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# Enterprise Marketing Automation Software Selection

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**Individual Project Paper - ETM 530/630 – Decision Making**

**Spring 2018**

**ENTERPRISE MARKETING AUTOMATION SOFTWARE  
SELECTION**

**ANJU BABU**

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## Abstract

Enterprises devote a large amount of time and effort in selecting software products that are critical to their competitive advantage, and one such software is the marketing automation software. The paper discusses in detail the different criteria and methodology for selecting one marketing automation software product among the leading products available in the market.

The selection process was identified as a multi-criteria decision-making (MCDM) problem and the methodology used for analysis was Hierarchical Decision Model (HDM), a variation of Analytic Hierarchy Process (AHP). Nine experts with different backgrounds in terms of job functions, functional experience, and geographies, who had expertise in marketing automation tools or related products were requested to give their inputs for the HDM analysis and a detailed analysis was done on the results. The results pointed to a single product as the winner of the analysis which was found to reflect the market share and research data and helped understand the decision-making process under different preferences and perspective differences.

For future research and further analysis, the model could be made more robust with the inputs from more number of experts to eliminate any bias or outliers and corroborating the results by independently analyzing it with different decision-making methodologies such as TOPSIS or DEA.

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## Background

Consider an organization wanting to automate its marketing processes. They have to ensure that the marketing communications are coherent and tailored in order to reach the right customers in the right way. The assumption is that they already have a high-end CRM (Customer Relationship Management) software; however, this does not satisfy their specific marketing communication and analysis needs.

They decide to select a leading marketing automation software available in the market that integrates well with their CRM. They select 4 different software that are leaders in the marketing automation market and find that there are significant differences in their features, performance, and implementation cost. The products are - HubSpot, Marketo, Pardot (Salesforce), Eloqua (Oracle). They need to come up with a comprehensive method for analysis and to decide on the best software that matches their needs.

## Introduction

Marketing automation refers to the software that exists with the global goal of automating marketing actions. [1] With the help of software platforms and related technology, marketers will be able to reach to their targeted customers in the most effective ways. [2] The software in integration with the CRM software collects data, stores it, analyzes it, and sends out targeted

communication to potential customers in a timely and tailored way. It allows the marketer to design, execute, automate their routine and advanced tasks. [3]



*Figure 1: Elements of Marketing Automation [4]*

The marketing department is the pivotal division in an organization as far as the competitive advantage and strategic decision making is concerned. Hence, it is important for the companies to stay competitive by attracting the most valuable customers and keep them engaged in their products and services. Hence, the concept of marketing automation in addition to the CRM software is especially important for a marketer. [5]

Marketing automation is thus very important for a company that needs to have a strong focus on customer communication and stays competitive. Hence, the marketing software industry has been booming ever since companies have realized the importance of digital marketing. Marketing automation software is a burgeoning industry with a total revenue of \$3.65 billion in 2014 and projected to grow at a rate of 8.55% to reach \$5.5 billion by 2019. [6]

The intense competition among the marketing automation software providers have blessed the users with a lot of choices in terms of competitive pricing, added marketing features, intelligent analytics, and technical support. Choosing the right software for the organization requires astute deliberation and analysis.

A comprehensive model that helps in this decision-making process is detailed in this paper.

## Methodology

The needs differ from organization to organization and not every important criterion can be represented in monetary terms. An exhaustive list of factors that affect decision making may not be possible; however, efforts must be made to consider all the relevant quantitative and qualitative factors into account. This requires intense research on the relevant criteria, details about each alternative, and inputs from experts who have done the decision making in a related industry. [7] [8] [9]

A detailed literature review was done on the different methodologies that could be used for technology adoption, software to be specific. [10] [11] [12] [13] [14] [15] Hierarchical Decision Model (HDM), which is an extension of the popular multicriteria decision-making tool Analytic Hierarchy Process (AHP), allows a thorough analysis of multiple criteria in complex decision-making processes. It helps in classifying decision criteria into a multi-layered hierarchy and allows to analyze each factor at each layer in pairs. [16] [17] [18] [19] [20] [21] [22]



Subject-matter-expert (SME) inputs are used to rank or give weights to each criterion at all the levels. The HDM tool developed by PSU computes the average of the inputs from the experts and assigns weights to the criteria. It also computes the extent of inconsistency in each expert's input and the disagreement factor among all the experts.

The steps include:

1. Define the decision objective
2. Define all the criteria
3. List the alternatives
4. Quantify each decision based on the formula  $\sum_{i=1}^I P_i \times \sum_{j=1}^J C_j \times \sum_{k=1}^K O_k = 1$

where  $P_i$  = weight of the perspective i to the decision

$C_j$  = weight of criteria j to the decision

$O_k$  = weight of option k

I = number of perspectives

J = number of criteria

K = number of options/alternatives

5. Analyze the results from the tool, especially the mean values, inconsistency, disagreement, and F-test value.

After completing the HDM, further analysis of the options was conducted using a variation of the Data Envelopment Analysis (DEA). [23] [24] [25] [26] [27] The entire process of DEA was not used

for the analysis. It was important to understand the factors that contribute to the success of the product. Hence, the analysis was stopped at the stage where the most competitive factors were found for each product. The level-2 perspectives and the level-3 criteria are deconstructed and analyzed separately to see what values of those are maximizing the values assigned to each option, without changing the values of the options. This helps in understanding the rationale behind selecting the options in varying cases of preferences in terms of perspectives and criteria. The inspiration was drawn from DEA and goal programming analysis. The decision-making units (DMUs) considered were each of the options and the inputs/outputs (no differentiation in this case) considered were the normalized mean scores of the perspectives and the criteria.

## Research Questions

The set of research questions that the paper intends to answer are given as follows:

1. What are the important criteria that are crucial to decision-making? How do these criteria compare with each other?
2. Would the most popular software (highest market share) emerge as the winner as per the inputs from the SMEs?
3. Will a single product be the winner in all the different perspectives and criteria? Will they differ when the perspective and criteria weights change?
4. Would there be a significant disagreement between the subject-matter experts? What would be the reason behind the disagreement?

## Selecting the Options

Based on the market share and popularity of the software, HubSpot, Marketo, Pardot, and Eloqua were selected.

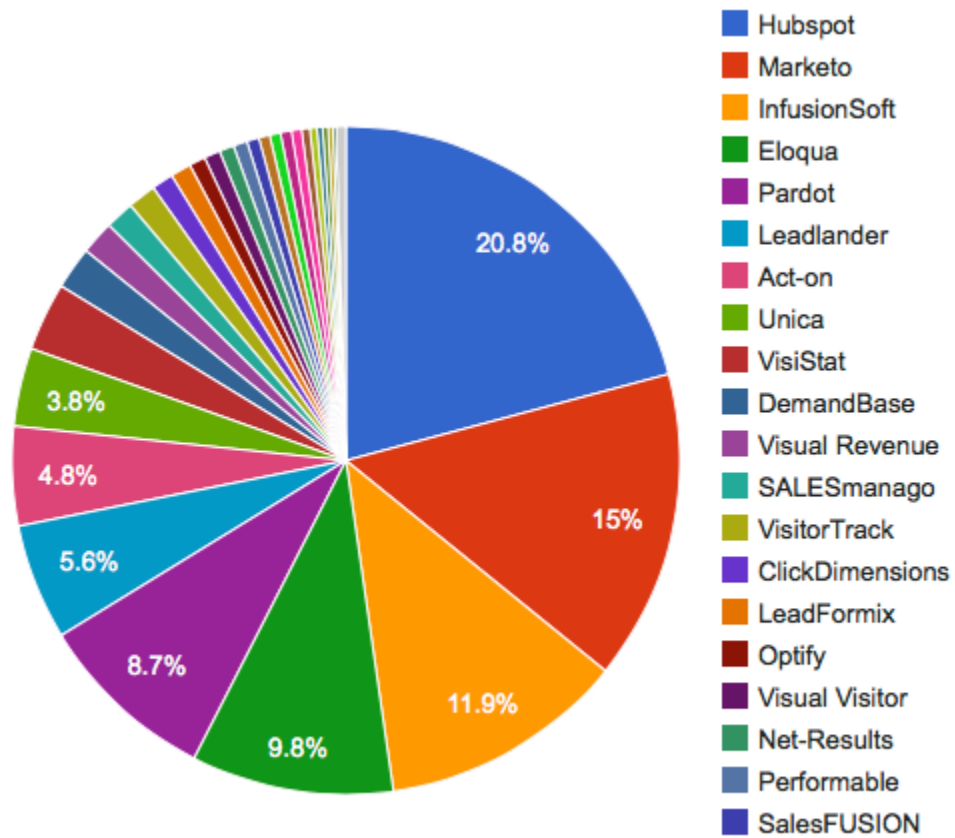


Figure 2: Marketing Automation Market Share [28]

