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Transworld Auto Parts (A)[1]

It was an unusually cool and foggy morning in the summer of 2009, but Ellen Bright, CEO of Transworld Auto Parts (TAP), was too preoccupied to notice the weather. She was focused on the two balanced scorecards before her. One, from the luxury division, showed strong financial results; while the other, from the economy division, reported disappointing financial performance but good progress in achieving the targets for its non-financial goals. She would soon be meeting with the heads of each division and wondered what feedback she should give them about their progress in implementing their strategies. With TAP's future on the line, any misstep she made now could be irreparable.

TAP, a $6.6 billion subsidiary of a U.S. diversified manufacturing company, was a Tier 1 manufacturer of original and after-market parts for automobile producers in the United States and abroad. TAP had been directly affected by the downturn in the auto industry (see TAP's financial reports in **Exhibit 1**). Major customers, including Chrysler and General Motors, were on the brink of insolvency, and even robust car makers, such as Toyota and Honda, were selling many fewer cars amidst the global recession.

The parent company had hired Ellen Bright, a veteran in the auto and aerospace industries, in October 2008 to turn TAP around. The dismal 2008 results and projections for 2009 led Bright to conclude that she had to make radical changes in strategy and then implement the new strategy flawlessly. She had no room for error. If she were successful, however, TAP could take advantage of opportunities in the troubled auto industry. She recalled a recent report that outlined both the challenges and the opportunities for auto parts makers:

> Suppliers are still facing challenges of higher costs, price and volume pressure, and, at times, erratic production schedules from their auto-producing customers. Thus, our U.S. original equipment sales outlook for 2009 is negative. We see light vehicle sales volume of about 10.3 million in 2009 and 11.5 million in 2010, down from 13.2 million for 2008, with a similarly scaled reduction in production. Because the economy has weakened, however, visibility in 2009 is more limited than usual. We expect the Detroit Three to collectively lose share to foreign brands in 2009. Thus, the greater a supplier's exposure to U.S.-based companies, the greater will be the impact on its performance, in our view. Still, we believe that

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[1] This case borrows heavily from an earlier case: Robert Kaplan, "Domestic Auto Parts," HBS No. 105-078 (Boston: Harvard Business School Publishing, 2005) and its accompanying teaching note: HBS No. 107-087 (Boston: Harvard Business School Publishing, 2007), as well as Professor Kaplan's accumulated published works on strategy maps and the balanced scorecard. The authors wish to thank Professor Kaplan for his guidance, ideas, and direction in developing this case.

Professor V. G. Narayanan and Research Associate Lisa Brem prepared this case. The company mentioned in this case is fictional. HBS cases are developed solely as the basis for class discussion. Cases are not intended to serve as endorsements, sources of primary data, or illustrations of effective or ineffective management.

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in the long term, rising automobile production in Asia and other emerging markets presents an opportunity for the larger multinational suppliers to increase sales and profits. . . .

Despite near-term challenges, U.S. auto parts suppliers are increasing the proportion of business they do outside the U.S. Emerging markets are becoming more attractive to parts manufacturers due to lower labor costs for manufacturing and engineering, and/or growing demand in local and regional markets. China, for example, is important both as a source of low-cost parts to ship abroad, as well as for local market vehicle demand. Global expansion among the Tier 1 parts makers is important, as it supports automaker efforts to consolidate designs across international markets and to expand international businesses overall.[2]

The Executive Staff Meeting: Defining a Strategy

In December 2008, following extensive consultations with her board of directors and the corporate executive team, Bright prepared for a high-level two-day offsite strategy meeting in which she would announce a dramatic restructuring. TAP manufactured two core product lines—electronics and interiors—in four customer-centered divisions: luxury, economy, midpriced, and truck. TAP served three geographic markets: North America, Europe, and Asia. The four customer divisions each had very different customers and customer value propositions. Bright looked over the marketing reports that Mary Stewart, her vice president of marketing and sales, had put on her desk that morning (see **Exhibits 2** and **3**). These reports reinforced her view that future success would depend on how well she positioned TAP to compete aggressively in its most profitable segments.

Attending the meeting were Aaron Eckhard, the president of the luxury division; Kim Kwon, the president of the economy division; the chief financial officer; and the vice presidents of marketing, manufacturing, and research and development. After presenting a report that showed the product level financials (**Exhibit 4**), the global market production figures (see **Exhibit 5**), and the market segment reports, Bright summarized her position:

> If you look at our data and the reports coming out of the industry analysts at a macro level, you can see that the best course of action for us would be to go after the segments that give us the potential for the most profit. Those segments are the luxury car makers (mostly serviced from plants in Europe) and the economy car makers. Now, I realize that plants in both the U.S. and Asia serve a high proportion of economy car makers, but I feel strongly that TAP should focus its resources on Asia, since it is a growing market with great potential. As for our other customer segments, we are losing money in the truck and mid-price segments and these are dragging down our more profitable lines.
>
> After much discussion at the corporate level, a thorough review of the alternatives with TAP's board of directors, and gaining preliminary agreement from union leaders, we've made the difficult decision to shut down the product lines and customer divisions that cater to these low-performing segments and focus only on luxury and economy car makers. Most of the plants affected will be in the U.S., leaving the majority of the facilities in Europe and Asia intact (see **Exhibits 6a** and **6b**). We have not made this decision lightly, but we feel it is the only way we can save TAP. On the positive side, I believe we can grow our top line by selling more products to our customers in profitable segments and win over new customers in new markets, primarily in Asia.

