last question. The offered choices for two last questions are based on the items of analysis used in phases 2 and 3. It's also possible for the subjects to write down their further expectations regarding functional features and aesthetics characteristics.

این پرسشنامه به منظور بررسی نظرات، سنا یق و نیازهای مختلف استفاده کنندگان ایرانی در ارتباط با طراحی گوشیهای تلفن همراه نوکیا می باشد و اطلاعات بدست آمده فقط جنبه پژوهشی خواهد داشت .

با سپاس،

گروهی از دانشجویان کارشناسی ارشد طراحی صنعتی

مشخصات فردی جنس: مذکر/ مونث سن: شغل: مقطع و رشته تحصیلی:

لطفا مشخصات تلفن همراه فعلی و قبلی خود را در جدول زیر بنویسید:

دستگاه موبایل	رنگ	نام شرکت تولید کننده	مدل	تاریخ خرید	تاریخ تعویض
در حال حاضر					
قبلی					

1) برای یک گوشی تلفن همراه ایده آل کدامیک از قابلیت های عملکردی زیر لازم است :

☐ GPRS ☐ IR/ Bluetooth ☐ پخش موسیقی ☐ دوربین
customizations☐ ☐ USB port ☐ وزن ☐ عمر باتری
☐ رادیو ☐ نمایشگر رنگی☐ ☐ حافظه جانبی دستگاه ☐ حافظه دستگاه
☐ مرورگر وب سایر موارد : .....

2) برای گوشی تلفن همراه ایده آل خود، از میان فاکتورهای زیبایی شناسی (فرمی) زیر را براساس سلیقه انتخاب کنید:

تک رنگ (نقره ای /مشکی /سفید) ☐ کاربرد رنگهای متنوع ☐
فرم پیچیده بدنه ☐ فرم ساده بدنه ☐ استفاده از رنگ های براق ☐
استفاده از رنگ های مات ☐ نمایشگر بزرگ ☐ استفاده از قطعات فلزی در بدنه ☐
فرم صفحه کلید دریچ ☐ فرم صفحه کلید غیر دریچ ☐ گوشی بشکل در دار ☐
گوشی بشکل کشویی ☐ کاربرد خطوط و لبه های قوسدار در بدنه ☐
ظاهر متفاوت و غیر معمول ☐ کاربرد خطوط مستقیم در بدنه ☐
گوشه های بدنه :

☐ ☐ ☐

سایر موارد : .....

Figure 2: The used questionnaire for investigating the Iranian users of Nokia MP.

The subjects were 70 students in the field of art and design randomly selected among the students of Azad University, Tehran University of art and University of Tehran, Iran. The subjects' ranged in age from 19 to 30, 38% of them being female.

The derived data from the questionnaires have been analyzed through the methods of Quantification Theory Type III and Cluster Analysis, to show the groupings and distributions of the subjects on the basis of their marked choices respecting the functional features and aesthetics characteristics.

4. RESULTS

4.1. AESTHETIC ANALYSIS

As the output of analyzing the samples, the 77 selected NOKIA MP models presented in Iran market, on the basis of the determined aesthetic items, the chosen cut-off line for the clustering algorithm has yielded 8 major clusters. This choice of the cut-off line is carefully made in order to arrive at the most meaningful grouping of the samples. The distribution of the samples based on their aesthetic characteristics is shown into a graph in Figure 3. Based on the most frequent items in the context of each resulted cluster and the characteristics of the samples belonging to it, the clusters are named as follows:

Cluster 1, Dual Personality; Cluster 2, Asymmetrical & Exciting; Cluster 3, Unusual & Avant-garde; Cluster 4, Classic; Cluster 5, Simple & Modern; Cluster 6, Business Class; Cluster 7, Mid-cluster; and Cluster 8, Fashion & Emotion.

The resulted clusters are almost spread in each quarter of the graph (Fig. 3). The model numbers of the samples belonging to each cluster are shown in Table 4. Based on the frequency of the items in the context of the distributed samples in each of the four areas of the graph, the directions of the axis are named *Content – Form* and *Classic Simple – Modern Complex*.

