Reporting Model for Decision Support Based on the SAF-T Standard

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Abstract

The purpose of this paper is to summarize the results and conclusions obtained during an investigation aiming to reveal the usefulness and added value of the SAF-T when used to support decision making and the internal management of organizations. The research addresses the SAF-T standard as a source of knowledge for decision support and intelligent auditing.

The research contextualizes the contribution of the SAF-T based model as a scalable way to make intelligent audits, implement new business processes and manage electronic control. The information quality of this report and digital model is also stressed.

Upon automatic reporting based on SAF-T data one can draw financial conclusions and decide changes on a firm´s commercial scope. This article also highlights the advantages of decision making based on the proposed model and report. A set of hints and suggestions for further research work on this topic is also provided.

Keywords: Accounting; SAF-T; Information systems; Reporting Control.

1. RESUME

This poster intends to disseminate the results achieved during the development of a master's thesis in the area of financial and commercial reporting based on the Standard Audit File for Tax Purpose (SAF-T) (Vicente, 2016).

This goal of the project was to propose a reporting model for decision support based of the SAF-T standard. In order to show how the SAF- T may contribute significantly for business decision-making support the resulting model and dashboard was based in a deep collaboration with a company. The DSR (design science research) methodology was used to produce an artifact; the case study enabled to validate and refine the artifact in a real situation. This artifact also shows a use case of abnormal use, use the SAF-T for internal purposes of the organizations and not just for tax reporting.

The adoption of a case study during the investigation was intended to enable collecting information through semi-structured interviews and to support the purposed model in a real business situation. The interviews were made to the control managers of the company of the case

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study. During the interviews were used guidances in which they were able to obtain information of indicators, decision support context metrics to be present in the dashboard that allows visualization of the data model. Together with the interviewees, the indicators dictionaries were defined. And as described in the methodology came the artefact later validated and tested by the same actors.

The organization that participated in the research has a strategy based on leadership by technological competence, aiming at securing lasting competitive advantages and promoting the company presence in international markets. This context led the company to create a set of processes to adapt to this new digital age, and to make usage of validation, analysis and reporting platform based upon SAF-T files.

The proposed model of the use of a set of XML files (SAF-T export format) relative to different fiscal years from the case study organization. Aggregate data makes use of data aggregation and mapping software (Colbi) that transforms XML files into a relational database (PetaPilot, 2015). With multiple aggregate indicators, it is then possible to create a decision support dashboard that will be fed directly from the same data source used for fiscal reporting, the SAF-T.

As a result of the investigation, this artifact emerged as a demonstrator of the one-page dashboard concept, with data based only on SAF-T. It was applied to the company of the case study. The **Figure 1** shows the final result of the artifact: the form with the requirements and indicators of the case study.

Goals Form

Year 2015 **Month** April **Valeus** Real

P	ID	Indicators	Limit	Medium	April 2015	Target	Light
Financial	F1.0	General solvability	50%	35%	40%	15%	
	F3.0	EBITDA %	30%	50%	82%	80%	
	F4.0	ROE	50%	60%	90%	90%	
	F5.0	ROA	25%	35%	27%	40%	
	F6.0	Financing Costs	15%	10%	0%	0%	
	F9.0	Sales performance	50%	60%	82%	70%	
	F10.0	Critical point	250,000 €	300,000 €	400,860 €	500,000 €	
	F11.0	Financing leverage ratio	50%	70%	100%	80%	
	F12.0	Security Margin	50%	100%	229%	200%	
Comercial	C1.0	Average receipts	360	300	13	150	
	C2.0	Average payments	150	200	265	360	
	C7.0	Email accounts	50	100	94	200	

Figure 1 – Proposed goals control form

The **Figure 2** shows the final result of the artifact: the dashboard with the requirements and indicators of the case study.

