Jacqueline Fraga, Sul América Cia Nacional de Seguros

README
SAS® Visual Analytics provides users with a unique view of their company by monitoring products, and identifying opportunities and threats, making it possible to hold recommendations, set a price strategy, and accelerate or brake product growth.

In SAS Visual Analytics, you can see in one report the return required, a competitor analysis, and a comparison of realized results versus predicted results. Reports can be used to obtain a vision of the whole company and include several hierarchies (for example, by business unit, by segment, by product, by region, and so on).

SAS Visual Analytics enables senior executives to easily and quickly view information. You can also use tracking indicators that are used by the insurance market.

ABSTRACT
The objective of this paper is to present a single report that allows you to view: profitability indicators, results and competition of all company's products, implemented in SAS® Visual Analytics in SulAmérica.

INTRODUCTION
SulAmérica operates in multiple insurance segments, such as health and dental, auto and other property and casualty, The company also offers life and personal accident insurance as well as asset management, private pension, and savings bonds products.

In 2014, the Company's consolidated revenues totaled R$16.9 billion, with R$13.5 billion in insurance premiums. On December 31, 2014, SulAmérica the asset management business, had U.S. $ 21.6 billion in assets under management.

With approximately five thousand employees, SulAmérica conducts business through an extensive and diversified distribution network that includes more than 30,000 independent brokers, more than 20 distribution partnerships, and 16,000 bank branches accessible through sales partners.

With approximately 7.0 million customers (individuals and companies) and 100% of revenues generated in Brazil, Sul América's administrative headquarters is located at Rua Beatriz Laragoiti Lucas, 121 in Rio de Janeiro and the geographic distribution of the Company's branches is shown in the figure below as follows:

Mission
To provide protection and well-being to individuals and organizations, at all stages of life, creating value in a sustainable manner through a relationship of trust and respect.
Vision

To be recognized as the best option in the markets we serve, fulfilling our clients’ needs with excellence through a close and solid relationship with our colleagues, brokers and business partners, seeking a balance between growth and profitability.

Values

We are guided by the satisfaction of our customers and brokers.

We value our staff and teamwork.

We seek healthy and long-lasting relationships with our partners.

We always aim for the best results and the continuous improvement of our operations.

We fulfil our promises, preserving our commitment to sustainability.

OBJECTIVE

Provide users a single view of the Company through the products:

- identifying opportunities and threats;
- making recommendations;
- defining price strategies;
- accelerating or not the product growth.

The report provides a view of the entire Company, including several hierarchies (for example, by business unit, by segment, by product, region, and so on).

Allows senior executives easily and quickly read the information.
REPORT CONCEPTS

VIEW SHAREHOLDER - INDICATOR PROFITABILITY

Indicator that shows the relationship of net income realized from the company about total premiums;

\[
\text{ROEC} = \frac{\text{Net Income}}{\text{Total Premiums}}
\]

VIEW BUDGET - INDICATOR RESULTS

Indicator that identifies products that are or are not reaching the budgeted target. The ratio between the actual result and the result budgeted.

Assumptions: Result after taxes and profit sharing.

\[
\text{Result} = \frac{\text{Net Income Real}}{\text{Budgeted Net Profit}} - 1
\]

VIEW MARKET - INDICATOR MARKET SHARE

Indicator that shows SulAmérica's percentage representative on the market = the ratio of volume of product premium in SulAmérica and the volume of the same product premium in the market.

\[
\text{Market Share} = \frac{\text{Premiums Sul América}}{\text{Premiums in the market}}
\]
QUADRANTS ANALYSIS

The graphs presented in the report are divided into quadrants. In the graph there is a horizontal line indicating the growth in premium expected from Sul América and one vertical line indicating the expected profitability.

The products will be plotted on the charts.

The products in quadrant "yellow" – quadrant A, are the products with growth in premium and profitability higher than expected.

The products in quadrant "green" - quadrant B, are the products with growth in premium higher than expected and profitability lower than expected.

The products in quadrant "pink" - quadrant C, are the products with growth in premium and profitability lower than expected.

The products are in quadrant "Purple" – quadrant D, are the products with growth in premium lower than expected and profitability higher than expected.

For the company the ideal would be that all products were in quadrant A.