[2] Efraim Levy, "Autos & Auto Parts," *Standard & Poor's Industry Surveys*, June 25, 2009, pp. 3–4.

Based on a competitive analysis conducted by an outside market research firm [see **Exhibit 7**] and an internal analysis of our core competencies, we've decided to differentiate ourselves in the economy division by producing high quality car parts with the lowest lifetime price. All of our major competitors in the economy segment focus their strategy on producing parts with the lowest initial cost. We will differentiate ourselves by instead producing high quality parts that will be known in the industry for durability and low maintenance cost. We must make sure that we clearly communicate our value position to auto makers who have built a reputation for durable, high quality cars in the economy segment.

In the luxury division, our strategy will be to produce the most innovative, quality parts on the market. While our major competitors are pursuing a customer integration strategy, we believe that if we focus our efforts on producing the most innovative and technologically superior car parts in the industry, then luxury OEMs will come knocking at our door.

You all know that our parent company has set a stretch target goal for us: By 2011, achieve an 8% return on capital employed (ROCE)—a dramatic increase over our current negative ROCE. The company's CEO stated that if we do not reach these goals and maintain a positive cash flow, he will seek to either divest or close TAP. It appears that the unions will agree to the plant closures and offer substantial concessions on health care and pension benefits in order to save the company. We also have some resources available to us for capital improvements, R&D, and other investments; and we qualify for the U.S. government's Auto Supplier Stability Program. We must do what we can within this constrained environment. I'd like to hear from each of you about how your division will help us achieve both our financial goals and our market strategy. Let's start off with you, Joe.

Joe Nathan, Bright's newly hired CFO, shared his data with the group:

Ellen and I have worked extensively to develop the economics that must be in place for TAP to achieve its financial goals. I designed a simple model to pinpoint the critical economic drivers needed to reach our goal of an 8% ROCE and positive cash flow by 2011. Due to the economic downturn and the extensive plant closures, we forecasted only $4.5 billion in sales in 2009. That means, to cut our negative ROCE from -15% to -7% in one year, we need to reduce our cost of goods sold (COGS) from 95% to 90% in 2009, then to 83% over the next two years. If economic forecasts are on track, and if we can target the right growth segments, we should see revenues increase to $5.5 billion by 2010, and $6.5 billion by 2011. We need to better utilize our capital assets, both current and new—currently we are operating at 65% on old assets—and we must get to 90% utilization on an upgraded and downsized asset base. Finally, we must minimize our total cost structure—today we are operating above the average cost in our competitor group and we are bleeding cash. We need to get to the lowest cost quartile to compete. These are the key drivers needed to get to the financial results expected by the parent company. We must balance them—one against the other—to achieve our overall goal of 8% ROCE by 2011.

Eckhard, the luxury division president, chimed in:

I am glad to see that the company is putting its focus and resources toward the luxury division. As you know, we have always been a leader in product innovation, something our customers continue to value. What you may not realize is that the innovative products we designed for our high-end customers five years ago have started to filter down to the rest of our customer divisions. Satellite radio and Bluetooth capability, for example, are now becoming options for the economy segments.

Bright asked Michael Milton, vice president of manufacturing, for his perspective. Milton said:

We're under huge pressure to reduce costs and prices to the customer, except for the very high end. Because of the uncertainty in the market, the OEM's[3] production schedules are all over the map, making it nearly impossible to anticipate their volumes, which in turn makes any capacity utilization target extremely difficult to make. In addition, our raw material costs are so unpredictable that it's hard to keep COGS under control.

To remain competitive in this environment—heck, to remain solvent in this environment—we need to do a lot of internal things better. We need to coordinate supplier management, manufacturing, and product delivery so we can effectively and efficiently get products to the customer. We need to be on time and on spec just to get the opportunity to sell new products. Key in my mind is managing the supplier pipeline, the raw materials—there's a lot of money to be saved there, especially if we can consolidate our product line, increase capacity in the remaining plants, and redesign our products to reduce their materials costs without sacrificing product quality or functionality.

We also need to balance our focus on cost cutting with the need to make investments in process improvements and new and upgraded equipment. Unscheduled downtime and the inability to make fast product switchovers on the manufacturing floor are killing us. Upgraded capital will both reduce our costs and help deliver consistently on time and on spec. We talk a lot about preventive maintenance, but we need to get real about it. This could save us big time in terms of costs and effectiveness. If we don't do these operational things, we will have trouble convincing the luxury manufacturers to pay a premium price for our product. Plus we won't be profitable in the economy segment if we can't get our manufacturing costs under control.

Kwon, president of the economy division, added his thoughts:

It is not just that we should become better manufacturers—we have to be the best. Our customers, particularly in Asia, have no tolerance for substandard suppliers. We must not only be competent, but fully master just-in-time (JIT) and lean processes in order to gain and retain the economy car OEM customers in Asia. Our entire division must become lean—every single employee must be trained in these processes—and we can only do this with resources and total leadership buy-in from the corporate level.

Rita Richardson, vice president of research and development, responded to the challenge to produce state-of-the-art, technologically sophisticated products:

To go back to what Aaron said, I agree that if we are to compete in the luxury segment, we certainly need to get creative and bring to market new and improved products in partnership with our leading customers. Our customers have been demanding more from us on product development. In Europe, they want us to move faster—we have to come up with new designs and product innovations—because they are having trouble keeping up with new regulations on emissions and safety standards, and it's very hard to anticipate what the customer will want. To reduce new product development time, we need to invest in new CAD/CAM software, and acquire and train skilled design engineers, scientists, and technicians from top-tier schools and competitors. We also need to invest in prototyping equipment. We want to be able to strip our competitors' products, see what technology they have that we do not, reverse

[3] Original equipment manufacturer.

engineer those technologies, and acquire those capabilities. We should be a one-stop shop for all the technological needs of our premier customers.

