Volkswagen of America: Managing IT Priorities

Dr. Uwe Matulovic, chief information officer (CIO) of Volkswagen of America (VWoA), placed the telephone in its cradle and leaned back in his chair, replaying the just-completed conversation with one of his peers from the Executive Leadership Team (ELT). The call, Matulovic mused, had been similar to three others he had participated in that week, each with a different ELT member. The results of a new prioritization process—a list of IT projects that would be funded in 2004—had been unveiled only a few days earlier. But already a storm was gathering.

The phone calls from other executives had common themes. All the callers had expressed concern that high priorities for their areas of the company had not been funded. Some had repeated views expressed during the prioritization process by people who worked for them about supposed categorization mistakes that penalized their business units. And each of the calls had concluded with an informal request to insert an unfunded project (or two) into the IT department’s work plans. “We don’t have to reopen the process,” the most recent caller had said, “but perhaps spare capacity might be applied to make some progress on this project in 2004—we’ve done this before, and it would mean a lot to our area and to the company’s growth plans.”

The 10 business units that made up VWoA had proposed more than 40 projects, with funding requirements totaling $210 million (US). A budget of only $60 million (an amount capped by VWAG, the parent company of VWoA) made some degree of disappointment inevitable. But the intensity of pushback against the new process was surprising. The ELT had endorsed the idea of improving upon the old way these decisions were made, via unstructured debate among executive sponsors. The new process, it was agreed, would make trade-offs explicit and link projects and the core business processes they impacted with VWoA corporate goals. An orderly, rational process would replace what in the past had sometimes been haphazard.

But now questions were being raised about whether the new process was right for VWoA. Some business units had seen none of their projects funded. Whispers throughout the company suggested that the process was “too theoretical” and noted that IT infrastructure projects had been treated separately, not forced through the same process, which many considered unfair.

As Matulovic peered through the window into an overcast sky, he wondered whether he should order exceptions to the process. If a project was small and just below the line of funded projects, maybe IT should figure out a way to get it done. Or maybe he should stand his ground and defend the new process. Matulovic did not work for the other members of the ELT, but he did have to work with them. Whatever he decided could certainly affect working relationships, so he would need to consider his options carefully.

Professor Robert D. Austin, Dr. Warren Ritchie, and Gregory Garrett prepared this case. HBS cases are developed solely as the basis for class discussion. Certain details have been disguised. Cases are not intended to serve as endorsements, sources of primary data, or illustrations of effective or ineffective management.

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Background—Volkswagen of America

Ferdinand Porsche designed the first Volkswagen automobiles during the 1930s in Germany. The original vehicles, targeted at the mass market ("Volkswagen" means, literally, "people’s car"), were intended to transport a family of five at highway speeds, use modest amounts of fuel, and remain within financial reach for most people. The company’s signature platform by the late 1940s was the Beetle, which, with its rounded styling and reliable air-cooled engine, became internationally popular. For about 20 years, sales of the Beetle hurtled skyward, propelling the company’s total worldwide vehicle sales past a million in 1955 and to a high point in 1969. Although popularity of the Beetle declined throughout the 1970s and its importation was discontinued in the U.S. late in that decade, production of Beetles in Latin America continued into the 1990s. It remains the best-selling car of all time.\(^1\)

After peaking in the late 1960s, the pattern of sales for the North American subsidiary of Volkswagen settled into a trying cycle of ups and downs that became known, due to its jagged contours, as the “Himalayas Chart” (see Exhibit 1). Sales fell precipitously until the introduction of the Rabbit in 1977, then recovered briefly before dropping sharply again. This time the introduction of the Jetta prompted another short-lived recovery, followed by a several-year descent to a new low point in the early 1990s known informally within the company as the “Valley of Despair.”

It seemed to some that midlevel managers within VWoA had fallen into an unhealthy habit of waiting for the next round of new models to rescue them from present difficulties. Executives wanted to break the cyclical pattern of sales. Through concerted efforts to develop more proactive tendencies and a series of more rapid model introductions (New Golf, New Jetta, New Passat, and New Beetle), sales rose encouragingly into the twenty-first century. New brand positioning and effective advertising helped move the firm into competition with other more upscale brands.

