



# **INDUSTRIE PININFARINA: THE NEW CUSTOMER DECISION**

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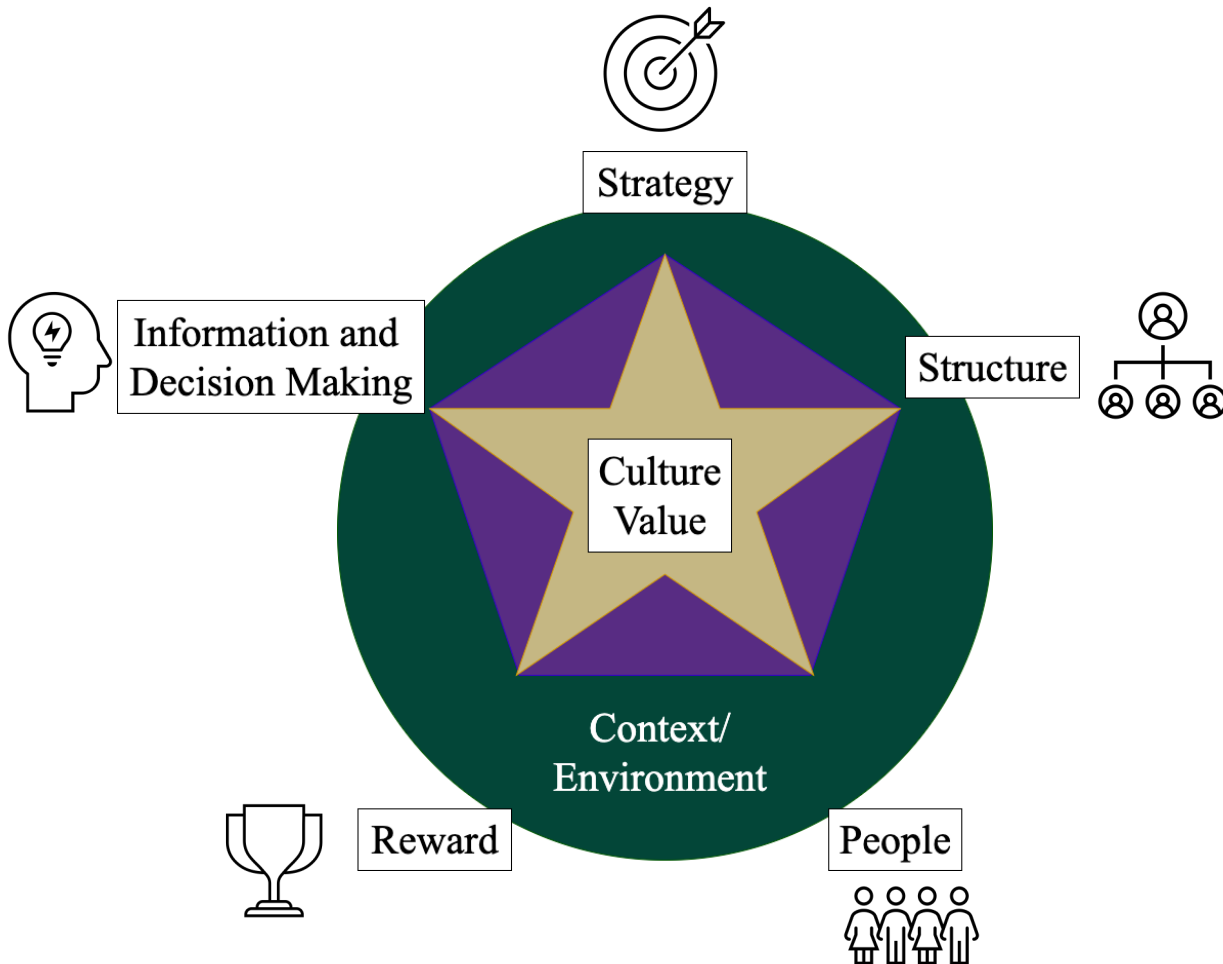


# Overview

Moving Forward with Pininfarina



# Star Model Analysis



## ✓ Strategy:

- Differentiation strategy on high-quality design services and manufacturing for niche small-scale cars
- Expand partnerships with other big name brand car companies, like Porsche, Mercedes, BMW, to achieve high utilization of existing facilities on at least one shift.
- Hire more high-skilled technicians to maintain volume flexibility and minimize capital costs.

