The baobab processing sector in Malawi: Strategy, business models and profitability.

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1. Introduction/ Background

- The baobab (*Adansonia digitata L.)* is an important indigenous fruit tree in Africa (Viljoen, et al., 2011) . Since the 2000s, the country is characterized by an intensive commercialization of baobab by numerous formal and informal food processing enterprises.
- Supply of affordable and high-quality processed baobab products is currently faced with a number of challenges in Sub-Saharan Africa.
- However, research results with regard to strategy, business models and performance of these enterprises are scant.
- The study was aimed at examining the relationship between firm performance and strategy and business model used by the firm.

Fig. 1: Some Baobab products produced in Malawi

2. Methodology

- Cross-sectional data was collected from a sample comprising of 8 formal and 129 informal baobab processing enterprises.
- Independent Variables: Business strategy (BS); Business model (BM). Firms were classified into strategy types based on Miles & Snow strategic typology (*Conant, et al., 1990)*. Study adapted a strategy measurement scale from *Jusoh & Parnell (2008).*
- Business model archetypes were identified via cluster analysis using items proposed in the Business Model Explicitness (BME) framework by Morris et al. (2005).
- Dependent variable: Gross Margin (GM)=(Gross Profit/ Sales Revenue)*100
- ANOVA used to test effect of firm's choices on business model and strategy on firm's profitability.

3. Results

Table 1 : Strategy Type * Business model type Crosstabulation

		Business model type		
		1	2	Total
Strategy Type	Reactor	37a	75a	112
	Defender	0a	1a	1
	Analyzer	5a	16a	21
	Prospector	2a	1a	3
Total		44	93	137

Each subscript letter denotes a subset of Business model type categories whose column proportions do not differ significantly from each other at the .05 level.

Table 2: Effect of business model and strategy on firm profitability (Gross margin)

	Choices	N	Mean	Std. Dev	Std. Error	F	Contrasts
Strategy dimension							
Product positioning	Low cost	26	51.84	14.31	2.81		
	Superior product quality	83	62.01	16.44	1.8		
	Meeting consumer demands	11	65.74	19.01	5.73		
	Uneven and transient	17	57.54	15.09	3.66		
	Total	**137**	**59.83**	**16.51**	**1.41**	**1.30**	
Competitive focus	Improving our efficiencies	26	53.3	9.67	1.9		
	High innovation	8	62.76	13.09	4.63		R<P,A
	Learning about our customers	69	64.68	17.38	2.09		D<P,A
	Sporadic	34	54.29	16.66	2.86		
	Total	**137**	**59.83**	**16.51**	**1.41**	**5.13****	
Success posture	Actively initiate change	6	59.78	12.43	5.07		
	Calculated followers of change	21	53.61	12.61	2.75		
	Opportunistic	110	61.02	17.17	1.64		
	Total	**137**	**59.83**	**16.51**	**1.41**	**1.79**	
Business model dimension							
Distribution	Direct channels	99	58.55	15.75	1.58		
	Indirect channels	38	63.16	18.14	2.94		
	Total	**137**	**59.83**	**16.51**	**1.41**	**2.16**	
Product-type	Semi-processed products	44	66.02	17.99	2.71		
	Finished products	93	56.90	14.99	1.55		
	Total	**137**	**59.83**	**16.510**	**1.41**	**9.70****	
Firm type	Business to business	42	64.50	17.95	2.76		
	Business to consumer	95	57.76	15.48	1.58		
	Total	**137**	**59.83**	**16.51**	**1.41**	**4.99****	
Market scope	Local markets	103	58.14	16.25	1.60		
	Regional markets	28	65.58	16.94	3.20		
	National markets	6	61.89	15.06	6.15		
	Total	**137**	**59.83**	**16.51**	**1.41**	**2.33**	
Revenue model	Fixed pricing model	91	57.77	15.38	1.61		
	Flexible pricing model	46	63.91	18.02	2.66		
	Total	**137**	**59.83**	**16.51**	**1.41**	**4.33***	

[1,2,3,4] Characteristic of defender; prospectors, Analyzers and Reactor strategy types respectively

4. Discussion

- The industry is dominated by firms that can be classified as reactors. This type of strategy is considered inferior to the other strategy type (Conant, et., 1990).
- A firm's strategic choice on competitive focus has a significant effect on profitability. Firms with strategic choice associated with reactor and defender strategy types have significantly lower gross margins compared with those using prospector or analyser strategy type. This agrees with Jusoh &Parnell (2008) who report that defender strategies are not effective in industries that are in growth stage.
- A firm's choices on value proposition, revenue model, position in the value chain have an effect on profitability

5. Conclusion

- Some firms' choices on business model and business strategy have a significant effect on profitability of the firm.
- There is need to build capacity of baobab processors on choice of business strategy and designing of business models so that they can make choices that optimizes profitability. This will result in improvement of performance of the baobab processing sector in Malawi.

References

Jusoh, R., & Parnell, J. A. (2008). Competitive strategy and performance measurement in the Malaysian context -An exploratory study. *Management Decision*, 46(1): 5-31.

Morris, M., Schindehutte, M., & Allen, J. (2005). The entrepreneur's business model: toward a unified perspective. *Journal of Business Research* 58: 726-735.

Viljoen, A. M., Kamatou, G. P. & Vermaak, I., 2011. An updated review of *Adansonia digitata*: A commercially important African tree. *South African Journal of Botany*, 77: 908-919.

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