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**Gemstar–TV Guide International:
IT Governance in a Technology Business**

Cyrus F. Gibson

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Abstract: In 2006 Gemstar–TV Guide had evolved from print and early electronic media for distributing television listings to a diverse and changing set of services on such platforms as wireless and Internet. The case describes the issue of organizing and governing the management of information technology, such as the key data of listings continuously updated, and management of new technological investments, such as the distribution through the new platforms and creation of new revenue-producing experiments. Under these conditions of uncertainty and change, managers work to balance formal clarity of roles and responsibilities and with the importance of informal working relationships.

Keywords: IT organization, IT governance, media business, IT capability change.

6 Pages



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***Gemstar–TV Guide International:
IT Governance in a Technology Business***

In June 2006, Gemstar-TV Guide International was a technology business in a highly uncertain market and technology environment. The company had recovered from disclosure of financial fraud by the early CEO and had changed leadership from the board of directors down to the CEO and virtually all his direct reports. Its business of providing TV guidance had evolved from print-based in the TV Guide Magazine to multiple channels including direct to the TV set, via cable partners, via the Internet, and via mobile phones. Revenues for 2005 were \$604 million, down from \$879 million in '03 and \$732 million in '04. Net income after tax in '05 was \$20.6m, up from a loss of \$577 million in '03 and a loss of \$69 million in '04.

Looking ahead, the company faced new challenges of internal technology integration, IT cost efficiencies, and new product development. In particular, early in 2006 senior managers were working to evolve the appropriate organizational structure, people to fill roles, and governance mechanisms around internal IT and technology in products.

Turbulent History, Cleanup, Fresh Start

Gemstar-TV Guide was a Wall Street darling during the dot.com boom, with a market

capitalization reaching a high of \$21b early in 2001. Under founder and CEO Henry Yuen the company licensed intellectual property based on some 200 patents, primarily in the area of interactive television. In 2000, Rupert Murdoch's News Corporation negotiated a stock merger worth \$7.9 billion for 41% of the company. The move reflected News Corporation's interest in the interactive TV boom that was anticipated by many media industry observers. News Corporation representatives soon held a majority of Board seats. In 2003, it was discovered that management of Gemstar-TV Guide had apparently "cooked the books." Yuen and his CFO were ousted, the company was fined by the Securities and Exchange Commission, and a major cleanup of the financials was begun by a new CEO from another News Corporation business, one of the Fox family of businesses.¹

In December 2004, after a successful restoration of credible financial reporting and the divestiture of some parts of the business, Rich Battista, also from Fox, was named CEO. His

¹ In March, 2006, Henry Yuen was found liable for securities fraud in an SEC lawsuit. In May a federal judge ordered Yuen to pay \$22.3 million in fines and penalties.

This case study was prepared by Cyrus F. Gibson of the MIT Sloan Center for Information Systems Research. This case was written for the purposes of class discussion, rather than to illustrate either effective or ineffective handling of a managerial situation. The author would like to acknowledge and thank the executives at Aetna for their participation in the case study.

mandate, given the cleanup, was to return the focus of the company to operations.

Toward the Future

Early steps under Battista included financial and planning governance and business organizational changes. These were followed by the development of explicit vision and strategy, completed in late 2005. Participating managers reported a distinctive change in style and morale.

One governance change was a complete revision of the corporate planning function, including the design and implementation of new forecasting, budgeting and monitoring processes, procedures and tools. One manager involved in this described the atmosphere and style of change as follows:

“We hired people who had been there and done such cleanups in large corporate environments where the design and execution of such policies and procedures was standard operating practice. This was not a place to learn. Someone has to be able to walk in and say, ‘These are the holes, and here’s how you plug them one by one to get this ship pointed in the right direction.’”

By 2006, the business was structured into business units primarily by the platform or channel by which TV guidance and schedule information was delivered. The organization as of July 2006 is shown in Exhibit 1. The delivery of TV guidance by some of those units were:

- To the consumer via print (*TV Guide Magazine*);
- Direct to the TV via airwave signal (*TV Guide OnScreen*—technology sold to and built into the TV set by the manufacturer);
- Interactive with the TV via licensing to cable companies for viewers to access through cable box (*Interactive Program Guide*);
- Direct to the TV via separate TV channel (*TV Guide Channel*, which produced programs providing guidance on

TV shows and entertainment to viewers); and

- To the consumer via *Digital Media* (Internet website and mobile phones).

Battista and his management team developed a vision and strategy that focused the business on offering “a comprehensive guidance solution to all television viewers.” Key assets included things that were both *content* (such as the database of program listings for the thousands of local TV markets in the US), and related to *delivery* (such as the strong appeal of the TV Guide brand name, and licensing and transmission of listings to cable providers, etc.).

