

# ANALYSIS OF THE BUDGETING SYSTEM: A CASE STUDY OF A MANUFACTURING COMPANY

Nazanin Bybordi, A. A. Ousama\* and Obeid S. Shreim

## ABSTRACT

**Research aim:** This paper aims to analyse the practice of the budgeting system in a light manufacturing company operating within the Iranian automotive industry.

**Design/ Methodology/ Approach:** The paper uses a case study method based on a lighting manufacturing company. A semi-structured interview was implemented to collect the required data. The respondents consist of a total of four department managers and the Chief Executive Officer (CEO) of the company.

**Research finding:** The paper found that the current system being used for budgeting is not efficient due to the significant variances between actual figures (performance) and planned budget.

**Theoretical contribution/ Originality:** This paper is considered among the empirical studies to evaluate the budgeting system applied to a manufacturing company within the Iranian automotive industry.

**Practitioner/ Policy implication:** The paper reveals important weaknesses in the budgeting system practised in Iran. This finding can be considered very useful as it highlights that the system suffers from inefficiency. Companies can attempt to improve the system by implementing effective methods such as the formation of a budget committee, and preparation of the cash budget to increase the efficiency of the system.

**Research limitation/ Implication:** Although the paper provides evidence on the status of budgeting systems, it focused predominantly on interviews. Future research on this issue may use data triangulation by using other primary (e.g. questionnaire survey) and secondary data.

**Keywords:** Budgeting System, Budget, Evaluation, Lighting Industry, Iran.

**Type of article:** Research paper

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\*Corresponding Author: *A. A. Ousama, PhD* is an Assistant Professor at Qatar University, P.O. Box 2713, Doha, Qatar. Email: osamaanam@gmail.com

*Nazanin Bybordi*, is a Commercial Expert, Industrial Automation, Iran. Email: nazanin.bybordi@gmail.com

*Obeid S. Shreim, PhD* is an Associate Professor at Sana'a University, Yemen. Email: obeidshreim677@gmail.com

## 1. Introduction

In the Middle East, the Islamic Republic of Iran is a rich country in terms of natural resources and labour. It ranks third globally in petroleum reserves and has the second largest population and economy in the Middle East and North Africa (Ilias, 2010). Iran's GDP and its growth in the year 2017 were reached to 430.709 billion and 3.8 per cent, respectively (The World Bank, 2019; International Monetary Fund, 2019) and it is estimated to be 484.663 billion for the GDP in the year 2019 (International Monetary Fund, 2019). Recently, the dynamic Iranian business environment forces managers to prepare for positive competition under unstable conditions. Managers of manufacturing companies, for example, need effective management tools to predict the major changes which may affect business while planning their future direction and resources needed to achieve the targeted objectives and goals (Farzib, 2001; Ilias, 2010). One of the fundamental tools for managers to implement their management functions is budgeting (Bremser, 1988). A budget is considered a complete plan representing the ability to acquire and use resources over a specific period. It constitutes a plan for the future expressed in quantitative terms (Garrison et al., 2003). For many years, companies view budgeting as a necessary estimate of the next year's revenue and expenses. However, as companies become more dynamic and the marketplace becomes more competitive, that attitude needs to change. Companies continuously attempt to improve their ability in terms of an appropriate estimation of their future operations and their resource requirements (Rasmussen and Eichorn, 2000). Generally, it is believed that multiple functions regarding budgeting system (i.e. planning, coordination and control) can be achieved when financial decision-making and the internal operation of a company is in progress (e.g. Drury, 2000; Garrison et al., 2003; Joshi et al., 2003). They are the required elements of successful operations (Hansen et al., 2007). Proper implementation of the budget as a management tool requires companies to comply with the plan and promote effective coordination and communication between different departments (Horngren et al., 2005). On the other hand, improper implementation will result in variances between budget and actual figures (i.e. performance) (Averkamp, 2009).

The choice and design of the budgeting system depend on the company's size, diversity and degree of decentralisation (Merchant, 1981). Therefore, for the budgeting system to be effective and practical, it should be reflected in all objectives of the company. Thus, all activities of the company should be presented separately and estimated quantitatively in order to have a comprehensive budget for the entire company. Therefore,

the roles of planning, cooperation, and control in budgets are essential for the company to achieve its objectives.