Stewart, VP of marketing, added:

There are many things we should address from a marketing perspective. First, we must be much more aggressive in signing new customers in Asia. Everyone in the industry knows this is a growing segment, so the competition will be fierce. As Kim pointed out, we need to quickly get up to speed on lean processes to leverage our presence there and gain a reputation for delivering low-cost, high-quality parts in that region.

Next, we should respond better to the evolving needs of our customer base. Our OEM customers are changing the way they do business; they are looking to partner much more closely with their suppliers. The parts suppliers that will flourish in this environment will be able to take total responsibility for key subassemblies. Gone are the days when the OEMs just wanted a specific part; now they want fully assembled systems that they can use for final assembly. Finally, we need to showcase the enhanced R&D capability that Rita is talking about by working more closely with our customers to anticipate their needs. We need to help our customer divisions get closer to their key customers to drive the message that TAP is an innovator with new and enhanced abilities to design the products they want. We should seek to partner closely with our thought-leading customers in product development from the inception of the idea to producing the final product. Perhaps a closer customer relationship can also solve the production lead time problems you've been experiencing in manufacturing, Mike.

Milton replied:

Yes, I agree that working more closely with our customers could help us anticipate changes in production schedules, and better employees with better training and better IT systems will help in that regard. However, with all due respect to Rita and Aaron, I think we're getting ahead of ourselves here with all this commitment to R&D. We have to do the basic things right before we can move to innovation and new customers. We don't have unlimited resources; we have to pinpoint where we should invest our time, people, and money so that they will have the most impact. I say we should focus on efficiencies and quality control at all our plants, then once we've established ourselves as the low-cost provider and are making some profits, move on to the R&D side.

Richardson rebutted, "If you wait on R&D until you have all the factories working flawlessly, we'll be so far behind that we'll never catch up."

Bright interrupted the argument by saying:

We have to be able to be competitive in all these dimensions, but each division will emphasize its own value proposition. As long as we can keep our operating cash flows healthy, the parent company is willing to invest in programs that can help us compete. I know this is difficult and these are probably the most grueling economic times that any of us has experienced. That's why we need a clear strategy for our customer divisions, and an implementation plan and measurements that can keep us on track. We know our overarching strategy is to target the luxury and economy segments with low-cost/high-quality products and enhanced product innovation. We know our financial goals are to increase cash flow and ROCE; our customer goals are to increase market share in Europe and Asia. We know we have

to improve our internal processes and our employee competency levels to accomplish this. Now we need to decide how to craft implementation plans for each division that will help us reach our goals. I'm very intrigued by the idea of a strategy map and balanced scorecard. They have been used successfully in many top companies and I believe they can help us articulate and implement our strategy.

The Balanced Scorecard

Bright recalled her experiences in the summer of 2008 when she attended an executive education program that featured case studies and lectures on the balanced scorecard (BSC). Bright believed the BSC could help the TAP executive team describe the objectives that must be accomplished for the company to achieve its strategy. She had gone on to explain the concept behind the BSC to her team:

> The BSC is a tool designed to align the whole organization behind a single strategy. The BSC divides the possible performance measures into four categories, or "perspectives": (1) financial, (2) customer, (3) process, and (4) learning and growth. The strategy map is a visual representation of our strategy and the cause-and-effect relationships that will enable us to reach our goals. The balanced scorecard takes the components of the strategy we identified in the map and creates specific targets and action plans to implement each strategic component.
>
> The scorecard is "balanced" because it uses both financial and nonfinancial metrics to track progress. Examples of financial goals are ROCE, cash flow, and revenue growth, whereas nonfinancial goals can include topics such as increased employee training and leveraging IT. The BSC also keeps us from focusing too much on the short term. Although improving revenues is vital for TAP's short-term success, we can't lose sight of our long-run goals that will position us for success years from now, like developing partnerships with our customers.
>
> To create a good BSC, we need to think hard about cause-and-effect relationships between the four perspectives. How exactly will utilizing IT, for example, help with product development? These linkages will provide the foundation for the programs we implement to reach our strategic goals. We must never forget that all of the nonfinancial goals have to be linked to our financial goals. The arrows that connect the objectives in the four perspectives represent these cause-and-effect relationships.
>
> Finally, I need to emphasize the difference between leading and lagging indicators. On the strategy map, many of the financial and customer goals are lagging indicators, that is, they improve only after the strategy has been implemented for some time. There are leading indicators, however, that we can affect immediately, such as number of machines receiving regular maintenance. Many of the nonfinancial measures will be leading. Meeting our leading targets should indicate that we are on track to achieve our financial (lagging) targets.

Bright had turned to Kwon and Eckhard, saying:

> I want your top priority to be developing a balanced scorecard for your division. Our deadline is to have it completed within one month from today; the first of the New Year. You should first develop a strategy map to help you articulate the strategic objectives for each division.