## 1. HubSpot



HubSpot is a publicly traded company headquartered in Cambridge, Massachusetts. It was founded in 2006 and have a revenue of \$270.97 million. They have about 41,500 customers in 90+ countries. A sophisticated end-to-end marketing solution and ease of use are the main competitive advantages of HubSpot. [29]

## 2. Marketo



Marketo is a private company headquartered in San Mateo, California. It was founded in 2006. It was acquired by Vista Equity Partners for \$1.79 billion. Marketo has a wide customer base across industries and has a global footprint. Marketo has positioned itself as a marketing automation company and provides niche solutions to its customers. [30] [31]

## 3. Eloqua



Eloqua is a wholly-owned subsidiary of Oracle. It naturally inherits its parent company's expertise in cloud and enterprise software management. It was founded in 1999 and is headquartered in San Francisco, California. It specializes in marketing automation with a strong focus on revenue performance management. [32]

## 4. Pardot



Pardot is the marketing automation software by Salesforce. It was founded in 2007 and is headquartered in Atlanta, Georgia. It has the competitive advantage of being the subsidiary of the most popular CRM provider and specializes in B2B marketing automation. [33]

### Hierarchical Decision Model

A detailed study was done on the software selection process, particularly marketing automation software. [34] [35] The most important perspectives and criteria were listed out and a hierarchical decision model was made. When considering the software selection, one has to look at the perspectives of the product itself, its cost, the technical support from the vendor, and the attributes of the vendor company itself. 3-4 criteria relevant to each perspective were then listed out. [36] [37] [38] [39] [40]

The initial model was:

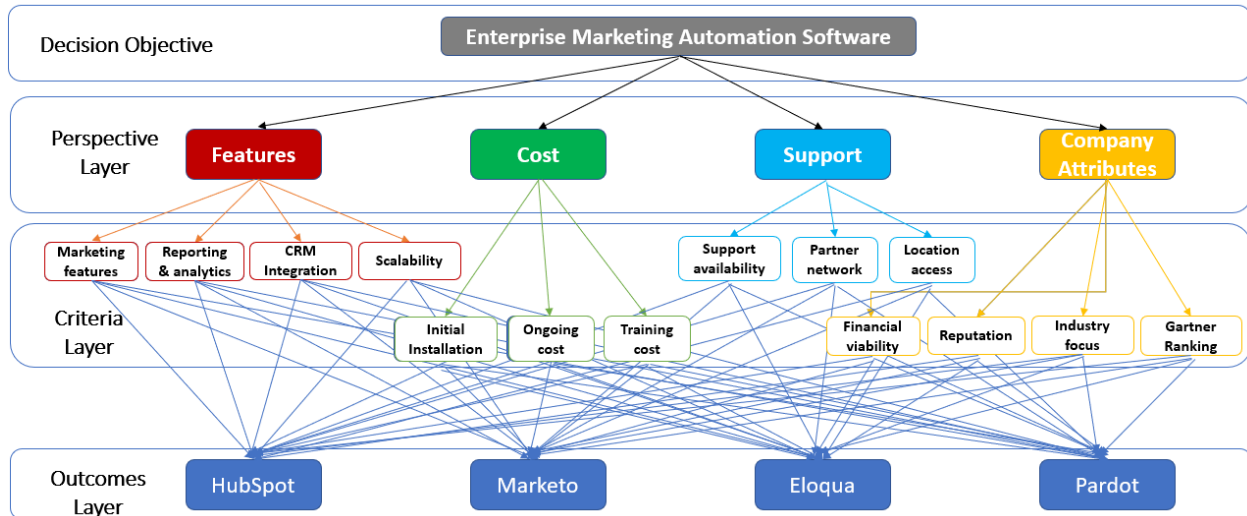


Figure 3: HDM - Initial Model

Subject-matter-experts in the field of marketing automation and software selection for enterprises were contacted for giving suggestions on the above model.

The experts gave their opinion on the relevant perspectives and criteria. The perspective ‘Support’ was considered an aspect of the cost and company attributes, that needed to be treated differently. 4 experts from different domains gave their opinions and the model was restructured as follows:

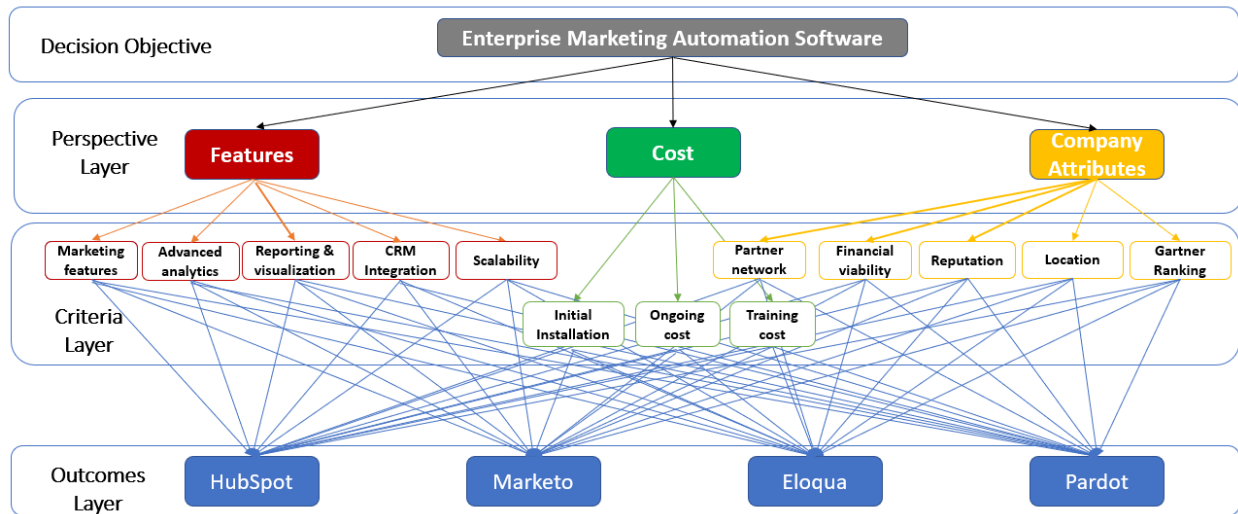


Figure 4: HDM - Experts' Comments Incorporated

The above model was entered into the PSU’s HDM tool. Email links were sent to the subject-matter-experts who hailed from different geographies, companies, levels of expertise, and seniority levels. Experts from the 4 listed companies were exempted to avoid any potential conflict of interest and for an unbiased ranking.

SME#	Expertise	Company
1	Marketing, Sales, Strategy	Columbia
2	Marketing automation, Automation systems	Infosys

<b>3</b>	Marketing automation, Organizational policy-making	L&T
<b>4</b>	Marketing, Software selection	Intel
<b>5</b>	Strategy, Software selection	Intel
<b>6</b>	Marketing automation, Strategy, Analytics software, Resource planning	IBM
<b>7</b>	Software selection, Strategy	PSU
<b>8</b>	Marketing, Analytics, Strategy	Intel
<b>9</b>	Marketing automation, Analytics, Strategy, Industry benchmarking	PwC



## Perspectives & Criteria – Explained

After the literature review and consultation with experts, the HDM was finalized with focus on 3 perspectives – Features, Cost, & Company Attributes. Each perspective and the criteria considered under them in the hierarchical tree are explained below:

### Features

The most obvious factor for adoption of a marketing automation tool in a company is the features and benefits of the marketing automation tool itself. A high-intensity of competition within the software providers goes on in the market by making their software/platform better than others in terms of marketing features, visualization, etc. The most important features to be considered carefully while selecting the software are:

### Marketing Features

The original and most important functionalities of the product are considered in marketing features. These include lead nurturing, campaign management, lead management, landing pages, email marketing, social marketing, lead scoring, visitor tracking, Google AdWords visibility, etc., to name a few. While interviewing the experts, marketing features were found to be the single most important function of the marketing automation tool.

### **Advanced Analytics**

To remain competitive, the marketing automation software vendors add advanced analytics and machine learning prowess to the tool. These features provide the users increased marketing and sales intelligence from the past available data and other data available from the system. As more and more companies are taking advantage of the newest technologies and intelligent systems, advanced analytics serve as the differentiator from one product to another.

### **Reporting & Visualization**

Most of the tools are feature-rich and quite diverse in their functions. In an organization where only a limited number of personnel would receive advanced training on all these features, it becomes important that the tool's dashboard and reporting tools are intuitive enough to convey the message to personnel from different departments. This feature is especially important in understanding cross-functional departments. C-suite executives and senior officials would like this feature for a quick overview and increased visibility to the marketing performance. Another important factor is the ease of integration with third-party visualization applications used by the company.

### **CRM Integration**

From the literature review and expert interviews, it was clear that the companies view marketing automation as an extension of customer relationship management (CRM). CRM has gained

popularity since the last 3 decades and has now become ubiquitous not just in enterprises but in small and medium-sized companies as well. Salesforce is the most popular CRM tool and all the interviewed experts had that as the preferred CRM in their company. Thus, it is increasingly important that the marketing automation and the CRM tool are easily and automatically synchronized.