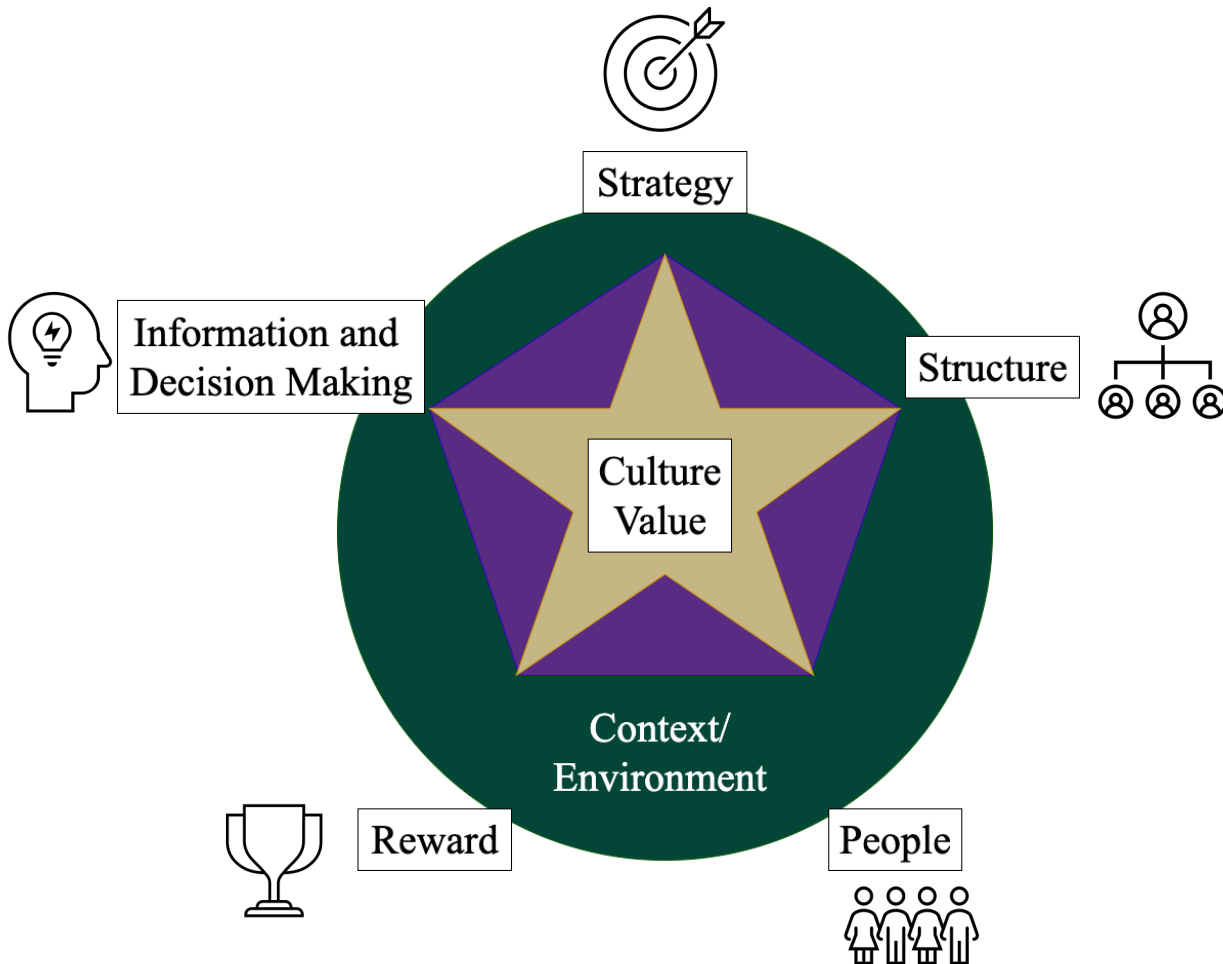
## ✗ People:

