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THE CASH-FLOW BUDGETING WITHIN A COMPANY
BUGETAREA CASH-FLOW-URILOR LA NIVELUL UNEI COMPANII

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Abstract: *Treasury management, in the forecasting stage, anticipates the company's receipts and payments in quantitative terms through the cash inflows and outflows budget. The cash inflows and outflows budget must take into account certain timing differences generated by accrual accounting. In the context of this material, the situation of an entity located in the city of Arad is considered, with retail trade as its main activity, which aims to expand by producing and selling its own organic pasta products. In this context, an Excel-based interface is proposed, which will guide users through several steps in developing the treasury/cash budget, both on a monthly basis for the next 12 months and on an annual basis for the next 4 years, in accordance with the new business component. The importance of the cash inflows and outflows budget is once again emphasized, given that Romania operates under an accrual accounting system, which does not ensure the alignment of the moment an expense is recognized in accounting with the moment it is paid, nor the moment a revenue is recognized with the moment it is actually received.*
Keywords: *budgeting, cash budget, cash flow, forecast, accrual accounting.*

JEL: *G31, M41.*

Introduction

The Excel-based working interface begins the process by setting objectives in line with the planning function of management, namely a general SMART-type objective (Specific, Measurable, Achievable, Relevant, and Time-bound), and specific objectives that derive from and detail the general one, all stated using action verbs.

Next, for each specific objective, an activity is defined, with varying degrees of importance. The importance of each activity will have an impact on the budgeting outcomes.

The next step involves the selection of suppliers, both for material resources (raw materials, consumables) and services (energy, water, telecommunications). For selecting material resource suppliers, decisions are made under risk conditions using a decision tree. The analysis involves three suppliers, each offering three material resources. The importance (weight) of each material resource in the production process and its acquisition cost are known. As a minimization criterion, the chosen supplier will be the one that cumulatively minimizes the total cost across all three resources.

As for service suppliers, the decision is assumed to be made under conditions of certainty, based on direct offers. Using the initial matrix method, the service with the lowest acquisition cost is selected, cost being a minimization criterion to optimize the entity's results.

Subsequently, the calculation of the optimal quantity of material resources is conducted, taking into account ordering and storage costs, which are inversely proportional. Based on the Wilson-Whitin model, the optimal quantity is the one that minimizes the total cost arising from the trade-off between ordering and storage. The parameters considered include: the annual requirement for the main material resource (e.g., flour, eggs), the average ordering cost (e.g., transport), the unit acquisition price of the material resource, and the unit storage cost per monetary value (how much it costs to

store a stock worth 1 leu).

Given the uncertainty inherent in a market economy, it is essential to maintain a safety stock. The uncertainty stems from supply delays, ranging from 0 to n days, each delay scenario having a certain frequency based on past activity.

Safety stock levels are determined using three methods: the American JIC (Just-In-Case) method, which recommends a high safety stock; the Japanese JIT (Just-In-Time) method, which recommends a low safety stock; and the European balanced method, which places the safety stock between the two extremes. To justify the European method, a cost matrix is used that analyzes all possible delay scenarios, calculating both the overstocking cost (due to unnecessary storage) and the opportunity cost (due to stockouts and interruptions in production and sales). This is followed by a consequence matrix, which weighs the cost scenarios according to their probability of occurrence.

The management of potential new clients is addressed using the ABC method. This involves grouping, analyzing, monitoring, and controlling clients based on their importance. Group A includes loyal, highly important clients, few in number but representing a high proportion of sales. They receive discounts in the form of rebates (for quality issues or delays), quantity discounts, and loyalty bonuses, and are monitored closely. Group B includes moderately important clients, both in terms of sales volume and number. They may receive rebates and quantity discounts. Group C includes less important clients, large in number but with a small share of sales. They may receive basic rebates and are managed with less attention. The interface will require input on the estimated number of clients per category, and the average estimated rates for rebates, discounts, and bonuses. Based on this, the estimated selling price for each client group and for the total new activity will be generated. Naturally, no objective-driven activities can be carried out without human resources. Each proposed activity is analyzed according to its importance, and the interface will return the number of employees required for each. Starting from a base salary fraction and a multiplier coefficient depending on the activity's importance, salary expenses will be calculated both per activity and for the total business initiation or expansion. Any new business idea or expansion involves risk. A standard questionnaire with ten questions is used, with the interface allowing the user to select the appropriate responses. A score is then calculated and, based on standard intervals, the idea is categorized into one of three risk levels: low, moderate, or high. A low-risk idea is implementable; a moderate-risk idea can be pursued with caution; a high-risk idea should be reconsidered.

An essential aspect of any business is the turnover rate of suppliers and clients. This is evaluated in terms of turnover speed (average number of renewals per year) and average duration (the number of days between two successive cycles). These are inversely proportional: higher turnover speed implies a shorter duration, and vice versa. Ideally, supplier turnover speed should be low, and client turnover speed high. These must be harmonized to avoid excessive delays in supplier payments or overly aggressive collection from clients.

Finally, the cash inflow-outflow budgets are prepared, taking into account potential loans, investments, and the previously estimated parameters. Budgeting is done monthly for the next 12 months and annually for the following 4 years.