### **Scalability**

It is desired that the tool is flexible enough to accommodate different marketing needs and caters to the requirements of different departments. Also, it is expected that the tool works well when the organization structure changes or expands. This is of prime importance in case of mergers and acquisitions when companies with different marketing strategy and tactics would want to use the same tool. An ideal tool would allow seamless integration.

### **Cost**

Marketing features and the reputation of the product aside, when making the buying decision, the most crucial factor in consideration is the cost factor. It is in the organization's best interest that they derive maximum value from the product at minimum cost. Cost of the product has an integral role in deciding and driving the purchase decision.

### **Initial Installation**

When the companies adopt the tool for the first time in the organization or are migrating from another platform, there are a lot of processes involved and infrastructure to be purchased new. In order to derive maximum benefits from the tool, the supporting infrastructure has to be in harmony with the tool and organizations realize that. Although most software tools are based on monthly or annual subscriptions, a huge upfront or initial payment would be required by the vendor. The organization has to consider all these factors while deciding on the tool as it can be crucial for approval processes and change management.

### **Ongoing Cost**

As discussed earlier, most software products have a monthly or annual subscription plan based on the features, organization size, and the number of licenses. This has a direct effect on the bottom-line cost and financial control of the organization.

### **Training Cost**

The company should have internal experts who have a good grasp of the products and its features. Therefore, training is important. The software vendors realize that and they provide training along with their product at additional cost to the customer. The customer can use either this option or can get the personnel trained by third-party training providers or consultants.

Although not significant, if there are employees trained on a particular product, the organization can save significant amounts on training and development costs.

## **Company Attributes**

The success of a product greatly depends on the company developing it. Companies like Oracle and Salesforce have already proved themselves with their enterprise products and have a definite edge over the other players. Also, if the companies have a long-standing relationship by using other products from the same vendor, there is a higher chance of selecting the same vendor for the new software itself. On an average, it is said that the probability of customer retention and upselling is 60-70%, while the probability of customer acquisition and selling new products is only 5-20%. [41]

## **Partner Network**

Sometimes, partner network provides benefits almost as good as owning the product or solution. It is difficult to thrive alone in the technology market and hence the importance of the partner network. A company with a wide range of reputed partner network will seem more attractive while making the buying decision. The marketing automation will not be a standalone tool and will work in conjunction with other software and platforms such as CRM, ERP, etc. Companies look for partner network for advanced features and consulting services as well.

### **Financial Viability**

The financial status of the software vendor goes beyond the numbers in the annual/quarterly reports and speak volumes on the profitability of the product and the trustworthiness of the company. Therefore, it is important to look at the financial viability of the company before buying their product. While buying a product and making a substantial commitment requires that the product involved will continue to exist and the company will continue providing services as required. Thus, at a minimum, the going concern of the company should be assessed. [42]

### **Reputation**

Reputation is often underrated while doing a quantitative analysis. However, in order to enter into the consideration-set of the products, reputation plays a major role, if not the most important role. High-involvement decisions should ideally be beyond cognitive biases, and therefore, including one source of cognitive bias in the model itself will help remove that factor from the rest of the factors and assessment.

### **Location**

Most of the companies have a global presence or have that consideration in the future roadmap. Thus, it is important to them that their software provider also has a global presence and are accessible for support whenever required.

## Gartner Ranking

Gartner is one of the most reputed research firms and their reports and ranking of products or companies in different domains are considered in high regard by consultants and decision-makers. Every year, they come up with the magic quadrant by positioning the products as Leaders, Challengers, Niche Players, and Visionaries. Although it is the most desirable to get into the Leader quadrant, according to the specific needs of the company, the desirability of the product varies.



Figure 5: Gartner Magic Quadrant, February 2017 [43]

## Data Collection

As planned, the modified model was created in the HDM tool website developed at PSU. Initially, it was planned to include only 3 levels of hierarchy and leave out the options for expert analysis. This was considered because experts were not identified in the subject and leaving out the options analysis would result in inaccurate results. As guiding the experts was not recommended, educating the non-experts and then asking them to give their inputs was out of the question as well. Additional experts were identified, who did not have experience in marketing automation per se, but in other marketing software such as CRM and general software selection for their organizations.

The HDM link from the website was sent to the experts over email along with a description of the perspectives (Appendix B) and the tool comparison report from R2I (free report generated from the website). [44] Video conferencing was done for experts who needed to understand the HDM tool better.

9 experts gave their inputs on the tool and the tool calculated the mean, inconsistencies, and disagreements within experts. The highest mean suggested the most preferred software. Inconsistency and disagreement had to be below 0.1. There was one expert who had an inconsistency of 0.16. This expert was requested to reconsider and redo the test and the particular section where inconsistency arose was pointed out. However, the expert was never guided at any point or asked to change his opinion.



## Results

The results from the tool are as depicted below:

Marketing Automation Software	HubSpot	Marketo	Eloqua	Pardot	Inconsistency
	0.5	0.27	0.15	0.08	0.07
	0.22	0.26	0.24	0.28	0
	0.21	0.3	0.29	0.2	0
	0.2	0.26	0.28	0.26	0.03
	0.31	0.23	0.25	0.22	0.03
	0.26	0.31	0.27	0.16	0.01
	0.38	0.24	0.15	0.23	0.02
	0.18	0.26	0.46	0.09	0.04
	0.3	0.24	0.24	0.22	0.01
<b>Mean</b>	<b>0.28</b>	<b>0.26</b>	<b>0.26</b>	<b>0.19</b>	
<b>Minimum</b>	<b>0.18</b>	<b>0.23</b>	<b>0.15</b>	<b>0.08</b>	
<b>Maximum</b>	<b>0.5</b>	<b>0.31</b>	<b>0.46</b>	<b>0.28</b>	
<b>Std. Deviation</b>	<b>0.1</b>	<b>0.03</b>	<b>0.09</b>	<b>0.07</b>	
<b>Disagreement</b>					<b>0.063</b>

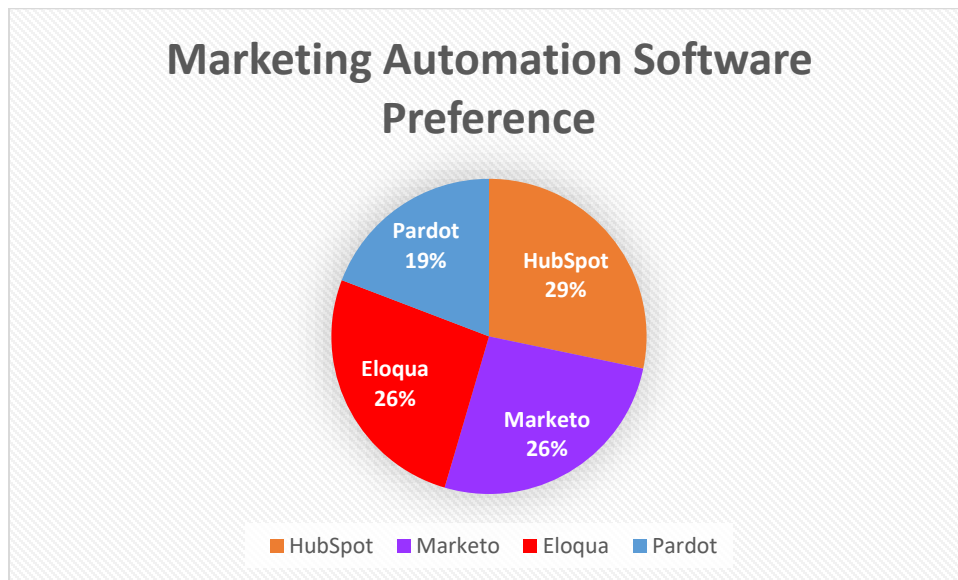
Figure 6: Experts' Input Summary (names of experts hidden due to privacy concerns)

The final quantified model is separately shared as Appendix A.

Source of Variation	Sum of Square	Deg. of freedom	Mean Square	F-test value
Between Subjects:	0.04	3	.014	<b>1.71</b>
Between Conditions:	0.00	8	0.000	
Residual:	0.20	24	0.008	
<b>Total:</b>	<b>0.24</b>	<b>35</b>		
<b>Critical F-value with degrees of freedom 3 &amp; 24 at 0.01 level:</b>				<b>4.72</b>
<b>Critical F-value with degrees of freedom 3 &amp; 24 at 0.025 level:</b>				<b>3.72</b>
<b>Critical F-value with degrees of freedom 3 &amp; 24 at 0.05 level:</b>				<b>3.01</b>
<b>Critical F-value with degrees of freedom 3 &amp; 24 at 0.1 level:</b>				<b>2.33</b>

Figure 7: Statistical F-test for evaluating null hypothesis

## Analysis



*Figure 8: % preference of marketing automation software*

From the results obtained, HubSpot is the winner which scored the highest score of 0.28. Marketo and Eloqua tied for a very near second while Pardot was left far behind by most of the experts. A clear preference for any one software was lacking and varied according to the industry and seniority. The variance in preferences was evident in the ranking of preferences and criteria as well. As the experts had diverse backgrounds in terms of functional knowledge, geographies, demographics, seniority level, organizational structure, decision-making power, the results balanced out. A detailed discussion of the results and their analysis are following:

## Level-2 Perspectives

All the experts, sans one, selected **Features** as the most important criteria. This is consistent with the assumption that the functionality of the product would be the most important criteria. Only one expert suggested that **Cost** would be the most important factor. Otherwise, Cost was considered the second most important factor and **Company Attributes** took a distant third spot. The results were in accordance with the initial assumptions.