Globally within VWAG in the early 2000s, senior executives began to broaden their view of the traditional VW Group portfolio of vehicles. Upon his arrival in 2001 as VW Group chairman, Dr. Bernd Pischetsrieder initiated a strategy of diversifying the product offerings from VW Group companies. He observed that, globally, the VW Group brands were overrepresented in small-car and lower-priced segments but that much of the industry growth during the previous five years had been in midsized vehicles and emerging segments, such as sport utility and special-purpose vehicles. The new diversification strategy would create a portfolio that matched the global demand for vehicles, not just focus on segments in which the VW Group had traditionally produced.

Simultaneously, Pischetsrieder initiated a consolidation of the VW Group automotive brands into two groups, each with different positioning directions. In these brand groups one dominant brand represented the tower and two other smaller-volume brands were partnered with the dominant brand. For example, in the VW Brand Group, the VW brand served as the dominant brand and was partnered with Bentley and Skoda. These brands were to be positioned as “classic” brands. The other brand group was the Audi Brand Group, which consisted of Audi, SEAT, and Lamborghini; this group was positioned as “sporty.” The purpose of consolidating brands into groups was to force some alignment among brands to help determine their requirements for future models in new segments. The result of these changes was a number of proposed new models to be developed and launched for both brand groups over the period from 2004 through 2008.

\(^1\) Other marketing nameplates have sold more units, but these nameplates were not the same vehicle in different geographies, nor did they retain as much consistency in core design as the classic Beetle.
VWoA’s CEO, Gerd Klauss, could see that the implication of the product-diversification strategy being developed in Germany would have dramatic impact on the U.S. and Canadian importer operations. If all models proposed in 2002 were ultimately approved and produced, VWoA would grow from importing nine models in 2002 to over 22 models by 2008 (see Exhibit 2). This sort of growth in product offering was unprecedented in VWoA history. In order to prepare for the growth in product offering and the associated sales and service volume, Klauss instituted an organizational readiness program called “Next Round of Growth” (NRG) and made it the key leadership focus (see Exhibit 3). The aims of the NRG program were to define the goal, function, and organizational changes required at VWoA to support and enable the new global product diversification strategy. Klauss intuitively understood that some of the things that the company was currently engaged in must stop, some new things must start, and other existing activities must be enhanced. The question really became: Which activities belonged in which categories?

VWoA organized itself around core processes that enabled sales and marketing, logistics of vehicle distribution, and after-sales service (see Exhibit 4). These functions would need to be robust as the VW and Audi brands’ product variety increased. Plans also called for a continued push to reposition Audi as a tier-one premium brand. Central to the NRG program were a set of ranked high-level business goals, such as “Build Brand Customer Loyalty” (number one) and “Improve Vehicle Value” (number two). (A list of these goals, with their ranks, is shown in Exhibit 5.)

By 2003, sales had leveled off slightly but at a high level (though still not at late-1960s levels). Repositioning of brands generated higher margins. The Touareg, the company’s foray into the lucrative sport utility vehicle space, had garnered favorable reviews and was poised for market success. New versions of Passat and other models were planned for near-term launch. Overall, prospects for VWoA seemed favorable, despite worldwide auto industry overcapacity, unfavorable currency exchange rates, and high oil prices.

**Information Technology at VWoA (1992–2002)**

During the 10 years from 1992 through 2002, VWoA executives focused on turning the VW and Audi brands around in the U.S. market. Marketing and selling activities were the funding priority. Information technology was considered a source of overhead to be kept at subsistence levels so that all available funds could be used in the market.

In 1992, in order to reduce short-term IT costs, VWoA entered into a 10-year agreement with Perot Systems, an IT services provider. Perot assumed responsibility for the maintenance, repair, and operation of the IT production environment. After this outsourcing contract was signed, VWoA dramatically reduced its internal IT staff to fewer than 10 people and, in doing so, eliminated much of the knowledge of IT within the company. Over the next few years it became apparent that VWoA had probably cut too deeply. There was insufficient IT knowledge within VWoA even to administer the outsourcing contract. Over the next seven years, VWoA progressively added staff to its internal IT department and built it back to 28 employees.