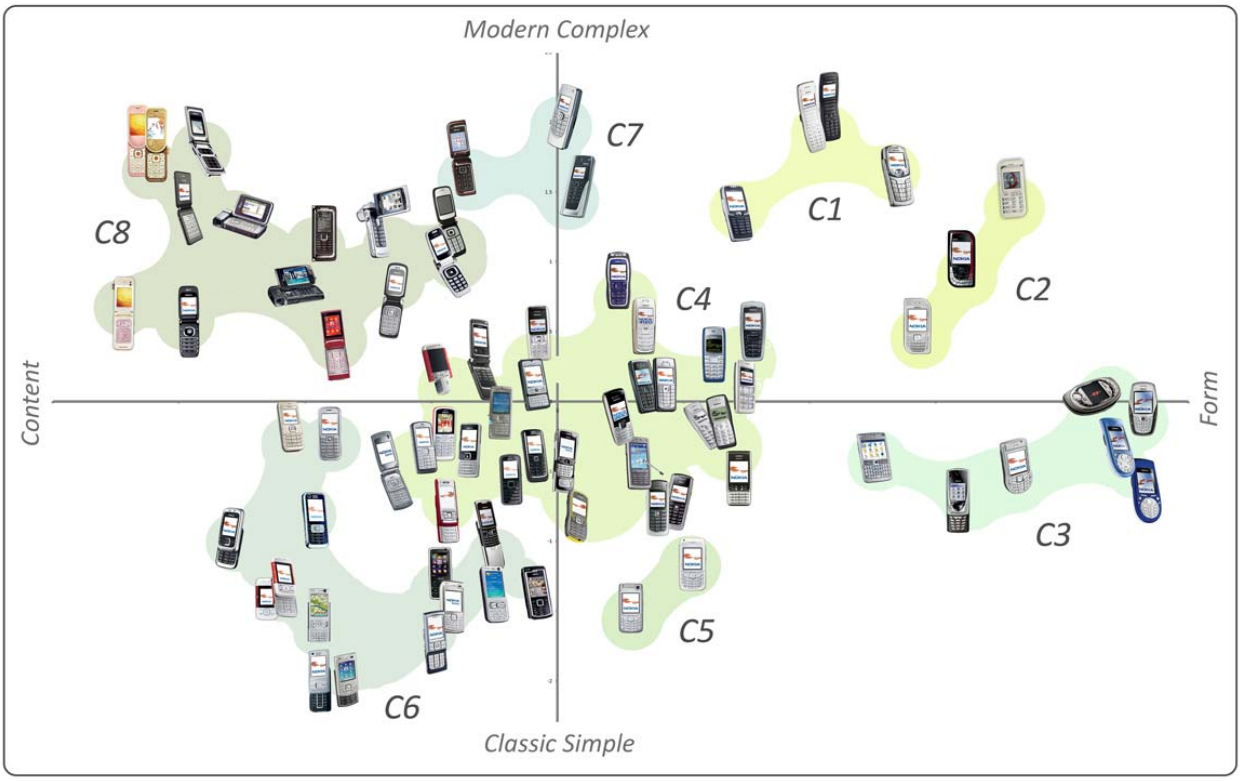

Figure 3: Distribution of the selected samples of Nokia MP models based on their aesthetic characteristics.

Cluster 1	Cluster 2	Cluster 3	Cluster 4		Cluster 5	Cluster 6	Cluster 7	Cluster 8
2650	6670	3650	1101	6020	6680	5200	7270	6060
2652	7260	3660	1100	6021	6681	5300	9300	6085
6822	7610	6600	1110	6070		6030	9500	6101
E70		6630	1600	6080		6111		6103
		7650	2310	6151		6120		6170
		E61	2600	6230		6233		7200
		NGageQD	2610	6230i		6270		7370
			2626	6260		6280		7373
			3120	6300		8800		7390
			3220	6708		N70		E90
			3230	E60		N72		N76
			3250	E65		N73		N90
			5070	N71		N77		N93
			5500	N91		N80		N93i
			5700			N95		

Table 4: The model numbers of the samples belonging to the clusters resulted from the aesthetic analysis.

Cluster 1, Dual Personality, is laid on the *Modern Complex – Form* area of the graph (Fig. 3). It involves four samples. The most considerable particular of this group of MPs is their dual characters, changing into something that is not predicted, N- 6822 being a good example. This cluster could be characterized in the items of foldable, trapezoid keypad shape, low curve corners, and innovative content.

Cluster 2, Unsymmetrical & Exciting, involving three samples is laid on the *Modern Complex – Form* area of the graph. Regarding to the physical gestalt of these MP models, their avant-garde form is always arresting. The most obvious characteristic in this cluster is asymmetry. This cluster could be characterized in asymmetrical gestalt consisting of highly curve and direct line, asymmetrical keypad form.

There are seven samples laid in Cluster 3, Pioneer & Avant-garde, which is near *Form* axis direction of the graph. The samples belonging to this cluster have unusual forms. For instance, in N-gage the ordinary form of dialing is basically changed. There are the asymmetrical, curve and/or highly curve lines on the top or bottom of their gestalt. They have somewhat the unusual sizes.

Cluster 4, Classic, is laid on the central area of the graph. It contains the large number of samples, 29 MP models, most of them being the good-old Nokia models with the same Identity and design character. Overall, in the samples belonging to this cluster: display, keypads, function keys are together; number pads are close to each other in raw and column; keypad shape are trapezoid and square; and gestalt lines are always direct or low-curve.

There are just two samples in Cluster 5, Simple & Modern, with the same levels of price and function. Their different type of function keys separates them from other MP models. This cluster tends to *Classic Simple* axis direction in the graph. It can be characterized in single body, straight lines, and the vertical position of function keys.

Cluster 6, Business Class, is laid on the *Classic Simple – Content* area of the graph. It involves fifteen samples. Using steel-like finish surfaces gives them the touch of modern style. But some very pioneer form and stylish gestalt are not presented in these samples. This cluster like the previous one still traces some classical trends, but with a modern taste. It could be characterized in the following items: sliding body, front camera, straight lines with no-curve corners of gestalt, and metallic parts or steel-like finishing surfaces.

