The Impact of Green Human Resource Management (GHRM) Practices on the Competitive Advantage of the Jordanian Educational Institutions

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Abstract:
The current study aimed to find the impact of GHRM practices in terms of Green selection and recruitment (S&R), training and development (T&D) and rewards system (RS) on the Jordanian educational institutions’ competitive advantage in terms of the differentiation, responsiveness, and the cost leadership in the Jordanian educational institutions. The study sample consisted of 130 respondents from the human resources departments at three universities (Yarmouk University, Jordanian University of Science and Technology, and the Jordanian University). To achieve the study objectives, the researcher designed a questionnaire for data collection.

The study revealed that the implementation of GHRM practices have a positive relation to increase the competitive advantage of the educational organizations in Jordan. The results of the study indicated a medium implementation of GHRM practices sub-variables in the educational sector in Jordan. T&D has the highest implementation rate among the sub-variables, then S&R followed by RS.

Keywords:
Green human resources practices, competitive advantage, Educational organizations

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Introduction
Governments worldwide seek to implement the Millennium Development Goals though supporting the political, social and cultural rights of the human. Various researchers believe that millstone to achieve the development is illustrated in developing the educational institutions. Due to the technological development, countries sought to achieve the development goals through activating the role of the universities and the educational institutions because they have an important role in moving the wheel of development and achieving the scientific and economic progress (Sharqi, 2008). In the fifties of the twentieth century, the number of universities in the Arab world did not exceed ten universities and few thousands students were enrolled in these universities. However, the situation has changed, and the number of universities exceeds 300, with more than 7 million students of both genders attending (Al-Azzawi and Al-Dulaimi, 2010). Universities shall meet the key elements to achieve the quality advantage in the educational sector such as having effective academic programs and management. Whereas, these characteristics are pillars of competitiveness that improve the perspectives about these institutions and the services they provide (Fombrun and Van Riel, 2004).

Human Resource Management (HRM) is a significant department in all firms, and this department is responsible for handling and processing, and integrating all of the firm activities in order to enhance its performance (Rawashdeh & Al-Adwan, 2012). The rapid technological advancement that occurred after the industrial revolution had made the HR as a main engine for production. HR department function has exceeded the recruitment and other routine practices to reach other managerial functions such as identifying the organization vision and objectives (Aykan, 2017). According to Grenville et al. (2014), protecting the environment and saving the natural resources for the future generations had become the main concern of the managers and policy makers. These concerns have motivated the business organizations to develop their management practices by involving environmentally friendly procedures in order to apply the green management (Prasad, 2013). Many organizations had created the Environment Management System (EMS) to preserve the natural resources, while EMS is a vital method that aims to achieving sustainable development (Chan, 2011). EMS has been adopted in different departments such as marketing, finance and operation departments (Mittal & Sangwan, 2014), and recently Human Resources departments followed the green system (Prathima & Misra,
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2013). As well as, due to the vital role of HRM to achieve the sustainable development for the organizations, researchers turned their attention to study the relation between HR and EM; and this alignment is called GHRM and aims to enhance the employees’ green behaviors (Mathapati, 2013), and to improve the commitment of the employees toward the environment (Schuler & Jackson, 2014).

GHRM practices are the company’s policies, practices, and systems that motivate its employees’ green practices for the interests of people, business and the nature. GHRM involve different practices, and these practices are Green selection and recruitment, Green development and training, and Green rewards and compensation (Opatha, 2014). Moreover, due to the importance of EM and GHRM, firms have emerged them with their goals and strategies (Ahmad, 2015). In addition, HRM practices are fundamental resources in any organization to maintain sustainable environment, and GHR practices are required to maintain the sustainable Competitive Advantage in all organizations (Almada & Renata, 2018). Environmental consciousness shall be taken into account in all HR practices in order to enhance the sustainable competitive advantage, environmental performance, and EMS. Therefore, GHRM practices improve the employees’ commitment toward the sustainability of the environment, so GHRM practices have significant role in enhancing the competitive advantage of the organizations (Aykan, 2017).

In Jordan, GHRM topic is under research, while this filed suffer from a research gap. Further researches in this area could enhance the related literature and benefit the policy makers and managers to apply the GHRM practices. The present study aims to illustrate the significant of the GHRM, as well to show the impact of the GHRM practices on the competitive advantage of the Jordanian educational sector.

