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## Orange juice on the Brazilian market: A viable alternative in the face of declining demand in Europe and the United States



PhD Marcos Fava Neves
USP / FEARP / MARKESTRAT - favaneves@gmail.com
Vinícius Gustavo Trombin
USP / FEARP / MARKESTRAT - vinicius.trombin@gmail.com
Rafael Bordonal Kalaki
USP / FEARP / MARKESTRAT - rkalaki@markestrat.org

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## Introduction

- In nearly 50 years: US\$ 60 billion to Brazil;
- Brazil is responsible for $53 \%$ of world production and exporting roughly $\mathbf{9 8 \%}$ of this production;
- Exports from the Brazilian citrus complex in 2011:
$\checkmark 2.4$ million tonnes of product
$\checkmark$ US\$ 2.7 billion in revenue
$\checkmark$ Representing about 3\% of
Brazilian agribusiness exports
- Europe - absorbs roughly 70\% of Brazil's export volume - reduce $5 \%$ in 8 years
- USA - absorbs roughly $70 \%$ of Brazil's export volume - reduce $21 \%$ in 8 years



## Research Questions and Objectives

 Research question:- Which business model and go-to-market strategies could be used to increase the consumption of orange juice on the Brazilian domestic market?

Objectives of the study:

- To present information clearly and objectively about the current situation of the Brazilian citrus-growing sector
- To analyze an alternative to the current crisis of international consumption of orange juice faced by this sector



## Literature Review

| AUTHOR | YEAR | CONTRIBUTIONS |
| :--- | :---: | :--- |
| Frezza | 1998 | Concept of Business model |
| Hax \& Majluf | 1991 | Segmentation |
| Kotler | 1996 | Segmentation, differentiation <br> and positioning |
| CZINKOTA et al. | 2001 | Mix marketing |
| Stern et al. | 1996 | Distribution channels |
| Saes | 2000 | Collective actions <br> characteristics of emerging <br> markets |
| Sheth | 2011 |  |

## Method Used




## Results:

2003-2010:

- Global consumption of orange juice fell 5.3\%
- The most significant drop was in Germany, at 22.8\%
- U.S. with a decrease of roughly $\mathbf{2 0 \%}$
-US and Germany corresponded to a decrease of 363,000 tonnes of FCOJ equivalent in annual sales $\mathbf{= 9 0}$ million boxes of orange per year
- In just one year, emerging markets consumed 42,000 tonnes more FCOJ


## Analysis of Consumption

Consumption of orange juice in the 40 top markets, grouped by continent

| Continent | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 1 0}$ | Variation <br> $(\mathbf{2 0 0 3 / 2 0 1 0})$ |
| :--- | ---: | ---: | ---: |
| North America | 1,117 | 930 | $-15.3 \%$ |
| Europe | 910 | 903 | $-1.4 \%$ |
| $\quad$ Western Europe | 797 | 746 | $-7.0 \%$ |
| $\quad$ Eastern Europe | 113 | 157 | $38.2 \%$ |
| Asia | 232 | 268 | $15.4 \%$ |
| Central \& South | 88 | 108 | $16.0 \%$ |
| America |  |  |  |
| Oceania | 45 | 47 | $5.6 \%$ |
| Africa | 23 | 33 | $40.3 \%$ |

Source: Prepared by Markestrat based on data from Tetrapak and Euromonitor.

- The consumption in the next year?
- Europe is again facing a severe crisis
- The stable price of concentrated juice at levels above the previous year



## Current situation of supply, demand and carry-over stock of Brazilian orange juice


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## Results:

Product


- 100\% orange juice
- Not from concentrate (NFC) or reconstituted (FCOJ)
- The juice will be packaged in 1liter, 330 ml and 200 ml Tetra Paks
- The brand to be created, "Consortium-Consecitrus,