There are three samples laid in Cluster 7, Mid-cluster, that is near *Modern Complex* axis direction of the graph. The major particulars of this cluster are: Innovative content; metallic parts or steel-like finishing surfaces; and asymmetric and/or complex gestalt.

Cluster 8, Fashion & Emotion, laid on the *Content – Modern Complex* area of the graph, involves fourteen samples. As the samples belonging to this cluster have the creative styles and fashionable lines, it does not obey any classical identity. Therefore, the signs of fashion and market trend are traceable in this cluster. This cluster can be characterized in: foldable; metallic parts or steel-like finishing surfaces; highly curved corners; innovative content; combination of matt colors and shiny metallic parts; and textile finishing.

4.2. FUNCTION ANALYSIS

As the result of function analysis of the samples, the chosen cut-off line for the clustering algorithm has yielded four major clusters which are named ‘very simple technology’, ‘simple technology’, ‘medium technology’, and ‘high technology’. Based on the nature of the frequent items in the context of the samples belonging to each cluster, the above names are given. The output distribution of the samples derived from this analysis is shown in Figure 4.

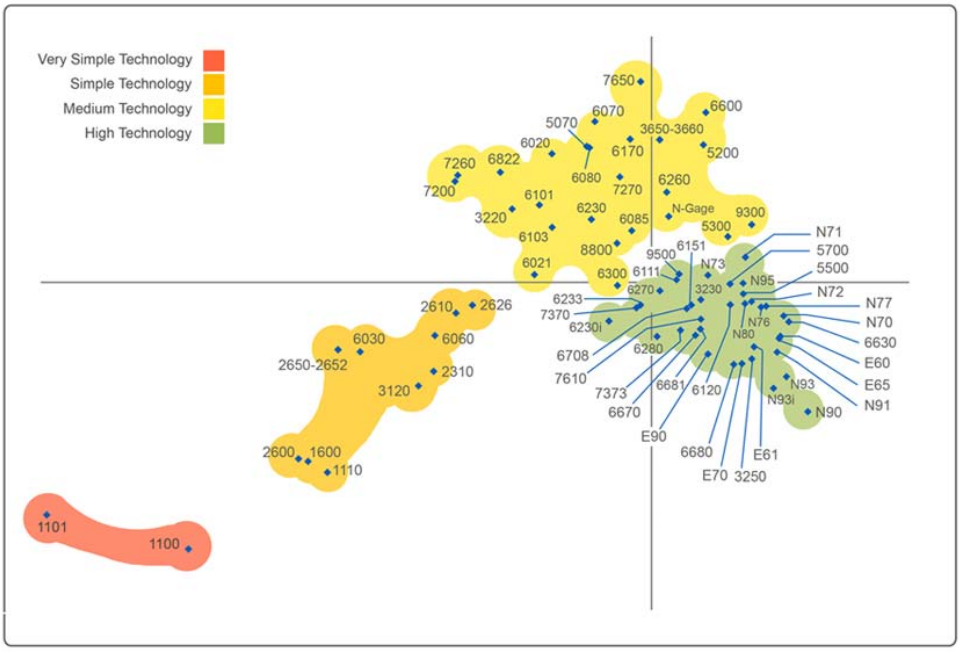

Figure 4: The output distribution of the samples on the basis of their functional features.

The first cluster consists of the MP models with the minimum required function. The second one has more possible features than the first one, though the samples belonging to it have still the low level of technology. The samples belonging to the third one fulfill a wide range of the users' needs, nevertheless they have some shortages of the functional features. The last cluster consists of the samples labeled as High Technological MPs; while some of them can be considered 'state-of-the-art' technology. NOKIA offers very large range of functional factors in her MP models. This variety can change the characteristic of MP form only a mono-function one like N-1100, to almost a pocket pc like N-95. As the percentage of the MP models belonging to each cluster in the context of all of the collected samples (Fig. 5) shows, most of the NOKIA MP models have the High Tech. functional features.

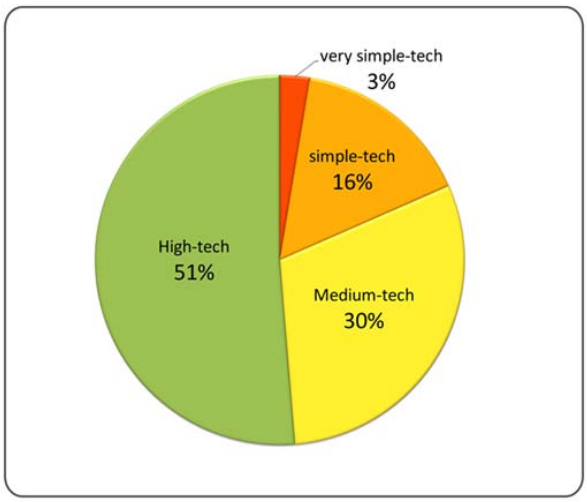

Figure 5: The percentage of the samples belonging to each functional cluster.