Basic content

The working assumptions for the preparation of the budgets, processed using an Excel-based interface, are presented below:

Table 1. Working assumptions

Volume of receipts (RON) / Frequency of receipts (days)	*13684*	*30*			
Loan amount (RON) / Month in which the loan is received	*50000*	*1*			
Volume of payments (RON) / Frequency of payments (days)	*4167*	*90*			
Investment amount (RON) / Month in which the investment is made	*5000*	*1*			
Amount of additional salaries (RON) / Salary payment delay (days)	*4000*	*30*			
Employer's social security contribution related to additional salaries (RON)	*90*				

Amount of additional salaries and contributions (RON)	*4090*				
Monetary value of services (RON) / Service payment delay (days)	*29*	*60*			
Monthly repayment installment amount (RON) / Total number of installments / Number of installments per year / Repayment months	*5000*	*10*	*2*	*6*	*12*
Monthly interest amount (RON) / Monthly interest rate (percent)	*500*	*0,01*			
Number of upcoming years in the forecast horizon		***1***	***2***	***3***	***4***
Amount of future annual loans (RON)		*0*	*0*	*0*	*0*
Amount of future annual investments (RON)		*0*	*0*	*0*	*0*

Source: author's vision

Regarding the budgets, a positive cash flow can be observed starting from the first year of activity, with a fluctuating yet consistently positive trend over the following four years.

Thus, although seemingly risky, the idea proves to be favorable in terms of the financial results achieved. While in an income-expense budget the result in the first year might appear as a loss, in reality, from a cash perspective, the entity is in a favorable position, considering that the contracted loan represents a cash inflow without being recognized as income from an accounting standpoint.

The monthly budget for the first year of activity is presented below:

Table no. 2: Monthly budget for the first year of activity

Flow/Month	***1***	***2***	***3***	***4***	***5***	***6***	***7***	***8***	***9***	***10***	***11***	***12***	***TOTAL***
Turnover (RON)	*0*	*13684*	*13684*	*13684*	*13684*	*13684*	*13684*	*13684*	*13684*	*13684*	*13684*	*13684*	*150527*
Contracted loans (RON)	*50000*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*50000*
Material resources (RON)	*0*	*0*	*0*	*4167*	*4167*	*4167*	*4167*	*4167*	*4167*	*4167*	*4167*	*4167*	*37500*
Investments (RON)	*5000*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*5000*
Salaries and contributions (RON)	*0*	*4090*	*4090*	*4090*	*4090*	*4090*	*4090*	*4090*	*4090*	*4090*	*4090*	*4090*	*44990*
Services (RON)	*0*	*29*	*29*	*29*	*29*	*29*	*29*	*29*	*29*	*29*	*29*	*29*	*319*
Repaid loans (RON)	*0*	*0*	*0*	*0*	*0*	*5000*	*0*	*0*	*0*	*0*	*0*	*5000*	*10000*
Interest (RON)	*500*	*500*	*500*	*500*	*500*	*450*	*450*	*450*	*450*	*450*	*450*	*400*	*5600*
Cash flow (RON)	***44500***	***9065***	***9065***	***4899***	***4899***	***-51***	***4949***	***4949***	***4949***	***4949***	***4949***	***-1***	***97118***

Source: author's processing

The annual budgeting for the next 4 years is presented as follows:

Table no. 3: Annual budgeting for the next 4 years

Flow/Year	***N***	***N+1***	***N+2***	***N+3***	***N+4***
Turnover (RON)	*150527*	*164211*	*164211*	*164211*	*164211*
Contracted loans (RON)	*50000*	*0*	*0*	*0*	*0*
Material resources (RON)	*37500*	*50000*	*50000*	*50000*	*50000*
Investments (RON)	*5000*	*0*	*0*	*0*	*0*
Salaries and contributions	*44990*	*49080*	*49080*	*49080*	*49080*
Services (RON)	*319*	*348*	*348*	*348*	*348*
Repaid loans (RON)	*10000*	*10000*	*10000*	*10000*	*10000*
Interest (RON)	*5600*	*4400*	*3200*	*2000*	*800*
Cash flow (RON)	***97118***	***50383***	***51583***	***52783***	***53983***

Source: author's processing

Conclusions

Budgeting is a key element in the current and, especially, future activities of economic entities.

In this study, we have chosen to focus on cash-flow-based budgeting, as it is significantly more relevant in an accrual accounting system, such as the one used in Romania.

In such a system, the moment an expense is recognized does not coincide with the moment it is actually paid (for example, salary expenses are recognized during the month in which the work is performed, while the actual payment occurs the following month).

Likewise, the moment revenue is recognized does not match the moment it is collected (for example,

goods invoiced with a 30-day payment term result in revenue being recognized at the time of invoicing, while the cash is received 30 days later).

Bibliographical references

1. BÂTCĂ DUMITRU, C. G., SAHLIAN, D. N., ȘENDROIU, C. Managementul performanței. București: Editura CECCAR, 2019. ISBN 978-606-580-097-7.
2. GOMOI, B. C. Management financiar și al performanțelor. Timișoara: Editura Eurostampa, 2020. ISBN 978-606-32-0956-7.
3. ȚILICĂ, E. V., CIOBANU, R. Finanțe și management financiar. București: Editura CECCAR, 2020. ISBN 978-606-580-130-1.