In 1999, a new Volkswagen AG (VWAG) Group company was created in the United States, gedasUSA Inc. GedasUSA was the U.S. subsidiary of gedas AG, the consolidator of IT operations within the global Volkswagen group of companies. Although gedas was a wholly owned subsidiary of VWAG, it was established with a mandate to charge external market rates in providing services to other VW-owned companies. GedasUSA assumed responsibility for administering the outsourcing contract with Perot Systems and would assume responsibility for IT operations at the expiration of

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2 These goal rankings were arrived at in 2002 by a high-level executive group within VWoA.
the Perot contract in 2002. GedasUSA would also undertake development project work for VWoA, using a formal contracting process. To speed the start-up of gedasUSA, all 28 employees of the VWoA internal IT department were transferred to gedasUSA. Again, VWoA was left with no real IT knowledge, having transferred IT capability to gedasUSA. Although the IT knowledge stayed within the VW Group, the arms-length relationship between gedasUSA and VWoA made it appear that the knowledge was lost to VWoA.

During the same period, other organizational entities were also emerging within VWoA and influencing the IT environment. The late 1990s was a period of dramatic growth in the use of the Internet to support automotive sales and marketing activities. In 1999, VWoA set up “eBusiness teams” for the purpose of creating digital-marketing assets and interacting with customers in new ways. eBusiness teams were situated in each of the VW and Audi brand organizations, as well as in the after-sales parts and vehicle distribution business units. These units developed relationships with their own third-party providers for the development and maintenance of Web applications.

Between 1999 and 2002, gedasUSA, Perot Systems, and the VWoA eBusiness teams worked together to rebuild the IT environment to support the now rapidly growing VW and Audi brands. However, it became increasingly clear that the IT function was not performing optimally within VWoA. Responsibility for managing IT was shared among multiple providers with no single organizational entity in control of the overall process. Furthermore, the business units within VWoA were increasingly concerned that IT expenses were on the rise and that IT projects seemed to be plagued with schedule and cost overruns.

In 2002, the ELT at VWoA, in conjunction with the global IT organization, decided that a new business unit was required within VWoA, one that could become the single point of governance for all IT issues. That new organization would consolidate the technical elements of the eBusiness teams and act as a point of contact for gedasUSA, which would in turn act as VWoA’s lead IT delivery partner. The new internal IT department would be VWoA’s third attempt to create such a function in the past decade. It was considered imperative to achieve a stable organizational solution this time. To accomplish this, Matulovic was moved from VWAG headquarters in Wolfsburg, Germany to the United States to design, establish, and then lead the new organization.

Matulovic was not an information technologist by training or experience. Within VWAG, he had been the leader of process development. Before that he had managed the paint shop in VWAG’s largest factory in Wolfsburg. In Matulovic’s mind, the major issues at VWoA were not related to technology but rather to the ambiguity that surrounded governance and development processes. Upon his arrival, Matulovic set about creating a new internal IT department, which he called “Business Process, Technology and Organization” (BPTO).

The new BPTO department, composed of 23 people, assumed chief firefighter roles as they dealt with a portfolio of “challenged” projects. Matulovic took several immediate steps to douse the flames. Most significantly, he empowered a nascent Program Management Office (PMO) to take over management of all IT projects and required all projects to have a qualified project manager and to abide by project management standards. The focus of the PMO was to require more planning prior to the project execution phase and to require weekly status reports and monthly budget reviews for all projects. During 2002 these changes were implemented, and gradually on-schedule and on-budget projects became the norm. Matulovic, satisfied that VWoA had built a capability to do projects right, turned his attention to a different question: Are we doing the right projects?
Choosing the Right Projects to Fund

To implement the NRG program, members of the BPTO and corporate strategy groups at VWoA, in partnership with strategy consultants from gedasUSA, created a high-level business architecture (BA, see Exhibit 6). This architecture explicitly depicted the key resources of the enterprise in an organized way to answer the basic interrogative questions: why, how, who, what, where, and when. The architecture helped strategists understand the relationships among these different elements. In developing the business architecture, VWoA built a blueprint of the business. The business architecture included:

- A hierarchical and prioritized view of all major goals (56) across the enterprise
- An enterprisewide function model that displayed all major activities in the corporation
- An enterprisewide information inventory
- An organization model mapped to the functions
- A current-state systems inventory mapped to the major functions of the enterprise

The business architecture output was termed a blueprint and was expected to play an important role in formalizing governance and prioritization processes because it provided a means of categorizing organizational activity (including IT projects) and relating them in a logical way to the company’s strategy and ability to execute strategy.

