



**Business intelligence tools & trade marketing
models to support SMEs development:
MPHIM+ model.**

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Matricola N° 733503

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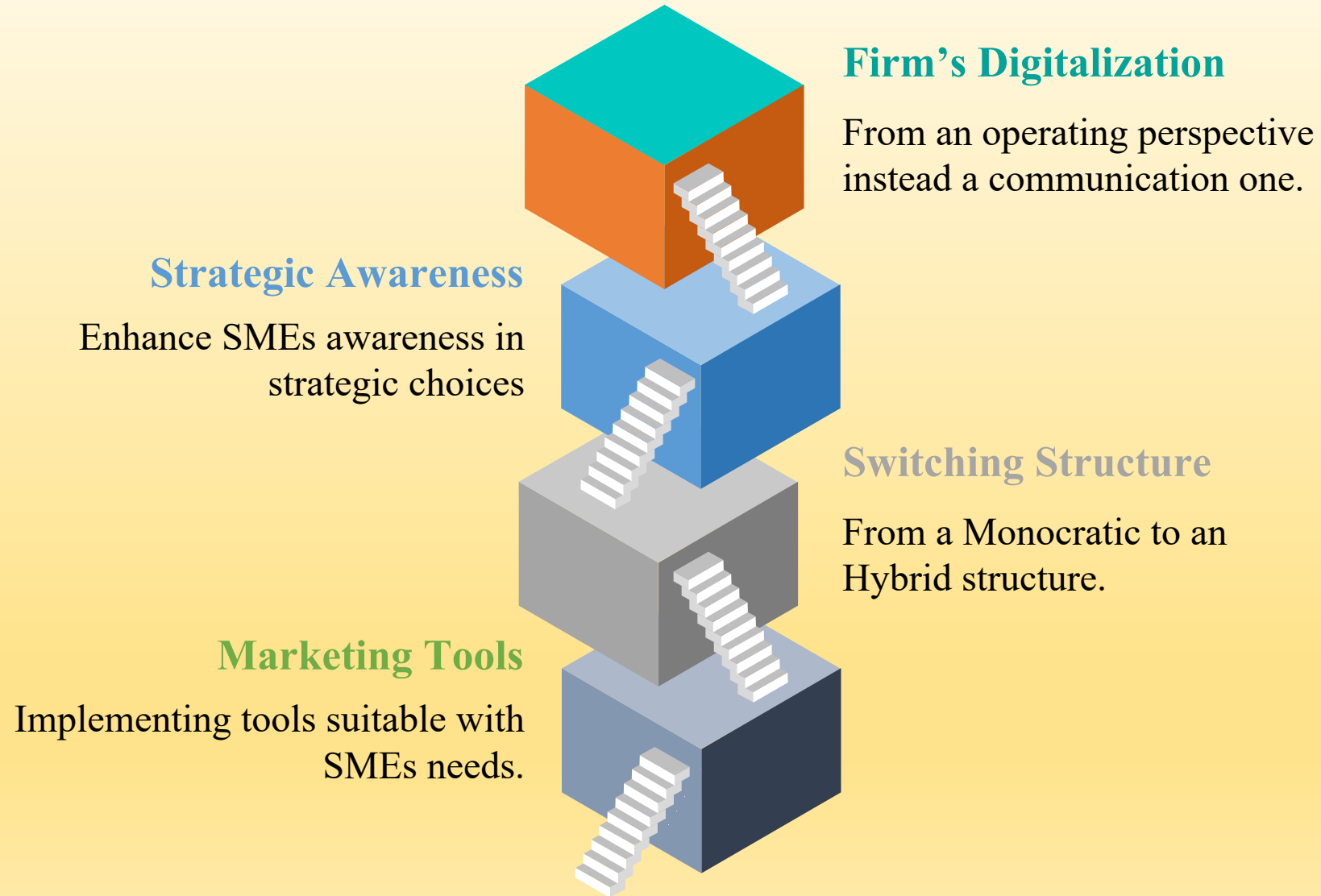


*Case
Study:
Ro.Se srl*



*Conclusion:
Key
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Work's Purposes



What's MPHIM+?

Mphim+ is a business intelligence software that facilitates the choices of operational marketing.

In terms of sales channels, long / short channel, pricing, maximum sustainable commissions in case of recourse to external agents / e-commerce sites, etc.

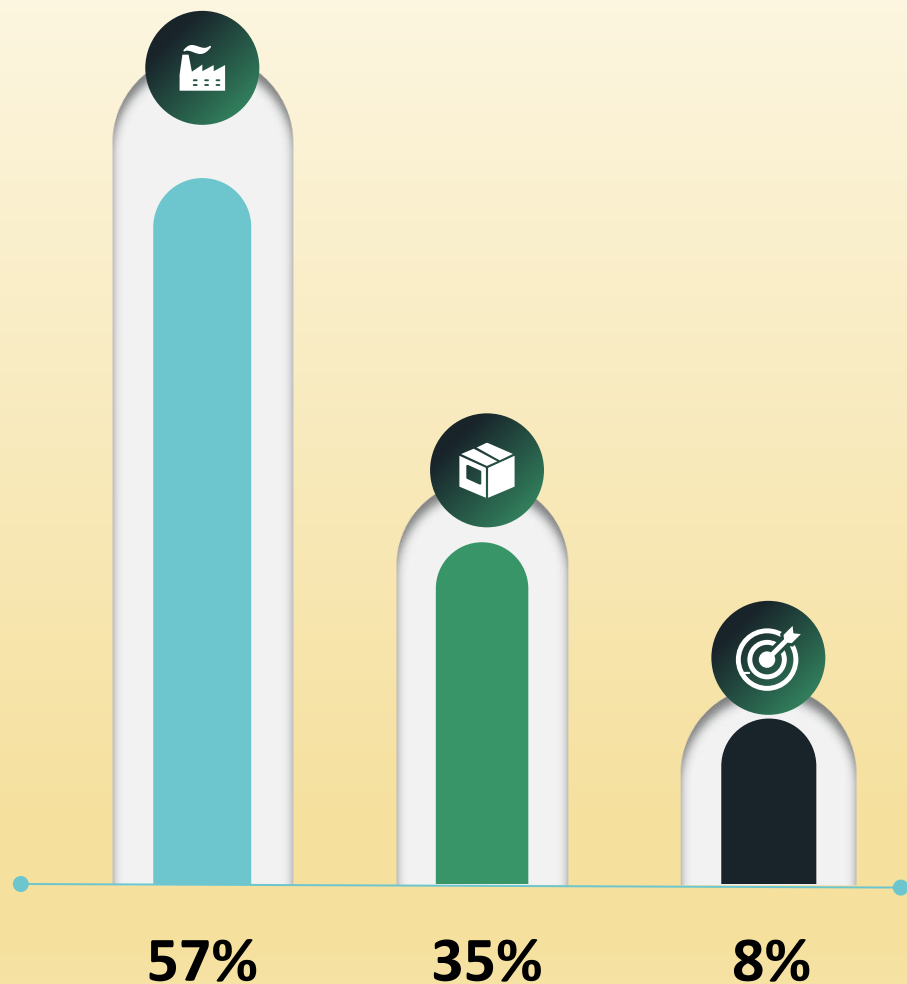
The software has been built on critical aspects and fundamental issues that SMEs are required to challenge in a global market.



