PlayHard Inc. (hereinafter "the Company") is one of the top Spanish players in the baby-rattle´s market. It was founded in 1985, and from its first year it has been one of the leaders in this product segment. Despite in the first years the competitive level in this market was really low, in the last years they are suffering the entrance of new competitors from the Asian market that are permanently pushing down prices. This new competence is also fostering the company to do its best in order to keep on subsisting.

From a brief analysis of the Company´s context, it operates at capacity and has three main market segments (i-Single nursery schools, ii-Groups of nursery school franchises and iii-Malls and baby stores -physical and online stores-), that reported the following data for 2017.

€	Single nursery schools	Franchises	Malls and Baby stores	TOTAL
Revenues	4,505,000	5,100,050	3,050,200	12,655,250
Cost of Goods Sold	4,340,000	4,805,009	2,705,000	11,850,009
Gross Margin	165,000	295,041	345,200	805,241
Other Operating Costs				604,875
Operating Income				200,366
Gross margin / Revenue	3.7%	5.8%	11.3%	6.4%
Operating margin / Revenue				1.6%

Despite from its first years the founder of the Company always used gross margin percentage [(Revenue - Cost of goods sold) ÷ Revenue] in order to evaluate the relative profitability of its customer segments, the successor (the founder´s elder son) has proved expertise in activity-based costing methodologies (not in vain he has worked before for 6 years in one of the most relevant players in the European market developing CFO role) and is considering using it at the Company to analyze and allocate the concept "Miscellaneous operating costs", that represents a still significant percentage of the total operating costs. In order to go ahead with this new methodology, he defined 3 activities that may act as a driver for this "Miscellaneous operating costs, together with its respective cost driver:

Activity Area	Cost driver
Order processing	Number of customer purchase orders
Delivery to customer	Number of deliveries
Customer support	Number of calls registered from customers demanding support

The level of each activity in the three market segments and the total cost incurred for each activity in 2017 is as follows:

Activity-based cost data	Activity level			Total cost of activity, 2017
PlayHard Inc. Activity	Single nursery schools	Franchises	Malls and Baby stores	
Orders processed (number)	250	3,000	6,000	250,675
Deliveries made (number)	660	2,500	3,000	138,600
Support calls (number)	2,000	14,000	40,000	215,600
				604,875

Required:
1. Compute the cost driver **rates** for each of the three activity areas.
2. Use the **activity-based costing** information to allocate the 605.000€ of "Miscellaneous operating costs" to each of the market segments. Compute the operating income for each market segment.
3. Assuming that the founder was planning to stop selling to single nursery schools according to his traditional profitability perspective, would you try to change his mind according to the new ABC methodology to be implemented by the successor?
4. What is **customer profitability analysis** and why is it important for management?

Answer:

1. The per-unit cost driver rates are:

	Total cost:	#	€/action
Order processing:	250,675 €	9,250	27.1 €/order
Delivery:	138,600 €	6,160	22.5 €/deliver
Support:	215,600 €	56,000	3.85 €/call

2. The activity-based costing of each distribution market for 2017 is:

€	Single nursery schools	Franchises	Malls and Baby stores
Orders processed (27.1€ x 250;3000;6000)	6,775	81,300	162,600
Deliveries made (22.5€ x660;2500;3000)	14,850	56,250	67,500
Support calls (3.85€ x2000;14000;40000)	7,700	53,900	154,000
TOTAL	**29,325**	**191,450**	**384,100**

The revised operating income statement is:

€	Single nursery schools	Franchises	Malls and Baby stores	TOTAL
Revenues	4,505,000	5,100,050	3,050,200	12,655,250
Cost of Goods Sold	4,340,000	4,805,009	2,705,000	11,850,009
Gross Margin	165,000	295,041	345,200	805,241
Other Operating Costs	29,325	191,450	384,100	604,875
Operating Income	135,675	103,591	(38,900)	200.366
Gross margin / Revenue	3.7%	5.8%	11.3%	6.4%
Operating margin / Revenue	3.0%	2.0%	-1.3%	1.6%

3. From a cost (**quantitative**) perspective, there are two issues:

(a) We need to have in mind that the original analysis was incomplete and therefore less accurate to make decisions.

Conclusions on the ratios obtained in the previous questions: From the new approach the "malls and baby stores" comes from the best to the worst position in terms of profitability (on the contrary, "single nursery schools" becomes the most profitable segment).

(b) We also need to understand better what type of costs are included in other operating costs: which of the "other operating costs" are avoidable and which are non-avoidable.

Furthermore, there are **qualitative** factors to take in consideration (e.g. impact near the customers, brand implications, etc.).

4. Customer profitability analysis (CPA) is defined as:

   "the evaluation, analysis and isolation of all the significant costs associated with servicing a specific customer/group of customers from the point an order is received through manufacture to ultimate delivery and the revenues associated with doing business with those specific customers/customer groups."

In customer profitability analysis, customers are grouped according to the needs of each group (e.g. based on level of income or revenue, age, order size etc.), then variations in the revenue and costs of servicing for the customer groups of interest are identified. The revenue and costs can then be attributed to customer groups, with profit emerging as the difference. Using this information, the organization can tailor its products to the most profitable customer. For instance, by analyzing their customers, a mobile phone company can target their products to a particular segment of the market that is proving to be the most profitable. The middle aged and elderly segment may for example prefer the most basic mobile phone and thus may tend to buy the most basic phone package. The younger segment may however be prepared to spend more money on a phone that has multiple functions. Such information can be useful in targeting a product to a particular market to ensure that profits will be maximized.

Customer profitability analysis (CPA) will be able to identify the strong (or profitable) and weak (or non-profitable) customers. This analysis is important for a company, especially for marketing managers. Marketing managers will use the result of this analysis to determine the marketing strategy and decisions. Organizations can take corrective actions that could improve their order size and permit them to continue to deal with them. An organization can also benefit from a customer profile analysis by customers' age group. For example, in case of · mobile phone, an organization should know who are the users of their mobiles or which age group (young, middle or old-aged) contributes significantly to their sales revenues. With this sort of analysis, an organization can initiate a strategy to increase their market share.