Several organizational entities would play a role in creating and managing a new process for managing priorities at VWoA. The ELT, of course, had primary responsibility for executing the NRG program, of which the new IT governance processes were a part. An IT steering committee (ITSC), composed of senior business and IT representatives, would guide and approve the process of IT project selection and prioritization. The PMO subsection of BPTO, which had done so much to tame difficulties with out-of-control projects, would administer the IT project-proposal and approval process. The PMO worked with the team that had developed the business architecture to arrive at a detailed process for moving projects through selection and prioritization. And the Digital Business Council (DBC), composed of representatives from the eBusiness teams within each business unit, would do the difficult work—categorizing projects, assessing their business impact, discerning their alignment with goals, and making trade-off decisions—required to reach a final list of projects for which funding was recommended. The entire process was expected to play out in three phases spanning three months, from July through September.

Phase I—Calling for Projects, Communicating Process, and Identifying Dependencies

To start the process, PMO put out a formal call for projects with due dates for proposals. In July, before business unit requests were required to be filed with PMO, the corporate strategy team with gedas strategy consultants facilitated a workshop with members of the DBC. This workshop conveyed to DBC members that project funding would this year involve them to a much greater extent and expose them to much more information about proposed initiatives across the company. Each business and technology initiative would be mapped against the business architecture to make explicit 1) the business function that would be affected, and 2) the major goal that the initiative would advance. At the meeting, representatives from each business unit informally presented their proposed initiatives and indicated functionally how the project would change the business. Meeting participants located their initiatives onto an oversized “function wall” (see Exhibit 7). As the discussion progressed, business unit representatives began to recognize that many of them were
planning to invest in very similar initiatives. Similar projects were grouped into common enterprise projects. Enterprise projects were removed from individual business unit lists and added to an enterprise portfolio.

In discussing individual initiatives, the DBC also identified dependencies among projects. It became clear that many projects would affect other projects. Most important, some projects could not be started until other projects had been completed. This realization caused business unit representatives to remove initiatives from their 2004 proposal list and include them instead on 2005 or 2006 lists. The result of this phase of DBC activity was that a proposed $210 million list of initiatives was simplified to a list of $170 million that would be formalized in Phase II.

Phase II—Formal Project Requests from Business Units

During a short second phase, each business unit formally crafted project proposals using a predefined template. Proposals detailed information about each project, including:

- Name
- Changes it would cause in the current environment
- A financial model
- The enterprise function that was being improved/affected (as determined in Phase I)
- The enterprise goal that the project would advance

In addition, proposals categorized projects in terms of 1) the type of investment they represented, and 2) the type of technological application that would be involved.

Three different investment types were recognized:

**Stay in business (SIB)**—An action that was required for legislative reasons, to maintain business continuity, or was overtly mandated by the parent organization. Examples of these investments included customer privacy efforts (legislated) or disaster recovery (business continuity).

**Return on investment (ROI)**—An action that had predictable cost savings, productivity gain, and/or revenue-generating results. This needed to sufficiently exceed the investment, which included the initial setup investments and the ongoing maintenance and operations. For example, you might install a new system because its annual maintenance costs would be 50% lower than those of the existing system.

**Option-creating investment (OCI)**—Similar to ROI, but with less certainty about the cost savings and/or revenue-generating results. These were risky actions taken in anticipation of discovering a new idea or execution that led to a competitive advantage. Frequently, these would be prototypes that, if successful, would evolve into larger implementations that could be justified via ROI criteria.

Three different technological application types were recognized:

**Base-enterprise IT platform**—Infrastructure services and tools, or common utilities and externally developed applications used across the company (data warehouses, Internet-based communications, desktop productivity tools)

**Enterprise applications**—Company-specific systems that provided broad functionality across the enterprise or that produced information used throughout the enterprise
Customized point solutions—Systems and solutions useful in targeted application but not recognized as useful across the enterprise.

The investment and application type would influence how particular investments under consideration would be treated in the selection and prioritization process.

Once proposals were prepared for each project, each business unit’s leadership ranked them by priority. Business unit managers assumed that, as in past years, they would at a minimum gain approval for their most highly prioritized projects.

Some business units were uncomfortable as they associated projects with enterprise goals. The leader of each business unit was an ELT member and thus realized that assigning projects to NRG goals implicitly ranked them in their importance to VWoA. By associating a project with an enterprise goal, they knew they were strengthening or weakening the enterprise-level case for the project. There was a temptation to think of ways to associate projects considered important with a goal important to the company to improve chances of funding.

Initiatives that had been grouped in Phase I as having significant synergies were again called out as potential enterprise projects. They remained in business units’ individual portfolios with a special note dictating removal from the business unit portfolio if the enterprise project was approved. Thus, another way to get a project approved was to gain its inclusion in an enterprise project that had a good chance of approval.

