ASSESS THE DEGREE OF MASS CUSTOMIZATION STRATEGIES IMPLEMENTATION IN FOOD AND BEVERAGES, SHAREHOLDING INDUSTRIAL COMPANIES IN JORDAN

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ABSTRACT

The purpose of this study was to assess the degree of Mass Customization strategies implementation in food and beverages shareholding industrial companies in Jordan, and if there are differences in the degree of application among the companies studied due to the following variables: administration responsible for the strategy application in the company, the existence of organizational marketing unit in the company, the company's ownership, whether the company is exporter or not.

The researcher adopted two types of data: the data gleaned from books, net, studies and previous research, while the second was a field study included: the design and distribution of a questionnaire to collect data from managers concerned about the variables of the study. Questionnaires have been distributed to 50 manager and (43) were recovered with a percentage of (86%). The questionnaire consisted of sets of questions, included: food and beverages industrial sector companies' characteristics and the degree of the company's implementation of the strategies mentioned. Reliability test was conducted (Cronbach's Alpha) to determine the reliability of the data collection tool (questionnaire). The reliability test ratio of both the independent and dependent variables were (81.41%). The population of the study were (12) food and beverages shareholding industrial companies in Jordan. The unit of analysis in this study was manager, and data were collected from: marketing managers, product design managers, directors of research and development, in each of the twelfth companies. The results of the study were as follows:

1. The extent to which food and beverages industrial companies in Jordan apply mass Customization strategies were moderate for the: participatory, and adaptive MC strategies., while it was high for cosmetic and transparent ones.
2. There is no difference in the degree of MC strategies implementation in food and beverages industrial companies in Jordan attributed to: the administration responsible for MC strategy implementation in the company, existing of organizational marketing unit in the company, the company's ownership, whether the company is exporter or not.

Researcher presented a set of recommendations that can be summarized as follows:

1. Food and beverages shareholding industrial companies in Jordan should conduct training programs to re-qualify managers on marketing activities for the purpose of more understanding to the recent marketing concepts and strategies.
2. Inform specialist's managers in food and beverages shareholding industrial companies in Jordan about the foreign leaders firms in MC strategy implementation, and the reasons for its success, as well as the reasons for the failure of other companies.
3. Food and beverages shareholding industrial companies in Jordan should claim universities and academic specialized centers to conduct conferences and lectures to specialized marketing managers in these companies about concept, principles, Forms, and determinants of mass customization strategies.
4. Food and beverages shareholding industrial companies in Jordan should conduct surveys to know about their customer's willingness in buying products customized using collaborative, adaptive, and transparent strategies of mass customization.

Keywords: Mass Customization: Participatory strategy, Adaptive strategy, Transparent strategy, Cosmetic strategy.

1. INTRODUCTION

Mass Customization concept is currently, trading widely in the literature of economics and management, in a way that raises many questions about. Is the meeting of opposites (design product according to a single client requirement - Customization) with (production to meet the largest number of customers-Mass) is a real intellectual trend or is it just a temporary trend that will fade with time?

The recent history to Mass Customization began in 1970, when Alvin Toffler wrote in this area through his book:
Future Shock. In 1987 Stan Davis wrote in MC through his published book: Future Perfect. But the ideas that laid to
the strategic dimension of the MC, suggesting a typical Paradigm Shift of the productive mainstream of thought,
known as the Mass Production to the MC was in the work of Joseph Pine in 1993.

We must distinguish between two distinct segments of the MC, the imagination concept, is the ability to provide
anything required by the customer, profitability, at any time and place, and in any way the customer wants. The
applied and practical concept, is the ability to use flexible processes and organizational structures to produce a range
of products and services tailored to the specifications required by the customers, in the lowest possible cost [4].

A number of writers argue that provide products and services as requested by the customer will be achieved through
a package of pre-defined configuration in the product, its objective is to determine the extent to which producer can
modify the product, as requested by the client, and then instruct the client to compare between the options available
within this range.