4.3. PRICE RANGES ANALYSIS

4.3.1. DISTRIBUTION IN PRICE RANGES

All of the collected samples of NOKIA MP models according to their prices in Iran market are classified within five price ranges including Cheap, Cheap-Medium, Medium, Medium-Expensive and Expensive. Figure 6 shows the percentage of the samples belonging to each price range.

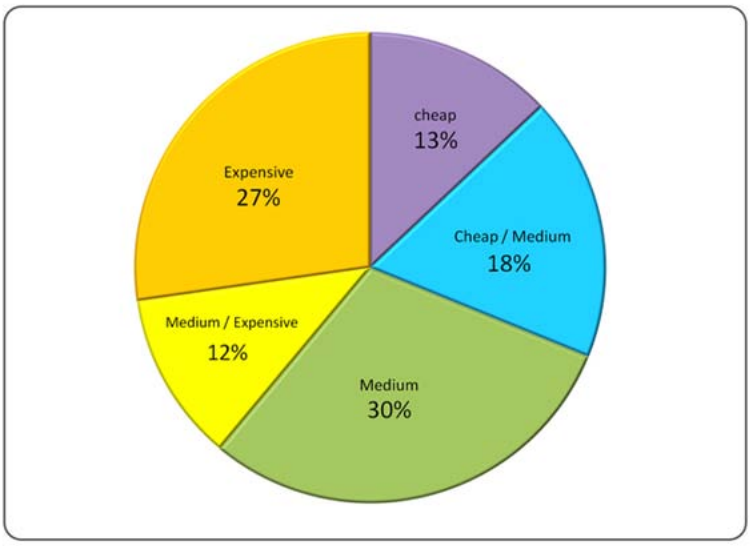

Figure 6: The percentage of the samples belonging to each price range.

4.3.2. PRICE AND AESTHETICS

To compare the aesthetic characteristics between the above-mentioned price ranges, in each of the eight resulted aesthetic clusters the frequency of the samples belonging to each price range is calculated. In order to know whether each price range has any dominant aesthetic character, the benchmarks of the aesthetic clusters are arranged on the basis of the price ranges. In the benchmarks, shown in Figure 7, the written number above a related column to a price range indicates the percentage of the samples laid in a cluster beside all of the samples belonging to the price range. The comparison between the benchmarks shows that there is not a serious limitation in the distribution of the aesthetic clusters in the different price ranges. However, most of the lowest price range samples are in Cluster 4 (Classic), while the highest price range ones are mostly in Clusters 6 (Business Class) and 8 (Fashion & Emotion). As the percentage of the highest price range and Medium-Expensive samples are also significant in Cluster 4, this cluster can not be definitely considered an allocated aesthetic character for any of the above-mentioned price ranges.