Statement of the problem
The environmental requirements are rising in the last decades that push the organizations to improve their practices within green orientation. GHRM practices have a positive impact to achieve and enhance the competitive advantage of the organizations (Aykan, 2017). Few studies have conducted to find the impact of GHRM practices on the competitive advantage of the educational institutions. Therefore, the present study aimed to focus on the impact of GHRM practices on the competitive advantage of the educational institutions in Jordan.

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Questions of the study:
The current study is devoted to answering the following main question:
1. Do GHRM Practices ((S&R), (T&D), and (RS)) affect competitive advantages elements (Differentiation, Cost Leadership, and Responsiveness) of the educational sector in Jordan?
Based on the green human resources elements the main question is divided to the following questions:
2. Does Green Human Resources Management Practices affect the competitive advantages (Differentiation) of the educational sector in Jordan?
3. Does Green Human Resources Management Practices affect the competitive advantages (Cost Leadership) of the educational sector in Jordan?
4. Does Green Human Resources Management Practices affect the competitive advantages (Responsiveness) of the educational sector in Jordan?

Study Hypothesis:
The above questions will be answered by testing the following hypothesis:
Main Hypothesis:
H01: GHRM Practices ((S&R), (T&D), and (RS)) do not affect competitive advantages elements (Differentiation, Cost Leadership, and Responsiveness) of the educational sector in Jordan, at (α≤0.05).
Based on the green human resources management components the main hypothesis can be divided into the following sub-hypotheses:
H01.1: GHRM Practices do not affect competitive advantages elements (Differentiation) of the educational sector in Jordan, at (α≤0.05).
H01.2: GHRM Practices do not affect competitive advantages elements (Cost Leadership) of the educational sector in Jordan, at (α≤0.05).
H01.3: GHRM Practices do not affect competitive advantages elements (Responsiveness) of the educational sector in Jordan, at (α≤0.05).

Study Model:
Based on the problem statement and its questions, the researcher developed the following model to study the impact of GHRM practices on competitive advantages, as shown in the model (Figure 1).
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**Figure (1): Study Mode**

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Dependent variable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Green Human Resources practices:</strong></td>
<td><strong>H₀₁</strong></td>
</tr>
<tr>
<td>- Green selection and recruitment (S&amp;R)</td>
<td><strong>H₀₁.1</strong></td>
</tr>
<tr>
<td>- Training and development (T&amp;D)</td>
<td><strong>H₀₁.2</strong></td>
</tr>
<tr>
<td>- Rewards system (RS)</td>
<td><strong>H₀₁.3</strong></td>
</tr>
</tbody>
</table>

**Competitive Advantages:**
- Differentiation
- Cost Leadership
- Responsiveness

**Study Methodology**

The study adopted the descriptive approach and SPSS was used. The researcher developed a questionnaire to collect the data from HR departments in three Jordanian universities. The study sample consisted of 130 respondents from the human resources departments at three universities (Yarmouk University, Jordanian University of Science and Technology, and the Jordanian University).

**Literature Review**

The previous researchers who sought to identify the meaning and aspects of GHRM practices concluded to the fact that GHRM practices rely on the HR managers and their green behaviors patterns. As well, successful EMS involve the process of integrating the green human resources practices and applying these practices in the organization’s policy (Jabbour and Santos, 2010). According to Callenbach et al. (1993), The GHRM in any organization seek to apply the efficient use of the natural resources, and aim involve the HRM practices within the organization strategies in order to fulfil the sustainability. The business organization could increase its productivity and protect the stakeholders’ interests through integrating the GHRM practices. There are many benefits from applying the GHRM practices such as reducing the carbon footprints, whereby HR management apply the effective use of the available resources to achieve the organization goals. GHRM practices are wide and distributed, but all of these practices aim to preserve the natural resources, such as Skype interviews, online communications, reduce the use of papers through distributing the tasks to the employees online (Mandip, 2012).
The GHRM practices involve three main practices include and they are the green recruitment (Grolleau et al., 2012), providing rewards based on the employees awareness about preserving the natural resources to save the environment (Jabbour et al., 2012), as well, empowering the employees through presenting training programs for them (Unnikrishnan & Hedge, 2007). The study of Razab et al. (2015), the researchers suggested to present questions that relate to the process of protecting the environment during the interviews with the job applicants. As well as, during the training period, the trainers shall provide information about the green practices that are included in the organization strategy to the new joining employees. Moreover, the training shall involve providing information about the organization’s policies and regulations to preserve the environment, and awareness about the organization’s green goals. Furthermore, the job interviews shall be prepared adequately to evaluate the job applicants’ compatibility to the job and their harmony to the organization’s green goals. Besides, green training and development (T&D) is one of the vital aspect of GHRM practices. Green T&D is one of effective tools in developing the HR green practices (Jabbour, 2011). As well as, green T&D seek to enhance the knowledge of the employees regarding the process of preserving the environment and the natural resources, and this leads to creating a sense of competence among the employees to reduce the amount of the waste and preserve the energy (Zoogah, 2011). Furthermore, the green reward system (GRS) has an important influence in motivating the employee and developing their performance (Teixeira et al., 2012). Adopting GRS aims to enhance the employee's performance, as well to turn the employees’ attention to focus on the importance of preserving the natural resources and protecting the environment (Lindström & Vanhala, 2011). Human Resources Managements shall motivate the employees to be committed to the Green Practices through providing rewards to the employees who show interest and commitment to protect the environment and preserve the natural resources. (Liebowitz, 2010).