The common denominator of many studies is to emphasize the change in production methods due to technological
changes, competitive pressures and globalization, have created an environment which represent the main success
factors for business organizations (efficiency, effectiveness, quality, productivity, and satisfy the wishes and needs
of the client's). The large and stable market which is, the justification for the Mass Production Paradigm is no longer
dominant today. The advertising discourse that characterized the standard markets that prevailed in the past is no
longer convince Customers, but now the needs and desires of individual beat toward a shift in business model . And
the productive companies that will succeed in this millennium are those that will form different from the standard
production model.. However the concepts of quality are converging in one objective: to satisfy the needs and wishes
of the final decision owner on acceptance / rejection of the product provided to him. Mass Customization Strategies has been applied on a large scale, as an inevitable response to the change in the market [1].

The application of strategies that provide the product according to the specifications required by customers is an
advanced stage in the application of the modern marketing concept. standard product, which already operates under
similar consumer tastes, and the relative stability in the application, is no longer will serve and meet all the desires
in markets characterized by the change in consumption pattern due to differences in tastes and demands, and
constantly growing variety of products. MC is the strategy that could be a substitute for Mass Production strategy
[10].

Hence, the need has become urgent to adopt marketing strategies, that proactively manages the processes of product
formation through many productivity templates substantially cover the most customers wishes and tastes of, and
increase their awareness of the value of the product [5].

The assessment of the degree of MC strategies implementation and the evaluation of differences in the application of
those strategies in food and beverages shareholding industrial companies in Jordan, attributed to a number of those
companies characteristics, form the two dimensions of this study.
The audit to the literature of the subject found that there is a number of universally applicable strategies to MC
strategies (cosmetic, Participative, adaptive, and transparent) [5].

2. MASS CUSTOMIZATION STRATEGIES
Mass Customization strategies have been identified in four strategies: transparent, Cosmetic, adaptive, and
collaborative [5]; [8]; [9].

2.1 Cosmetic MC
Cosmetic mass customization can be defined genuinely imposing way to tailor the same base product or service for
different customer groups, despite the name. In the end of the production process the color, accessories, and other
customer’s personality or product’s intended use related improvements can be taken into notice. This way of
customization can be successfully put into practice in such businesses, where customer is satisfied to customization
of final stage of core process and it is not needed to intervene to actual core solutions.

2.2 Transparent MC
In manufacturing the development has lead to a position where importance of services
as a part of business grows. Product and production oriented companies have to acquire knowledge of services production or at least search for partners who has service competencies in their industry. Hence, e-Business provides one way to offer some opportunities in traditional after-sales functions. E-Business is not just one technical loop of order-delivery-invoice –chain, but also a new form of producing services. Third way to put mass customization in practice is based on idea that customers are not bothered with feature definitions and different inquiries. The idea of customization is based on collecting and analyzing customer knowledge through enterprise resource planning (ERP) systems and from different service channels. Collecting and storing customer preferences extensively can yield growth of expertise on customer needs which can be realized in next customer service situations.

2.3 Adaptive MC
Adaptive mass customization is based on forward planning and representations of almost all possible combinations of product modules. For example a designing system can be offered to help designing in cooperation with customer features of a machine or for example constructing different lighting alternatives (product configuration tools). Product or service itself or its representation doesn’t change that much because inside the product families different alternatives can be varied.

2.4 Collaborative MC
Most challenging, difficult and also expensive way to mass customize is based on using customer interaction in specifying product or service features. This cooperative model is needed when it is difficult for customer to express product preferences or when product is attached with complicated specifications, which in whole forms the end product. In this case even the seller can’t know what customer eventually wants.

The problem of the study is centered on the belief that degree of MC strategies implementation in food and beverages shareholding industrial companies in Jordan is low.

In general, the problem of the study can be developed by introducing the following questions:
1. Is there a difference in the degree of MC strategies implementation in food and beverages shareholding industrial companies in Jordan attributed to the administration responsible for the strategy application in the company?
2. Is there a difference in the degree of MC strategies implementation in food and beverages shareholding industrial companies in Jordan attributed to the existence of organizational marketing unit in the company?
3. Is there a difference in the degree of MC strategies implementation in food and beverages shareholding industrial companies in Jordan attributed to the company’s ownership?
4. Is there a difference in the degree of MC strategies implementation in food and beverages shareholding industrial companies in Jordan attributed to whether the company is exported or not?