Critical Elements in SMEs



Fortezza's Survey



Survey conducted on 40 SMEs Emilia Romagna area-based. Operating in B2B Market.



57% of the sample recognizes that its activity requires tools.

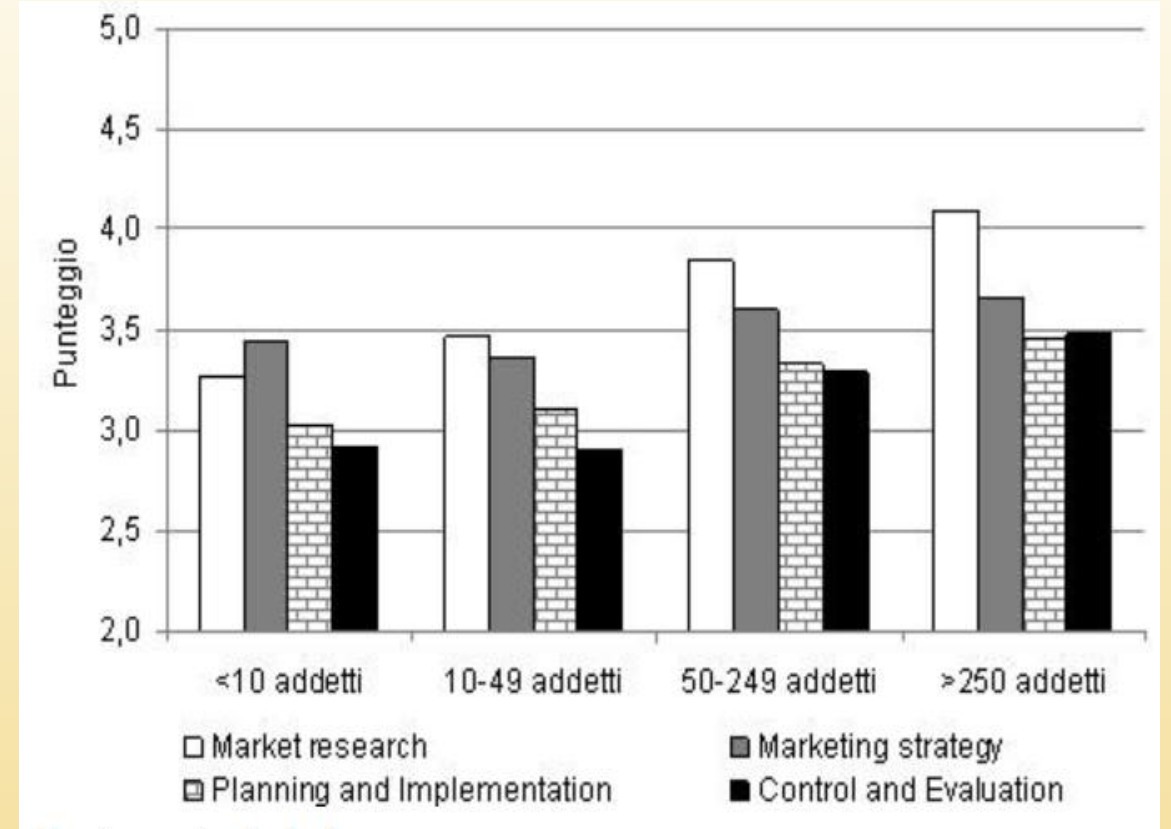


35% of the sample is not aware about the role of tools for marketing planning



Despite, this high percentage of awareness only the 8% is able to perform a consistent and successful marketing strategy.

“TRUEFOOD” Survey’s Results



The empirical survey was conducted in ten European countries and the sample analyzed is represented by 468 companies operating in the traditional food sector.

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Business Intelligence



01. Algorithms

It makes possible find mathematics solution for theoretical concepts. (4Ps)



03. Push Strategy

The BI allow to assess automatically if we have met the required mark-up per each B2B client.

02. URTD



UNIQUE REAL TIME DASHBOARD. Observing in real time future results.

04. Pricing Policy



The system allows us to perform a price discrimination in real time based on decimals



ERP & BI



It is a management software that integrates all the relevant business processes of a company

- Finance, accounting.
- Human resources.
- Research and development.
- Sales and Marketing.

Enterprise resource planning



BIS tends to give entrepreneurs a dynamic corporate's picture such as: What is the maximum agent's fee that an entrepreneur may sustain with regard to several aspects (profit margin, full cost, sales price and transport costs).