As well, the study of Chopra & Meindl (2001) showed that the term “Competitive Advantages” illustrates the capacity of the organizational to ensure the need of the customers through providing a competitive products and services compared to the other services and products of the competitors. The competitive advantages refers to the satisfaction level of the customers, and the organization could achieve it through the its products and services (Ambe, 2010). As well as, the competitive advantage of any organization could give products to customers with high quality and better price. As well, the competitive advantage adds the flexibility to the products and services to meet the customers’ demands (Jia and Wang, 2019). According to Kotze (2002), the sustainable competitive advantage
The Impact of Green Human Resource Management (GHRM) Practices on ... requires ensuring the organization flexibility, creativity, culture and knowledge. Researchers investigated the influence of GHRM practices implementation on various sectors. These researchers found that GHRM practices have an effective impact on developing the human capital, the performance of the organization, and the organization’s competitive advantage (Chiappetta & Jabbour, 2011). The study of Tang and Sun (2008) found that maintaining the organization competitive advantage require ensuring of four dimension and they are the recruitment strategy, reward strategy, compensation strategy, and the management performance strategies. As well as, the differentiation strategy shrinks all the variables that affects the customer’s perception through offering more than physical features and service attributes (Heizer, et. al., 2014). This strategy is a critical feature that shall be met in the products and services of any firm to deliver the features that differ from the competitors (Yoo, et. al., 2015).

In other words, the services and products differentiation refers to the organization ability to enhance the quality of its services and products and creating an innovative and creative features to the services. Besides, the cost leadership refers to the process of providing similar products as the services of the competitors at lower costs (Ambe, 2010). The cost strategy refers to ensuring the competitive advantage through controlling the costs of the operations effectively, and the cost of managerial affairs, transportation, and the used material (Council, 2012). As well, this strategy refers to the organizational capability to deliver the products and services at the lowest cost without affecting the quality of the services and products. The responsiveness strategy rely on two principles. The first is the organization’s flexibility to be ready for any changes in the customers’ demands in terms of quantities or specifications. The second principle is the organization’s speed to meet and satisfy this demand (Al-Atrash, 2018). In other words, the responsiveness strategy refers to the organization ability to react and respond to the changes in the markets and requirements, and to deliver the services and products on time.

**Analysis and Results Discussion**

**Demographic analysis**

The demographic analysis is illustrated in the following sections based on the characteristics of the valid responses i.e. frequency and percentage of the participants such as gender, age, experience, education, position, and division.

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>70</td>
<td>53.8 %</td>
</tr>
<tr>
<td>Female</td>
<td>60</td>
<td>46.2 %</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 30</td>
<td>41</td>
<td>31.5 %</td>
</tr>
</tbody>
</table>

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The table shows that the majority of respondents are males, were 70 (53.7%), and 60 (46.2%) are females. As well as, the majority of respondents ages are less than 40 years 50 (38.5%) out of the total sample, then those ages less than 30 years 41 (31.5%), after that the respondents less than 50 years 25 (19.2%), finally those older than 50 years 14 (10.8%). The respondents are having experience less than 10 years 56 (43.1%), then respondents experience between (10-20 years) 51 (39.2%), followed by those with experience between (21-30 years) 15 (11.5%). Finally, respondents have more than 30 years’ experience were very 8 (6.2%). Moreover, the majority of respondents holds bachelor degree 91 (70.0%), then master degree holders are 31 (23.8%) after that 7 (27.3%) have diploma degree, finally 1 (0.8%) have Ph.D. degree.