- Using a work-team system to track morale and suggestions
- Enhance team-building via interpersonal skills training
- Negotiation with labor union during financial depression
- Training program for shop-floor workers

## ✗ Structure:

- Multi-divisional and highly specialized
- Split into design and manufacturing divisions
- Not currently optimized for mass-volume manufacturing

# Star Model Analysis



## ❌ Rewards:

- European work culture means that overtime pay
- Extrinsic rewards based on employee increased output is not likely to work
- Mitsubishi Japanese workers unpaid overtime, process-oriented and result-oriented
- European workers only result-oriented

## ❌ Information and Decision Making:

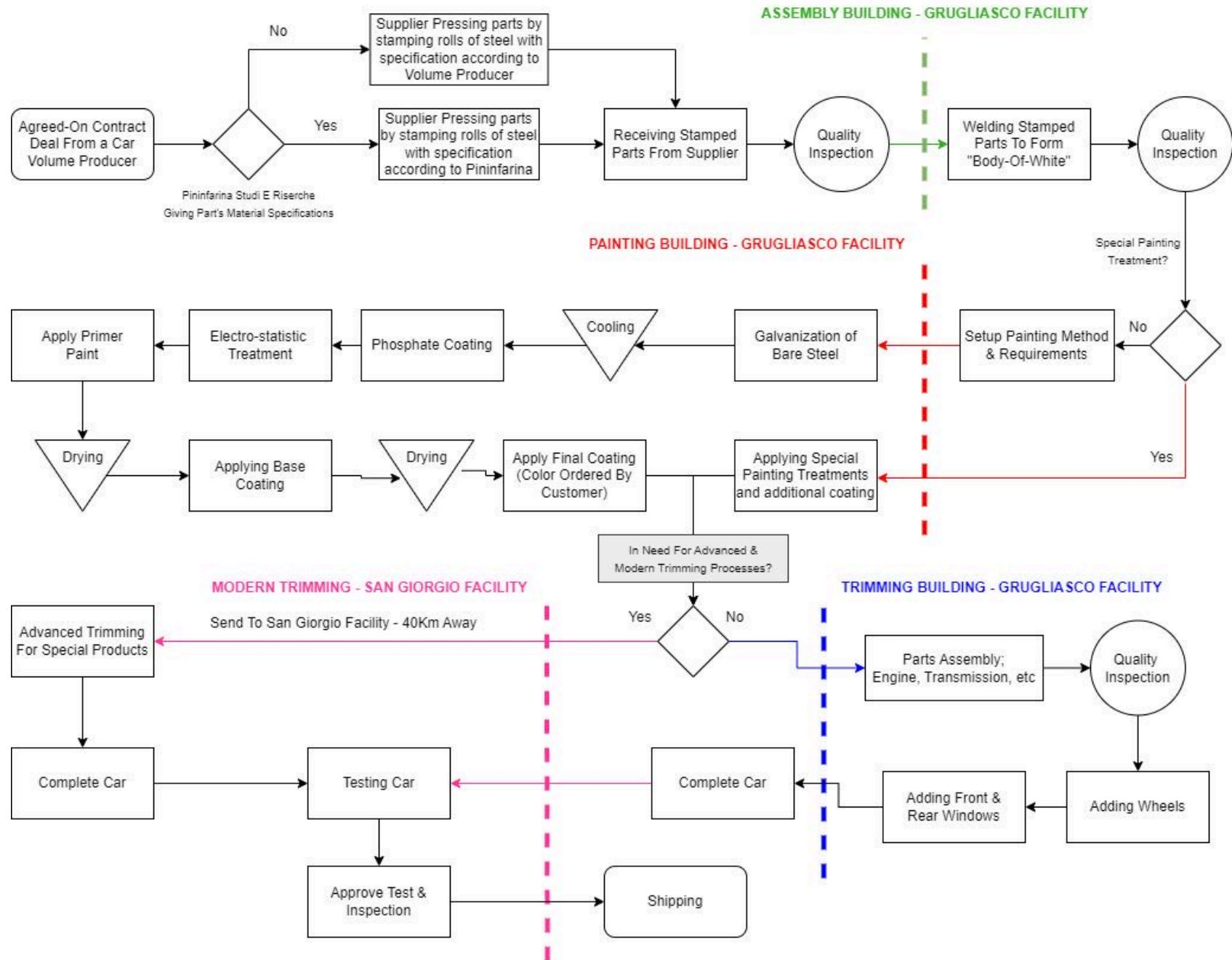
- No emphasis on teamwork and collaboration, individual no information spread
- Lower level of automation inside the operation mechanism
- Production process all depends on the volumes instead of dynamic demands