3. IMPORTANCE OF THE STUDY, BENEFITS AND JUSTIFICATION FOR CONDUCTING
Through his survey to previous studies, the researcher didn't find any conducted study in Jordan regarding to the application of MC strategies. Hence, the importance of this study addressed a great importance and modernity issue, and at the same time become an area of application by the major global industrial companies, because of these strategies importance in the continuity and survival of the organization in an environment characterized by severe competition. It is hoped that this study illuminates the road of knowledge to both scholars and practitioners in the areas of business and marketing. It also opens the door widely for students particularly for those who are not fluent in English language to obtain a theoretical background of the strategies mentioned, and for further studies in industrial and service sectors alike.

4. OBJECTIVES OF THE STUDY
This study aimed at:
1. Understand the concept, components, and strategies of MC in the marketing literature.
2. Examine the degree of MC strategies implementation in food and beverages shareholding industrial companies in Jordan.
3. Assess the differences in MC application in food and beverages shareholding industrial companies in Jordan attributed to a number of those companies characteristics variables.

5. THE HYPOTHESIS OF THE STUDY
The field study was designed to test a main hypothesis and a number of subsidiary assumptions, as follows:
5.1 The main hypothesis:
Ho: There is no difference in the degree of MC strategies implementation in food and beverages shareholding industrial companies in Jordan attributed to each of the following variables: administration responsible for the strategy application in the company, the existence of organizational marketing unit in the company, the company's ownership, whether the company is exporter or not. Five sub- Hypothesis have been emanated from The main one:

5.2 The First sub-hypothesis:
Ho1: There is no difference in the degree of MC strategies implementation in food and beverages shareholding industrial companies in Jordan attributed to the administration responsible for the strategy application in the company.

5.3 The Second sub-hypothesis:
Ho2: There is no difference in the degree of MC strategies implementation in food and beverages shareholding industrial companies in Jordan attributed to the existence of organizational marketing unit in the company.

5.4 The Third sub-hypothesis:
Ho3: There is no difference in the degree of MC strategies implementation in food and beverages shareholding industrial companies in Jordan attributed to the company's ownership.

5.5 The Fourth sub-hypothesis:
Ho4: There is no difference in the degree of MC strategies implementation in food and beverages shareholding industrial companies in Jordan attributed to whether the company is exporter or not.

6. METHODOLOGY OF THE STUDY

6.1 Population and Sample
The population of the study is composed of the (12) food and beverages shareholding industrial companies in Jordan. Comprehensive survey is used to obtain data from the population. The researcher adopted a purposeful sample of 50 managers in these companies to obtain data for the study, they are: marketing managers, product design managers, research and development managers. Hence, managers referred to earlier, Can be regarded as the unit of analysis for this study.

6.2 Data collection tools
To collect data for the current study and its variables, the researcher used a questionnaire, it included two parts: the first, contained some of the characteristics of companies have been covered in the study. The second: measured the degree of MC strategies (cosmetic, participative, adaptive, transparent) implementations in the companies have been covered in the study.

6.3 Sources for obtaining data
The researcher adopted two sources to collect data for this study:
1- Secondary data sources:
Included, references, literature, and periodicals relevant to the study in order to clarify basic concepts related to the study, its various dimensions, and to identify the most important studies on the subject
2- Primary data sources:
Questionnaire was designed for collecting data from the managers responsible for MC strategies application in the companies have been covered in the study for their assessment to the degree of Mass Customization strategies (cosmetic, participative, adaptive, transparent) implementation in food and beverages shareholding industrial companies in Jordan.