Business Intelligence

URTD graphic of MPHIM+

Product Info

Last Updated: 11-04-2018 10:00:30

Product Name: Veritas anno 2016

Product Code: 2 CIP

Price Calculation

Full Cost

Amount: 2.7000

Mark Up %: 10.00

Mark Up: €0,2700

Target Price: €2,9700

Price List: €8,9100

CIP - Carriage and Insurance Pz

Segmentation B2B market

Wholesaler +

Specialty Shop < 400m2 +

End Customer +

Min. Order

1 pallet

3 box

1 box

Discount

56%

44%

0%

Sales Price

3,9204

4,9896

8,9100

Quantity

600

18

6

Total Amount

2.352,2400

89,8128

53,4600

Sales Network: Amount & %

100.00%

120,9051 5.14%

18,3937 20.48%

16,0380 30.00%

Sales Network Roles: Amount & %

Agent

72.00

87,0564 3.701%

13,2438 14.746%

11,5474 21.600%

Manager

28.00

33,8487 1.439%

5,1499 5.734%

4,4906 8.400%

Director

0.00

0,0000 0.000%

0,0000 0.000%

0,0000 0.000%

Sales Price Margin Amount & %

611,2778 25.99%

22,8226 25.41%

21,2238 39.70%

EBT Margin

Agents' commission

Tot amount of revenue

Price discrimination to max profit

Segmentation B2B market

Wholesaler +

Specialty Shop < 400m2 +

End Customer +

Min. Order

1 pallet

3 box

1 box

Discount

56%

44%

0%

Sales Price

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5,1499 5.734%

4,4906 8.400%

Director

0.00

0,0000 0.000%

0,0000 0.000%

0,0000 0.000%

Sales Price Margin Amount & %

611,2778 25.99%

22,8226 25.41%

21,2238 39.70%

Markup For Trader Sales

Customer

Wholesaler - 1 pallet

Ho.Re.Ca - 3 box

Specialty Shop < 400m2 - 3 box

End Customer - 1 box

Wholesaler - 1 pallet

27.27%

27.27%

127.27%

Ho.Re.Ca - 3 box

78.57%

Specialty Shop < 400m2 - 3 box

78.57%

Channel Dimension

[illegible]

Incentive System Check-up

Product Info

Last Updated: 18-02-2018 14:57:52

Product Name: Don Luca anno 2016

Product Code: 2 CIP

Price Calculation

Full Cost

Amount

2.7000

Mark Up %

10.00

Mark Up: €0,2700

Target Price: €2,9700

Price List: €8,9100

CIP - Carriage and Insurance Paid to

Customer	Min. Order	Discount	Sales Price	Quantity	Total Amount	Commissions			Network Management %	Sales Network: Amount & %	Sales Network Roles: Amount & %			Sales Price Margin Amount & %
						Max.	Reduction %	Applied			Agent	Manager	Director	
									0.00		72.00	28.00	0.00	
Wholesaler +	1 pallet	56%	3,9204	600	2.352,2400	24.24%	19.10	5.14%	0.00%	120,9051 5.14%	87,0564 3.701%	33,8487 1.439%	0,0000 0.000%	611,2778 25.99%
Specialty Shop < 400m2 +	3 box	44%	4,9896	18	89,8128	40.48%	20.00	20.48%	0.00%	18,3937 20.48%	13,2438 14.746%	5,1499 5.734%	0,0000 0.000%	22,8226 25.41%
Ho.Re.Ca +	3 box	44%	4,9896	18	89,8128	40.48%	20.00	20.48%	0.00%	18,3937 20.48%	13,2438 14.746%	5,1499 5.734%	0,0000 0.000%	22,8226 25.41%
End Customer +	1 box	0%	8,9100	6	53,4600	66.67%	66.67	0.00%	0.00%	0,0000 0.00%	0,0000 0.000%	0,0000 0.000%	0,0000 0.000%	37,2618 69.70%

Markup For Trader Sales

Customer	Trader			
	Wholesaler - 1 pallet	Ho.Re.Ca - 3 box	Specialty Shop < 400m2 - 3 box	End Customer - 1 box
Wholesaler - 1 pallet				
Ho.Re.Ca - 3 box	27.27%			
Specialty Shop < 400m2 - 3 box	27.27%			
End Customer - 1 box	127.27%	78.57%	78.57%	

$\Delta 1$ = mark-up wholesaler = (price to retailer - price to wholesaler) / price wholesaler (4.9896-3.9204) / 3.90204 = 0.2727 = 27.27 %

$\Delta 2$ = retail mark-up = (consumer price - retail price) / retail price (8,9100-4,9896) / 4,9896 = 0,7857 = 78,57%

$\Delta 3$ = (price at wholesaler - target price) / price at wholesaler = (3,9204-2,9700) / 3,9204 = 0,2424 = 24,24%

Pricing Policy



$$\text{Mark-up} = (\text{Sale price} - \text{Purchase price}) / \text{Purchase price}$$

mpnim + has implemented a real database, on the basis of the experience acquired in the field

$$\text{Target price} = \text{Full cost} \times (1 + \text{Mark-up } \%)$$

the sufficient price that the company must apply to cover all direct and fixed cost.

$$\text{Price list} = (\text{target price} \times 3)$$

X3 is due to the general practice adopted by the producers, who proceed to multiply by 3 the company full cost.

Pricing Policy examples

Customer	Discount	Sales Price	Quantity	Total Amount	Sales Network Roles: Amount & %			Sales Price Margin Amount & %
					Agent	Manager	Director	
					100.00	0.00	0.00	
Wholesaler +	65% ▾	882,0000	500	441.000,0000	13.230,0000 3.000%	0,0000 0.000%	0,0000 0.000%	27.761,6000 6.30%
wholesaler_1	64% ▾	907,2000	500	453.600,0000	13.245,1200 2.920%	0,0000 0.000%	0,0000 0.000%	40.366,6400 8.90%

Product: galvanized wrought iron gate
Full cost: euro 800,00
Price list: euro 2.520,00

Customer	Discount	Sales Price	Quantity	Total Amount	Sales Network	Sales Price Margin Amount & %
					Agent	
					100.00	
Wholesaler +	65% ▾	10,5000	75000	787.500,0000	19.687,5000 2.500%	17.797,5000 2.26%
wholesalers_01	64% ▾	10,8000	75000	810.000,0000	19.683,0000 2.430%	40.338,0000 4.98%

Product: X
Full cost: euro 10,00
Price list: euro 30,00



Product



Place

Marketing Mix

Marketing involves the management of corporate actions aimed at marketing products and services in an orderly, efficient and profitable manner.
(Castello, 2016)



Price



Promotion

Product

It entails all packaging level.