# Overview Of Current Operations

		Assuming Mitsubishi Same	Up To 1996	
	Manufacturing Charastiristics	JAPAN	PININFARINA	DIFFERENCE RATIO
	Productivity(hours/vehicle)	16.8	42.5	-40%
	Inventories (days)	0.2	1.75	-11%
	% of workforce in teams	69.30%	95%	26%
	Job rotation (0 = none, 4 = frequent)	3	2.7	-10%
	Suggestions/employee	61.6	0.1	
	Training of new production workers (hrs)	380.3	N/A	
	Welding (Automation% of steps)	86.20%	19.50%	-67%
	Painting (Automation% of direct steps)	54.60%	40%	-15%
	Assembly (Automation% of direct steps)	1.70%	5%	3%

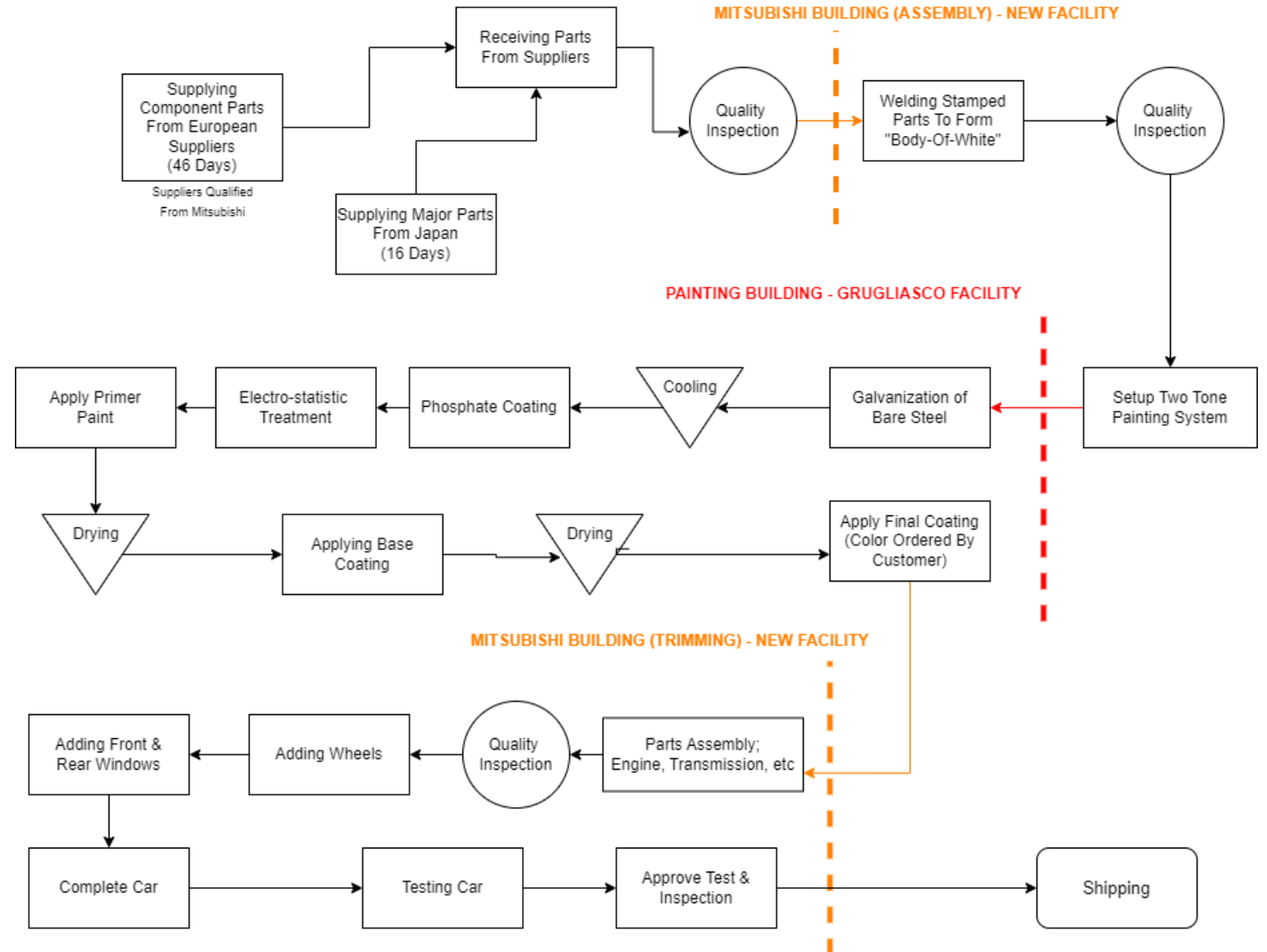
- Increase Throughput Rate to match productivity.
- Opportunity for development in training employees and applying new working methodologies.
- Automating only the important processes. Manual work can't be all eliminated