During the next several weeks, Ron Royerson, the vice president of strategic development, led a small project team to conduct interviews with the corporate VPs and division managers about their

customers, competitors, quality initiatives, suppliers, and internal processes. He also gave them a presentation on how to draft strategic objectives for the strategy maps, and measures and initiatives for the balanced scorecards (see **Exhibit 8** for an excerpt of this presentation). Royerson summarized:

> Strategic objectives, measures, and initiatives should be as action oriented, clear, and concrete as possible. Objectives should be dynamic; try to use action statements for each objective. For example, "provide superlative after-sales support" is better than "sales support." Measures transform the strategic objective into tangible results and should give us the information we need to judge progress. Measures, if crafted correctly, will change behavior in the workforce. Finally, initiatives outline the action plans that will close the gap between our current performance (where we are now) and our desired performance (where we want to go). A well-crafted strategic initiative will have accountability, clearly defined start and stop dates, progress milestones, deliverables, a budget, and committed resource allocation.

After several long days and weekend retreats, the team was able to complete strategy maps, balanced scorecards, targets, and action plans for the luxury and economy divisions (see **Exhibits 9a** and **9b** for strategy maps, and **Exhibits 10a** and **10b** for balanced scorecards, targets, and action plans).

Once the BSCs had been approved, each division began to implement the action plans selected to help them reach their targeted performance. Eckhard described his experience crafting the scorecard:

> I was quite concerned that we should not bite off more than we could chew. I wanted to keep our goals within reach and not try to do everything at once. By focusing on just a few important measures that would help us reach our financial targets, I felt we had a better chance of success. Also, I am a great believer that you can effectively focus only on a few things at a time. It may be a cliché, but less is more. I believe that if your employees are happy today, your customers will be happy tomorrow, and your shareholders will be happy the day after.

Kwon explained why his division had developed a more extensive scorecard:

> As we studied the strategy map, we realized there were many cause-and-effect linkages that would become crucial levers for changing behavior and thus enabling our organization to meet our goals. We decided to err on the side of more strategic objectives rather than less. When a pilot flies a plane, he doesn't just worry about altitude; he has to be concerned with airspeed, fuel levels, trajectories, and weather conditions. Like the pilot, we believed that we had to simultaneously manage many factors if we wanted to reach our destination.

Six Months Later—Summer 2009

Bright instituted quarterly review meetings to check the progress of each division's new strategy. She used the balanced scorecard to review each division's results compared to the BSC targets. Eckhard and Kwon both knew that the COO position was vacant and that one of them would likely end up with that job, and that a large part of their evaluation would be based on their performance as reflected in the BSC.

Just before the second such meeting, Bright reviewed the BSC results (see **Exhibits 10a** and **10b**). She was pleased to see that Eckhard had surpassed his cash flow and profit targets. Bright also noticed that the luxury division's quality indicators dropped slightly, but it continued to rate highly on innovation. Overall, Eckhard and his division had done a wonderful job exceeding their financial

goals and were close to target on most of their customer initiatives. On the other hand, the economy division had not attained its financial targets. Bright was particularly puzzled at the economy division's results because it had been so successful in the learning and process dimensions.

As the fog continued to obscure the view from her windows, Bright pondered how she could determine which division had better performance. The luxury division, by meeting its financial targets, greatly added to the company's overall financial health, and allowed TAP to report better results from the prior year. Turning to the economy division, she was satisfied with how they had positioned themselves to take advantage of anticipated growth in the economy segment, which would contribute to TAP's long-term financial performance. She sat back and thought about her dilemma: "The more I look at these results, the more confused I become. I can't decide which division has performed better."

Exhibit 1 Transworld Auto Parts Financial Statements

Annual Income Statement (abbreviated) (in $USM except where noted)

	Dec 08	Dec 07	Dec 06	Dec 05	Dec 04
Revenue	$ 6,681	$ 7,886	$ 7,993	$ 11,883	$ 13,060
Costs of Goods Sold	6,360	7,485	7,479	11,495	12,678
Gross Profit	$ 321	$ 401	$ 514	$ 388	$ 382
Gross Profit Margin (%)	4.81%	5.09%	6.43%	3.26%	2.93%
SG&A Expense	678	775	802	1,720	1,176
Operating Income	$(357)	$(375)	$(288)	$(1,332)	$(793)
Interest Expense	98	157	123	101	103
Income Tax Expense	0	0	0	0	0
Net Income	$(455)	$(531)	$(411)	$(1,433)	$(897)

Annual Balance Sheet (in $USM)

	Dec 08	Dec 07	Dec 06	Dec 05	Dec 04
Cash	$1,626.0	$2,030.6	$1,539.9	$1,405.5	$1,326.4
Net Receivables	692.3	805.0	871.5	1,216.6	1,778.0
Inventories	247.8	346.5	364.0	375.9	622.3
Other Current Assets	174.3	468.3	520.1	143.5	184.1
Total Current Assets	$2,740.4	$3,650.4	$3,295.5	$3,141.5	$3,910.8
Net Fixed Assets	1,513.4	1,955.1	$2,123.8	$2,081.1	$3,712.1
Other Noncurrent Assets	219.8	238.0	237.3	292.6	393.4
Total Assets	$4,473.6	$5,843.5	$5,656.6	$5,515.2	$8,016.3
Accounts Payable	$740.6	$1,236.2	$1,277.5	$1,262.1	$1,682.1
Short-Term Debt	1,887.9	66.5	70.0	339.5	355.6
Other Current Liabilities	361.2	466.9	450.1	469.7	652.4
Total Current Liabilities	$2,989.7	$1,769.6	$1,797.6	$2,071.3	$2,690.1
Long-Term Debt	45.5	1,921.5	1,489.6	1,056.3	1,059.1
Other Noncurrent Liabilities	1,259.3	1,415.4	1,701.0	1,621.2	3,182.2
Total Liabilities	$4,294.5	$5,106.5	$4,988.2	$4,748.8	$6,931.4
Total Equity	179.1	737.0	668.4	766.4	1,084.9
Total Liabilities and Equity	$4,473.6	$5,843.5	$5,656.6	$5,515.2	$8,016.3

Source: Casewriters.