Place

requires not only the completion of decisions regarding the number and type of commercial intermediaries but also the remuneration and incentive policies provided in favor of them

Price

the first concern is to determine the price levels that allow a coverage of direct and fixed costs in order to make a reasonable profit.

Promotion

Mphim + makes it possible to evaluate, the economic impact on the company's profit margin of investments deriving from the use of one or more promotional tools.

Marketing Mix Report

The report is available for multiple parties involved in the selling and placement process. (Agents, producers, Retailers)

PRODUCT



Product Name: Don Luca anno 2016
Product Code: 2 CIP
Delivery Time Conditions: FINO A 1 PALLET 10 GG

PRICE

Price List
€8.9100

Customer	Minimum Order	Discount	Discounted Price	Sales Price Margin
Wholesaler	1 pallet	56%	€3.9204	25.99%
Ho.Re.Ca	3 box	44%	€4.9896	25.41%
Specialty Shop < 400m2	3 box	44%	€4.9896	25.41%
End Customer	1 box	0%	€8.9100	69.70%

Advance Payment/Down Payment/Balance	Moments of Payment	Percentage of Down Payment/Balance
anticipo	ordine	100%

PLACE

Location: Italia
Customers: Wholesaler, Ho.Re.Ca, End Customer, Specialty Shop < 400m2
Customers Description: Enoteche e rivenditori al dettaglio di beverage, strutture ricettive e consumatore finale.

Markup For Trader Sales

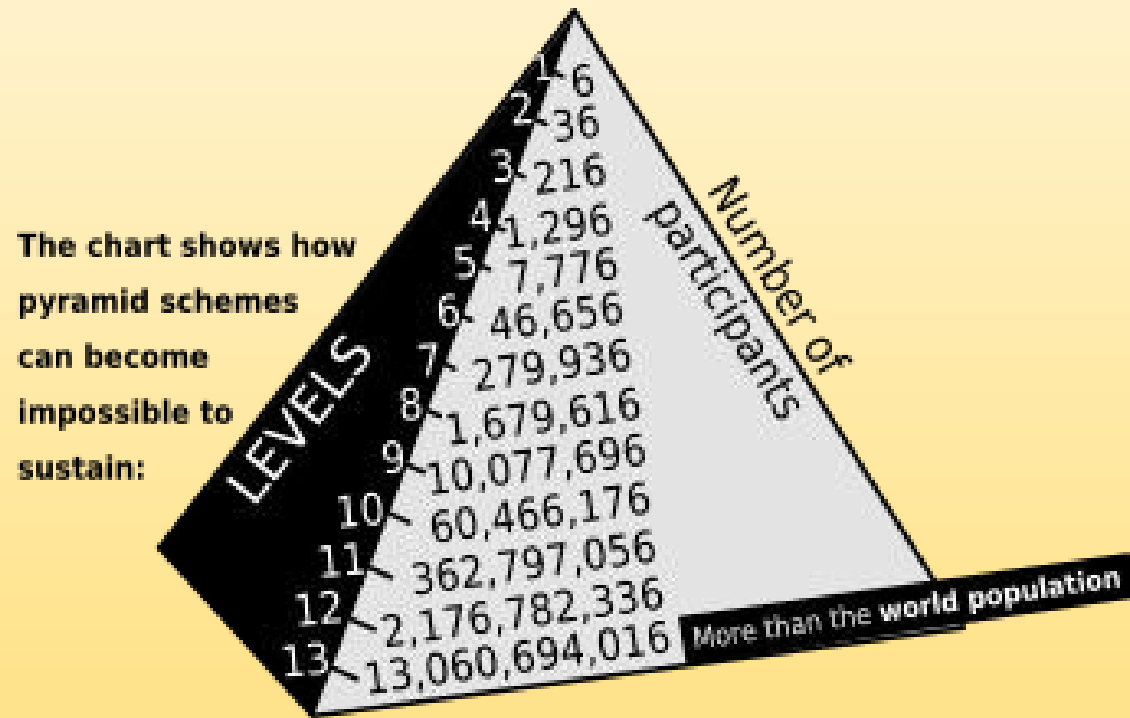
Customer	Trader			
	Wholesaler - 1 pallet	Ho.Re.Ca - 3 box	Specialty Shop < 400m2 - 3 box	End Customer - 1 box
Wholesaler - 1 pallet				
Ho.Re.Ca - 3 box	27.27%			
Specialty Shop < 400m2 - 3 box	27.27%			
End Customer - 1 box	127.27%	78.57%	78.57%	

PROMOTION

Location: Italia
Promotions: Fair, Sales Agent, E-Commerce B2B, E-Commerce B2C
Promotions Description: Forza vendita indiretta, partecipazione eventi fieristici, B2B e B2C

Customer	Minimum Order	Discount	Sales Network			Commission
			Agent	Manager	Director	Sales Network
Wholesaler	1 pallet	56%	3.015%	1.172%	0.000%	4.187%
Ho.Re.Ca	3 box	44%	12.012%	4.671%	0.000%	16.684%
Specialty Shop < 400m2	3 box	44%	12.012%	4.671%	0.000%	16.684%
End Customer	1 box	0%	0.000%	0.000%	0.000%	0.000%

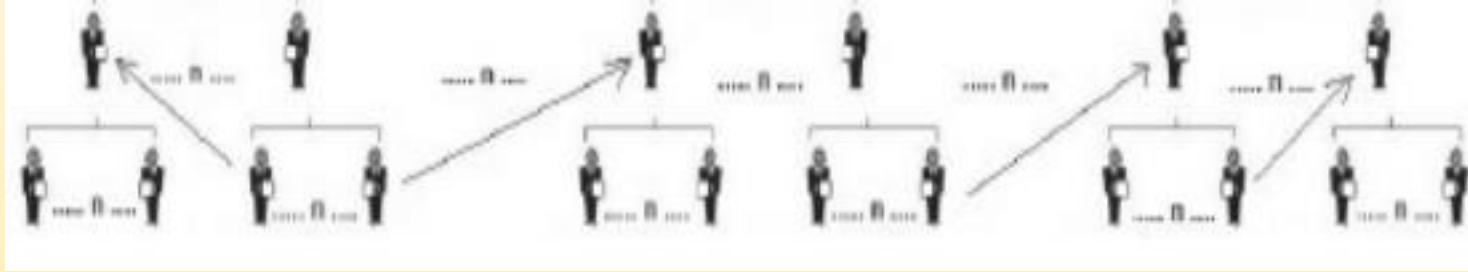
Network Marketing in MPHIM+: *Ponzi scheme*