6.4 The statistical analysis methods used:
Since the study is descriptive, and analytical, the researcher employed the most appropriate statistical methods to the nature of the data available, for the purpose of analyzing variables and testing hypotheses of the study, ranging from descriptive statistics and inferential statistics, as follows:

1- Descriptive statistics (mean, and standard deviations) to describe the degree of MC strategies (cosmetic, participative, adaptive, transparent) application in the companies included in the study.
2- Two Way ANOVA: to test the difference in the degree of MC strategies implementation, which is attributable to the following variables together: administration responsible for the strategy application in the company, the existence of organizational Marketing unit in the company, the nature of industrial activity for the company, the company's ownership, whether the company is exporter or not.

3- One Way ANOVA: to test the difference in the degree of MC strategies implementation, which is attributable to each of the following variables: administration responsible for the MC strategies application in the company, the Company's ownership.

4- Independent-Sample (T-Test): to test the difference in the degree of MC strategies implementation, which is attributable to each of the following variables: the existence of organizational marketing unit in the company, whether the company is exporter or not.

6.5 Validity and reliability
1. (Validity) means the ability of the instrument to measure the variables that are designed to measure. Questionnaire has been introduced to a number of specialists in marketing studies to ascertain the validity of the instrument.

2. The reliability of the tool: refers to the possibility of obtaining the same results if the measurement re-evaluated under the availability of similar circumstances and by using the same tool for the measurement tool. (Cronbach's Alpha) is used to determine the degree of reliability of the tool. The test result was (.814) which is higher than the acceptable limit (.60).

7. PREVIOUS RESEARCH
1. The purpose of this study was to determine how the consumer contributes to the product design to gain access to value-added to producer and consumer alike. And the study also aimed at answering the following questions: -How does the consumer contribution to product design create value for the producer, and consumer? -What tools that help organize the participation of consumers in product design? The most important findings to the study were: The involvement of consumers in product design, will give producer the differentiation in the field of knowledge to the needs of consumers, and the creation of expertise in the area of cooperation which is difficult for competitors to imitate, in addition, the involvement of consumers in product design allows the producer to impose high prices for his product, and can benefit from the presence of potential innovators of consumers involved in the design. The study also found that the participation of consumer in product design will contribute to the composition of the product that corresponds to the preferences[3].

2. This study aimed to prove that it is not necessary, the existence of individual relationships (One-to-One Relationship between the provider of good, service, and the customer when making products according to demand. It is imperative for the future of a product according to specifications required by customers. The study indicated the importance of involving customers in product design, because of their impact in reducing the non-state, non-confidence of customers, the conduct of the product, nature, and specifications, and components of the product manufacturer. The study also found, that the collective cooperation in the design of the product, develop the creative capabilities of the customers. Finally, the study found, that the way to build trust with customers, and find ways to reduce risk perceived by customers, resulting from the process of product design specifications set by customers is through: support for collective determination[2].

3. The purpose of this study was to identify how MC strategies are used in Finnish Metal and Electronics Companies, in order to achieve productive efficiency, and effectiveness. And to answer the question of how to combine competence to achieve productivity, by reducing costs. And to achieve efficiency, by maintaining the customer, and ensure their loyalty to the company and its products. Several case studies that have been applied, in the steel and electronics Finnish has been used. The most important results of the study were: it is necessary for any organization to achieve sufficient productivity if it wants to achieve efficiency, in order to access to a competitive position, and the organization should first obtain knowledge about the preferences of customers, and then use this knowledge for innovation in production. And find the concept of individual service to enhance the links with customers. To do so effectively, the organizations should use MC strategies (cosmetic, transparent, collaborative, and adaptive). It also recommended to achieve consensus between MC, and the use of e-business, and the sharing of knowledge with the customer to achieve the innovation that will benefit the customer as well[8].
This study aimed to identify the requirements of the transition from MC strategy to another (transparent, collaborative, cosmetics, adaptive) information systems or the so-called e-Business. The adoption of one MC strategy can’t continue indefinitely. Since the market conditions are renewable, the company should transit between the four MC marketing strategies (transparent, cooperative, cosmetics, adaptive). The team used the case study of a number of projects that work in the areas of metals and electronics in Finland, and has also collected data through the form of (40) projects from those projects. Results of the study showed that different information systems are necessary for each transition from MC strategy to the other. The study recommended the need to adopt appropriate information systems for the intended strategy to move or shift it[5].