HIERARCHIES

SulAmérica is present in several business segments. These segments are divided into several hierarchies and can be visually presented here:

It’s possible to view SulAmérica as a whole, in the first rectangle. Then, by Business Segments: Insurance and Pensions, Asset Management and Saving Bonds. Within Segment, there are the Business Units. Next, Insurance and Pensions are divided into: Health and Dental, Automobile, Property & Casualty, Life and Personal Accident and Pensions.
And for each business unit, there are products and sales regions.
THE REPORT IN SAS VISUAL ANALYTICS

The report contains:
1. The report cover
2. Shareholder view
3. Budget view
4. Market view
5. The assumptions for each of the views

Following are each of contents:

1. The report cover

![Figure 1. The report cover](image)

2. Shareholder view

This view shows the profitability indicator of 2014, in two graphs: On first graph, the indicator is based on the actual results of the company until the current month and the budgeted results for the future months of the year. On the second graph, the indicator only considers the results until the current month.

Since this report is showing the analyses of 2014, the graphs are the same. We can observe that SulAmérica Company's profitability indicator is higher than the target (Profitability Indicator), while the premium growth's indicator is lower than the target (Target Growth SulAmérica).
By clicking on the bubble that represents the whole SulAmérica, the graphs dynamically show business segments in three bubbles: Savings Bonds, Asset Management and Insurance and Pensions.

The size of the bubble represents the premium volume.
When you mouse over each bubble, the associated indicators are displayed: Profitability Indicator, Growth Premiuns’ Indicator and Total Premiuns.

**Figure 4. Shareholder View – Business Unit**

By clicking on the bubble that represents Insurance & Pensions, the graphs dynamically show business segments in five bubbles: Automobile, Health & Dental, Property & Casualty, Life and Pensions.

**Figure 5. Shareholder View – Portfolio**
By clicking on the bubble that represents Business Unit Health, the graphs dynamically show Products Portfolio in five bubbles: Corporate - Group Health Insurance, SME* - Group Health Insurance, Dental - Group Health Insurance, Individual and Administrative Services.

Figure 6. Shareholder View – Product

Then, in each of these product lines, you can see each product, and then within each product, the regions in which they operate.

Figure 7. Shareholder View – Region
3. Budget view

This view displays the year results indicator in 2014, in two graphs: The first graph shows the indicator as cumulative period until the current month and the chart on the right shows the indicator for the month, which can be chosen.

This indicator shows what has been achieved compared to what was budgeted. Products that are below the Awards line, are performing in premium volume less than budgeted. Products that are on the left of the result indicator line, are the products which make the net profit under budget and those on the right are performing over budget.

Thus, it would be expected that all products were in the upper right quadrant.

Figure 8. Budget View – Whole SulAmérica
Figure 9. Budget View – Business Segment

Figure 10. Budget View – Business Unit
4. Market View

This view shows the indicator of market share, which compares the participation of SulAmérica on the market. Presents a ranking of the companies in each segment and presents the Market share of SulAmérica in the current year compared to the same period last year.

Figure 11. Budget View – Whole SulAmérica

Figure 12. Budget View – Business Unit
6. The assumptions for each of the views

For each view, there is a section that describes the assumptions used on the development of the Report.
CONCLUSION

The idea of this report is to enable the executives to examine a complete view of the company by showing indicators of profitability, budget and market. That way, the decisions can be faster and easily made.

From this report, it's possible to create others ones according to the needs and requests.

SAS Visual Analytics also provides simulations, with filters and drop lists.

It provides:
Wide view of the company
Fast decision making
Discussions about products
Identification of opportunities and threats

REFERENCES
Website Available at http://ri.SulAmérica.com.br/

ACKNOWLEDGMENTS

First to God, without him in my life would never have this opportunity. God does not choose the qualified, He enables the chosen ones.

Special thanks to the mentor and promoter of this paper, André Caldeira.

Thanks to:
Team SAS Brazil, Victor Tavares, Victor Vicente and André Novo.

My bosses Gláucia Carvalho, Reinaldo Amorim and Arthur Farme.

My Actuarial Area team, which put into practice all the knowledge acquired.

My friend Bruno Nogueira by encouraging and eternal crowd.

My friend Ana Claudia Colodetti and Janice Leal for helping with the English language.

My family, for the hours of your fellowship that were dispensed in order to complete this paper.

RECOMMENDED READING
- SAS® Enterprise Guide®
- SAS® Visual Analytics®
CONTACT INFORMATION

Your comments and questions are valued and encouraged. Contact the author at:

Jacqueline Paiva Fraga
SulAmérica Cia Nacional de Seguros
55-21-2506-8599
jacqueline.fraga@sulamerica.com.br
jpaivaf@yahoo.com.br
br.linkedin.com/in/jacquelinepaivafraga

SAS and all other SAS Institute Inc. product or service names are registered trademarks or trademarks of SAS Institute Inc. in the USA and other countries. ® indicates USA registration.

Other brand and product names are trademarks of their respective companies.