Law n. 173 of August 17th 2005.
Art 5: *Prohibition of pyramid selling forms and games or chains.*

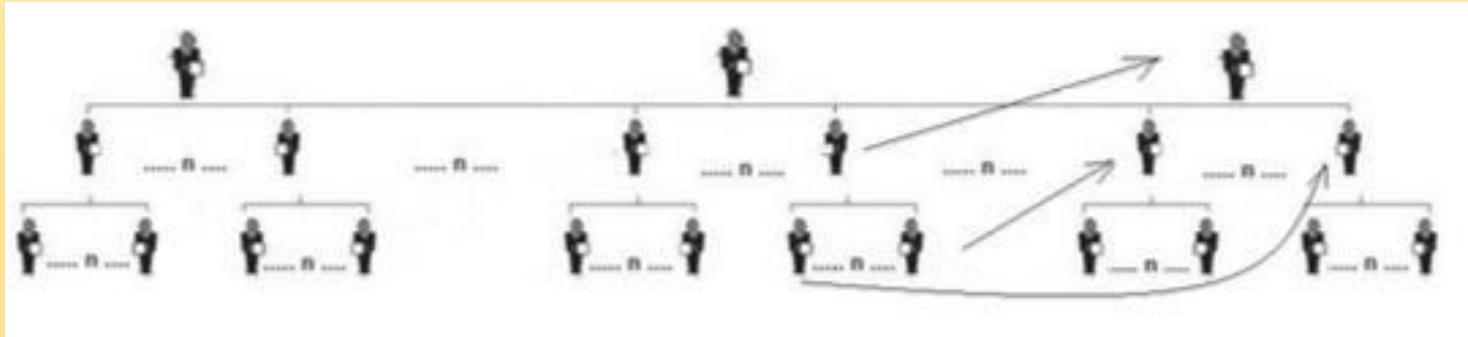
- 1) Given $n = 6$, for $p = 11$ the customers / sellers are more than the inhabitants of the United States: $n^p = 6^{11} =$
362.797.056.
- 2) Given $n = 6$, for $p = 13$ the entire world population has been almost doubled: $n^p = 6^{13} =$
13.060.694.016

Network Marketing in MPHIM+: *3Ds+ Scheme*



2-level Castello scheme (3ds): managers and agents

1. **Director:** is the sales network manager.
2. **Manager:** coordinates the agents
3. **Agents:** promote the sale of the product based on the commercial policy developed by the company.



3-level Castello scheme (3ds): Director, managers and agents

Unlike pyramid schemes such as the Ponzi scheme, the Castello scheme considers a horizontal and not a vertical development

MPHIM+ as Five Model Software

Trade Marketing Model

- › allowing SMEs to develop marketing strategies
- › product placement, segmentation of B2B market, targeting of clients, distribution channels.

Management Model

- › allowing SMEs to be aware about choices to make in order to reach its goals, evaluating pros and cons of those choices..

NM Model

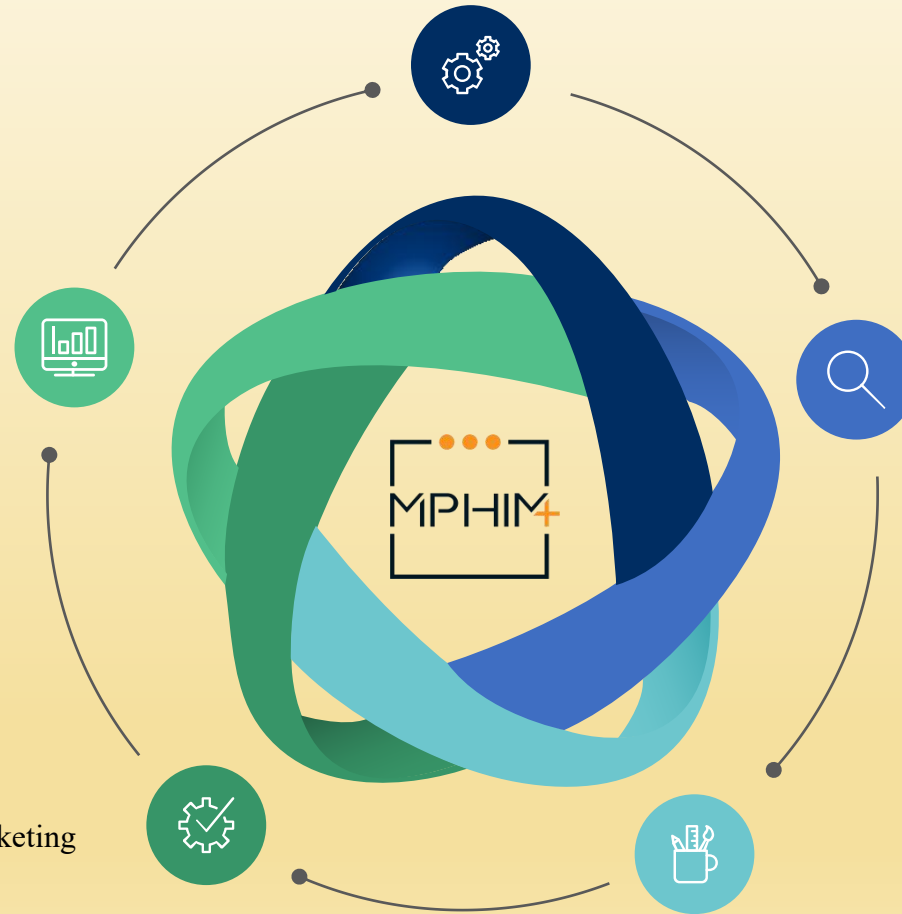
- › allowing firms to develop a sales network in order to increase exponentially sales volume.

