Title Page

MBA 541 Executive Summary - Rolla Mobile Case

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Executive Summary

This comprehensive document delves into the intricate decision-making process behind selecting a processor supplier for Rolla Mobile. A thorough analysis, encompassing Supplier Financial Analysis, Porter's Five Forces Analysis, and Supplier Segmentation Analysis, guides the decision towards strategic sourcing diversification. The primary emphasis is on Samsung, meticulously balancing with a nuanced secondary consideration for Huawei.

Factors Affecting the Decision

Supplier Financial Analysis

Firstly, the following ratios are determined for all four potential suppliers and further interpretations were made using the industry standard average data obtained from the ***Stockanalysis.net*** website and ***textbook (Exhibit 7.4)***. (Calculation sheet attached with the submission)

- *Liquidity Ratios (e.g., Current Ratio, Quick Ratio)*
- *Profitability Ratios (e.g., Contribution Margin, Operating Margin, Net Profit Margin)*
- *Solvency Ratios (e.g., Leverage, Debt to Assets Ratio, Debt to Equity Ratio, EBIT Coverage Ratio)*
- *Efficiency Ratios (e.g., Assets & Inventory Turnover, Accounts Receivable & Payable Days)*

Interpretations

With respect to the interpretations made, the following red flags and concerns were identified in the financials of potential suppliers.

1. ***Asset Turnover – Qualcomm*** has a significantly lower asset turnover than the industry average, which could be due to inefficient asset use in the firm, which could have a very small influence on supply production.
2. ***Inventory Turnover –*** There are no problems or red flags about this ratio in any firm. Everything falls within the industry norm.
3. ***Receivable Days – Samsung*** has a significantly lower value, which could be due to stringent lending regulations. When better negotiated, it may not have a significant impact on supply. However, ***Qualcomm*** has a much higher value ***(i.e., is a red flag)***, which will affect the company's cashflow, which will have a significant influence on supply.
4. ***Payable Days –*** Here, ***Intel*** has a much greater value (***i.e., is a red flag***), which could be due to the company's irregular cashflow, which will have a large impact on supply.
5. ***Leverage -*** There are no problems or red flags about this ratio in any firm. Everything falls within the industry norm.
6. ***Return on Equity – Samsung and Qualcomm*** have significantly poor returns, which could be due to insufficient income relative to the equity invested, which could only have a negligible impact on supply.
7. ***Long-term Debt to Equity -*** There are no problems or red flags about this ratio in any firm. Everything falls within the industry norm.
8. ***Long-term Debt to Assets – Huawei*** has a considerably greater value, which could be due to the higher debt amount in contrast to the asset value resulting in difficulty paying lenders, which could have a significant influence on cashflow.
9. ***Current Ratio & Quick Ratio -*** There are no problems or red flags about this ratio in any firm. Everything falls within the industry norm.
10. ***EBIT Coverage - Intel*** has a considerably higher value, which could be due to higher interest expenses resulting in difficulty paying lenders, which will have a handful impact on the firm's cashflow.
11. ***Contribution, Operating & Profit Margin – Samsung and Qualcomm*** have significantly lower margin values, which could be due to the quantity of sales performance in the company, which will have a very small impact on supply.

Porter's Five Forces Analysis

Interpretations

The interpretations of each force influencing the procurement strategy with regard to the analysis carried out using the Porter's Five Forces Analysis Tool are listed below,