The purpose of this study was to investigate the possibility of applying MC strategies in the garment industry, through revealing the extent of consumer interest in MC strategies. The study found, a great interest in MC strategies application between the respondents. And through the use of several scenarios showing how to use the MC strategies, a model that help interested businessmen and researchers in how to use the above strategy in the garment industry has been built[6].

This study aimed to determine the factors that make organizations ready to move from the Mass production strategy to MC strategies. Three groups of factors indicate the possibility of moving: industry, competitive and environmental considerations, organizational structure and orientation of the Organization has been tested. The study concluded that there is an impact on the factors mentioned to move to MC strategies. And that if the organization wants to move to the strategies referred to, it must determine the product specifications, or products that can be produced in order to achieve the wishes and preferences of customers[7].

8. RESULTS OF THE STUDY
In this part of the study, the main hypotheses, and sub- hypotheses emanated from, have been discussed and analyzed. The statistical analysis has been done in the context of food and beverages shareholding industrial companies in Jordan. The following table shows this data:

<table>
<thead>
<tr>
<th>Industrial sector</th>
<th>population (N of companies)</th>
<th>Respondent companies NO</th>
<th>distributed questionnaire NO</th>
<th>recovered questionnaire NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food and beverages</td>
<td>12</td>
<td>12</td>
<td>50</td>
<td>43</td>
</tr>
</tbody>
</table>

8.1 Characteristics of the sample, and the companies included in the study.
In this part of the study, the major characteristics of the companies surveyed reviewed in terms of: administration responsible for the strategy application in the company, the existence of marketing unit in the company, the nature of industrial activity for the company, the company's ownership, whether the company is exporter or not.

1. ADMINISTRATION RESPONSIBLE FOR MC STRATEGIES APPLICATION IN THE COMPANY
The number of managers in food and beverages shareholding industrial companies in Jordan involved in the study is identified. The following table illustrates the results:

<table>
<thead>
<tr>
<th>manager</th>
<th>Frequencies</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>marketing</td>
<td>19</td>
<td>44.2</td>
</tr>
<tr>
<td>product design</td>
<td>12</td>
<td>27.9</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>12</td>
<td>27.9</td>
</tr>
<tr>
<td>total</td>
<td>43</td>
<td>100.0</td>
</tr>
</tbody>
</table>

It's clear from the data in the above table that the rate of (44.2) of the sample were marketing managers, while (27.9) of them were product design managers, and (27.9) of them were R&D managers.
2. The existence of Marketing unit in the companies
The extent to which a marketing unit exists in companies included in the study is identified. The following table illustrates the results:

Table (3) Distribution of the companies according to the Existence of marketing unit

<table>
<thead>
<tr>
<th>Existence of marketing unit in companies</th>
<th>Frequencies</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>27</td>
<td>62.8</td>
</tr>
<tr>
<td>No</td>
<td>16</td>
<td>37.2</td>
</tr>
<tr>
<td>total</td>
<td>43</td>
<td>100.0</td>
</tr>
</tbody>
</table>

It's clear from the data in the above table that (62.8) of the companies have a responsible marketing unit for their marketing activities. This result reflects a medium level of recognition and interest to the importance of marketing as a function of tasks, activities, and the need for specialized marketing unit in their industrial companies. It's more powerful to apply MC strategies in companies that have an organizational marketing unit responsible for marketing activities.

3. Ownership of the company
The distribution of the companies according to the ownership of the company were included and identified. The following table illustrates the results:

Table (4) Distribution of the companies according the ownership of the company

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Frequencies</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jordanian</td>
<td>36</td>
<td>83.7</td>
</tr>
<tr>
<td>foreign</td>
<td>2</td>
<td>4.7</td>
</tr>
<tr>
<td>mixed (joint investment)</td>
<td>5</td>
<td>11.6</td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
<td>100.0</td>
</tr>
</tbody>
</table>

It's clear from the data in the above table that (83.7) of the sample surveyed were fully national in terms of ownership, and (11.6) were mixed. While foreign companies operating in Jordan did not exceed (4.7).