Another critical issue is the causes of budget variances. An analysis of these variances will provide managers and budget producers a better recognition of the status and prevailing conditions of the business environment (Palmer, 2012). Proper variance analysis leads to on-time modification of company plans and operations, and consequently increases the proficiency of the company (Khoshnazar, 2000). Also, by understanding the causes of budget variances, it is possible to implement strategies to decrease costs and minimise the possible variances when these factors appear. Moreover, variance analysis enables management to create maximum cooperation between different departments, which then leads to a design and control of the company's activities under a cooperative effort of planning.

The paper aims to analyse the practice of the budgeting system in an Iranian manufacturing company in the automotive lighting industry (i.e. company A1) in terms of planning, coordination and control. It also aims to suggest effective methods for a more accurate budgeting system in the company. The study contributes to fill-up the gap in the literature in the budgeting system in the manufacturing companies in the Iranian automotive industry. We hope that the findings of the study can help companies in understanding the current practice of the budgeting system and its weaknesses and try to enhance it. Such enhancements might result in improving the company's performance, thereby leading to greater stability in the automotive industry.

## **2. Literature Review**

There is considerable literature on the management accounting practices that includes; standard costing, cost-volume-profit analysis, budgeting system and variance analysis (e.g. Uyar, 2010; Al, Sherine and McLellan, 2011; Yalcin, 2012; Sunarni, 2013; Ahmad and Leftesi, 2014; Mbawuni and Anertey, 2014; Ahmad and Zabri, 2015; Messner, 2016; Otley, 2016; Nuhu et al., 2017; Ax and Greve, 2017; AlKhajeh and Khalid, 2018; Lunkes et al., 2019). Several studies focusing on budget and budgeting systems have been conducted internationally. For example, Henttu-Aho and Järvinen (2013) examined the implications of companies' changes (i.e. new management accounting tools) on the budgeting systems. They found that the function of the budgeting system (i.e. the planning, control, and evaluation) remain, even though new management accounting systems were adopted. This is considered as the practice of "Beyond Budgeting". Sandalgaard and Nikolaj Bukh (2014) explored the motives for going

“Beyond Budgeting” when companies change their management accounting tools. Similar to Henttu-Aho and Järvinen (2013), they found that when companies change their management accounting systems due to the motivation of adopting “Beyond Budgeting”, these companies would maintain some budget targets. On the other hand, some studies examine the efficiency of the current budgeting systems. Popesko and Šocová (2016) examined the budgeting systems practices in the Czech companies and found that there was dissatisfaction with the current systems. This finding can be seen as a motive for adopting “Beyond Budgeting”.

More specifically, this section focuses on budgeting system studies conducted in Iran. Samarín (1995) conducted a study examining the budgeting system of companies in the rubber and plastic industry using a questionnaire survey method. The study highlights the fact that the master budget has a significant impact on the performance of such companies. Also, the study found that the significant factor in preparing the budget was the consideration of human relations. Good coordination between different levels of an organisation increases the knowledge of managers and staff of the organisation’s goal and realisation of the weaknesses and problems of their system. The study suggested the creation of a budgetary department in the organisation.

On the other hand, by focusing on the budgeting system in a state organisation, Alibakhshi (1995) examined the benefits and roles of a budgetary control system. Similarly, the study used the questionnaire survey method to collect the data. The study found that the budgeting system in the state organisation faces significant problems such as lack of scientific characteristics, lack of implementing the critical roles of planning, coordination, and control and there is no comparison between the planned budget and actual figures. The study suggested that implementing a zero-based budgeting system would achieve efficiency.

In a different sector, Mohammadi (2000) conducted a study to evaluate the budgeting system in universities. The study examined whether the budgeting process is capable of leading a university to achieve its goals. The questionnaire survey method was also used in this study. It found that the current budgeting system had some limitations preventing the university from achieving its objectives. Therefore, the study recommended the planning programming and budgeting system to improve the current system and increase its efficiency.