### Features > Cost > Company Attributes

It was found that the expert who was in a less senior position and was constantly working on the marketing automation and other software rated the Features to a high degree as compared to other perspectives. The reason could be the identification of the importance of features in the hands-on experience rather than account or cost management roles.

Mid-level account managers were found to rate Cost with a higher weight than those in a technical or functional hands-on role or strategic consultant or Director role. The reason for this might be that they identify the importance of staying within the budget for their account and getting maximum value for the product. These experts tend to overlook the importance of the Company Attributes as these decisions are rarely handled by them and are looked into by the strategy department.

Experts who had a direct role in shaping the strategy of the organization, especially strategy consultants and higher-level executives, tend to give almost equal weight to Company Attributes as much as the Cost factor. From their perspective, it is important that they take into account the going concerns and health of the company that they get into business with. The departments and mid-level managers are bound to rely on them for taking care of this information in the decision-making process. Although Company Attributes scored the least among all the other perspectives, it was rated relatively higher by the strategic experts. Thus, this perspective is not to be ignored as these are the people who would be engaged in the contract management and negotiations with the vendor for a long-term business relationship.

From the analysis of the Perspective ranking by the experts, it was clear that the inherent bias according to the job function is very relevant in decision-making. This was found to be true irrespective of the geography and organizational size. The difference in judgment was found to be stemming the most from the job function and knowledge about the particular perspective. Experts were found to rate those perspectives which they knew better, higher.

### **Level-3 Criteria**

The 3 perspectives were further broken down into the criteria. The criteria under each perspective are discussed separately.

Before the HDM process, the following was the order of importance of each criterion of the Features perspective:

**Marketing Features > CRM Integration > Advanced Analytics > Reporting & Visualization > Scalability**

The experts' inputs came by and there were slight changes in the ranking order of the different criteria, although Marketing Features remained the most important and Scalability remained the least important. Marketing Features were followed by CRM Integration which was further followed by Advanced Analytics and Reporting & Visualization with the same level of importance.

The response from the experts was mixed. Like the perspectives, there were differences in the way the experts rated the criteria and this was in accordance with their job functions, seniority levels, and type of organization.

It was found that the functional experts ranked the Marketing Features much higher than the rest of the criteria and ranked the Reporting & Visualization quite low; whereas, more senior and executive-level people ranked the Reporting & Visualization much higher. This result is evident from the fact that more senior officials would not be working with the tool and would be only engaged with it by looking at the dashboard or reports from the tool. The functionality according to them is still important, but they are equally interested in getting lucid reports that help them get an overall perspective on the performance and future insights.

Another important factor found was that experts from service-oriented firms ranked the Advanced Analytics higher than those from the product-oriented firms. This seemed counter-intuitive initially as it is usually thought that people working in product-oriented firms are more exposed to hands-on experience with the artificial intelligence and analytics than those from the service-oriented firms who mostly concentrate on the theoretical aspects of the artificial intelligence and analytics. One reasoning could be that the analytics feature is hyped and the actual product-oriented firms may not find it so important as it claims it to be. The benefits of using advanced analytics could be marginal. The other reason could be that those in product-oriented firms may not see the importance yet as the analytics is mostly at the nascent stage and they have not realized the full potential of it. As consultants from the service-oriented firms are involved in studying these deeply and are involved in the actual implementation of these features for their clients, they might be more in tune with the scope of using advanced analytics and thus rated its importance higher.

CRM integration was rated high by the experts from core marketing areas, which was as expected. Scalability was not rated very high by any expert as this was more or less a long-term goal and might be already taken care of by the product. According to the interview with a few experts (who did not participate in the survey), scalability and flexibility of the product are taken for granted and is expected, whichever product is concerned. Thus, among Features, the important aspect that was found to affect the decision-making was job function, seniority level, and organization type.

The second perspective that was considered was the Cost. The results followed the initial assumptions.

**Ongoing cost > Initial investment > Training cost**

All the experts almost unanimously agreed on the importance of the cost factors. The only expert who differed in the ranking was the one who rated the cost to be the most important perspective. He rated the initial investment to be more important than the ongoing cost. It could be thought of the current scenario in his organization or department where budget sanctions might be roadblock or constraint in adopting any new product.

Training cost was ranked the least important by all the experts. The initial interview gave a few insights about this. The experts said that the training costs were not a concern to them as they are usually a one-time insignificant amount. Also, most of the tools are very intuitive and does not require special training. The free online instructions and manuals give good guidance on how to use the tool and its features. All the companies have inside experts who are well-versed with marketing theory and CRM tools and thus, it is easier for them to understand and utilize the tool in the best possible way. Therefore, the training cost is ranked the least important.

The third and least important perspective is the Company Attributes. The assumption before the HDM analysis was as follows:

**Reputation > Partner network > Ranking > Financials > Location**

The results were different from the assumptions. Reputation was still considered the most important and location the least important. However, Financials of the supplier organization was found to be more important than it was assumed to be.

**Reputation > Financials > Ranking > Partner network > Location**

Most of the experts rated reputation to be the most important aspect in the company attributes. This is clear from the fact that reputation helps the company to be in the top-of-the-mind recall while considering for a new software adoption, and this would be the reason why they would consider reputation as the most important aspect. Word-of-the-mouth publicity of the software from internal experts and external consultants play a major role in decision making and this is evident in the rating of this criteria. Also, the more well-known and reputable the supplier company is, the easier it is to get sanctions from the authorities for implementation.

The financial condition of the company was underrated initially but proved to be the second most important aspect. It was thought that experts who are into managerial and more senior roles would consider financials to be more important than those in a more technical role. But, no such pattern was found in the HDM inputs. There were no trends or patterns in experts considering financials to be an important criterion.

Most consultants and account managers follow the ranking by major research companies such as Gartner as a gospel and would seriously consider that while selecting the software. They



believe these research companies to have done the detailed study on each of the software available and trust their expertise on the matter. The market share is also found to be closely related to the ranking on the Gartner magic quadrant. Software such as Eloqua and Marketo that feature in the leader quadrant are clearly considered to be superior to the other software available in the market. For the most part, these comprehensive studies and rankings play a major role in the decision making.

To start with, the partner network was considered to be one of the very important factors, but experts' inputs said otherwise. There was a trend in the ratings of the partner networks. It was found that experts from the consultancy and service-oriented firms rated partner networks to be higher than those from product-oriented and manufacturing firms. This shows the inherent bias of the experts in making the decision in service-oriented and product-oriented companies. Service-oriented firms are greatly dependent on their partners for products and implementation, therefore it is evident that they tend to perceive partner networks to be one of the strong criteria for decision making.

All the experts unanimously agreed on rating Location of the companies' offices to be the least important. As all the experts hail from global firms and have the understanding that today's web-connected world ensures no or little hassle in the actual physical location of the supplier office.

## Level-4 Options

The selection of the software by the experts matched well with the market share and comparisons available on the web for each of the software. [45] [46] [47] [48]

### **HubSpot > Marketo > Eloqua > Pardot**

Although market share was not a criterion for selection and ranking which mirrors that was not rated the highest by any of the experts, the results were still following the general market trends. This shows that the model takes into account all the relevant aspects considered by the decision makers and gives a sturdy model for assessment.

The F-test value is 1.71 whereas the 95% confidence level value is 3.01. Because the difference between each of the choices is marginal. Although HubSpot is the winner, Marketo and Eloqua closely follow it and ties for the second spot. Only Pardot was left as a distant third. The reason for this less differentiation would be because all 4 are highly competitive products. They are highly reputed companies that strive to stay on top of the market and vie for the top spot with the aid of cutting-edge technology. They are differentiated very less in terms of features and cost. Although company attributes differ, all of them are well known among the circle of experts and are well-respected for the good reputation. This less differentiation could be the reason for the very close scores and low F-test value.

As the scores were too close and the experts' opinions had to be deconstructed to find the pattern, a sensitivity analysis with each of the option was planned. However, a data envelopment analysis with goal programming was used for exact optimized scores. Goal programming is a widely used method which falls into the category of multi-objective optimization for multi-criteria decision analysis. [13] However, as the detailed goal programming was not required in this case and providing priority for the deviation is very subjective to individual judgment, the final analysis was performed, but avoided in this report for clarity and integrity of results. Hence, the deviation aspect was not considered and the mean of each option was considered and recorded independently for the assessment. This analysis is also important to find the competitive advantage of each product.