Exhibit 1 (continued) Transworld Auto Parts Financial Statements

Annual Cash Flow Statement ($USM)					
	Dec 08	Dec 07	Dec 06	Dec 05	Dec 04
Net Operating Cash Flow	$ (81)	$ 205	$ 197	$ 292	$ 293
Net Investing Cash Flow	(146)	(124)	(236)	(162)	(547)
Net Financing Cash Flow	(178)	410	173	(51)	113
Net Change in Cash	$ (405)	$ 491	$ 134	$ 79	$ (141)
Depreciation & Amortization	291	330	301	1,058	480
Capital Expenditures	(206)	(263)	(261)	(410)	(579)
Cash Dividends Paid	0	0	0	0	0

Source: Casewriters.

Exhibit 2 TAP Customer Division Value Proposition, December 2008

End-User [or "Consumer"] Defined Attributes (in ranking of importance to end-user)	Mid-size	Luxury	Economy
First most important	Comfort	Innovation	Low cost
Second most important	Low cost	Performance	Fuel economy
Third most important	Quality	High quality	Quality
Customer (OEM) Defined Attributes (in ranking of importance to OEM)			
First most important	Price	New product innovation	Price
Second most important	Customer service	Product design	Product quality
Third most important	On-time delivery	Technical expertise	JIT/lean

Source: Casewriters.

Exhibit 3 TAP Key Customer Segments by Percentage of Sales in Each Geographic Division, December 2008

	North America	Europe	Asia
Low-priced small cars	10%	5%	35%
Low-priced midsized cars	16%	5%	30%
Low-priced CUV/SUVs[a]	4%	5%	10%
Luxury cars	5%	35%	5%
Luxury SUVs	12%	5%	5%
Luxury CUVs	8%	5%	5%
Luxury sport	5%	30%	5%
Moderately priced cars, SUVs, and CUVs	20%	3%	5%
Trucks (noncommercial)	20%	7%	0%
Total	100%	100%	100%
Total Sales (%)	45%	30%	25%

Source: Casewriters.

[a] Crossover utility vehicles (CUVs) are built on car frames and have little or no off-road capability, SUVs (sports utility vehicles) are built on truck frames and typically have off-road capability.

Exhibit 4 TAP Selected Financial Data, by Customer Division (in $USM), FYE 2008

Product Category	Economy Small to Midsized Cars/SUVs/CUVs	Moderately Priced Cars/SUVs/CUVs	Luxury (all segments)	Truck (all segments)	Total
Revenue	$ 2,255	$ 745	$ 2,939	$ 742	$ 6,681
COGS	2,100	899	2,560	801	6,360
SGA	135	244	171	128	678
Operating Income	$ 20	$ (398)	$ 208	$ (187)	$(357)

Source: Casewriters.

Exhibit 5 Global Light Vehicle Production by Region (in thousands of vehicles)

	2003	2004	2005	2006	2007	2008
North America	15,874	15,773	15,753	15,252	15,021	12,607
South America	1,922	2,517	2,816	3,034	3,492	3,688
European Union	17,472	17,765	17,793	18,058	18,992	17,710
Other Europe	1,909	2,355	2,259	2,528	2,840	3,107
Asia & Oceania	20,363	22,588	23,860	26,178	28,335	28,575
Africa	379	401	491	531	493	548
Total	57,918	61,399	62,973	65,580	69,173	66,234

Source: Compiled from data provided by the International Organization of Motor Vehicle Manufacturers and Efraim Levy, "Autos & Auto Parts," *Standard & Poor's Industry Surveys*, June 25, 2009.

Exhibit 6a TAP Plant Status, Q4 2008

Plant Location	Status	Plant Location	Status
Electronics:		**Interiors:**	
Pennsylvania, Montgomery	Remain Open	Alabama, Montgomery	Close by March 2009
Ohio, Beatty	Close by March 2009		
Alabama, Dothan	Close by Dec 2008	Michigan, Lansing	Remain Open
Poland	Remain Open	Michigan, Saginaw	Close by Dec 2008
Japan	Remain Open	Mississippi, Jackson & Hattiesburg	Close by March 2009
Mexico	Remain Open	Tennessee, Asheville	Close by June 2009
Spain (3 plants)	Remain Open	Brazil (2 plants)	Remain Open
South Korea	Planned opening fall 2009	Mexico (2 plants)	Remain Open
Argentina (2 plants)	Remain Open	France, Lyon	Remain Open
France, Montpellier	Close by Dec 2008	Germany (2 plants)	Remain Open
		UK	Remain Open
		China (2 plants)	Remain Open
		Japan (2 plants)	Remain Open
		South Korea (3 plants)	Remain Open

Source: Casewriters.