# CURRENT PROCESS FLOW DIAGRAM

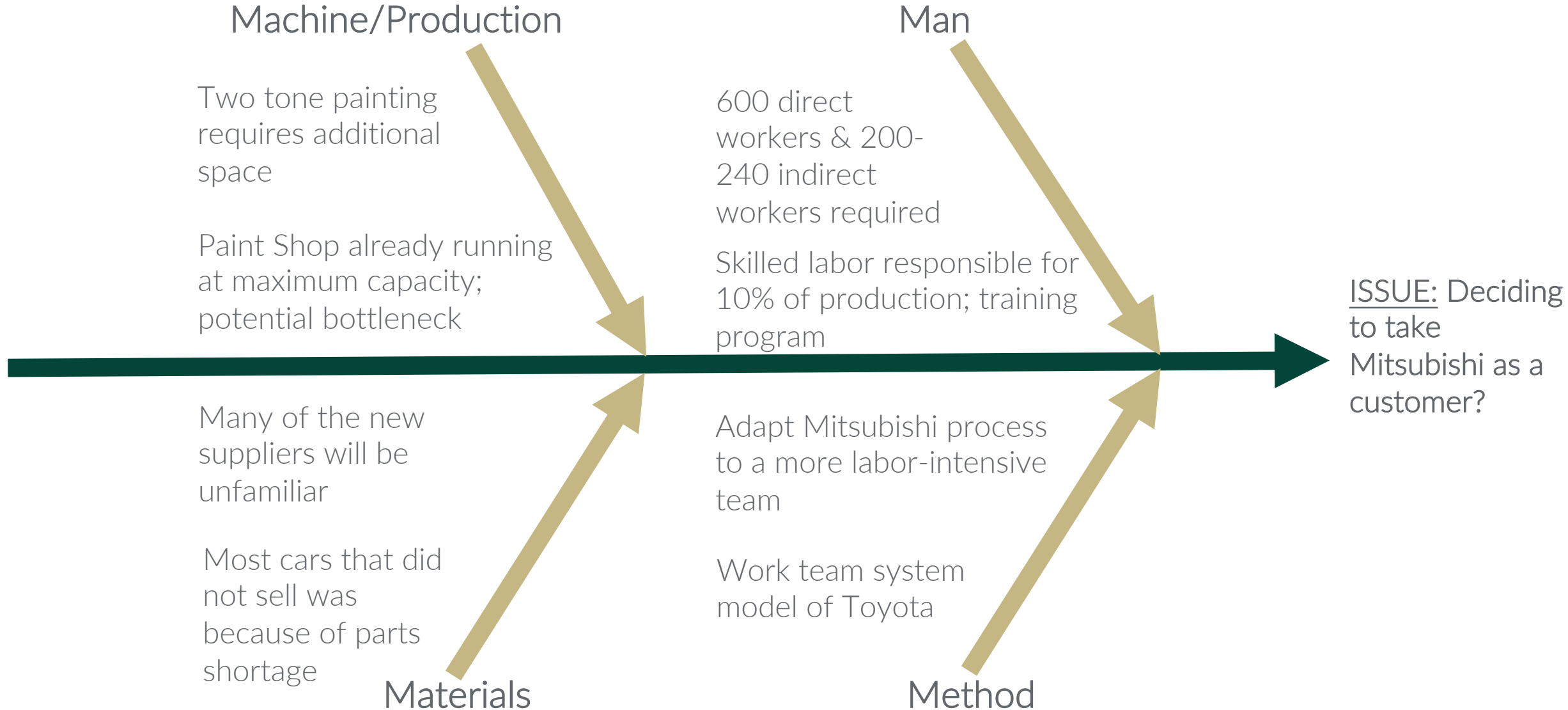


# MITSUBISHI MODEL PROCESS FLOW DIAGRAM

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# FISHBONE DIAGRAM





# COMPETITIVE OPERATIONAL PRIORITIES & VARIABILITIES

## CURRENT COPs:

- Premium Design
- Greater Flexibility
- Close links & joint problem solving between manufacturing and design



## NEW COPs:

- Quality & Reliability
- Greater Volume
- Customer Satisfaction

## VARIABILITIES:

### Internal Predictable:

- Worker adjustment after adapting process to Toyota system

### External Predictable:

- Increasing market share amid stiff competition

### External Predictable:

- Absenteeism
- Production Delays

### External unpredictable:

- Supplier issues
- Changing customer expectations

# Prominent Risks and Issues to Consider

- Japanese cars shorter average model life, 3 years
- Mitsubishi Pajero is already in prototype stage
- IPF bears the risk of investment, can it be recouped
- Mitsubishi didn't tour IPF's plants
- IPF Paint shop is at capacity
- Ameliorate IPF's defect level
- IPF hasn't dealt with orders of this distance before

# Financial Size-Up

## Efficiency Ratios

Efficiency Ratios '94-'95		
	1994	1995
Days of Inventory	48	59
Days of Receivables	90	144
Days of Payables	204	227

## Liquidity Ratios

Liquidity Ratios '94-'95		
	1994	1995
Current Ratio	1.32	1.36
Quick Ratio	1.09	1.10

## Leverage Ratios

Leverage Ratios '94-'95		
	1994	1995
Debt to Total Assets	0.64	0.63
Debt to Equity	1.78	1.70
Sales/Assets	0.95	0.86
Cash/Total Debt	0.22	0.12

## Profitability Ratios

Profitability Ratios '94-'95		