### **Maximizing Each Option**

The objective of each independent analysis was to maximize the value of each option by making the perspective scores and criteria scores as variables. At first, the analysis was done using the scaled score which was the product of perspectives with the respective criteria. However, the perspective and criteria analysis were further separated out as both of them are important in their own ways and required separate analysis. It was found that using the scaled score would result in the perspectives score overshadowing the criteria score which resulted in a less than accurate result in terms of criteria analysis.

Each option was considered the Decision-Making Unit (DMU) for each analysis and the perspectives and criteria were separately considered as variables. Thus, analyzing one option became a 2-step process. Before starting the analysis, it was ensured that the mean perspective scores, criteria scores under each perspective, and option scores under each option were normalized. Option values were kept constant throughout the analysis. The tool used was Microsoft Excel Solver with Simplex linear programming. Sensitivity analysis was parallely done with each Solver run. However, as each DMU gave maximum value owing to their unique competitive advantage, there were no further insights from the sensitivity analysis as shadow prices were 0 for each analysis.

Level-2	Level-3	HubSpot	Marketo	Eloqua	Pardot						Scaled score
Features	Marketing Features	0.31	0.34	0.21	0.13	1		0.51	0.00		0.00
	Advanced Analytics	0.35	0.29	0.21	0.14	1			1.00		0.51
	Reporting & Visualization	0.32	0.35	0.20	0.13	1			0.60		0.31
	CRM Integration	0.21	0.26	0.24	0.29	1			0.00		0.00
	Scalability	0.24	0.22	0.34	0.20	1			0.00		0.00
Cost	Initial installation	0.25	0.23	0.32	0.21	1		0.30	0.00		0.00
	Ongoing cost	0.28	0.23	0.26	0.22	1			0.00		0.00
	Training cost	0.23	0.21	0.32	0.24	1			0.00		0.00
Company Attributes	Partner network	0.24	0.20	0.38	0.19	1		0.19	0.00		0.00
	Financials	0.23	0.23	0.33	0.21	1			0.00		0.00
	Reputation	0.25	0.22	0.27	0.26	1			0.00		0.00
	Location	0.23	0.23	0.32	0.22	1			0.00		0.00
	Ranking	0.38	0.26	0.22	0.14	1			1.00		0.19
		0.35	0.30	0.21	0.14	1 =	1	1.00			

Figure 9: HubSpot Analysis

At first, the perspectives were made variables and the criteria scores static. It was found that HubSpot took the highest score when the weight of Features was the highest. Then, the perspectives were kept static and the criteria were made variables. This reinstated the superiority of HubSpot features to a great extent. It was found that advanced analytics and ranking were the

major contributors to the high score. Reporting & visualization seemed to contribute too. HubSpot was found to be the winner in two separate areas in Features and this pretty much explains why the features of the HubSpot were considered superior. HubSpot beats all of its competitors in terms of ranking and placement as a Leader in the magic quadrant. This seems to give the product an edge over its competitors in the overall scoring. More insights on the supremacy of HubSpot can only be explained after the analysis of all the different products.

Level-2	Level-3	HubSpot	Marketo	Eloqua	Pardot								Scaled score
Features	Marketing Features	0.31	0.34	0.21	0.13	1			0.51	0.97			0.49
	Advanced Analytics	0.35	0.29	0.21	0.14	1				0.00			0.00
	Reporting & Visualization	0.32	0.35	0.20	0.13	1				1.00			0.51
	CRM Integration	0.21	0.26	0.24	0.29	1				0.00			0.00
	Scalability	0.24	0.22	0.34	0.20	1				0.00			0.00
Cost	Initial installation	0.25	0.23	0.32	0.21	1			0.30	0.00			0.00
	Ongoing cost	0.28	0.23	0.26	0.22	1				0.00			0.00
	Training cost	0.23	0.21	0.32	0.24	1				0.00			0.00
Company Attributes	Partner network	0.24	0.20	0.38	0.19	1			0.19	0.00			0.00
	Financials	0.23	0.23	0.33	0.21	1				0.00			0.00
	Reputation	0.25	0.22	0.27	0.26	1				0.00			0.00
	Location	0.23	0.23	0.32	0.22	1				0.00			0.00
	Ranking	0.38	0.26	0.22	0.14	1				0.00			0.00
		0.32	0.35	0.21	0.13	1	=	1					

Figure 10: Marketo Analysis

While perspectives were the variables, the features aspect was found to be the major contributor to Marketo’s high score. This ties with the findings of HubSpot also rated high in terms of features. Thus, further analysis of Marketo’s different criteria becomes mandatory to find which aspects are contributing to the high ratings of the features. On analyzing the criteria, it was found that marketing features and reporting & visualization were contributing to the high score of Marketo. As marketing features were considered the most important criteria among all the features, if singled out on the most important feature, the winner of the analysis would have

been Marketo. Also, when considering the Reporting & Visualization factor, Marketo was found to be the choice rather than HubSpot. The disadvantage of Marketo could be considered in terms of cost and company attributes. The strength of Marketo was found to be concentrated on the features.

Level-2	Level-3	HubSpot	Marketo	Eloqua	Pardot							Scaled score
Features	Marketing Features	0.31	0.34	0.21	0.13	1			0.51	0.00		0.00
	Advanced Analytics	0.35	0.29	0.21	0.14	1				0.00		0.00
	Reporting & Visualization	0.32	0.35	0.20	0.13	1				0.00		0.00
	CRM Integration	0.21	0.26	0.24	0.29	1				0.00		0.00
	Scalability	0.24	0.22	0.34	0.20	1				1.00		0.51
Cost	Initial installation	0.25	0.23	0.32	0.21	1			0.30	0.38		0.12
	Ongoing cost	0.28	0.23	0.26	0.22	1				0.00		0.00
	Training cost	0.23	0.21	0.32	0.24	1				0.00		0.00
Company Attributes	Partner network	0.24	0.20	0.38	0.19	1			0.19	1.00		0.19
	Financials	0.23	0.23	0.33	0.21	1				1.00		0.19
	Reputation	0.25	0.22	0.27	0.26	1				0.00		0.00
	Location	0.23	0.23	0.32	0.22	1				0.00		0.00
	Ranking	0.38	0.26	0.22	0.14	1				0.00		0.00
		0.24	0.22	0.35	0.20	1	=	1				

Figure 11: Eloqua Analysis

While considering the perspectives, Eloqua was found to score the highest in company attributes. This confirms the assumption that Eloqua will inherit the competitive advantage of company attributes from its parent company Oracle. Still, what exact features were contributing to the high rating had to be found out and thus further analysis of the criteria was done. It was found that Eloqua scored high on scalability, partner network, and financials. Oracle products are used extensively by many companies and they ensure that scalability factor is taken care of in the enterprise products. Partner networks and financials of Oracle enables Eloqua to score high in these areas. However, all these criteria were not rated very high by the experts which explains

why Eloqua did not emerge as the winner. It can be concluded that the preference towards Eloqua is heavily dependent on the parent company Oracle.

Level-2	Level-3	HubSpot	Marketo	Eloqua	Pardot							Scaled score
Features	Marketing Features	0.31	0.34	0.21	0.13	1			0.51	0.00		0.00
	Advanced Analytics	0.35	0.29	0.21	0.14	1				0.00		0.00
	Reporting & Visualization	0.32	0.35	0.20	0.13	1				0.00		0.00
	CRM Integration	0.21	0.26	0.24	0.29	1				1.00		0.51
	Scalability	0.24	0.22	0.34	0.20	1				0.00		0.00
Cost	Initial installation	0.25	0.23	0.32	0.21	1			0.30	0.00		0.00
	Ongoing cost	0.28	0.23	0.26	0.22	1				0.00		0.00
	Training cost	0.23	0.21	0.32	0.24	1				1.00		0.30
Company Attributes	Partner network	0.24	0.20	0.38	0.19	1			0.19	0.00		0.00
	Financials	0.23	0.23	0.33	0.21	1				0.00		0.00
	Reputation	0.25	0.22	0.27	0.26	1				1.00		0.19
	Location	0.23	0.23	0.32	0.22	1				0.00		0.00
	Ranking	0.38	0.26	0.22	0.14	1				0.00		0.00
		0.22	0.24	0.27	0.27	1	=	1				

Figure 12: Pardot Analysis

On analyzing the perspectives, Pardot was found to score the highest in cost factor, a perspective that was untouched by the other 3 options. On further analysis, it was found that Pardot did well in CRM integration, training cost, and reputation as well. However, even while having the maximized score, Pardot was found to be only as good as Eloqua and did not clearly win on any aspect, which explains the market position of the product. Being the subsidiary of Salesforce, which is the most used CRM software, it would be expected that CRM integration of Pardot would be excellent. The reputation of Pardot would also be contributed to being the subsidiary of Salesforce. As Pardot features are relatively lesser compared to its competitors, they are able to maintain a low-cost model.