Phase III—Transforming Business Unit Requests into Enterprise Goal Portfolios

With all official requests submitted, in September the DBC met for a two-day off-site to convert the emerging business-unit-focused project portfolio into an enterprise-focused portfolio. Prior to the meeting, the corporate strategy and PMO teams used the dependencies and enterprise project groupings from Phase I to create a high-level schedule of all projects. Because many projects depended upon others completing (or starting), many of the 2004 proposed projects clearly could not be started until 2005 or later. Also, some business unit project proposals were officially combined to form enterprise project proposals.

As the overall project list changed due to dependencies and the creation of enterprise projects, DBC representatives reshuffled the projects still on their lists for 2004. Now some of a business unit’s most important projects were officially not viable until 2005 or later; others would be considered as corporate projects. So business unit representatives needed to reprioritize their proposals for 2004. The group agreed that each business unit would identify the three most important projects still on the 2004 list. In a flurry of real-time cell phone consultations with business unit managers not on the DBC, each unit arrived, by the end of day one, at a final list of its top three projects.

DBC members returned for a second day to discover their work far from over. Overnight, the corporate strategy and PMO teams had regrouped the top three picks for each business unit into five goal portfolios, each one corresponding to one of the major enterprise goals from the NRG program (see Exhibit 8). DBC members quickly familiarized themselves with this new representation of the enterprise portfolio and quietly took note of how their business units’ submissions related to VWoA goals.

The second day’s decision making began with a discussion about the accuracy of the project-to-goal associations proposed by individual business units in their proposal documents. Several projects that had been associated with the most critical NRG goals were reclassified, which dealt a blow to
their prospects of being funded. The discussion grew heated. Eventually the team agreed, and the final goal portfolios were determined.

Near the end of the day, the group began to speculate about the amount of the total IT project budget. Of the roughly $60 million available overall, $16 million had been set aside to fund “stay in business” initiatives, most of them infrastructure projects under the discretion of CIO Matulovic; another $30 million would fund enterprise projects, which left about $14 million for the highest-priority business unit projects. These back-of-the-envelope calculations told them immediately that the funding requirements for all the top three projects exceeded the budget. It was not clear how to solve this gap between funding requirements and the budget. They wondered what they should recommend to Matulovic and the ITSC:

- Should they drop the lowest-ranked goal portfolio in its entirety? (If they did this, several business units would gain approval for no IT projects for 2004.)
- Should they apply an equal percentage of funds to each goal portfolio?
- Should they cut apart each portfolio and fund more projects associated with the most critical goals and fewer projects associated with the less important goals?
- Should they recommend that the importance of business unit priorities be revisited relative to the enterprise priorities from the NRG (perhaps reallocating some enterprise funds to business unit projects)?

Members of the DBC recognized that they had far more information to make this decision than ever before. But the complexity of the surfaced trade-offs was greater also. Without a doubt, this process resulted in a different view of prioritization than simply presenting each business unit’s top three initiatives independently (see Exhibit 9 for a summary of the overall process).

Through the lenses of the business architecture and the new process, it appeared that several projects favored by business units did not have sufficient enterprise value to make the funding cut. This outcome seemed to present business unit executives with two options: 1) they could acknowledge that projects from other areas might be more important to achieving enterprise goals, that the projects they had advocated were not, upon further examination, as important; or 2) they could challenge the merit of the new methodology for selecting and prioritizing projects. As Matulovic had discovered in the past few days, not everyone was choosing option one.

The Final Project List

In keeping with the ranking of the NRG goals, the DBC recommended funding business unit projects in order of goal portfolios (funding all projects in the top-ranked portfolio, then moving to the portfolio with the next highest rank, etc.). The recommendation was approved by the ITSC.

The Unfunded Supply Flow Project

One implication of the final prioritization decision was that a project critical to the company’s global supply chain management objectives was left only partially funded. The multiyear SAP implementation, midway finished, needed VWoA full funding to stay on track. But it was a large
project; its full cost would have, by itself, nearly wiped out a significant portion of the IT budget for 2004.