	1994	1995
Gross Profit Margin	2.56%	3.91%
Return on Equity	0.90%	2.68%
Return on Assets	0.33%	0.99%

Based on Pininfarina's financial ratios and ownership situation, we recommend raising **capital using a combination of debt and equity.**

# Decision

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We suggest that IPF signs the contract  
with Mitsubishi

**1**

**OPERATIONS**

Adopting a fully lean model of production to help with increased volume



**2**

**FINANCE**

A mix of debt and equity financing to ensure lots of leverage but still maintain control



**3**

**LEADERSHIP**

Incorporate growth into differentiation strategy. Creates alignment with operations overhaul and added capacity via additional workforce hiring.



All of these decisions contribute to the overall success of the Mitsubishi contract. They all must act in a succinct manner to ensure it is a successful venture for IPF.

## Short Term Benefits From Mitsubishi Collaboration

- 5-year shelter from volume uncertainty
- 5-year shelter from volume producers hanging their bargaining power IPF

## Long Term Benefits From Mitsubishi Collaboration

- Can make greater capital investments
- Acclimate to pending Japanese entrance and competition in Europe
- Increase value of IPF

# Organizational Implications

## Strategic Objective

- Incorporate growth into differentiation strategy
- Change operational strategy to adopt Japanese production system

## Structural Change

- Matrix Structure will foster collaboration and learning
- Experienced employees appointed to quality control and technical managers to train and develop hires