1. ***Supplier power -*** In the mobile phone chip sector, supplier power is moderate. While raw materials and equipment vendors exist, chip designers and manufacturers have relatively moderate leverage largely owing to the fewer substitutes available in the market. Suppliers can, however, wield power, particularly during times of scarcity.
2. ***Buyer power -*** Buyer power is moderate in the mobile phone semiconductor market, particularly for the product requirement of Rolla Mobile. Furthermore, the desire for high-quality, custom-designed semiconductors may have an effect on suppliers' R&D efforts which may in turn increase the power of the buyer substantially.
3. ***Barriers to new suppliers -*** The barriers to entry for new suppliers into the mobile phone chip market are substantial. Existing players have made substantial expenditures in R&D, production facilities, and intellectual property. The intricacy of chip design and fabrication, combined with existing partnerships with device makers, provide severe obstacles to entry.
4. ***Threat of Substitutes -*** In the mobile phone chip sector, the threat of alternatives is relatively moderate. While chip providers are available, the differentiation and customization of mobile phone chips for specific devices and applications limits the availability of direct substitutes. Manufacturers of mobile devices demand specific chips that are tailored to their products.
5. ***Supply market rivalry -*** With several manufacturers offering a wide range of chip products, the sector is intensely competitive. This diversity among rivals guarantees that mobile device manufacturers have a wide range of options, increasing competitive strife.

Recommendations to Rolla Mobile

- Given the low threat of new entrants and high barriers to exit in the mobile manufacturing industry, establish long-term contracts with the potential supplier. This provides stability and favorable pricing terms.
- Consider diversifying your supply base to address the suppliers' modest bargaining strength and lessen dependency. Engage several chip producers to maintain a consistent supply chain and prevent relying too heavily on one.
- Keep up with changes and market trends in the chip manufacturing sector.
- To increase supply chain resilience, plan for supply chain interruptions and, when practical, diversify your sourcing regions.
  Given the intense competitive rivalry in the industry, maintain flexibility in the supply chain. This enables quicker responses to changes in market demand and emerging technologies.

Category & Supplier Segmentation Analysis

Interpretations

The interpretations of each factor influencing the procurement strategy with regard to the analysis carried out using the supplier segmentation tool are listed below,

1. ***Category segmentation –*** The category of semiconductor is strategically positioned.
2. ***Supplier segmentation & risk analysis –***
    a. ***Samsung*** - Due to their wide range of semiconductor offerings, they are a preferred supplier with low risk.
    b. ***Qualcomm*** - Due to the market and competition, Qualcomm is a preferred supplier with a modest level of risk.
    c. ***Intel*** - Intel is a preferred vendor with a moderate level of risk, subject to ongoing innovation

and competitiveness.

d. ***Huawei*** - Due to geopolitical difficulties, Huawei is a potential provider with a high level of risk.

Recommendations to Rolla Mobile

- To reduce risks, Rolla Mobile should think about diversifying its pool of suppliers. With low to moderate risks, Samsung and Qualcomm are both strong competitors and excellent first-tier suppliers. To prevent any disruptions, it is suggested that you use multiple suppliers.
- Samsung has a low risk profile and is a diversified supplier. Samsung and Rolla Mobile should continue to work together strategically, especially for vital semiconductor parts like memory chips and display panels.
- Rolla Mobile should take Intel and Qualcomm into account as secondary or specialized vendors depending on the individual requirements. Specific mobile applications may benefit from Intel's emphasis on high-performance processing, while Qualcomm's expertise in wireless technologies is essential.
- Huawei poses significant geopolitical and legal dangers, so Rolla Mobile should be cautious when considering them as a supplier. Despite the variety of Huawei's services, the risk level needs to be carefully evaluated and backup plans should be put in place.
- Rolla Mobile should routinely evaluate the risks connected to its preferred suppliers. This entails keeping an eye on the state of the market, the stability of the geopolitical system, and the suppliers' financial situation.
- Rolla Mobile should have contingency plans for suppliers in case any key suppliers encounter unforeseen difficulties in order to handle potential disruptions.
- Market dynamics, rivalry, and technology improvements should all be closely monitored by Rolla Mobile. The semiconductor market is dynamic, so making quick decisions on suppliers will benefit from remaining educated.

Total Cost of Ownership Analysis

Samsung is the supplier with best per unit total cost mainly owing to the economical unit price quoted by them.