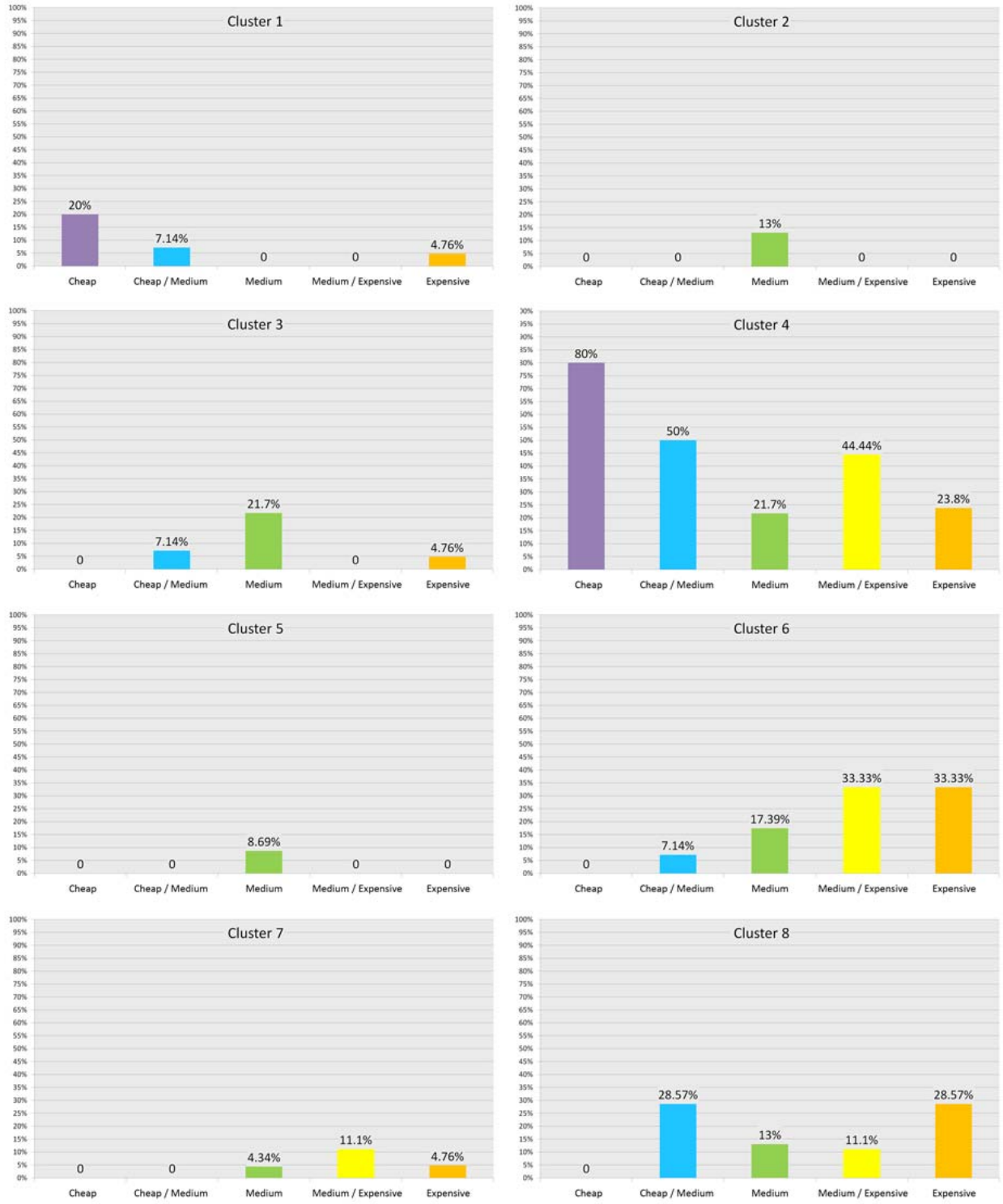

Figure 7: The benchmarks of the aesthetics clusters in terms of the price ranges.

4.3.3. PRICE AND FUNCTION

Here the resulted functional clusters are analyzed on the basis of the price ranges of the samples belonging to each cluster. Figure 8 shows the frequency of the samples belonging to the functional clusters including very simple technology, simple technology, medium technology, and high technology, in different price ranges. As the result, there is roughly a direct relation between the levels of functional feature and price in NOKIA MPs. Nevertheless, a variety of the level of functional features is slightly presented in each price range.

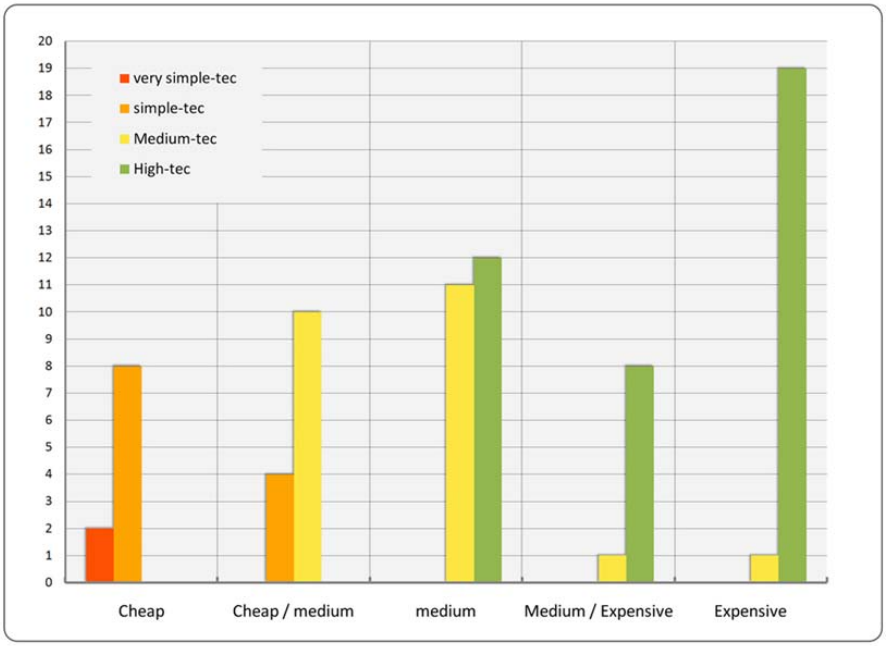

Figure 8: The frequency of the samples belonging to the functional clusters in the price ranges.

4.4. INVESTIGATION

As the determinant reflectors of the trends of the young generations in Iran, 70 Iranian university students in the field of design, who use NOKIA MP, are randomly selected as the subjects. They have been investigated through the regular questionnaires about their favorite MP characteristics. As the result of analyzing the data derived from the questionnaires, the chosen cut-off line for the clustering algorithm has yielded eight different clusters of the favorite aesthetic characters as the representatives of the subjects' trends. Based on the most frequent aesthetic items laid in each cluster, the clusters are named: Simple; Modern Classic; Modern Touches; Unusual & Complex;

Avant-garde; Modern Trace; Emotional and Simple & Emotional. The graph of distribution of the subjects based on their favorite aesthetic characters is shown in Figure 9.