The analysis helped to infer what is the factor that gives the competitive advantage to each product and this further helps in understanding under what circumstances, one should choose

each product. All the three products – HubSpot, Marketo, and Eloqua, were found to have a clear area of advantage. The summary of this is as given below:

Perspective	Criteria	Winning Product
<b>Features</b>	Marketing features	Marketo
	Advanced analytics	HubSpot
	Reporting & Visualization	Marketo
	CRM integration	Pardot
	Scalability	Eloqua
<b>Cost</b>	Training cost	Pardot
<b>Company Attributes</b>	Partner network	Eloqua
	Financials	Eloqua
	Ranking	HubSpot



For all the other criteria, the difference between each of the products was marginal. Thus, it is now known that according to the scenario and preferences, which product to choose. Also, the analysis sheds light on the competitive advantage of each product.

### **Inconsistency and Disagreement**

For optimal results in HDM, it is required that the inconsistency and disagreement values are below 0.1. A high inconsistency score means that the transitivity condition of the model was violated. [For e.g., if  $A > B$  and  $B > C$ , then  $A > C$ ]. HDM tool takes into consideration the magnitude of preferences as well.

The inconsistency values of 2 experts had exceeded this value and they were requested to retake the test. Both of them came up with better results the next time and thus, the inconsistency was eliminated. The disagreement value never exceeded 0.1 and thus did not require any reassessment.

### **Revisiting Research Questions**

**Q1:** What are the important criteria that are crucial to decision-making? How do these criteria compare with each other?

**A:** The important criteria were found and have been listed in the analysis. Features, especially the marketing features were found to be the most important aspect and were ranked very higher compared to other aspects such as the location of the company by all the experts.

**Q2:** Would the most popular software (highest market share) emerge as the winner as per the inputs from the SMEs?

**A:** Yes, HubSpot was found to be the most preferred product. This is consistent with the market share data and ranking of the product by famous research agencies.

**Q3:** Will a single product be the winner in all the different perspectives and criteria? Will they differ when the perspective and criteria weights change?

**A:** No, the preference of the product was found to change based on different aspects, especially on the weights given by experts to each of the perspectives and criteria. There was no clear winner product and each product was found to have its own unique competitive advantage. This also resulted in the products having very close scores and a low F-test value, which are discussed in detail in the sections above.

**Q4:** Would there be a significant disagreement between the subject-matter experts? What would be the reason behind the disagreement?

**A:** No, there was no significant disagreement. However, some aspects were found to change with the differing perspectives and diversity of the experts. The difference could be attributed to aspects such as job functions, understanding of and exposure to the particular perspective or criteria, product-oriented or service-oriented company, etc.

## Limitations and Future Scope

An attempt was done for a thorough analysis for understanding the decision-making process for adopting a new software product for the enterprise. However, it was limited by the availability of data, resources, and time. Given access to more data for the SMEs, the model could have been more robust. Finding experts who had exposure and deep understanding of all the products, perspectives, and criteria were difficult. Hence, the model could be prone to biased responses from the SMEs. The model is also prone to the limitations of Hierarchical Decision Modeling method. AHP/HDM only prioritizes the requirements and does not draw the attention to success-critical factors and their corresponding requirements. [49]

In order to avoid the biased response, additional number of SMEs could have been involved, as higher sample sizes provide more unbiased results and identify outliers. 9 SMEs from different industries and job functions gave their inputs. However, this is not an exhaustive list and many more experts from different industries and job functions could have been included.

Other decision-making methods such as decision trees (considering Return on Investments) and Data Envelopment analysis with goal programming could have been used to verify the results. But, the inadequacy and availability of relevant data prevented this. A detailed sensitivity analysis by varying each perspective and criteria could be done on the existing model.

## Conclusion

The selection of products for enterprise use has always been one of the difficult tasks in an organization, particularly when decision-makers have different backgrounds. The model described in this paper provides a detailed approach to solve this problem by incorporating the inputs from many experts in a multicriteria decision-making environment. The results were corroborated with the market shares of each product and the research papers published on this and were found to be reflecting it, thus communicating the robustness and practicality of the model.

It was also found that weighing the criteria depends on numerous factors such as job function and seniority level. Job function and understanding of each aspect was found to be the most important factors. Experts tend to rate those criteria higher which they understand better. Another interesting factor noticed was that more criteria were required to find patterns in the behavior of the experts according to their job functions. It was easier to spot differences in the case of 5 different criteria than 3 different criteria.

This proves that decision-making in an organization is a very subjective process. It is important that the decision-makers realize this and eliminate their bias. They could use the HDM method or other evolved methods or tools for achieving this goal.

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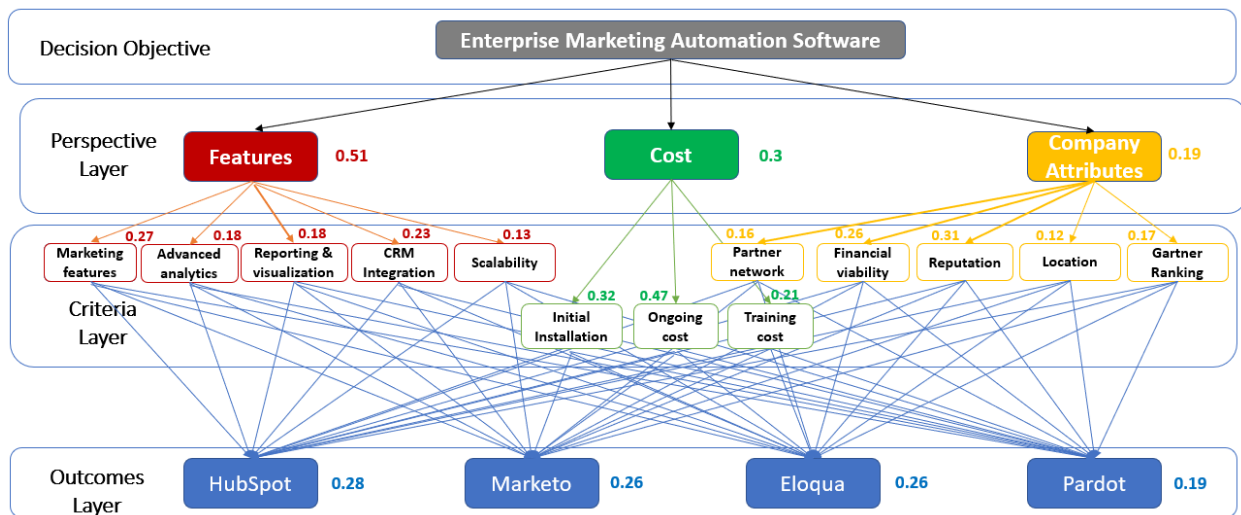
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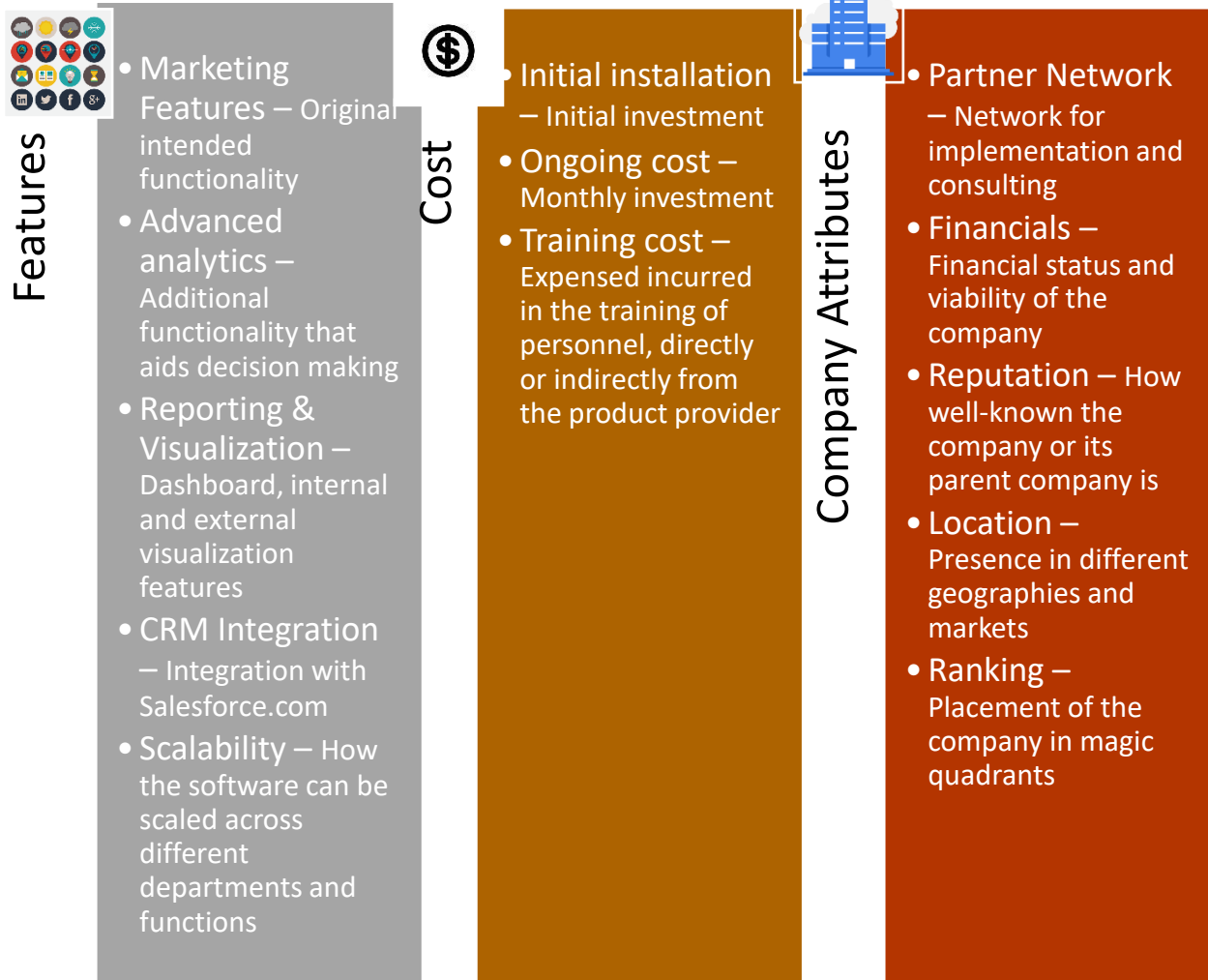
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## Appendix A