Table 1. Summary of Some Empirical Studies in Iran

Study	Technique(s)	Objective(s)	Finding(s)	Recommendation(s)
Samarin (1995)	Questionnaire	Study the current budgeting system	<ul style="list-style-type: none"> <li>Lack of coordination and control</li> </ul>	<ul style="list-style-type: none"> <li>Implement a budgetary control department</li> </ul>
Alibakhshi (1995)	Questionnaire	Study the role of budgeting system in state organisations	<ul style="list-style-type: none"> <li>Lack of scientific characteristic budgeting system does not play an important role in the state organisation</li> <li>Great variance between planned budget and actual figures</li> </ul>	<ul style="list-style-type: none"> <li>Implement a zero-based budgeting</li> </ul>
Mohammadi (2000)	Questionnaire	Evaluate the budgeting system	<ul style="list-style-type: none"> <li>Inefficient budgeting system</li> </ul>	<ul style="list-style-type: none"> <li>Implement a planning programming and budgeting system</li> </ul>
Nikbakht (2000)	Questionnaire, interview and documentation	Study the budget variances	<ul style="list-style-type: none"> <li>Significant variance between the planned and actual figures</li> </ul>	<ul style="list-style-type: none"> <li>Implement statistical techniques, proper budgeting software and proper financial recording system</li> </ul>
Haghparast (2004)	Questionnaire and interview	Study the efficiency of current budgeting system	<ul style="list-style-type: none"> <li>Inefficient budgeting system</li> <li>fixed budget</li> </ul>	<ul style="list-style-type: none"> <li>Implement a budgetary control system and flexible budget</li> </ul>

By conducting a case study on a fishery company, Nikbakht (2000) examined its current budgeting system and analysed the significant variances between budget and actual figures. The study used questionnaires, interviews, and documentation to collect data. It showed that there were significant variances between the planned and actual figures. Also, the study found that there was inadequate clarification of the company's strategies and goals. The study concluded that there is a need to implement statistical techniques for forecasting, using proper budgeting software system, and a proper financial recording system.

Finally, Haghparast (2004) examined the problems in the budgeting system in an Iranian company. The study implemented both questionnaire and interview methods to collect the data. The study found that the budgeting system suffered from inefficiency due to the increasing rate of inflation. It found that the preparation of the budget was based on the previous year's actual performance, which resulted in significant variances. The study concluded that there is a need to implement statistical techniques to forecast the budget based on the current organisational and economic situation and create a flexible budget and budgetary control system to increase the efficiency of the current system.

From the review of the above literature, it is clear that literature on budgets and budgeting systems in Iran remains limited in number and type of industry. Hence, there has yet to be a study focusing on the automotive lighting industry in Iran to evaluate its budgeting systems.

### **3. Research Methodology**

The paper opted for a case study as its research strategy in which a manufacturing company in the automotive lighting industry (i.e. company A) was selected for analyses. This approach allows for results reflective of actual practices within the industry, thereby affording a more accurate reflection of industry practices as they are. The automotive industry in Iran was selected, as it is a growing industry compared to other industries. Also, the manufacturing sectors deal with a lot of sales and production. Therefore, the need for a budgeting system is more important in such a sector, as pointed out by John and Ngoasong (2008). Company A is selected as it is considered a major producer of lighting systems in the automotive industry in Iran. Analysing its budgeting system offers a good understanding of budget practices by companies in the industry. Finally, and most importantly, company A was selected because it agreed to share the data required for the research.

A semi-structured interview method was implemented to collect the required data from the targeted respondents. The targeted respondents

consist of a total of four department managers and the Chief Executive Officer (CEO) of the company. The participants include the financial manager, procurement manager, production manager, sales manager, and CEO. The selection of participants was based on their role, influence, and involvement in the preparation of the budgets and the budgeting system of the company. The interview questions were organised in three parts, namely questions regarding the planning process, questions regarding the coordination process, and questions regarding the control process. The interviews were carried out according to the organisation's policies and the names of the interviewees were not recorded. The respondents' answers were in Persian, then translated into English. The interviews were recorded and reviewed to incorporate additional remarks. Each interview session took, on average, 30 to 60 minutes to complete. All interviews were conducted within two weeks. The interview data were analysed manually based on a descriptive method using a content analysis approach for the transcribed of the recorded interviews.

Before conducting the interviews, a validity test of the interview questions was performed by subjecting it to an analysis by academic experts in budget and budgeting systems. The study incorporated their feedbacks and revised the interview questions accordingly. To increase the level of reliability, a tape recorder was used, and notes were taken during the interviews to minimise the risk of forgetting or misunderstanding the responses.

## **4. Analysis and Results**

The following analysis of the interviews is based on three distinctive perspectives of budget functions, namely planning, coordination, and control. This is necessary to evaluate the efficacy of the system and to determine specific areas for improvement.