A cursory comparison of the project with the prioritization process revealed immediately why the project did not get funding. Much of its value would be recognized at the global level of the organization, not at the VWoA importer level. Locally in the U.S., the project’s value focused on warehouse performance benefits that did not relate directly to the topmost-ranked NRG goals in any obvious way. The business unit executive for supply flow understood, based on the methodology, why the project had not been funded. Although it promised savings, the big impact was global integration, which was sometimes a tough sell locally. In the internal language of VWoA, the project was a lot of “behind the curtain” stuff. And yet without sufficient funds for this project, the implementation would stretch another year. The initial reaction of the supply flow people in Germany was: “What do you mean it’s not funded? It’s got to be funded.” VWoA had to take the strategically important next step, but there was insufficient money at VWoA to do it.

The project appeared to Matulovic to have been poorly served by the new process. But his options were few. He could try to take funding from other funded projects; with a lot of work, he might find enough to do a little more work on the supply flow project. He could leave it to the supply flow area to work out what to do about this project. He could help them make an argument for funding the project from alternative sources. He could even use this project as a wedge to drive into the new prioritization process and reopen it. Matulovic knew the loss of funding would constitute a major setback for globalization initiatives based in Germany.

**Matulovic’s Decision**

Corporate strategy was clear. The difficulty was one of strategy implementation. Most would agree that strategy should drive IT operations, but legacy IT architecture and financial constraints imposed limits on what could be done to enact strategy. Business decisions about IT deployment made in the 1990s, when the company was in survival mode, created a need in the early 2000s for substantial IT investment. But most members of the ELT were either not around during the mid-1990s or had forgotten about decisions to withhold IT investment to support market incentives. Matulovic knew this caused some of his peers to view IT as an expensive item that usually fell short of what they needed from it. From some of the recent phone conversations, he gathered that some also thought this new process amounted to an attempt by the IT department to drive business strategy. It was a difficult situation, as Matulovic observed:

Setting priorities is one of the hardest things managers do. You try to involve everyone in the process and make it transparent, so that everyone owns the outcomes. But there is always room to second-guess the process, or decisions made in the process. People have a tendency to forget why decisions were made, or that we all agreed on the decision when it was made. What they see is “my project didn’t get funded, and this is keeping me from doing my job.” IT looks like an obstacle. If there’s one thing I’d like to turn around, it’s the idea that IT is an obstacle.
Exhibit 1  The “Himalayas Chart”

Source: Company documents.
Exhibit 2  Potential New Model Introductions, 2003–2007

The Strategic Change

Global Product Diversification leads to new Model introductions in US and Canadian markets

Source: Company documents.
Exhibit 3  Next Round of Growth Enterprise Goal Areas

Next Round of Growth Goal Areas to Support expanded product portfolio

VWoA / VWC Enterprise Goal Areas for 2008

- Customer Loyalty
- New Vehicle Value
- Pre-Owned Vehicle Business
- Stable Infrastructure
- Optimize Supply Flow

Source: Company documents.
Exhibit 4  VWoA Core Processes and Major Organizational Functions

Source: Company documents.
### Exhibit 5  Executive’s Ranking of Enterprise Goals for VWoA

#### Enterprise Goal Ranking for Project Prioritization

<table>
<thead>
<tr>
<th>Enterprise Goal Area</th>
<th>Rank</th>
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<tr>
<td>Customer Loyalty</td>
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<tr>
<td>New Vehicle Value</td>
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<td>Stable Business Infrastructure</td>
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<tr>
<td>Optimize the Supply Flow</td>
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Source: Company documents.
Exhibit 6  Relationship among Strategy, Business Architecture, and Performance

Strategy, Business Architecture & Performance

Source:  Company documents.
Exhibit 7  “Buckets” for Categorizing Project Functionality

Bucket Initiatives Based on Functionality

Source: Company documents.
Exhibit 8  Transforming Project Lists into Goal Portfolios

Project Proposal Prioritization Process

<table>
<thead>
<tr>
<th>Enterprise Goal Area</th>
<th>Rank</th>
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<tr>
<td>Customer Loyalty</td>
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<tr>
<td>Optimize the Supply Flow</td>
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Top 3 Ratings x NRG Prioritized Goals

Combining Top 3 into NRG Goal Portfolios

Next Round of Growth Goals

2004 Goal Portfolios

Loyalty
New Vehicle
Pre Owned

Supply Flow
Exhibit 8 (continued)

2004 Customer Loyalty IT Project Portfolio

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Actual Data Withheld

Source: Company documents.
Exhibit 9  Summary of Overall Project Prioritization Process

VWoA IT Project Approval Process

Source: Company documents.