Exhibit 6b TAP Plant Status by Customer Segment and Product Line, Q4 2008

	Electronics	Interiors
Luxury	Argentina (1) Poland Spain (1) Spain (2)	Brazil (2) Mexico (1) Germany (1) Germany (2) United Kingdom Japan (1) Japan (2)
Economy	Montgomery, PA Argentina (2) Japan Mexico Spain (3) South Korea (planned opening fall 2009)	Lansing, MI Brazil (1) Mexico (2) Lyon, France China (1) China (2) South Korea (1) South Korea (2) South Korea (3)
Truck/Mid-Priced (all plants to be closed)	*Ohio, Beatty* *Dothan, AL* *Montpelier, France*	*Montgomery, AL* *Saginaw, MI* *Jackson, MS* *Hattiesburg, MS* *Asheville, TN*

Source: Casewriters.

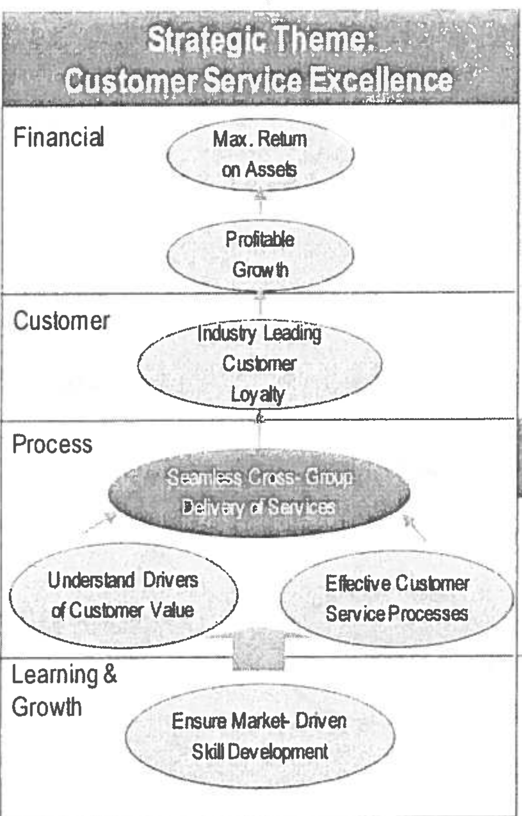
Exhibit 7 Market Research Study—Competitive Analysis

Source: Casewriters.

Exhibit 8 Crafting a Strategy Map and Balanced Scorecard: Objectives, Measures, Targets, and Initiatives

BSC Terminology

Strategic Theme:
Diagram of the cause and effect relationships between strategic objectives