### **4.1. Finance Department**

#### *4.1.1. Planning*

The paper found that the current system is based on quarterly sales budget for its plans. The purpose of preparing this budget for the finance department is to have control over the expenses and revenues in a way that the expected interest is achieved. All the data from the departments involved in preparing the budget will be sent to the finance department for adjustment.

For adjusting the budget, the finance department receives the sales estimation from the sales department and then assess the cost and the

related expenses. The planned budget for the current year depends on last year's performance. The only additional factor that is taken into consideration is the inflation rate. In terms of preparing the final budget, the finance department must calculate the cost of products sold. In order to do so, the analysis for each produced product will be conducted called the Bill of Material (BOM). Based on the BOM, the consumable amount of any material is determined. Also, the salaries and overhead costs will be calculated based on the standards. In the end, the cost of products sold will be calculated. Considering its involvement in this process, the finance department has the most impact on the final budget compared to other departments. The estimation of the planned budget takes into consideration the inflation rate and other important factors such as the economic and political situation, and technology changes and competitors' innovations.

#### *4.1.2. Coordination*

Regarding the coordination issue, the first step begins with budget preparation. The second step to be taken after the budget is prepared is to report it to the management for evaluation and approval. The top management (i.e. CEO) is responsible for holding meetings with departments in order to evaluate the planned budget and later to compare it with the actual performance and to resolve the variances that may occur.

#### *4.1.3. Control*

Concerning the actual performance and the budget, the paper found that the finance (i.e. financial) department is not fully committed to the planned budget, due to uncontrollable factors, such as sudden changes in demands from customers. However, if these factors are controllable and departments still do not follow the planned budget, the management must take appropriate action. Furthermore, there are cases where the finance department is not able to meet the requested funds, as indicated in the budget. This means that when the expenses of that department exceed the budgeted expenses, in such a case, the finance department would not be able to provide them with the additional funds.

Typically, the revision of the budget figures and items is on a seasonal basis. The budget figures and items are compared with the actual performance to assess the variances. If any significant variances occur, management will hold a meeting and investigate the cause of these variances. Then the variances are calculated by the department and reported to the management on a seasonal basis. The management gathers



the different departments' reports and announces the results in order to analyse and moderate them for the next seasons to prevent, as far as possible, their reoccurrence.

## **4.2. Procurement Department**

### *4.2.1. Planning*

In the procurement department, the purpose of budget preparation is to provide the production department with the raw materials on time and to prevent the production line from stopping. Thus, the budgets are provided to plan for procurement the production department's needs. Therefore, the budget helps in sourcing the raw materials to be prepared and delivered to the production department on time. The role of the procurement department is to provide raw materials based on estimated sales. They are invited to the meetings to coordinate the sales amount in which they give information about the amount of raw materials and the way they are supplied.

In terms of planning the supply of the raw materials for production, the sales department estimates the amount of sales and the production department defines the amount of required materials and the related scheduling. This information is then forwarded to the procurement department. The department will plan the purchasing process and perform the necessary coordination with the finance department for the letter of credit. The department then will have some meetings with the finance department to be informed about the amount required for the payment of the raw materials. Therefore, the procurement department plays a vital role in the preparation of the materials budget as it is responsible for supplying the raw materials to the production department.

### *4.2.2. Coordination*

Although the management is in charge of coordination between departments, the procurement department will inform the finance department about the materials needed and when these materials should be purchased. However, as highlighted, the delay in collecting receivables causes a problem of liquidity. Moreover, the economic sanctions and difficulties prone to overseas transactions result in difficulties to purchase the required raw materials. Also, the suppliers may announce a schedule that might conflict with the planned budget. This results in the need to report these shortcomings to the management. In such cases, the management will hold a meeting with the procurement department to decide either to replace the raw materials in the BOM or to change the production schedule.

### 4.2.3. Control

When the draft budget is prepared, the management will invite the procurement department to coordinate the purchasing budget of the raw materials. In case the draft budget is controlled, the comments and feedback of the procurement department will be announced to the budget preparation department. The comments of the procurement department must be considered because they are responsible for informing the rates to the budget preparation department.