## Results:

Price

|  | Unit Cost - 1 liter |
| :---: | :---: |
| Breakdown of the recommended price of 100\% reconstituted orange juice | R\$ per Liter - Orange juice reconstituted to 11.8o Brix |
| Final price of frozen concentrated orange juice delivered to the packaging plant FCOJ $66^{\circ}$ Brix - including INSS (Social Security contributions) Agribusiness | R\$ 0.7588 |
| Final Price of frozen pulp - U\$ 800/ton - 11.80 Brix - 6\% Dosage - including INSS (social security contributions) of agribusiness | R\$ 0.0951 |
| Aroma - U\$ 151/pound to 2 pound per 20,000 liters | R\$ 0.0320 |
| Loss of 1.5\% of Orange Juice during the packaging process and industrial CIP | R\$ 0.0114 |
| Cost of packaging the juice - Co-packing - Full service | R\$ 0.2900 |
| Cost of packaging materials: Tetra Pak cartons, tray, shrink wrap, and cardboard boxes | R\$ 0.4072 |
| Total Operating Cost of packaged orange juice delivered to the CD of the retailer | R\$ 1.7968 |
| Overhead | R\$ 0.0250 |
| Investments on promotional marketing of orange juice | R\$ 0.1914 |
| Final Cost of packaged Orange Juice delivered to the CD of the retailer | R\$ 2.0132 |
| Agreed funds "Big Chains" - 15\% | R\$ 0.5060 |
| Recommended Retail Price of packaged orange juice, free of taxes - "Big Chains" | R\$ 2.5192 |
| ICMS on retail sales | R\$ 0.3023 |
| Tax Substitution Cost | R\$ 0.1300 |
| PIS / COFINS on final operation | R\$ 0.2610 |
| Mark-up of the Business - Break Even Point - 5\% | R\$ 0.1606 |
| Recommended Retail Price of packaged orange juice with taxes - " Big Chains" | R\$ 3.3731 |
| Mark-up "Big Chains" - 30\% | R\$ 1.0119 |
| Recommended Retail Price of packaged orange juice on the shelf "Big Chains" | R\$ 4.3850 |

## Market



Figure 2. Network of Sales and Distribution channels
Source: Prepared by the authors.


## Results:

## Promotion

| Target publics | Objectives | Communication mix | Budget | Measuring Manage |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ment |  |  |  |  |

## Conclusions and Managerial Implications



Figure 2: Representation of the business model for the development of the domestic market.
Source: Developed by the authors.


## Conclusions and Managerial Implications

- Can see that the Brazilian citrus chain has a viable alternative to reduce the effects of the consumption crisis in the main consumer markets
- The solution to the current crisis in the Brazilian citrus sector necessarily depends on aggressive public-private policies
- In this paper, with the strategies operationalized, we estimate a market of $\mathbf{9 8 4}$ million liters of $\mathbf{1 0 0 \%}$ orange juice in 2020, which will require $\mathbf{5 0}$ million boxes of oranges.
- This initiative will help ensure that this production chain can remain competitive, providing better quality of life for society and further development for Brazil.

- CZINKOTA, Michael R... [et al.]. (2001). Marketing: as melhores práticas. Porto Alegre: Bookman. 559 p.
- Farina, E. M. M. Q. (2002). Consolidation, multinationalisation, and competition in Brazil: impacts on horticulture and dairy products systems. Development Policy Review, v. 4, n. 20, p. 441-457.
- Frezza, B. Itís Time to examine Your Companyís E-Businees Model. Internetweek. Manhasset: jun 22, 1998.
- Hax, Arnold C. e Majluf, Nicolas S. (1991). The Strategy Concepts \& Process - a Pragmatic Approach. New Jersey. Prentice Hall.
- Kotler, Philip (1996). Administração de Marketing: análise, planejamento, implementação e controle. 4åed. São Paulo: Atlas.
- Neves, M. F. et alii. (2010). O Retrato da citricultura brasileira. São Paulo: CItrusBR.
- Neves, M. F. et alii. (2011). The orange juice business. Wageningen: Wageningen Academic Publishers.
- Sheth, Jagdish N., Mittal, Banwari (1996). "A Framewaork for Managing customer expectations", Jounal of Market-Focused Management, 1 (2), 137-58.



## Thank You

## favaneves@gmail.com