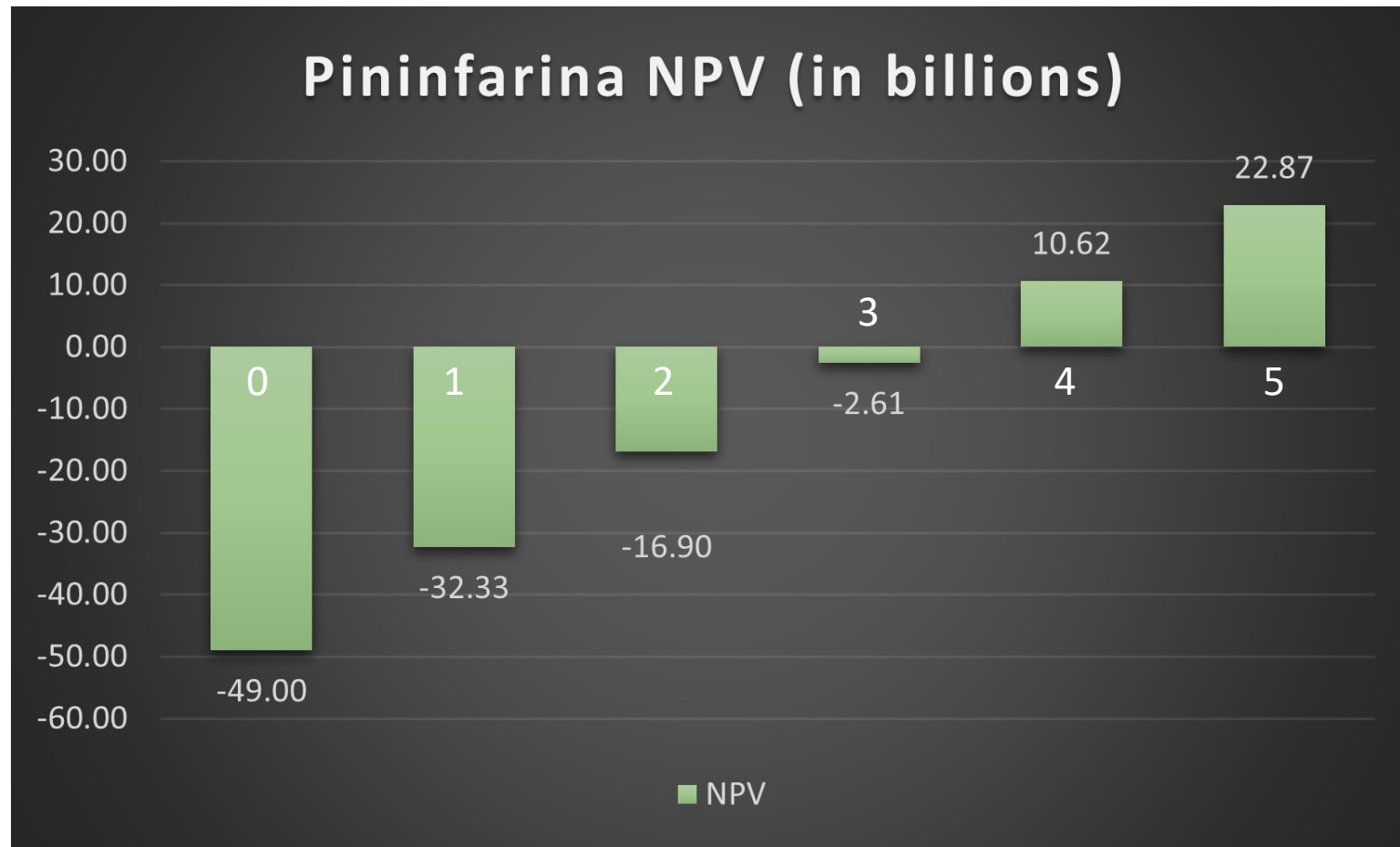
## People & Rewards

- Hire 600 direct and 240 indirect
- European work culture consideration

## IS+DS

- 3-month timeframe to implement action plan
- Capital Investments: facilities, equipment, etc.