4. Exporter / non-exporter
The distribution of the companies according to weather the company is exporter or not was identified. The following table illustrates the results:

Table (5) Distribution of the companies according to weather they are exporter or not

<table>
<thead>
<tr>
<th>Exporter</th>
<th>Frequencies</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>13</td>
<td>30.2</td>
</tr>
<tr>
<td>No</td>
<td>30</td>
<td>69.8</td>
</tr>
<tr>
<td>total</td>
<td>43</td>
<td>100.0</td>
</tr>
</tbody>
</table>

It's clear from the data in the above table that (69.8) of the companies weren't exporters, while only (30.2) were exporters. Such data indicate on weak export orientation. The need for applying MC strategies is more insisting to companies exporting to international markets, since; they work in an environment of fierce competition characterized by international leaders companies in the application of the MC strategies.

8.2 MC Strategies application in food and beverages shareholding industrial companies in Jordan
In order to determine the degree of MC application in food and beverages shareholding industrial companies in Jordan, mean and standard deviation of the statistical significance has been used. The following table shows the results of the statistical analysis.
The results of statistical analysis indicates that the General mean of the degree of MC strategies implementation together, for the sample of the study answers, was (3.61) with a standard deviation of (.55290). The relative importance for each of the four strategies came respectively: cosmetic Strategy with mean (4.00) and standard deviation (.62562). Followed by transparent strategy with mean (3.78) and standard deviation (.82258). Followed by adaptive strategy with mean (3.26) and standard deviation (.82474). Followed by Participative strategy with mean (3.16) and standard deviation (.82728). One-Sample T-Test was used to examine the mean of dependent variable (MC Strategies: cosmetic, transparent, adaptive, Participative) and compared them to the assumed value (4) which reflects a high degree of application. The test result indicates that the value of (t) and the level of (2-tailed) Sig for the four strategies, respectively, were as follows: (-.049) with the level of significance (.961) for the cosmetic strategy. (-1.730) with the level of significance (.091) for the transparent strategy. (-5.855) with the level of significance (.000) for the adaptive strategy. And (-6.698) with the level of significance (.000) for the participative strategy. Since the decision-rule is to reject the null hypothesis that the variable mean is equal to the assumed value, if the value of t is high, (the difference between variable mean and value proposed is great, and the area (2-tailed) Sig above the value of t is small-less than the acceptable level(.05). Accordingly, the premise that the variable average is equal to the value proposed to each of: participative and adaptive strategies. And accept the alternative hypothesis that the variable average is equal to the value proposed to each of: cosmetic and transparent strategies. This result means that the degree of MC application in food and beverages shareholding industrial companies in Jordan, is high for cosmetic, and transparent MC strategies, while it's medium for participatory, and adaptive MC strategies.

### 8.3 Hypothesis Testing

Ho: There is no difference in the degree of MC strategies implementation attributed to the following variables together: administration responsible for the strategy application in the company, the existence of organizational marketing unit in the company, the company's ownership, whether the company is exporter or not.

Ha: There is a difference in the degree of MC strategies implementation attributed to the following variables together: administration responsible for the strategy application in the company, the existence of organizational Marketing unit in the company, the company's ownership, whether the company is exporter or not.