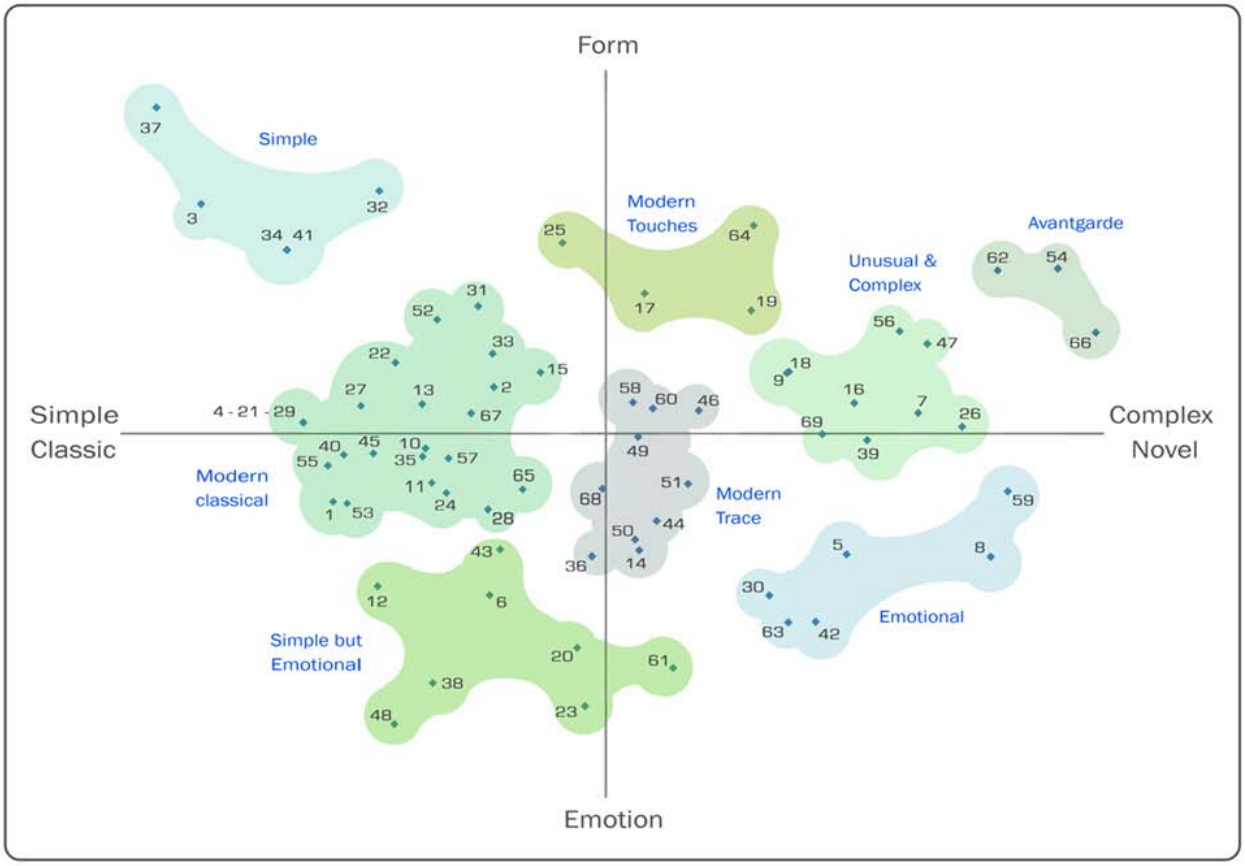

Figure 9: The distribution of the Iranian MP users based on their answered aesthetic items.

To show the most meaningful trends in the context of the subjects' favorites, the directions of the axis are named Simple-Classic – Complex-Novel and Form – Emotion. The outcomes of this investigation are mostly about the favorite MP aesthetic characteristics for the Iranian users. The answered items regarding the functional features are not so different from the functions offered by NOKIA and hence not so considerable to lead to the new directions for NOKIA MPs' functional features. This point emphasizes the effectiveness of MP aesthetic characteristics, especially for the young generations.

5. IMPLICATION

5.1. NOKIA DESIGN TREND

The numbers of the samples belonging to the aesthetic clusters show that most of NOKIA MP models have a ‘classic’ and ‘simple’ characters. These two characters can somehow be considered the strict brand identity of NOKIA. However, as it is mentioned and shown before, there is a wide range of aesthetic characteristics of MP models presented by NOKIA. To show NOKIA’s design trend, the samples based on the dates they have/had been launched are marked in the graph resulted from aesthetic analysis (Fig. 10). The dates of launch range in years from 2002 to 2007 that each year is differentiated with a color. The oldest samples launched in 2002 and 2003 are laid on the right side of the graph, the axis direction of *Form*. But the newest ones are mostly distributed in the left side of the graph, the axis direction of *Content*. Therefore, NOKIA’s main design trend seems the ‘content aesthetics’ of MP.