Hypothesis Testing:
H₀₁: GHRM Practices (Green selection and recruitment (S&R), training and development (T&D) and rewards system (RS)) do not affect competitive advantages elements (Differentiation, Cost Leadership, and Responsiveness) of the educational sector in Jordan, at (α≤0.05).
Table (2) shows that when regressing the three sub-variables of GHRM Practices against the total of Competitive Advantages, the model shows that GHRM Practices can explain 62.0% of the variation of Competitive Advantages, where (R²=0.620, F=68.442, Sig.=0.000). Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted, which states that GHRM Practices sub-variables (S&R, T&D, and RS) affect the Competitive Advantages of the educational sector in Jordan, at α≤0.05.
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Table (2): Multiple Regressions of GHRM Practices Sub-variables on Competitive Advantages.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.787a</td>
<td>.620</td>
<td>.611</td>
<td>68.442</td>
<td>000b</td>
</tr>
</tbody>
</table>


Based on the components of GHRM Practices, table (3) shows the impact of each sub-variable on Competitive Advantages. These sub-variables impacted Competitive Advantages, the highest impact was for S&R with 37.0% of the total impact and followed by T&D with an impact of 32.1% on Competitive Advantages, then T&D rated 23.0%.

Table (3): Multiple Regressions of GHRM Practices sub-variables on Competitive Advantages (ANOVA).

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.734</td>
<td>0.226</td>
<td>3.252</td>
<td>0.001</td>
</tr>
<tr>
<td>S&amp;R</td>
<td>0.274</td>
<td>0.054</td>
<td>0.370</td>
<td>5.034 0.000</td>
</tr>
<tr>
<td>T&amp;D</td>
<td>0.236</td>
<td>0.072</td>
<td>0.230</td>
<td>3.274 0.001</td>
</tr>
<tr>
<td>RS</td>
<td>0.322</td>
<td>0.076</td>
<td>0.321</td>
<td>4.260 0.001</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Competitive Advantages, -tabulated=1.960

H₀₁.₁: Green Human Resources Management Practices do not affect competitive advantages elements (Differentiation) of the educational sector in Jordan, at (α≤0.05).

Table (4) shows that when regressing GHRM Practices against Differentiation, the model shows that GHRM Practices can explain 47.7% of the variation of Competitive Advantages (Differentiation), where (R²=0.477, F=40.272, Sig.=0.000). Therefore, the H₀₁.₁ hypothesis is rejected and the alternative hypothesis is accepted, which states that GHRM Practices affect the Competitive Advantages (Differentiation) of the educational sector in Jordan, at α≤0.05.

Table (4): Multiple Regressions of GHRM Practices on Differentiation.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.700a</td>
<td>0.489</td>
<td>0.477</td>
<td>40.272</td>
<td>0.000b</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), S&R, T&D, RS, b Dependent Variable: Differentiation

Based on the components of GHRM Practices, table (5) shows the impact of each sub-variable on the competitive advantage (Differentiation). These sub-
variables have an impact on Differentiation, the highest impact was for T&D with 37.8% of the total impact and followed by S&R with an impact of 28.8%, then T&D rated 15.3%.

**Table (5): Multiple Regressions of GHRM Practices sub-variables on Differentiation (ANOVA).**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>0.792</td>
<td>0.300</td>
<td>2.637</td>
</tr>
<tr>
<td></td>
<td>S&amp;R</td>
<td>0.245</td>
<td>0.072</td>
<td>0.288</td>
</tr>
<tr>
<td></td>
<td>T&amp;D</td>
<td>0.444</td>
<td>0.096</td>
<td>0.378</td>
</tr>
<tr>
<td></td>
<td>RS</td>
<td>0.176</td>
<td>0.101</td>
<td>0.153</td>
</tr>
</tbody>
</table>

a. **Dependent Variable: Differentiation, tabulated=1.960**

H\(_{01.2}\): Green Human Resources Management Practices do not affect competitive advantages elements (Cost Leadership) of the educational sector in Jordan, at \(\alpha\leq0.05\).