Higher-Way ANOVA has been used to test this hypothesis; the results are shown in the table (7) below:

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Spreadsheet F</th>
<th>Calculated F</th>
<th>Sig</th>
<th>the result of the null hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration responsible for the strategy application in the company, the existence of organizational marketing unit in the company, the company's ownership, whether the company is exporting or not.</td>
<td>17</td>
<td>4.45</td>
<td>.753</td>
<td>.718</td>
<td>Acceptance</td>
</tr>
<tr>
<td>Error</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
It's clear from the data in the above table that the value of (F) calculated for the effect of interaction between the variables = (.753), at the level of significance (.718), means that it isn't statistically significant at a level of less than (0.05), the F distribution table shows that the value of F spreadsheet at the same degrees of freedom, and significance level = (4.45). Since the decision-rule is to reject the null hypothesis (Ho) if the value of F calculated is greater than its spreadsheet. Comparing the two values shows that the calculated F is less than F spreadsheet, which means accepting the null hypothesis (Ho), which states that there is no difference in the degree of MC strategies implementation of companies attributed to the following variables together: administration responsible for the strategy application in the company, the existence of organizational Marketing unit in the company, the company's ownership, whether the company is exporter or not.

**The first sub-hypothesis**
Ho: There is no difference in the degree of MC strategies implementation attributed to the administration responsible for the strategy application in the company.
Ha: There is a difference in the degree of MC strategies implementation attributed to the administration responsible for the strategy application in the company.

To test this hypothesis One Way analysis of variance (ANOVA) has been used, and the results are shown in the following table:

<table>
<thead>
<tr>
<th>Spreadsheet F</th>
<th>Calculated F</th>
<th>df</th>
<th>Sig F</th>
<th>the result of the null hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.23</td>
<td>.696</td>
<td>(2,40)</td>
<td>.505</td>
<td>Acceptance</td>
</tr>
</tbody>
</table>

It's clear from the data in the above table that the value of (F) calculated at the degree of freedom (2.40), and the level of significance (.505) is (.696)) and the value of F spreadsheet at the same degrees of freedom, and the level of significance = (3,23), Since the decision-rule is to reject the null hypothesis (Ho) if the value of F calculated is greater than the value of F spreadsheet. The results of the analysis shows that the F calculated is less than F spreadsheet, Which means accepting the null hypothesis (Ho), which states that there is no difference in the degree of MC strategies implementation attributed to the administration responsible for the strategy application in the company.

**The second sub-hypothesis**
Ho: There is no difference in the degree of MC strategies implementation attributed to the existence of organizational marketing unit in the company.
Ha: There is a difference in the degree of MC strategies implementation attributed to the existence of organizational marketing unit in the company.

To test this hypothesis independent samples (T-Test) has been used, and the results are shown in the following table:

<table>
<thead>
<tr>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t</th>
<th>sig</th>
<th>The result of the null hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>27</td>
<td>3.5212</td>
<td>.57513</td>
<td>-1.432</td>
<td>.160 Acceptance</td>
</tr>
<tr>
<td>No</td>
<td>16</td>
<td>3.7679</td>
<td>.49177</td>
<td>-1.491</td>
<td>.145</td>
</tr>
</tbody>
</table>

It's clear from the data in the above table that the value of (t) for the proportion of the sample study who answered yes to the question is (-1.432), at the level of significance (.160), and is not statistically significant at a level less than (.05). While the value of (t) for the proportion of the sample study who answered no to the question is (-1.491), at the level of significance (.145), and is not statistically significant at a level less than (.05). Since the decision-rule is to reject the null hypothesis (Ho) if the significance value level of t calculated is less than the acceptable level (0.05). The results of the analysis shows that the value of t calculated is greater than (0.05), which means accepting
the null hypothesis (Ho), which states that there is no difference in the degree of MC strategies implementation attributed to the existence of organizational marketing unit in the company.

The third sub-hypothesis
Ho: There is no difference in the degree of MC strategies implementation attributed to the company’s ownership.
Ha: There is a difference in the degree of MC strategies implementation attributed to the company’s ownership.

To test this hypothesis One Way analysis of variance (ANOVA) has been used, and the results are shown in the following table:

Table (10) The results of ANOVA to the third sub-hypothesis

<table>
<thead>
<tr>
<th>Spreadsheet F</th>
<th>Calculated F</th>
<th>df</th>
<th>Sig F</th>
<th>the result of the null hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.23</td>
<td>1.70</td>
<td>(2,40)</td>
<td>.196</td>
<td>Acceptance</td>
</tr>
</tbody>
</table>

It’s clear from the data in the above table that the value of (F) calculated at the degree of freedom (2.40), and the level of significance (.196) is (1.70) and the value of F spreadsheet at the same degrees of freedom, and the level of significance = (3.23). Since the decision-rule is to reject the null hypothesis (Ho) if the value of F calculated is greater than the value of F spreadsheet. The results of the analysis shows that the F calculated is less than F spreadsheet, Which means accepting the null hypothesis (Ho), which states that there is no difference in the degree of MC strategies implementation attributed to the company’s ownership.