Supplier Scorecard

As per the scorecard, it is evident that all the companies lie in the same range of being more than satisfactory or above average level. Out of which, Huawei and Samsung being the top performers it is clear that one of them should be obtaining the sourcing award.

Rationale for the Decision

Diversification Strategy

- Recognizing the multifaceted nature of risks stemming from geopolitical challenges, supplier financial health, and dynamic market conditions, the decision advocates for a balanced selection strategy.
- The primary reliance on Samsung is meticulously balanced with a secondary consideration for Huawei, fostering a diversified and resilient supply chain capable of navigating uncertainties.

Geo-Political Disruptions

- A pragmatic response to the political challenges associated with Huawei involves allocating a higher percentage of sourcing (70-75%) to Samsung. This strategic approach emphasizes risk mitigation.

Proposed Contract Structure

Rolla Mobile's proposed contract structure shall consist of a Master Agreement that outlines the general terms and conditions and a Long-Term Supply Agreement that details the quantity, duration, and pricing terms. A flexibility clause, quality standards, and performance measures are combined to guarantee flexibility in response to shifting market demands. Risk reduction techniques include termination strategy, protection of intellectual property, and contingency planning. Sensitive information is protected by data security and confidentiality clauses. While a dispute resolution mechanism expedites the resolution of conflicts, a price adjustment mechanism guarantees equitable and competitive pricing. Collaboration and sustainability are improved by regular performance assessments and environmental, social, and governance (ESG) commitments. The agreement places a strong emphasis on being proactive and resilient in order to create a strong and mutually beneficial partnership..

Negotiation Plan

Rolla Mobile's negotiation strategy shall begin with a thorough pre-negotiating process that includes the establishment of a cross-functional team, the creation of specific objectives, and in-depth supplier research. Building relationships, laying out a clear goal, and outlining expectations are given top priority during the negotiating process in order to foster a cooperative and upbeat environment. Constructive negotiations are fostered by the exploration and bargaining stage's characteristics of active listening, creative problem-solving, and adaptability. Before signing, terms must be finalized, a detailed agreement must be drafted, and full assessments must be carried out. Rolla Mobile places a strong emphasis on debriefing meetings, ongoing supplier relationship monitoring, and using learnings to improve future agreements. This plan guarantees a cooperative and strategic approach, opening the door for strong and profitable supplier relationships.

Issues to Monitor in the Relationship Going Forward

Geopolitical Risks

- Advocating continuous monitoring of geopolitical situations affecting Huawei, coupled with a strategic and adaptive adjustment to the sourcing strategy.
- The establishment of robust contingency plans is proposed to mitigate risks associated with geopolitical uncertainties.

Market Dynamics and Technology Improvements

- Stressing the importance of regular assessments of market dynamics, competition, and technological advancements empowers Rolla Mobile to make informed decisions in an ever-evolving technological landscape.