Marketing Mix Model

- › allowing SMEs to optimize all elements of marketing mix 4P (product, price, place, promotion).

Business Model

- › allowing SMEs to optimize the way in which the company develops its business.
- › realizing value for customers, stakeholders, employees and how manage and structure its costs.



MPHIM+ as Five Model Software

Product Info

Last Updated: 13-12-2018 06:57:36

Product Name: biscotto S

Product Code: S

Price Calculation

Full Cost

Amount: 1.0500

Mark Up %: 3.90

Mark Up: €0,0410

Target Price: €1,0910

Price List: €3,2729

CPT - Carriage Paid To

BUSINESS MODEL

SMEs' choices:

Source of revenues

Cost structure

How to make profits

Stakeholders

MANAGEMENT MODEL

SMEs' choices:

Coordinate marketing activities

Make strategic decisions

Motivate employees(1) (agents)

Define main goals

CHANGE CUSTOMER TYPES

Customer	Min. Order	Discount 1	Sales Price	Quantity	Total Amount	Network Management Amount & %	Sales Network: Amount & %	Sales Network Roles: Amount & %			Sales Price Margin Amount & %
								Agent	Manager	Director	
Wholesaler +	half pallet: 400	55%	1,4728	40000	58.911,3000	7.069,3560 12.00	4.082,5531 6.93%	4.082,5531 6.930%	0,0000 0.000%	0,0000 0.000%	5.759,3909 9.78%
Minimarket <200m2 +	3 box: 36	41%	1,9310	18000	34.757,6670	7.646,6867 22.00	3.997,1317 11.50%	3.997,1317 11.500%	0,0000 0.000%	0,0000 0.000%	4.213,8486 12.12%
End Customer +	1	12%	2,8801	5000	14.400,5400	0,0000 0.00	0,0000 0.00%	0,0000 0.000%	0,0000 0.000%	0,0000 0.000%	9.150,5400 63.54%

Markup For Trader Sales

	Trader	
Customer	Wholesaler - half pallet: 400	Minimarket <200m2 - 3 box: 36
Wholesaler - half pallet: 400		
Minimarket <200m2 - 3 box: 36	31.11%	
End Customer - 1	95.56%	49.16%

(1) It is important to underline that B.I. model allows firms to define the incentives system to motivate company's external personnel.

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Case Study: Ro.Se srl



Number of employees

14



REVENUES

€2.3 Million



Tot Net Asset

€1.5 Million



Main Issues faced by the firm before MPHIM+ application

- Identifying the maximum amount of fees, they can afford without suffering losses.
- Calculating the Social security Tax paid by company and its impact on profit margin.
- Assessing the compensation for termination of agent's agreement impact on firm's long-term profitability.

12

Months of
mphim+
application




All data shown are
collected at
31/12/2018





Furthermore, firm's selling price was really close to the corporate full cost





Ex Ante Scenario





 SIGN OUT

 PRODUCTS

 AGENTS

 ORDERS

 SETTINGS

 ARCHIVE

Product Info
Last Updated: 10-06-2019 16:40:13
Product Name: Rugolino ammorb.
 4Lt ex-ante
Product Code: Simulazione

Cost
 Full Cost

Amount
 1.0969

Mark Up %
 1.00

Direct Cost
 Direct Cost

Mark Up: €0,0110
 Target Price: €1,1079
 Price List: €3,3236
 Incoterms

CHANGE CUSTOMER TYPES

Customer	Min. Order	Discount 1	Discount 2	Discount 3	Final Discount	Sales Price	Quantity	Total Amount	Commissions			Network Management Amount & %	Sales Network: Amount & %	Sales Network Roles: Gross & Net Amount & %			Sales Price Margin Amount & %			
									Max.	Reduction %	Applied			Agent	Manager	Director				
Group of Minimarket and/or Supermarkets and/or Ipermarket +	5808	65%	0%	0%	65.00%	1,1633	5808	6.756,2141	4.76%	1.66	3.10%	0,0000	209,4426 3.10%	209,4426	0,0000	0,0000	175,9762			
														3.100%	0,0000	0,0000	--			
														2.525%	0,0000	0,0000	--			

During the September of 2017 results obtained, highlighted an EBT margin of **2.60%**, lower compared to the EBT margin of 2016 (**2.90%**).
2.49% at the end of the year.

Ex Post Scenario

PRODUCTS

AGENTS

ORDERS

SETTINGS

ARCHIVE

SIGN OUT

Pricing & Organization System

Product Info
 Last Updated: 10-06-2019 16:41:09
 Product Name: RUGOLINO AMMORB.4LT ORIENTAL AVC
 Product Code: A007

Cost
 Full Cost ▼
 Mark Up %
 3.40

Amount
 1.0969
 Direct Cost
 Direct Cos

Mark Up: €0,0373
 Target Price: €1,1342
 Price List: €3,4026
 CPT - Carriage Paid To ▼

