## CHAPTER 2

## LITERATURE REVIEW

Yustisia (2009) conducted research about making chocolate mold, case study on CV Anugerah Mulia. This research objective was to develop Chocolate Monggo design, CV Anugerah Mulia's chocolate brand, in order to make it more attractive and have the uniqueness of Java. The design was developed based on market research which was done toward Chocolate Monggo's customers. The CAD/CAM process was done using ArtCAM Pro 9.

Hananti (2009) conducted research about making several chocolate souvenirs using ArtCAM Pro9 technology. This research objective was to obtain several chocolate souvenir samples using ArtCAM including their packaging, production cost and market experiment. This research was used PDPC, Arrow Diagram and Fishbone Diagram as its method.

This thesis is about making the biggest rapid prototype 3D Borobudur stuppa chocolate mold, which in accordance with CV Anugerah Mulia requirements, using the existing CAD/CAM solution and machines in ADTC. The chocolate mold design is developed based on 2D drawing from CV Anugerah Mulia. The CAD/CAE phase is done using PowerShape 8.2.14, the CAM phase is done using PowerMill 8.0.09 and the machining process is done using Roland MDX-40. The master mold is made of ebalta and the chocolate mold is made of polyethylene (PE). Rapid Prototyping (RP) method is used in this thesis.

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Table	2.1	Comparison	of	Current	Research	and	Previous	Research
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Description	Researcher							
	Yustisia (2009)	Hananti(2009)	Current					
Case study	Yes	No	Yes					
Research object	Chocolate Monggo	Chocolate design prototype,	Rapid Prototyping of					
	souvenir's prototype	packaging, production cost	Borobudur stuppa chocolate					
	with Java identity	and market experiment	mold					
Research Objective	Obtain chocolate	Obtain chocolate souvenir	Obtain the biggest rapid					
	appearance of	prototypes using ArtCAM	prototyped Borobudur					
	Chocolate Monggo	including their packaging,	stuppa master mold,					
	based on customer	production cost and market	chocolate mold and RP cost					
	choice	experiment.						
Tools/Method	Survey Method	PDPC, Arrow Diagram,	Rapid Prototyping Method					
	(customer polling)	Fishbone Diagram						
Research Output	Prototype result of	Chocolate design	The biggest rapid					
	Chocolate Monggo as	prototypes, packaging,	prototyped Borobudur					
	Java souvenir	production cost and market	stuppa master mold,					
		experiment	chocolate mold and RP cost					