Conclusion

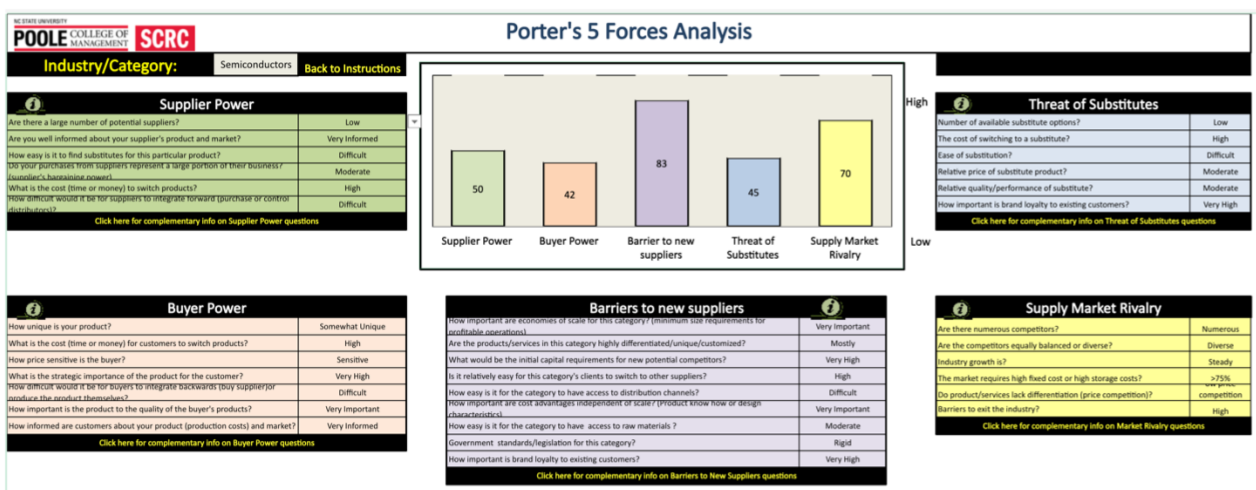
The choice to diversify sourcing was made after a thorough examination of financial, industry, and supplier-specific issues. It includes a nuanced primary reliance on Samsung and a well-considered secondary position toward Huawei. The goal of the suggested contract arrangements and continuing monitoring plans is to guarantee Rolla Mobile not only a robust but also an adaptable supply chain, strategically placing the business for long-term success in the dynamic and ever-changing mobile device manufacturing sector. With the help of this comprehensive framework for decision-making, Rolla Mobile will be able to effectively negotiate the intricacies of the contemporary semiconductor market.