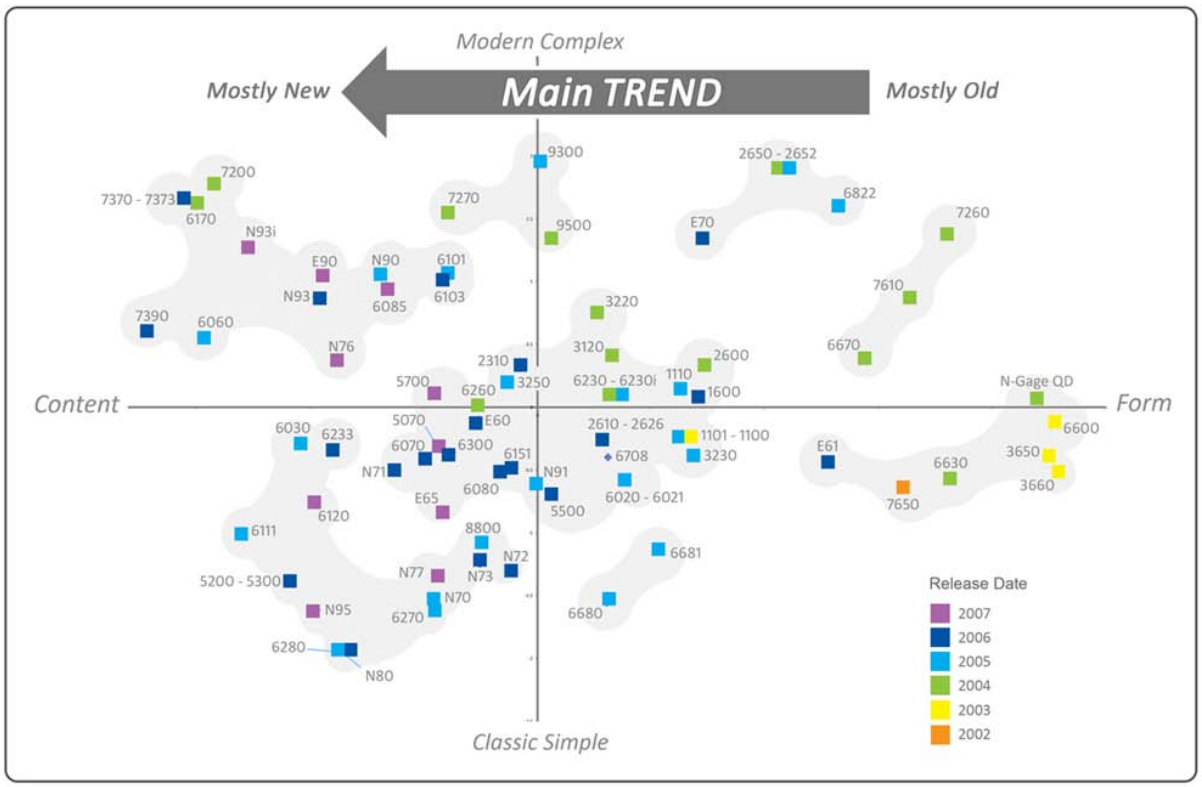

Figure 10: The distribution of the samples based on their launch dates.

5.2. NOKIA DESIGN APPROACH

According to the results of the analytical parts of this research, aesthetic, function and price range analysis, NOKIA has introduced a significant variety of the aesthetical characteristics and functional features in each price range. The close percentages of the samples belonging to the price ranges (Fig. 6) imply that NOKIA's users are indifferently distributed throughout all of the classes of the market from economy viewpoint. As the benchmarks of the functional clusters in terms of the eight aesthetic clusters (Fig. 11) show, a considerable variety of the aesthetic characters of the samples are presented in each cluster of the functional features except the 'very simple tech.' one in which just two samples are laid. Such a design approach has made it possible for NOKIA to satisfy and cover a wide range of the users' needs and tastes, namely market segmentations. This finding may roughly illustrate how NOKIA could keep her place and extend her domain in the market.