The production department calculates the purchasing of the raw materials based on the quantitative BOM, but the finance department does the calculation quantitatively and based on the total amount of raw materials. These two amounts are compared. The production department will then inform the amount of raw materials to the procurement department. The finance department will inform the amounts of the raw materials quantitatively and monetary to the procurement department. The finance department calculates the variances seasonally including the variance in consuming the raw materials. However, the variance of each of the raw materials that the goods consist of is not calculated. Instead, the sum of all variances is calculated. As a result, the source of resulting variance remains unclear.

## 4.3. Production Department

### 4.3.1. Planning

It is essential to prepare the production budget before starting production, to determine what kinds of products are going to be produced during the year or in different seasons in order for the production department to prepare their production lines, sort, mould, and produce according to the plan. Unfortunately, due to the lack of supervision, some of the departments do not follow their budgets, and as a result, these problems occur. Regarding the planning, the role of the production department in the budget preparation is to coordinate with the sales department in order to determine if this department can produce the amount of sales estimated. Coordination between procurement and sales departments is done through their department. The impact on the final budget is to announce the production capability. The volume and capacity of the production also needed to be announced.

For the preparation of the production budget, the amount of waste for each product will be calculated. Typical wastes are taken into consideration in the budget; however, the untypical wastes are not reported. The amount of materials needed for each piece and the type of material that will be used will also be specified. This means that the

production department prepares the product BOM and submits it to the finance department. The BOM is prepared to obtain the cost price and announces to the other departments the amount of materials required. This information is needed by the financial department to calculate the cost price. One of the main problems that the department faces is that it does not have any alternatives for the materials in the product BOM. Also, sometimes the suppliers cannot find specific raw materials, and thus, the substitute product will be purchased. However, the planned budget is calculated based on the raw materials specified in the BOM of products. This matter will affect the final budget and cause variances in the planned budget.

Based on the analysis of the interview, following the budget plan does not affect the production by decelerating or stopping it, but accelerates the process of manufacturing. As mentioned before, in the purpose of budget preparation, if the machines, moulds, equipment and material are ready before starting the production, there will be no problem. However, if the production department does not estimate the budget accurately, the department will face serious difficulties.

#### *4.3.2. Coordination*

In regard to the coordination issue, the production department will coordinate with the finance department to highlight the production difficulties and barriers for the budget preparation. In addition, the sales department will coordinate with the production department in order to find out if there is a possibility for production in terms of the available raw materials, machines, moulds, and others. In some cases, problems occur, for instance, machine and mould problem but are not reported to the finance department-deficiency, thereby causing problems in the implementation of the budget. As mentioned earlier, when the budget draft has been prepared, all the departments involved in the budgeting process should be invited under the supervision of management to discuss the planned budget. However, often, the budget draft is given to the finance department for the relevant adjustments with the exclusion of other departments. In special occasions when there is a problem in the budget, or there is a change in the production plan, the related changes will be reported to the finance department before the budget is approved.

When the budget preparation process begins, the sales department initially estimates the amount of sales and coordinate with the production department. During the meetings, the sales budget is examined in order to be compatible with the production budget for accuracy. When the sales department estimates the sales, the budget will be scheduled. This

scheduling will be forwarded to the production department to produce the products. The production department will calculate the amount of required materials by using the products BOM. After the calculation of the products required materials, a meeting is held with the procurement department in charge of purchasing the raw materials. The procurement department examines its products supply and compares it with the needed supply. The procurement department will then prepare the purchasing budget.

#### *4.3.3. Control*

Input from the production department is needed in the sales estimation because the yearly sales estimation is based on this capacity. If there is poor coordination between the sales and production departments, a variance in the budget will occur. The production budget is compared with the actual performance in the form of each product BOM and its raw materials. Therefore, an investigation is conducted to check the variance in the budget.

The budget variances may be related to the number of products. It means the number of products which were not produced due to an inability. It may also be in the use of the materials. If variance occurs, then it is investigated (e.g. if there is any problem in moulds, machines or it is due to the shortage of supplies). The unfavourable variance is justified. In addition, the problem may be related to the production rate in the working hours, which reveals that the company has no necessary efficiency. In this case, it will be observed if the workers are slow or incompetent. In such cases, the workers will be trained, or a new one will be replaced in order to reduce this kind of variance. If found that the production department faces constant variances, these problems are often due to the changes in the production request not related to manufacturing. However, the production department tries to manufacture the products based on the budget and the work order, unless there is a problem regarding the machinery or raw materials.