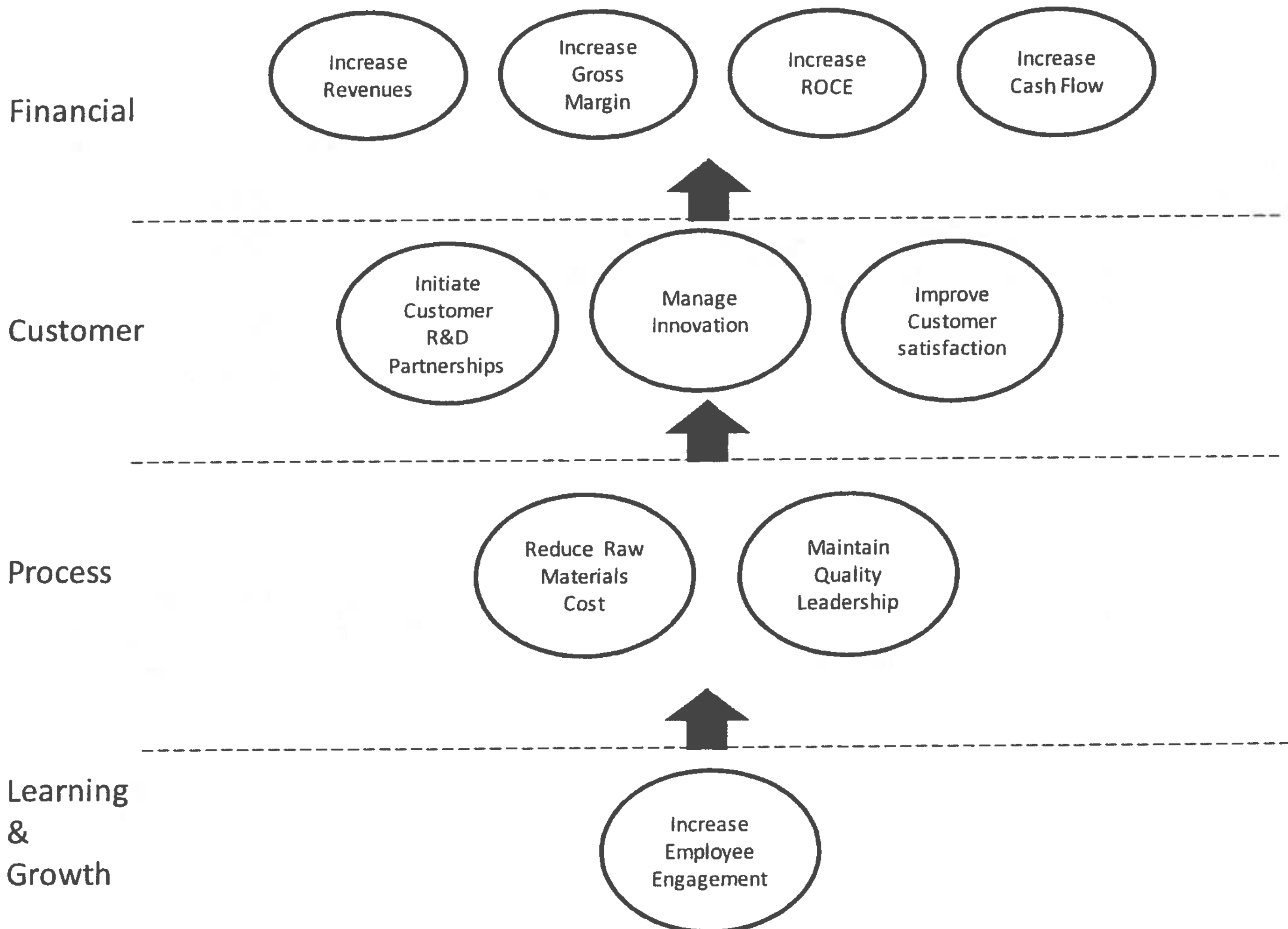


Objectives	**Measures**	**Targets**	**Initiatives**
Statement of what strategy must achieve and what's critical to its success	*How success in achieving the strategy will be measured and tracked*	*The level of performance or rate of improvement needed*	*Key action programs required to achieve objectives*

Objectives	Measures	Targets	Initiatives
Seamless Cross-Group Delivery of Services	Promised Delivery %	97% (first time)	Service Dispatch Automation

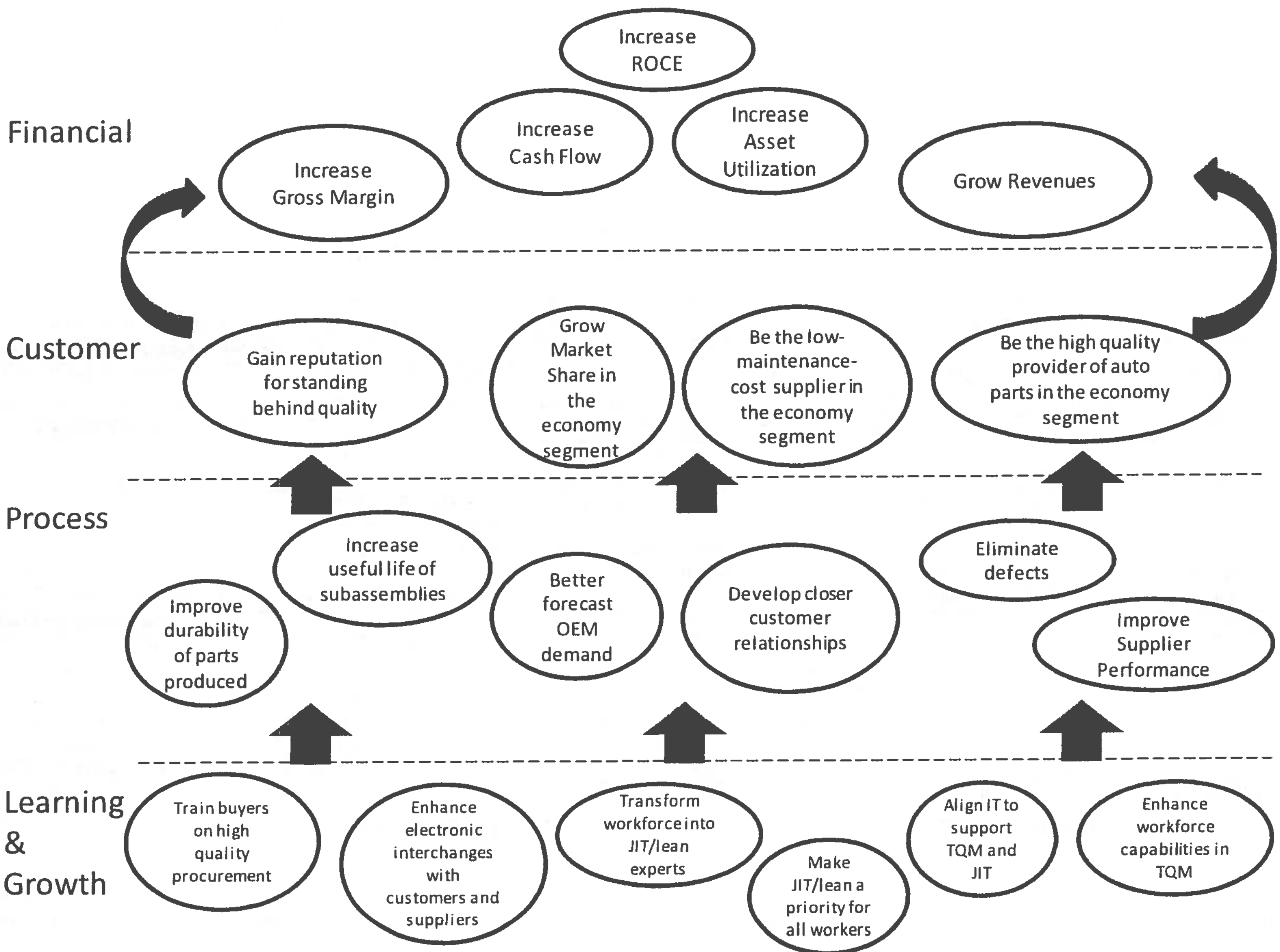
Source: Adapted from private correspondence to the casewriters from Robert S. Kaplan.

Exhibit 9a TAP Luxury Division Strategy Map, FY 2009



Source: Casewriters.

Exhibit 9b TAP Economy Division Strategy Map, FY 2009



Source: Casewriters.