The final quantified model is as given below:



## Appendix B



## Appendix C

### Expert 1 Inputs

Level-1		Marketing Automation Software												
Features	0.66													
Cost	0.23													
Company Attributes	0.1													
Inconsistency	0.06													
Level-2		Features	Cost	Company Attributes										
Marketing Features	0.17	0	0											
Advanced Analytics	0.26	0	0											
Reporting & Visualization	0.11	0	0											
CRM Integration	0.4	0	0											
Scalability	0.07	0	0											
Initial installation	0	0.11	0											
Ongoing cost	0	0.66	0											
Training cost	0	0.23	0											
Partner network	0	0	0.17											
Financials	0	0	0.26											
Reputation	0	0	0.43											
Location	0	0	0.08											
Ranking	0	0	0.06											
Inconsistency	0.11	0.03	0.08											
Level-3		Marketing Features	Advanced Analytics	Reporting & Visualization	CRM Integration	Scalability	Initial installation	Ongoing cost	Training cost	Partner network	Financials	Reputation	Location	Ranking
HubSpot	0.51	0.5	0.46	0.48	0.52	0.52	0.5	0.51	0.53	0.5	0.51	0.54	0.56	
Marketo	0.25	0.27	0.32	0.29	0.25	0.25	0.26	0.26	0.26	0.27	0.28	0.26	0.23	
Eloqua	0.15	0.16	0.14	0.14	0.14	0.15	0.16	0.14	0.15	0.15	0.15	0.13	0.13	
Pardot	0.09	0.08	0.08	0.09	0.08	0.08	0.08	0.09	0.07	0.08	0.07	0.07	0.08	
Inconsistency	0.06	0.05	0.1	0.07	0.05	0.08	0.07	0.07	0.06	0.07	0.06	0.06	0.08	
The final result:														
Level-1		Marketing Automation Software												
HubSpot	0.5													
Marketo	0.27													
Eloqua	0.15													
Pardot	0.08													
Inconsistency	0.07													

### Expert 2 Inputs

Level-1		Marketing Automation											
Features	0.48												
Cost	0.31												
Company Attributes	0.21												
Inconsistency	0												

Level-2		Marketing Automation		
Features	Cost	Company Attributes		
Marketing Features	0.42	0	0	
Advanced Analytics	0.16	0	0	
Reporting &	0.1	0	0	
CRM Integration	0.25	0	0	
Scalability	0.06	0	0	
Initial installation	0	0.31	0	
Ongoing cost	0	0.48	0	
Training cost	0	0.21	0	
Partner network	0	0	0.1	
Financials	0	0	0.16	
Reputation	0	0	0.42	
Location	0	0	0.06	
Ranking	0	0	0.25	
Inconsistency	0	0	0	

Level-3		Marketing Automation											
Marketing Features	Advanced	Reporting &	CRM	Scalability	Initial	Ongoing	Training	Partner	Financial	Reputation	Location	Ranking	
HubSpot	0.27	0.43	0.11	0.11	0.1	0.27	0.11	0.18	0.18	0.11	0.11	0.43	
Marketo	0.43	0.27	0.27	0.18	0.2	0.18	0.18	0.18	0.11	0.11	0.18	0.27	
Eloqua	0.18	0.11	0.11	0.18	0.43	0.11	0.43	0.43	0.43	0.27	0.43	0.18	
Pardot	0.11	0.18	0.18	0.43	0.27	0.27	0.43	0.27	0.27	0.27	0.43	0.11	
Inconsistency	0	0	0	0	0	0	0	0	0	0	0	0	

The final result:

Level-1		Marketing Automation											
HubSpot	0.22												
Marketo	0.26												
Eloqua	0.24												
Pardot	0.28												
Inconsistency	0												

### Expert 3 Inputs

Level-1		Marketing Automation											
Features	0.6												
Cost	0.2												
Company Attributes	0.2												
Inconsistency	0												

Level-2		Marketing Automation		
Features	Cost	Company Attributes		
Marketing Features	0.27	0	0	
Advanced Analytics	0.15	0	0	
Reporting &	0.24	0	0	
CRM Integration	0.15	0	0	
Scalability	0.19	0	0	
Initial installation	0	0.66	0	
Ongoing cost	0	0.19	0	
Training cost	0	0.15	0	
Partner network	0	0	0.21	
Financials	0	0	0.19	
Reputation	0	0	0.33	
Location	0	0	0.13	
Ranking	0	0	0.14	
Inconsistency	0.01	0	0.04	

Level-3		Marketing Automation											
Marketing Features	Advanced	Reporting &	CRM	Scalability	Initial	Ongoing	Training	Partner	Financial	Reputation	Location	Ranking	
HubSpot	0.08	0.32	0.28	0.16	0.16	0.25	0.25	0.25	0.17	0.19	0.24	0.25	
Marketo	0.58	0.21	0.18	0.24	0.37	0.25	0.25	0.26	0.27	0.24	0.25	0.25	
Eloqua	0.21	0.32	0.41	0.24	0.26	0.25	0.25	0.4	0.35	0.29	0.25	0.25	
Pardot	0.13	0.14	0.13	0.36	0.22	0.25	0.25	0.17	0.2	0.24	0.25	0.25	
Inconsistency	0	0	0	0	0.01	0	0	0	0	0	0	0	

The final result:

Level-1		Marketing Automation											
HubSpot	0.21												
Marketo	0.3												
Eloqua	0.29												
Pardot	0.2												
Inconsistency	0												



### Expert 4 Inputs

Level-1		Marketing Automation Software		
Features	0.43	0	0	
Cost	0.35			
Company Attributes	0.22			
Inconsistency	0			

Level-2	Features	Cost	Company Attributes
Marketing Features	0.2	0	0
Advanced Analytics	0.25	0	0
Reporting & Visualization	0.14	0	0
CRM Integration	0.19	0	0
Scalability	0.22	0	0
Initial installation	0	0.33	0
Ongoing cost	0	0.34	0
Training cost	0	0.33	0
Partner network	0	0	0.18
Financials	0	0	0.23
Reputation	0	0	0.19
Location	0	0	0.21
Ranking	0	0	0.19
Inconsistency	0	0	0

Level-3	Marketing Features	Advanced Analytics	Reporting & Visualization	CRM Integration	Scalability	Initial installation	Ongoing cost	Training cost	Partner network	Financials	Reputation	Location	Ranking
HubSpot	0.27	0.27	0.34	0.11	0.11	0.15	0.11	0.37	0.21	0.43	0.11	0.43	
Marketo	0.43	0.43	0.35	0.27	0.18	0.23	0.18	0.07	0.28	0.27	0.18	0.27	
Eloqua	0.18	0.18	0.18	0.18	0.43	0.18	0.43	0.32	0.22	0.11	0.43	0.18	
Pardot	0.11	0.11	0.12	0.43	0.27	0.27	0.43	0.25	0.3	0.18	0.27	0.11	
Inconsistency	0	0	0.02	0	0	0	0.06	0	0.29	0.14	0	0	

The final result:

Level-1		Marketing Automation Software		
HubSpot	0.2			
Marketo	0.26			
Eloqua	0.28			
Pardot	0.26			
Inconsistency	0.03			