### **4.4. Sales Department**

#### *4.4.1. Planning*

One of the aims of the sales department is to estimate the amount of sales. Therefore, the sales department should be able to know if there are capabilities to manufacture the estimated sales and deliver them to the customer on time. The sales department provides estimated sales to the finance department, and then based on the finance department's adjustments; the sales department starts the budgeting process. The sales

estimation is based on the contracts or orders received. Based on the previous year's contracts and orders, the sales department predicts the number of new contracts and the market share that can be achieved. In addition to the consideration of market demand, considering the production capacity is necessary. All these factors will be considered and reviewed in order to estimate the total amount of sales.

The importance of the sales department is considerable due to its effect on the final budget, as the budget information provided to the finance department for budget preparation is based on the sales budget if the estimation of sales is precise it will lead to an accurate final budget.

#### *4.4.2. Coordination*

The sales department estimates the amount of sales based on the ongoing contracts and the contracts predicted for the following year. The sales estimation will be provided to the finance department. The sale budget will be communicated to the management. This means that when the sales estimation has been given to the finance department, the budget will be adjusted, and the final sales budget will be reported to the management. The management will meet with all the departments for the final budget approval. When the budget is approved, the sales department might face two situations. If there are contracts, the sales will be based on them. Whereas, if there are no existing contracts, the sale department will try to get contracts based on estimated sales to achieve the target. Thus, the sales department tries to moderate the sales estimation by obtaining new contracts.

The sales department coordinates with the production department to ensure that the production department can produce the estimated sales budget. Therefore, necessary coordination must be made with the production department in order to receive their confirmation of the ability to produce the estimated sales. Since the production department is located in another city, this coordination is sometimes ineffective. As a result, the estimated sales is not always compatible with the production capacity, thereby causing variances between the budget and actual performance. Such cases highlight the poor coordination between the sales and the production departments.

Furthermore, coordination with the procurement department at times can be weak. The production department requires the estimates for the required raw materials from the sales and procurement departments. The procurement department, in most cases, does the necessary coordination with the finance department to finance the purchases. However, there are cases when the company has some deficiencies. The entire process can be

time-consuming, and coordination procedures may fail, thereby resulting in budget variances.

#### *4.4.3. Control*

In different seasons, the finance department compares the actual sales with the budgeted sales and calculates the variances. This calculation is based both on quantitative variances in terms of units and monetary variances (i.e. price). Next, the finance department reports these variances to the management, which in turn will inform the sales department. The sales department then will investigate the reasons for these variances and trying to minimise them.

### **4.5. Management (CEO)**

#### *4.5.1. Planning*

The management is responsible for budget planning. It coordinates with different departments to prepare their budgets and then approves these budgets. The management also controls the budget at different implementation stages. The budget has a positive impact on management objectives. It assists the management to decide correctly and follow the company's objectives consciously. The impact of the management on the budget is related to the performance of the company. The management tries the best to produce based on the highest capacity of the plant with the lowest costs in order to achieve optimal performance.

For the management, the planning of the budget is based on the strategic objectives of the company. Therefore, budget planning helps the management to understand the production ability and market share. For the budget planning purpose in the company, a flexible budget is applied to overcome the changes in the economic conditions and competition in a way that can help in achieving the strategic objectives. The flexible budget is based on a seasonal budget with the calculation of the variances in each season and moderates it for the next season.

#### *4.5.2. Coordination*

The management is responsible for the coordination between the related departments. Therefore, the management announces that the budget is going to be prepared and will coordinate the departments accordingly. Then, the departments provide their budgets for approval. Thus, after the approval, each department will report directly to the management. The management confirms that budget planning affects the company's efficiency. If there is no budget, no coordination will be applied between

the departments. After that, the sales department may decide to sell a product or sign a contract that the production department is not able to manufacture or support.

#### 4.5.3. Control

The budget has been prepared on a seasonal basis; the variance is also calculated in different seasons and is reported to the management. The budget variances at the end of each season and year are calculated and then compared with the actual performances in order to acknowledge whether the company was able to achieve its goals. Typically, the finance department announces the variances to the management. By this, there will be some individual and group meetings for investigating the budget's variances. The relevant departments need to explain the variances, and whether it is under the control of that department or not, and then try to resolve it. Finally, in order to motivate departments to follow the budget, the management gives awards to the departments, which have favourable variances. The departments will try to achieve their budget and achieve the company's objective. However, if there is any unfavourable variance, the management will consider some penalties for the relevant departments, for example, reduce the overtime payment.