# Financial Implications



IRR	15%
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**THANK YOU**



# Star Model Matrix – Supporting Document

	1. Strategy	2. Structure	3. People System	4. Rewards	5. IS + DM	Changes in Context?
Current State:	Pinindarina is a niche car manufacturer that pursues differentiation by specializing in the high-quality design and production of custom and small-series automobiles.	Multi-divisional structure into design and manufacturing divisions, good synergy between the two. Hierarchical shape that implemented team structure, but productivity dropped.	Selective hiring process for highly skilled workers that are scarce in the job market. Internally, a work team system was introduced alongside a technical and interpersonal training program. A new hire training program was also added.	It can be assumed that salaries are competitive given the higher skill and specialization of niche car manufacturers.	Assumed hierarchical structure as Manager of Operations is the sole decision maker, does not need to confirm or have decision approved.	
1. Strategy	Pinindarina should add growth to their objectives to be in line with the organizational expansion. Brand will transition from niche to volume.					<b>The Market:</b> High demand because of brand recognition and design services.
2. Structure	Structure will need to adjust to strategic shift by fully embracing Japanese lean system of production.	New workflow and layout can easily be implemented. Create cross-functional structure to utilize experienced workers and promoted them to team leads and train new employees.				<b>Talent Market:</b> Workers are highly specialized and more skilled than high volume manufacturer workers.
3. People	Additional workforce hiring will be aligned with strategy of growth and volume, and not just quality in low volume. <b>Change definition of quality: functionality vs. craftsmanship.</b>	Productivity levels will increase within teams, and employees will feel more integrated into their teams.	Additional 600 direct labour and 200-240 indirect labour required. New hires no longer need to be as skilled as current workforce. Utilize new training system and existing employees to be mentors for technique and culture development.			<b>Talent Market:</b> Niche car workers are harder to find when compared to the talent market for high volume producers.
4. Rewards	Employees will be intrinsically motivated by accomplishments achieved through teamwork and collaboration.	Lean system will motivate employees to share input on improvements and be recognized for it.	Salaries for new workforce can be lower than the ones hired for the specialized designs and manufacturing.	Align incentives with European work culture. Offer intrinsic rewards that motivate workforce to adopt Japanese methods.		<b>Labour Market:</b> Competitive salaries can be assumed given the quality and personnel that are employed.
5. IS + DM	Vertical and horizontal decisions remain the same.	Issues are identified when they occur, not after which speeds up the sharing of pertinent information across the production line.	No effect.	No effect.	Create schedule to implement organizational changes in the 3 month window. Make hiring decisions time-sensitive and allow teams more autonomy. Also, make decisions on what other operational changes need to happen. New factory? Facility?	<b>Disruptive Technology:</b> Not too much automation in niche.
6. Impact on Cultural Values	For this project, growth initiatives revise the definition of quality. Thus, culture of excellence is retained because quality in Mitsubishi's case is more so about functionality rather than customer specific needs (defect rate variability).	Hierarchical structure, no indication that there is pushback on the structure.	Promoting existing to managers, leads and training is better for flow of knowledge and culture spreading.	No effect.	Upper management decision making will make more sense to employees since it will be aligned with revised strategic objectives	<b>Social Alignment:</b> Good for economy if 800-850 new jobs are created for this contract.

Pininfarina NPV				
Period		Cash Flows	PV of Future Cash Flows	NPV
0		€ (49.00)	€ (49.00)	€ (49.00)
1		€ 18.00	€ 16.67	€ (32.33)
2		€ 18.00	€ 15.43	€ (16.90)
3		€ 18.00	€ 14.29	€ (2.61)
4		€ 18.00	€ 13.23	€ 10.62
5		€ 18.00	€ 12.25	€ 22.87
Sum			€ 22.87	

\*\*Assumed 2% return\*\*

Case Facts						
Income	€ 4,500,000,000,000					
Total Investments	€ (300,000,000,000)					
Captial Equipment	€ (37,500,000,000)	assumed 12.5% of TI				
Facilities	€ (4,000,000,000)					
Direct Workers	€ (166,740,000)	600 new employees, 27.79/hr from exhibit 8, 40 hr weeks, 50 weeks a year, 5 years				
Indirect Workers	€ (61,138,000)	same as before but 220 (avg between 200 and 240) But case said we could get away with half of this				
Total Costs	€ (341,727,878,000)					
Total	€ 4,158,272,122,000					