Appendices

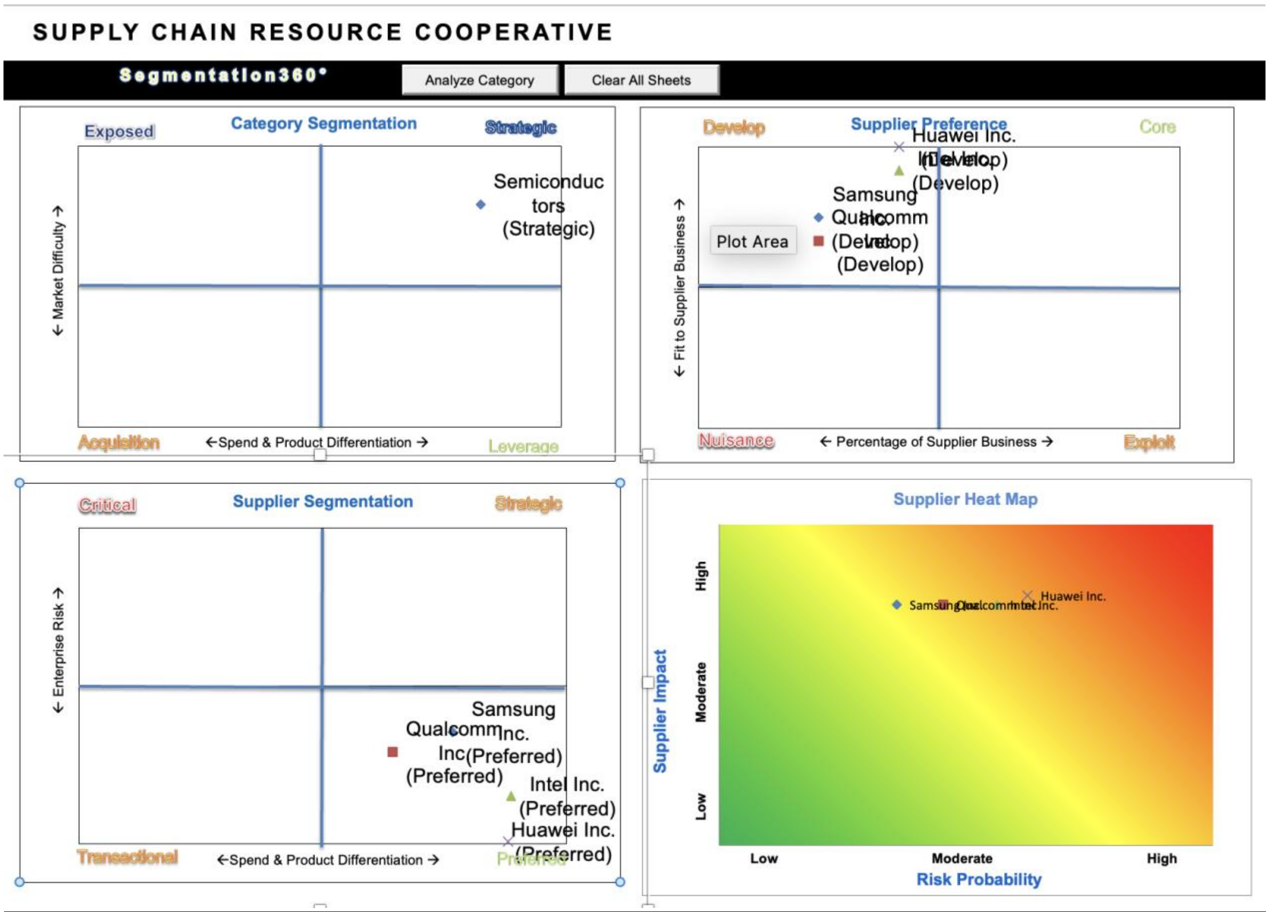
Supplier Financial Analysis

Supplier Financial Analysis				Legends		Concerns in Ratios	Red Flags
Category	Selected Financial Ratios	Formula	Industry Average (Data obtained from Stock Analysis Website & Textbook)	Samsung	Qualcomm	Intel	Huawei
Asset Utilization	Asset Turnover	Sales / Assets	> 0.5, higher the better	0.65	0.30	0.53	0.74
	Inventory Turnover	COGS / Inventory	> 3, higher the better	5.43	15.19	3.41	6.14
	Receivable Days	Current Account Receivables * 360 / Sales	30 - 50, shouldn't be too low or high	5.99	195.58	38.31	36.65
	Payable Days	Current Account Payables * 360 / Sales	< 50, shouldn't be too high, lower the better	6.36	33.39	93.13	63.40
Capitalization	Leverage	Assets / Equity	> 1, higher the better	1.34	2.44	1.76	6.71
	Return on Equity	Net Income / Equity	> 0.2, higher the better	0.08	0.02	0.27	0.89
	Long-term Debt to Equity	Long-term Debt / Equity	< 3.0, lower the better	0.00	0.70	0.33	2.74
	Long-term Debt to Assets	Long-term Debt / Assets	< 0.3, lower the better	0.00	0.29	0.19	0.41
	Current Ratio	Current Assets / Current Liabilities	1 - 3, shouldn't be too high	2.84	1.23	1.40	1.88
	Quick Ratio	(Cash + Short-term Inventory + Accounts Receivable) / Current Liabilities	0.8 - 2, shouldn't be too high or low	1.77	0.98	0.93	1.65
	EBIT Coverage	EBIT / (EBIT - Net Income - Tax Provisions)	> 10, higher the better	38.56	2.04	50.20	12.93
Profitability Ratios	Contribution Margin	(Sales - COGS) / Sales	50% - 60%, higher the better	0.37	0.25	0.59	0.65
	Operating Margin	Operating Income / Sales	25% - 30%, higher the better	0.13	0.14	0.31	0.32
	Profit Margin	Net Income / Sales	20% - 25%, higher the better	0.09	0.03	0.29	0.18