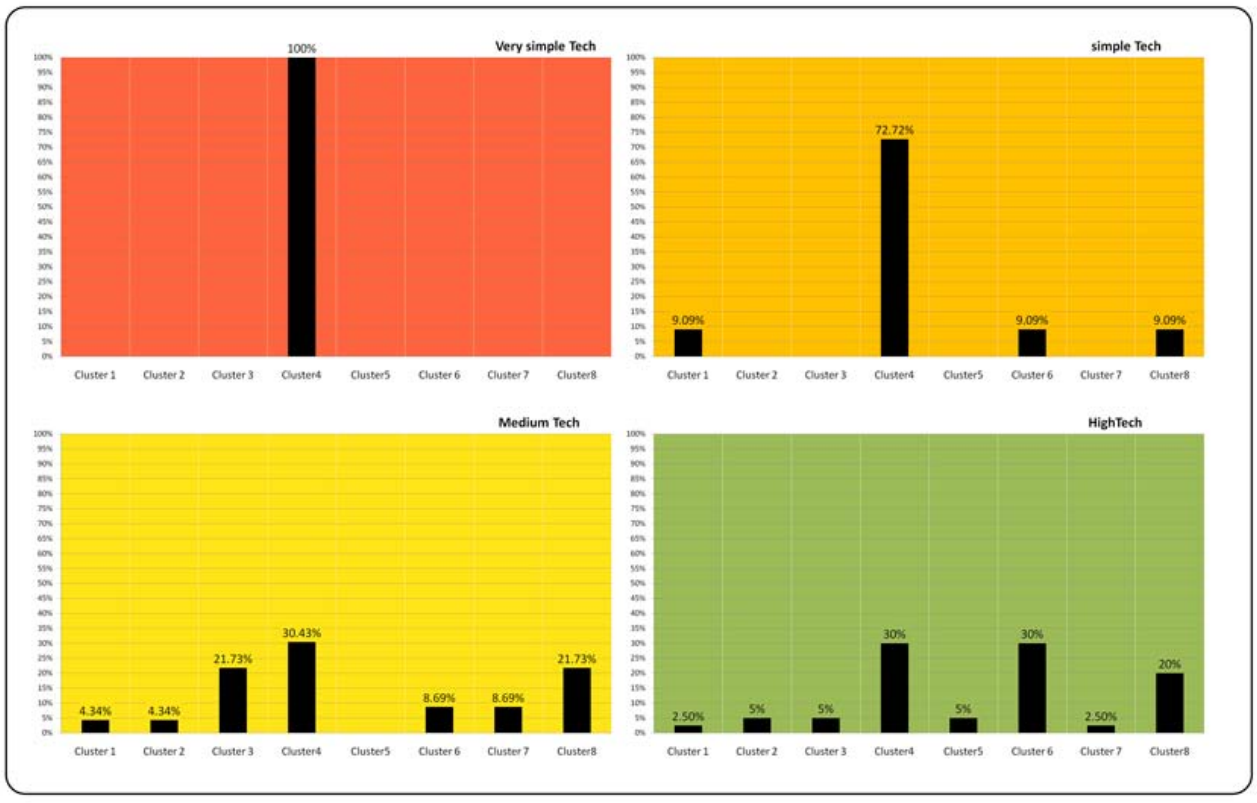

Figure 11: The benchmarks of the functional clusters in terms of the eight aesthetic clusters.

5.3. COMPARISON BETWEEN NOKIA & USERS TRENDS

Comparing the trends of the axis directions in the graphs resulted from aesthetic analysis of the samples (Fig. 3) and investigation of the Iranian users (Fig. 9), NOKIA could approximately satisfy the users' needs, demands, and/or favorites through the variety of MP models she has already launched. But, as the empty spaces in the graph relevant to the aesthetic analysis imply, there are few NOKIA MP Models with 'innovative form' presented in the market. According to the axis directions in the graph relevant to the distribution of Iranian subjects (Fig. 9), Iranian users' trend is also emphasizing the same things, willingness to more 'emotion' and 'novelty' in MP form and design. Although Nokia has launched some avant-garde MP models, they are not enough to cover the young Iranian users' favorites.

6. CONCLUSION

This research has attempted to clarify the reasons of NOKIA's great success in MP market of Iran from design perspective. In order to achieve the above goal, the aesthetic characteristics and functional features of NOKIA MP models in relation to their price levels in Iran market are analyzed. To know how much NOKIA MP models have covered the Iranian users' favorites and also to define the new possible design directions for NOKIA in Iran market, some Iranian users of NOKIA MPs are investigated during this research. The results of this research lead us to the following conclusions that can illustrate the major particulars of NOKIA's design approach and trend:

First, though most of NOKIA's MP models have the 'classic' and 'simple' character or namely her strict brand identity, a considerable variety of the aesthetic characteristics is being presented trough the new models of NOKIA MP to cover and satisfy a wide range of market segmentations or the various tastes and needs of the users in market.

Second, as the numbers of MP models belonging to the price ranges are not so different, NOKIA would cover all classes of the users in the market from economy points of view.

Third, there is roughly a direct relation between the levels of functional features and prices in NOKIA MP. However, NOKIA offers a wide range of aesthetic characteristics to somehow make up the lack of the highest level of technology and functional features in her lower price MP models.

Fourth, it seems that the design trend of NOKIA MPs is shifting from ‘form-aesthetics’ to ‘content-aesthetics’ in her recently launched new models.

And fifth, NOKIA has relatively satisfied and covered Iranian users through the variety and novelty of aesthetics and functions in her new MP models. Nevertheless, when precisely considering the Iranian users’ favorites and wills in comparison to the existing MP models’ characteristics, the new directions or trends for MP design could be extracted; more ‘emotion’ and ‘novelty’ in MP form and design. Regarding such directions may help a brand like NOKIA keep or even extend her domain in Iran market.

NOTE:

1. “Quantification 3 is one of a set of four statistical methods developed in Japan in the 50s (Hayashi, C. 1950) for the quantification of qualitative evaluations, and represents a method of pattern classification mathematically similar to Multidimensional Scaling (Kruskal and Wish, 1977)” . Further, the derived result or output of the analysis method of Quantification Theory III is actually very similar to the method of Non-linear Principal Component Analysis (Shackleton, et all,1996).

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