Exhibit 10a TAP Luxury Division Balanced Scorecard, Action Plan, and Results Metrics for Six Months Ending June 30, 2009 (budget figures are for a three-year budget)

Balanced Scorecard			Action Plan		Actual Performance
Objectives	**Measures**	**Target**	**Initiative**	**Budget**	
Financial Perspective					
Increased ROCE	• ROCE	• –7%			• 4%
Increase cash flow	• Year-to-date (YTD) cash flow from operating activities	• –$12M			• $8M
Increase revenue	• YTD revenue	• 1.3B			• 1.2B
Increase gross margin	• Gross margin %	• 14%			• 15%
Customer Perspective					
Improve customer satisfaction	• Global market share	• 5%	"Innovation" campaign	$50M	• 5%
Manage innovation	• Customer survey: % of customers who consider TAP "excellent" at innovation, product design, & technical expertise • Number of new products introduced	• 85% • 50	Customer attitudes survey New product launch	$2.5M $50M	• 83% • 50
Initiate customer R&D partnerships	• Number of customers with whom TAP partners to research and develop new products	• 20	Partnership initiative	$10M	• 10
Process Perspective					
Reduce raw materials cost	• Cost of raw materials (% of revenue)	• 65%	Supplier optimization program	$5M	• 60%
Maintain quality leadership	• Reduce defect rates (per 1 million parts)	• 3 PPM	TQM initiative	$10M	• 5 PPM
Learning and Growth Perspective					
Increase employee engagement	• % of employees "very satisfied" with the resources they have to do their job (annual survey). • % of employees "very satisfied" with the training they received in the past 12 months.	• 80% • 80%	Employee engagement and satisfaction ratings	$25M	• 62% • 65%

Source: Casewriters.

Exhibit 10b TAP Economy Division Balanced Scorecard, Action Plan, and Results Metrics for Six Months Ending June 30, 2009 (budget figures are for a three-year budget)

Balanced Scorecard			Action Plan		Actual
Objectives	Measures	Target	Initiative	Budget	
Financial Perspective					
Increase ROCE	• ROCE	• –7%			• –12%
Increase cash flow	• YTD cash flow from operating activities	• –$12M			• –$14M
Increase gross margin	• Gross margin %	• 6%			• 4%
Grow revenues	• YTD revenue	• $1B			• $0.9B
Increase asset utilization	• Asset turnover ratio	• 1.25			• 1.23
Customer Perspective					
Grow market share in economy segment	• Global market share in economy segment	• 6%	"Lowest Lifetime Cost/Highest Quality" campaign	$50M	• 5.9%
Be the low-maintenance-cost supplier in the economy segment	• Customer survey: % customers in economy segment that rate TAP as having lowest maintenance costs.	• 80%	"Low Maintenance Cost" Campaign	$3.5M	• 75%
Gain reputation for standing behind quality	• % of customers who rank company guarantee as "best in class"	• 75%	"No Questions Asked" Replacement Policy	$75M	• 70%
Be the high-quality provider of auto parts in the economy segment	• Customer survey: % customers in economy segment that view TAP as being "excellent" in quality attributes	• 80%	Customer attitudes survey	$2.5M	• 79%
Process Perspective					
Improve durability of parts produced	• % of parts with top rating for durability • % of parts that "fail in the field"	• 65% • 7%	R&D Initiative: Wear Resistant Parts Low Field Failure Rate Initiative	$5M $5M	• 63% • 7%
Better forecast OEM demand	• Stock outs • Inventory carrying costs (% reduction)	• 4% • 35%	TAP liaison onsite at customer	$1M	• 2% • 35%
Increase useful life of subassemblies	• % of subassemblies passing 10-year life tests	• 75%	Joint TQM/R&D program for longer useful life of subassemblies	$40M	• 75%
Develop closer customer relationships	• # of customers with which TAP has preferred supplier status	• 50	TAP status review	$1M	• 60
Eliminate defects	• Reduce defect rates (parts per million)	• 5 PPM	TQM, lean/kaizen	$10M	• 4 PPM
Improve supplier base and supplier performance	• % of suppliers with an A rating • Reduce avg. delivery time (days)	• 75% • 26	Supplier optimization program	$5M	• 78% • 25
Learning and Growth Perspective					
Enhance workforce capabilities in Total Quality Management (TQM)	• % of employees certified in TQM capabilities • # of TQM engineers hired	• 50% • 60	TQM training TQM hiring program	$25M $2M	• 53% • 65
Transform workforce into JIT/lean experts	• % of employees receiving JIT & Kaizen training • # of JIT/lean process engineers hired	• 50% • 60	Kaizen/JIT training JIT/lean hiring program	$25M $2M	• 52% • 64
Make JIT/lean a priority for all workers	• % of worker pay dependent upon JIT/lean measures	• 5%	Incentive restructuring	$2M	• 5%
Align information technology to support TQM and JIT	• % increase in IT spending • % of employees who rate information availability "appropriate and adequate" for their process improvement	• 20% • 40%	Upgrade forecasting & supplier data base systems Employee engagement survey	$40M $2M	• 20% 45%

Balanced Scorecard			Action Plan		Actual
Objectives	Measures	Target	Initiative	Budget	
	objectives				
Enhance electronic interchanges with customers and suppliers	• % of orders received and placed through streamlined/EDI process	• 90%	EDI Implementation and Rollout Program	$5M	• 95%
Train buyers on high quality procurement	• % of buyers trained in high quality procurement processes	• 20%	Hiring & training programs	$50M	• 25%

Source: Casewriters.