Table (6) shows that when regressing GHRM Practices elements against cost leadership, the model shows that GHRM Practices can explain 47.0% of the variation of Competitive Advantages (Cost Leadership), where \(R^2=0.470\), \(F=37.304\), \(Sig.=0.000\). Therefore, the \(H_{01.2}\) hypothesis is rejected and the alternative hypothesis is accepted, which states that GHRM Practices affect the Competitive Advantages (Cost Leadership) of the educational sector in Jordan, at \(\alpha\leq0.05\).

**Table (6): Multiple Regressions of GHRM Practices on Cost Leadership.**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>(R^2)</th>
<th>Adjusted (R^2)</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.686(^a)</td>
<td>0.470</td>
<td>0.458</td>
<td>37.304</td>
<td>0.000(^b)</td>
</tr>
</tbody>
</table>

a. **Predictors: (Constant), S&R, T&D, and RS, b Dependent Variable: Cost Leadership**

Based on the components of GHRM Practices, table (7) shows the impact of each sub-variable on Competitive Advantages on Cost Leadership. These sub-variables have an impact on cost leadership, the highest impact was for S&R with 35.1% of the total impact and followed by T&D with an impact of 33.1%, then T&D rated 10.6%.
Table (7): Multiple Regressions of GHRM Practices sub-variables on Cost Leadership (ANOVA).

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>0.611</td>
<td>0.310</td>
<td>1.969</td>
</tr>
<tr>
<td></td>
<td>S&amp;R</td>
<td>0.303</td>
<td>0.075</td>
<td>0.351</td>
</tr>
<tr>
<td></td>
<td>T&amp;D</td>
<td>0.126</td>
<td>0.099</td>
<td>0.106</td>
</tr>
<tr>
<td></td>
<td>RS</td>
<td>0.386</td>
<td>0.104</td>
<td>0.331</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Differentiation, t-tabulated=1.960

H_{01.3}: Green Human Resources Management Practices do not affect competitive advantages elements (Responsiveness) of the educational sector in Jordan, at (α≤0.05).

Table (8) shows that when regressing GHRM Practices elements against Responsiveness, the model shows that GHRM Practices can explain 48.8% of the variation of Competitive Advantages (Responsiveness), where (R^2=0.488, F=41.926, Sig.=0.000). Therefore, the H_{01.3} hypothesis is rejected and the alternative hypothesis is accepted, which states that GHRM Practices affect the Competitive Advantages (Responsiveness) of the educational sector in Jordan, at α≤0.05.

Table (8): Multiple Regressions of GHRM Practices on Responsiveness.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R^2</th>
<th>Adjusted R^2</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.707^a</td>
<td>0.500</td>
<td>0.488</td>
<td>41.926</td>
<td>0.000^b</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), S&R, T&D, and RS, b Dependent Variable: Responsiveness

Based on the components of GHRM Practices, table (9) shows the impact of each sub-variable on Competitive Advantages on Responsiveness. These sub-variables affect the Responsiveness, the highest impact was for T&D with 36.1% of the total impact, and followed by S&R with an impact of 33.2%, then T&D rated 12.1%.

Table (9): Multiple Regressions of GHRM Practices sub-variables on Responsiveness (ANOVA).

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
</table>

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Conclusion

GHRM practices have a significant impact on the competitive advantage dimensions by a medium implementation rate. As well as, GHRM practices have a medium impact on the competitive advantage of sub-variable Differentiation. GHRM practices have a medium impact on the competitive advantage sub-variable Cost Leadership. GHRM practices have a medium impact on the competitive advantage sub-variable Responsiveness. The results of the study indicated a medium implementation of GHRM practices sub-variables in the educational sector in Jordan. T&D has the highest implementation rate among the sub-variables, then S&R followed by RS. The medium rate for GHRM practices sub-variables resulted from the educational sector management are not implementing green practices and the managers do not realize the importance of implementing green practices among the human resources departments. The findings also showed a high implementation of Competitive Advantage Dimensions because the educational sector is always seeking toward competitiveness and adopting high-quality standards, whereby the highest implementation is the Differentiation dimension, then Responsiveness, and finally Cost Leadership.

References


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