Porter's Five Forces Analysis



<u>Category & Supplier Segmentation Analysis</u>



Total Cost of Ownership Analysis

Demand for Year One (Forecast)	***26480000***			
Cost Category	***Samsung***	***Qualcomm***	***Intel***	***Huawei***
Quoted Unit Price	*$16.00*	*$22.00*	*$20.00*	*$18.00*
Transportation	*$2.27*	*$0.92*	*$2.00*	*$2.45*
Tooling ***[Total Tooling Cost / Demand]***	*$0.11*	*$0.08*	*$0.15*	*$0.10*
Quality non-conformance costs ***[(Demand in Millions * PPM * Unit Cost) / Demand]***	*$0.15*	*$0.23*	*$0.15*	*$0.07*
Duties/customs, insurance, and tariffs ***[Duties/Cutoms + Insurance]***	*$1.44*	*$0.23*	*$0.42*	*$1.66*
Inventory safety stock carrying charges ***[Safety Stock * Unit Price * 18% / Demand]***	*$0.27*	*$0.36*	*$0.33*	*$0.30*
Ordering, inbound receiving and inspection costs	*$0.56*	*$0.61*	*$0.45*	*$0.31*
Estimated Per Unit Total Cost	***$20.80***	***$24.43***	***$23.50***	***$22.89***

Supplier Scorecard

Category	***Category Weightage***	***Sub Category***	***Sub Category Weightage***	***Score (On a scale of 1 - 5) [1 - Poor, 2 - Marginal, 3 - Satisfactory, 4 - Good, 5 - Outstanding]***			
				Samsung	***Qualcomm***	***Intel***	***Huawei***
Management & Personnel Capability	***7%***	*Leadership Competency*	***5%***	*4*	*4*	*3*	*4*
		Succession Planning	***2%***	*4*	*4*	*3*	*4*
Cost Competitiveness	***15%***	*Total Cost of Ownership*	***10%***	*5*	*3*	*3*	*4*
		Negotiation Flexibility	***5%***	*3*	*4*	*4*	*4*
Informations Systems Capacity	***5%***	*Advanced Technology Usage*	***2%***	*4*	*3*	*2*	*3*
		Data Security	***1%***	*2*	*2*	*3*	*3*
		System Integration Capability	***2%***	*3*	*5*	*2*	*4*
Quality Performance	***15%***	*Defect Rate*	***8%***	*3*	*3*	*4*	*5*
		Consistency in Quality	***7%***	*3*	*3*	*4*	*5*
Process & Technological Capability	***5%***	*Process Efficiency*	***3%***	*4*	*4*	*3*	*4*
		Research & Development Investments	***2%***	*5*	*5*	*2*	*5*
Environmental Compliance	***5%***	*Environmental Certifications*	***5%***	*2*	*2*	*2*	*2*
Delivery Performance	***10%***	*On-time Delivery Rate*	***10%***	*4*	*4*	*5*	*5*
Flexibility	***7%***	*Change in Order Volumes*	***4%***	*3*	*3*	*4*	*4*
		Customization Capability	***3%***	*3*	*3*	*4*	*4*
Long-term Partnership Potential	***5%***	*Customer Relationship Management*	***5%***	*4*	*3*	*3*	*4*
Volume Capacity	***8%***	*Scalability*	***5%***	*4*	*3*	*2*	*3*
		Capacity Planning	***3%***	*4*	*3*	*2*	*3*
Supply Management Capability	***5%***	*Inventory Management*	***3%***	*5*	*3*	*3*	*3*
		Supplier Relationship Management	***2%***	*4*	*4*	*4*	*3*
Collaboration & Communication	***5%***	*Communication Responsiveness*	***5%***	*4*	*4*	*4*	*4*
Regulatory Compliance	***4%***	*Quality Standards Adherence*	***4%***	*4*	*4*	*2*	*1*
Continuous Improvement	***4%***	*Continuous Improvement Initiatives*	***4%***	*4*	*4*	*2*	*2*
Final Score				***3.74***	***3.42***	***3.27***	***3.81***