The fourth sub-hypothesis
Ho: There is no difference in the degree of MC strategies implementation attributed to whether the company is exporter or not.
Ha: There is a difference in the degree of MC strategies implementation attributed to whether the company is exporter or not.

To test this hypothesis independent samples (T-Test) has been used, and the results are shown in the following table:

Table (11) the results of independent samples (T-Test) to the fifth sub-hypothesis

<table>
<thead>
<tr>
<th>Exporter or not</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t</th>
<th>sig</th>
<th>The result of the null hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exporter</td>
<td>13</td>
<td>3.7802</td>
<td>.55823</td>
<td>1.317</td>
<td>.195</td>
<td>Acceptance</td>
</tr>
<tr>
<td>non exporter</td>
<td>30</td>
<td>3.5405</td>
<td>.54388</td>
<td>1.303</td>
<td>.206</td>
<td></td>
</tr>
</tbody>
</table>

It’s clear from the data in the above table that the value of (t) for the proportion of the sample study who answered that their companies export is (1.317), at the level of significance (.195), and is not statistically significant at a level less than (.05). While the value of (t) for the proportion of the sample study who answered that their companies non-exporter is (1.303), at the level of significance (.206), and is not statistically significant at a level less than (.05). Since the decision-rule is to reject the null hypothesis (Ho) if the significance value level of t calculated is less than the acceptable level (0.05). The results of the analysis shows that the value of t calculated is greater than (0.05), which means accepting the null hypothesis (Ho), which states that there is no difference in the degree of MC strategies implementation attributed to whether the company is exporter or not.

9. FINDINGS AND RECOMMENDATIONS
This section contains the main findings and recommendations of the study that can be summarized as follows:

9.1 Finding
1- There is no specialized unit for marketing activities in the majority of food and beverages industrial companies in Jordan (Table 3). This result reflects a medium level of recognition and interest to the importance of marketing as a function of tasks, activities, and the need for specialized marketing unit in their industrial companies. It’s more
powerful to apply MC strategies in companies that have an organizational marketing unit responsible for marketing activities.

2- The extent to which food and beverages industrial companies in Jordan apply mass Customization strategies were moderate for the: participatory and adaptive MC strategies., while it was high for cosmetic and transparent ones(Table 6).

3- There is no difference in the degree of MC strategies implementation in food and beverages industrial companies in Jordan attributed to: the administration responsible for MC strategy implementation in the company, existing of organizational marketing unit in the company, the company's ownership, whether the company is exporter or not(Tables:7,8,9,10,11).

9.2 Recommendations
Researcher presented a set of recommendations that can be summarized as follows:
1. Food and beverages shareholding industrial companies in Jordan should conduct training programs to re-qualify managers on marketing activities for the purpose of more understanding to the recent marketing concepts and strategies.
2. Inform specialist's managers in food and beverages shareholding industrial companies in Jordan about the foreign MC strategy implementation leaders firms, and the reasons for its success, as well as the reasons for the failure of other companies.
3. Food and beverages shareholding industrial companies in Jordan should claim universities and academic specialized centers to conduct conferences and lectures to specialized marketing managers in these companies about concept, principles, Forms, and determinants of mass customization strategies.
4. Food and beverages shareholding industrial companies in Jordan should conduct surveys to know about their customer's willingness in buying products customized using collaborative, adaptive, and transparent strategies of mass customization.
5. Since MC concept, principles, Forms, and determinants of its strategies are modernity issues and important to both scholars and practitioners in the areas of business and marketing, further studies in this area are necessary.

REFERENCES