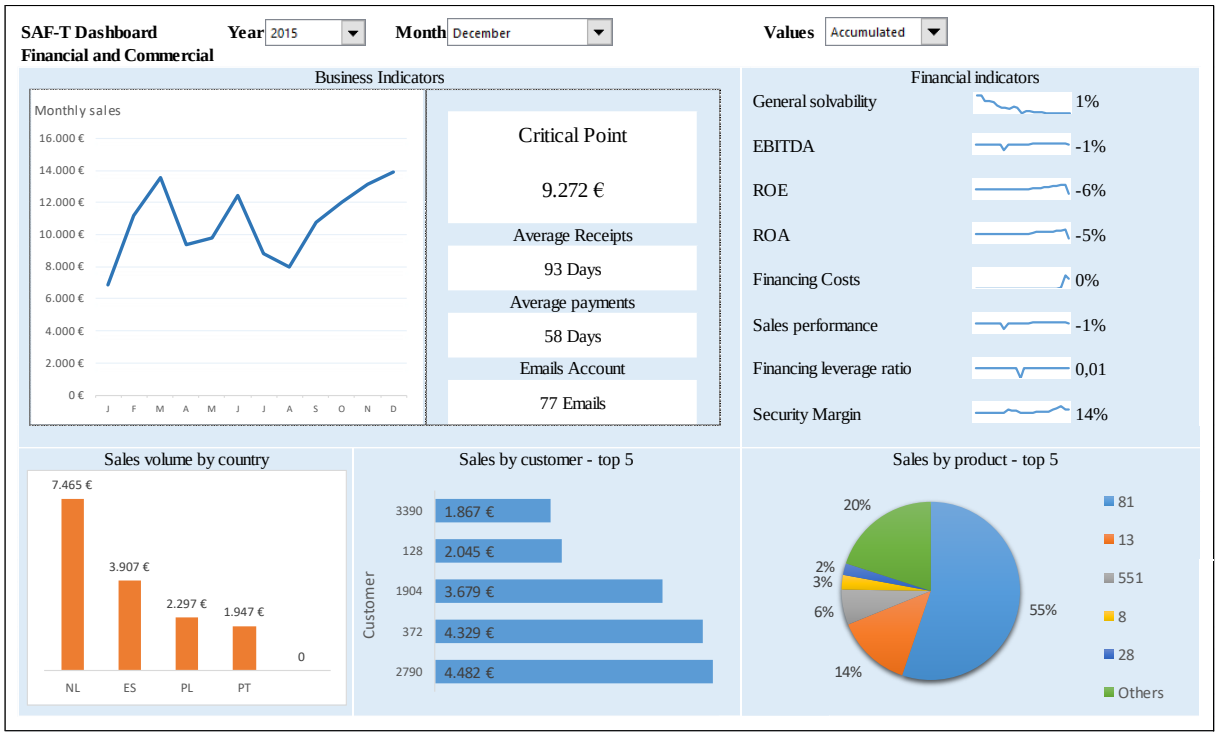

Figure 2 – Proposed dashboard model

From the SAF-T it is possible to extract a set of data that support indicators from financial and commercial components. To support decision making the dashboard contains indicators from the following perspectives (Alexander, 2007):

Financial - general solvency, EBITDA, ROE, ROA, financing costs obtained, profitability of sales, critical point, leverage of financial activity and margin of safety, etc.;

Commercial - Average days of receipts, average days of payments, sales (by customers, by country, by product, by year and month) and customers (by country and by product), etc.

Other perspectives and indicators could have been adopted, but these were selected and considered more relevant by the case study decision-makers, and also taking into account the scope of the data source. In this model and in the dashboard the indicators that emerged from the conclusions of the company of the case study were calculated and exposed.

In the case study it was defined that a performance evaluation model needs to be adjusted to each organization terms of requirements and also to the decision maker priorities. It is also important to adjust searching criteria and indicators that make up the model, allowing the aid of decision making.

In practical terms, the sole existence of the SAF-T file does not have advantages for the decision makers, since the XML file is not easily read by the user. However, the XML file guarantees

consistency in terms of structure and proves to be beneficial at various levels such as: cross-data – enabling to compare performance among companies of the same group; and quality of reporting - automatic reporting through an analyzer. The file contains all financial accounting movements (balance sheet and results report) thus including many other indicators that can be exported if requested by the decision makers.

Being an ongoing investigation there is a set of lines of work that may be followed. Some recommendations may be presented for future approaches to the topic being studied: extending the case study to another activity sector to adjust the model and the dashboard to the industry specific requirements; apply the model to other companies and compare the results obtained through the model with the existing data sources being used; to complement the data incorporated in the model with other possible sources of data, in order to introduce into the model indicators that are relevant to the organization but not present in the SAF-T file.

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