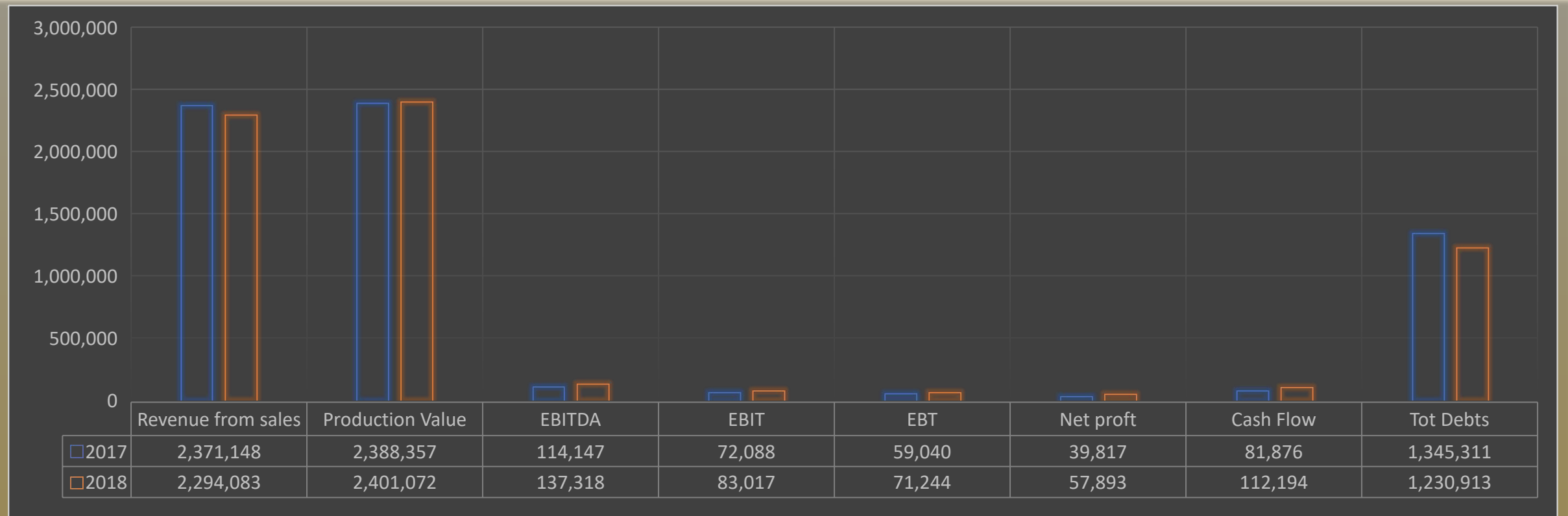
CHANGE CUSTOMER TYPES

Customer	Min. Order	Discount 1	Discount 2	Discount 3	Final Discount	Sales Price	Quantity	Total Amount	Commissions			Network Management Amount & %	Sales Network: Amount & %	Sales Network Roles: Gross & Net Amount & %			Sales Price Margin Amount & %
									Max.	Reduction %	Applied			Agent	Manager	Director	
Group of Minimarket and/or Supermarkets and/or Ipermarket +	5808	65% ▼	0% ▼	0% ▼	65.00%	1,1909	5808	6.916,8053	4.76%	0.33	4.43%	91,9935 1.33	214,4210 3.10%	214,4210	0,0000	0,0000	239,5956
														3.100%	0,0000	0,0000	3.46%
														174,6455	0,0000	0,0000	--
														2.525%	0.0000%	0.0000%	--

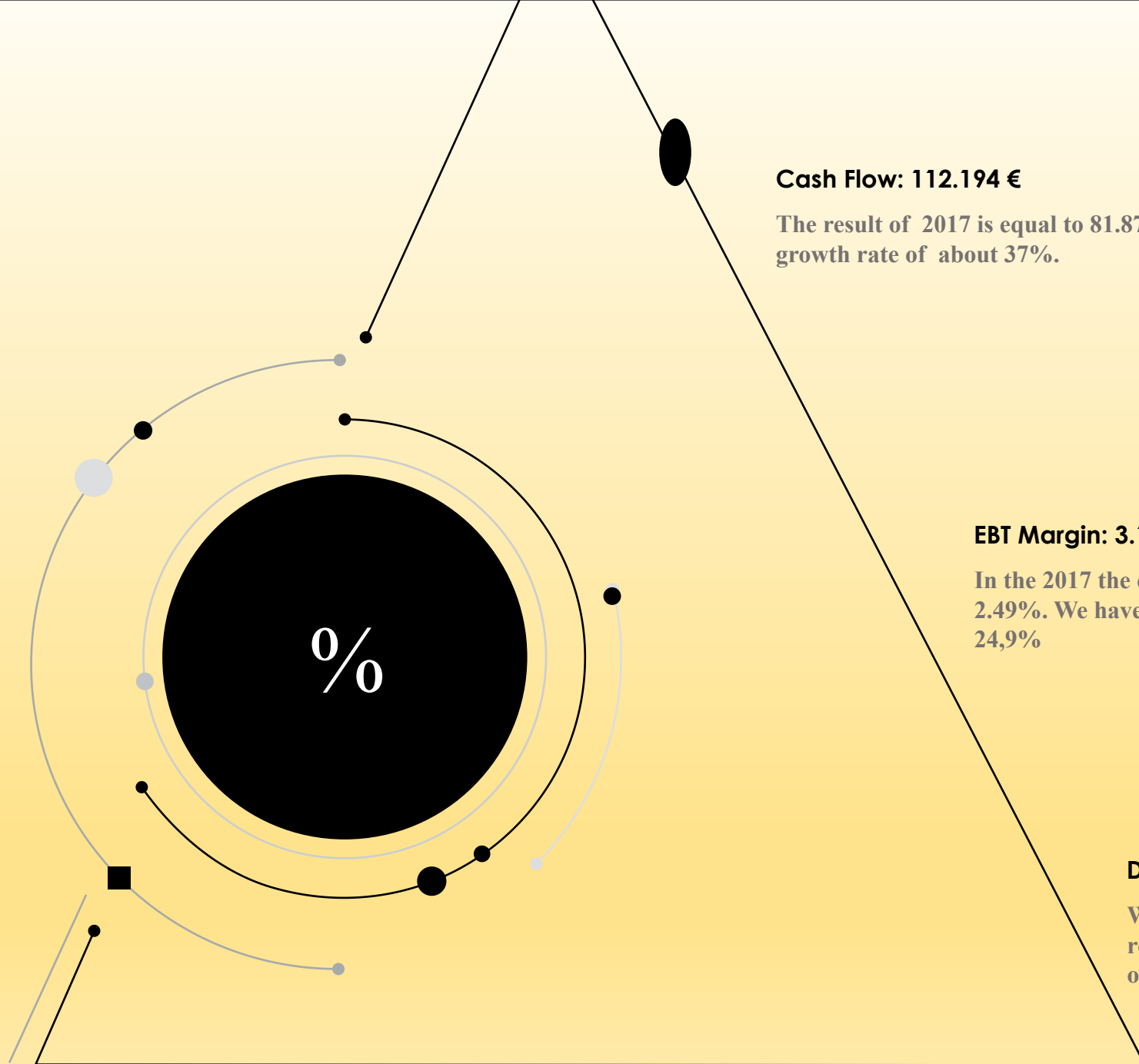
Through MPHIM+ a new incentive system has been built, it led to a new corporate **mark-up pricing**. The new 2018 mark-up is equal to **3.40%**.