In summary, three out of four departments believe that the budgeting system in company A is not sufficiently effective due to the following reasons: uncontrollable factors, liquidity problems, weakness in production budget (i.e. non-standardised BOM of products, amount of waste produced is not specified, and the variances of each raw materials is not calculated), lack of effective coordination among departments, lack of managers awareness in regard to the importance of the budget, and lack of appropriate software for budget planning.

## 5. Findings and Discussion

By analysing the data collected by the interviews, results show that the budgeting is not sufficient and causes significant variances between the planned budget and actual performances. This finding is consistent with many Iranian studies; for example, Mohammadi (2000) and Haghparast (2004). This is interesting as it shows that the Iranian companies are still suffering from weak budgeting systems. Also, the paper found that the budgeting system suffers from various setbacks which are identified as follows. First, often the variances are due to the price of raw materials, which are caused by offer-demand imbalances in the market. The changes in the production figure are usually due to changes in orders made by the automaker company as the customer. Second, due to the absence of a

budget organising committee, the budget is not prepared in time, which causes variances. Third, the company faces some liquidity problems. This is the leading cause of the absence of a cash budget. As a result, the purchase of raw materials and moulds delay the planned projects. Fourth, the company prepared its budget using the excel software where the formulas are open, which increases the possibility of errors. Fifth, the absence of a standard BOM concerning consumption of different raw materials in order to manufacture a product; the substitute raw materials in BOM of goods are not defined. Sixth, the amount of waste in the production line and the real consumption are not defined. Seventh, the variance of each material of which the goods are made up is not given; instead, the sum of all variances are calculated. Finally, the lack of managers' notices of the importance of the budget, which is often perceived as a formality.

To overcome such problems, there is a need to increase the effectiveness of the budgeting system and to minimise the budget variances requires several plans. If different plans are presented to achieve goals, depending on each situation, one of the plans can be executed. Since external factors, such as the price of raw materials and customer orders are out of control, by studying the possibilities and the limitations in each year, one plan can be selected to achieve the set goals. Second, there should be a budget committee. Budgeting involves considerable management coordination from all parts of the company, and therefore, the existence of a budget committee in any organisation is crucial. Each department involved in the budgeting process needs a representative to participate in such a committee. The budget committee is responsible for organising and supervising the preparation and administration of the organisation's budgets (Banovic, 2005). Third, there should be appropriate software for budget preparation, as the use of Excel is prone to high error probability. Software should be written that can be employed throughout the budget process from preparation to control at the company. As a result, the possibility of error in the planned budget will be minimised.

Fourth, the BOM of the product calculated through the programmed software and the absence of standard BOM of goods concerning the consumption of different raw materials creates significant variances in the company. The software needs to be programmed in order to calculate the substitute raw materials of goods in BOM as well. Fifth, the amount of waste in the production line and the real consumption should be defined in the production budget statement. In the case of unusual wastes, the exact information about the waste must be specified, and effort should be put into fixing it. Also, the money collected from selling the waste must be



specified. Sixth, the variance of each of the materials that the goods consist of should be calculated separately. By doing so, the source of the raw material variance can easily be determined. Managers should be trained to better appreciate the importance of budget preparation and its many processes.

## 6. Conclusion

The paper explored the budgeting system of company A in terms of planning, coordination, and control. By analysing the data collected from the interviews, the paper found that the budgeting system is not sufficiently efficient and causes significant variances between the planned budget and actual performances. In addition, the paper reveals critical weaknesses in the budgeting system practised in Iran. This finding highlights that the system suffers from inefficiency. Companies can attempt to improve the system by implementing effective methods such as the formation of a budget committee, and preparation of the cash budget to increase the efficiency of the system. Although the paper provides evidence on the status of budgeting systems, it focused on interviews. Future research on this issue may use data triangulation by using primary (e.g. questionnaire survey) and secondary data.

### Notes:

Company A is an Iranian manufacturing company in the automotive lighting industry where the interviews were conducted with its managers. Based on a request from the company to not reveal the name due to the sensitivity issue of the budgeting information, the authors refer to the company as company A.

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