### Expert 5 Inputs

Level-1		Marketing Automation Software		
Features	0.72	0	0	
Cost	0.21			
Company Attributes	0.07			
Inconsistency	0.02			

Level-2	Features	Cost	Company Attributes
Marketing Features	0.53	0	0
Advanced Analytics	0.09	0	0
Reporting & Visualization	0.07	0	0
CRM Integration	0.27	0	0
Scalability	0.04	0	0
Initial installation	0	0.18	0
Ongoing cost	0	0.74	0
Training cost	0	0.08	0
Partner network	0	0	0.05
Financials	0	0	0.2
Reputation	0	0	0.39
Location	0	0	0.13
Ranking	0	0	0.24
Inconsistency	0.03	0	0.04

Level-3	Marketing Features	Advanced Analytics	Reporting & Visualization	CRM Integration	Scalability	Initial installation	Ongoing cost	Training cost	Partner network	Financials	Reputation	Location	Ranking
HubSpot	0.56	0.35	0.26	0.06	0.07	0.12	0.18	0.08	0.04	0.11	0.08	0.11	0.44
Marketo	0.29	0.17	0.6	0.13	0.05	0.07	0.23	0.18	0.13	0.04	0.05	0.09	0.33
Eloqua	0.09	0.31	0.09	0.2	0.61	0.59	0.48	0.51	0.62	0.58	0.26	0.51	0.16
Pardot	0.06	0.16	0.04	0.62	0.26	0.22	0.11	0.23	0.22	0.26	0.61	0.29	0.07
Inconsistency	0	0.03	0.04	0.05	0.02	0.01	0.02	0.03	0.03	0.06	0.02	0.01	0.02

The final result:

Level-1		Marketing Automation Software		
HubSpot	0.31			
Marketo	0.23			
Eloqua	0.25			
Pardot	0.22			
Inconsistency	0.03			

### Expert 6 Inputs

Level-1		Marketing Automation	
Features	0.43		
Cost	0.33		
Company Attributes	0.25		
Inconsistency	0		

Level-2	Features	Cost	Company Attributes
Marketing Features	0.12	0	0
Advanced Analytics	0.21	0	0
Reporting & CRM Integration	0.19	0	0
Scalability	0.27	0	0
Initial installation	0	0.32	0
Ongoing cost	0	0.45	0
Training cost	0	0.23	0
Partner network	0	0	0.05
Financials	0	0	0.41
Reputation	0	0	0.29
Location	0	0	0.17
Ranking	0	0	0.1
Inconsistency	0.01	0	0.01

Level-3	Marketing Features	Advanced Analytics	Reporting & Visualization	CRM Integration	Scalability	Initial installation	Ongoing cost	Training cost	Partner network	Financials	Reputation	Location	Ranking
HubSpot	0.27	0.26	0.26	0.25	0.26	0.26	0.36	0.22	0.21	0.21	0.24	0.25	0.22
Marketo	0.35	0.47	0.47	0.43	0.22	0.36	0.16	0.27	0.19	0.25	0.24	0.25	0.27
Eloqua	0.22	0.17	0.15	0.2	0.36	0.16	0.3	0.32	0.4	0.4	0.36	0.3	0.35
Pardot	0.17	0.1	0.11	0.12	0.16	0.22	0.17	0.19	0.19	0.15	0.16	0.2	0.17
Inconsistency	0	0.01	0.01	0.01	0	0	0.05	0.03	0.01	0	0.01	0	0.01

The final result:

Level-1		Marketing Automation	
HubSpot	0.26		
Marketo	0.31		
Eloqua	0.27		
Pardot	0.16		
Inconsistency	0.01		

### Expert 7 Inputs

Level-1		Marketing Automation Software	
Features	0.31		
Cost	0.48		
Company Attributes	0.21		
Inconsistency	0		

Level-2	Features	Cost	Company Attributes
Marketing Features	0.29	0	0
Advanced Analytics	0.16	0	0
Reporting & CRM Integration	0.19	0	0
Scalability	0.24	0	0
Initial installation	0	0.43	0
Ongoing cost	0	0.33	0
Training cost	0	0.25	0
Partner network	0	0	0.2
Financials	0	0	0.2
Reputation	0	0	0.2
Location	0	0	0.2
Ranking	0	0	0.2
Inconsistency	0.01	0	0

Level-3	Marketing Features	Advanced Analytics	Reporting & Visualization	CRM Integration	Scalability	Initial installation	Ongoing cost	Training cost	Partner network	Financials	Reputation	Location	Ranking
HubSpot	0.43	0.43	0.43	0.31	0.25	0.43	0.43	0.36	0.35	0.27	0.29	0.27	0.39
Marketo	0.27	0.25	0.27	0.2	0.25	0.23	0.27	0.09	0.29	0.26	0.29	0.31	0.26
Eloqua	0.18	0.12	0.11	0.25	0.25	0.15	0.11	0.1	0.12	0.18	0.13	0.16	0.12
Pardot	0.12	0.2	0.18	0.25	0.25	0.19	0.18	0.45	0.24	0.27	0.29	0.27	0.21
Inconsistency	0.03	0.01	0	0.02	0	0.01	0	0.15	0.01	0.03	0	0	0.01

The final result:

Level-1		Marketing Automation Software	
HubSpot	0.38		
Marketo	0.24		
Eloqua	0.15		
Pardot	0.23		
Inconsistency	0.02		

### Expert 8 Inputs

Level-1	Marketing Automation Software		
Features	0.4		
Cost	0.37		
Company Attributes	0.23		
Inconsistency	0.03		

Level-2	Features	Cost	Company Attributes
Marketing Features	0.27	0	0
Advanced Analytics	0.16	0	0
Reporting & Visualization	0.4	0	0
CRM Integration	0.13	0	0
Scalability	0.05	0	0
Initial installation	0	0.22	0
Ongoing cost	0	0.7	0
Training cost	0	0.08	0
Partner network	0	0	0.12
Financials	0	0	0.27
Reputation	0	0	0.36
Location	0	0	0.05
Ranking	0	0	0.2
Inconsistency	0.09	0.08	0.04

Level-3	Marketing Features	Advanced Analytics	Reporting & Visualization	CRM Integration	Scalability	Initial installation	Ongoing cost	Training cost	Partner network	Financials	Reputation	Location	Ranking
HubSpot	0.18	0.2	0.21	0.18	0.17	0.17	0.17	0.19	0.18	0.17	0.16	0.2	0.18
Marketo	0.25	0.27	0.27	0.27	0.28	0.24	0.26	0.26	0.25	0.29	0.25	0.27	0.27
Eloqua	0.46	0.42	0.42	0.44	0.44	0.5	0.49	0.47	0.47	0.44	0.51	0.42	0.45
Pardot	0.11	0.11	0.11	0.12	0.11	0.1	0.08	0.08	0.1	0.1	0.08	0.1	0.1
Inconsistency	0.03	0.02	0.02	0.01	0.01	0.06	0.08	0.05	0.06	0.03	0.07	0.03	0.04

The final result:

Level-1	Marketing Automation Software		
HubSpot	0.18		
Marketo	0.26		
Eloqua	0.46		
Pardot	0.09		
Inconsistency	0.04		

### Expert 9 Inputs

Level-1	Marketing Automation Software		
Features	0.55		
Cost	0.25		
Company Attributes	0.2		
Inconsistency	0.04		

Level-2	Features	Cost	Company Attributes
Marketing Features	0.2	0	0
Advanced Analytics	0.2	0	0
Reporting & Visualization	0.2	0	0
CRM Integration	0.2	0	0
Scalability	0.2	0	0
Initial installation	0	0.33	0
Ongoing cost	0	0.33	0
Training cost	0	0.33	0
Partner network	0	0	0.23
Financials	0	0	0.39
Reputation	0	0	0.16
Location	0	0	0.07
Ranking	0	0	0.15
Inconsistency	0	0	0.04

Level-3	Marketing Features	Advanced Analytics	Reporting & Visualization	CRM Integration	Scalability	Initial installation	Ongoing cost	Training cost	Partner network	Financials	Reputation	Location	Ranking
HubSpot	0.25	0.57	0.2	0.22	0.5	0.25	0.25	0.22	0.17	0.25	0.12	0.25	0.5
Marketo	0.25	0.14	0.37	0.25	0.17	0.25	0.25	0.25	0.17	0.25	0.26	0.25	0.17
Eloqua	0.25	0.14	0.22	0.3	0.17	0.25	0.25	0.2	0.5	0.25	0.35	0.25	0.17
Pardot	0.25	0.14	0.22	0.22	0.17	0.25	0.25	0.33	0.17	0.25	0.26	0.25	0.17
Inconsistency	0	0	0	0	0	0	0	0	0	0	0	0	0

The final result:

Level-1	Marketing Automation Software		
HubSpot	0.3		
Marketo	0.24		
Eloqua	0.24		
Pardot	0.22		
Inconsistency	0.01		