In 2018 the new **price policy** came into effect. The price has been increased by €. 1,1633 to 1,1990, which led to **EBT** margins to 3.46%. At the end of the year EBT was equal **3.11%**.

MPHIM+ Impact



It has to be noted that the reduction of revenues from sales it's because of a reduction in purchases recorded by GDO (the greatest Ro.Se client) in the first quarter of 2018.



Cash Flow: 112.194 €

The result of 2017 is equal to 81.876 €. With a growth rate of about 37%.

EBT Margin: 3.11%

In the 2017 the company recorded 2.49%. We have a growth rate of 24,9%

Debt to Equity: 6.22%

We may record a positive decrease shown relative to 2017 (9.94%), with a decrease rate of 37,42%

Qualitative Analysis

Following the use of MPHIM + in your company, did any particular business problems emerge in the areas of marketing, management control and general management?

“The problems that emerged concern the low profitability of the leading products inherent to the impact that the commissions for agents and the related compensation had on our ROS.”

How did the software contribute in addressing these issues?

“It helped us to understand the real economic limits of each individual product, and it allowed us to work in a surgical way on the various budgets of marketing activities, also encouraging proportionally the budgets destined to our sales agents without suffering losses on products.”

What are the software features that have most influenced the improvement of business performance?

“Pricing & Organization System”

Qualitative Analysis

What are the main advantages that you have found after using MPHIM +?

“In our sector the decimals are quite important, but it is difficult to guess at first glance the variations that could lead to a positive or negative change of € 0.0001 in company profits. This year the system contributed to closing the budget in the best possible way with respect to our starting point.”

“The financial statement shows an increase in cash and cash equivalents resulting from the new price policy launched at the beginning of 2018 and which led to the expected results with a consequent improvement in cash flow. The same price policy will be implemented and improved in the future administrative year in order to consolidate and further improve the rotation of the company cash flow.” (Source: **2018 Notes of Financial Statement**)

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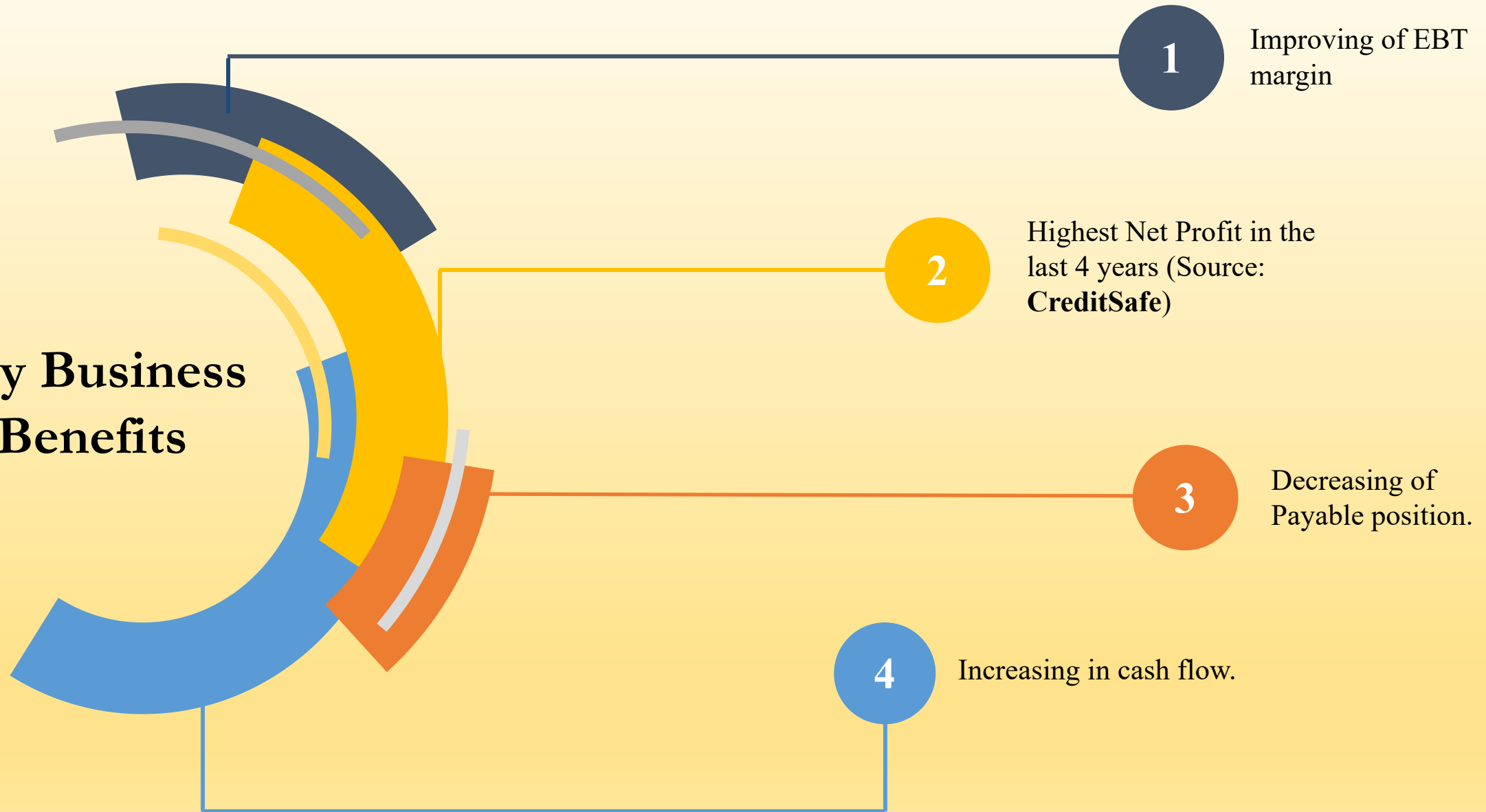


*Case
Study:
Ro.Se srl*



*Conclusion:
Key
Business
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Key Business Benefits



THANK YOU