As the executives of Gemstar-TV Guide turned to the future, technologically-based trends and disruptions were relevant to their strategy and management of technology. The business had experienced several disruptions in its core service of providing TV scheduling via the TV Guide magazine. First had been the printed “grid” that laid out TV channels as rows and time of day as columns, with shows and events in the cells. The business developed the capability to update the grid regularly, making it a core “asset” of the business. Then, as the number of TV channels via cable and satellite grew into the hundreds in every local TV market, the single page grid became unwieldy in print. This shifted the delivery from print to the TV itself, and required taking advantage of the interactive capability available through cable or a built-in hardwired device. Further change came with using the Internet and telecom platforms to distribute TV guidance, the situation in 2006.

The future direction of the business depended on trends that were still formative, and threats at several turns. For example, using the new Internet and telecom platforms as means of delivery opened Gemstar-TV Guide to potential competition from such players as Yahoo, although for the time being the company’s unique database of programs and updating capability was an advantage. Moreover, consumers were turning to a myriad number of information sources to obtain entertainment guidance on a growing number of traditional and digital platforms. In addition, a potentially disruptive

technology was emerging: video on demand (VOD), which would enable viewers to see what they wanted when they wanted it. Thus it was unclear what guidance medium or technology would be the most popular with consumers. This uncertainty was seen by many as creating an atmosphere of creativity.

One manager summarized the trends and situation as follows:

“For a company this large we have become very entrepreneurial. Our core product is guidance, but what we delivered in 1993 on paper is no longer where our target consumers are. They are assimilating multiple platforms in their home entertainment information gathering. Moreover, the platforms themselves continue to evolve, with a focus on increasing interoperability, such as using mobile patched into their home systems. A core group still reads the magazine, but increasingly the use of multiple platforms is becoming mainstream for entertainment guidance. The consumer preferences continue to adapt to emerging technology, increasing complexity in segmentation.”

IT and Technology

Because the business had grown by acquisition and was organized into relatively autonomous profit center lines of business, internal IT at Gemstar–TV Guide was largely decentralized and disparate. With the exception of financial reporting, applications for the business units were very different. They ranged from production fulfillment and subscription support for the *Magazine*, to web development and support for blogs for the Digital Media business, to support for the Data Solutions unit, the database of television listings. Steve Griffin joined Gemstar–TV Guide in 2003 with experience in IT in banking and health management and in financial management. He became senior vice president (SVP) and chief information officer (CIO) in the fall of 2004. He faced the challenge of providing infrastructure services to the business units, each of which had within it an IT person and applications team, setting direction for greater integration of data across the busi-

nesses, and achieving cost savings through more cost effective integration.

At the same time, Steve realized the future of the business depended on more than an efficient support of the back office. By 2006, the company had proposed and begun a major implementation of the Oracle package for accounting systems. Another issue was input and access of the company’s TV listings database. Some 200 people worked full time in offices in Pennsylvania, taking daily updates of TV listings from hundreds of broadcast, cable and local operators all over the country and keying it into the database. It was then available to business units for dissemination through the separate guidance products. The whole process begged for automation. In short, a better infrastructure was needed to share data and digital content in this critical asset. Beyond those issues, the company had to be on the forefront in trying new things with technology, experimenting with strategic applications for guidance, as it was doing with mobile phones and blogs on the Internet.

The organization and governance of the IT function did not have strong roots prior to Griffin’s arrival. Originally reporting to the chief financial officer (CFO), Steve subsequently reported to the chief operating officer (COO), who also had two of the six business units and the Data Solutions unit (listings database) reporting to him. Then, in 2006 when a new CFO was named, Steve was asked to report jointly to the COO and that new CFO. For IT project approval, Steve was a member of the Capital Investment Committee (CIC), a group formed after the financial cleanup to put discipline and transparency into the investment process. In addition to Steve as CIO, the CIC consisted of the SVP of Technology (Mike Starkenburg; see below), the COO, the CFO, the finance person responsible for capital investment processes and monitoring, and the Chief Accounting Officer. The annual investment process was first used fully in 2005–2006. Preliminary investment proposals came from the businesses or a centralized unit like IT to the CIC. Proposals were then formalized with

business cases and ROI, and the CIC made prioritization and allocation decisions.

Shortly after becoming CIO in 2004, Steve Griffin formed the IT Council. Consisting of each of the lead IT managers in the business units, the Council met monthly to address the basic question, “How can we make IT more efficient, and add more business value?” Of particular importance were discussions on how to balance centralization-decentralization through such means as the creation and adherence to technological standards. Steve and the Council were also considering adopting a portfolio view of IT investments and assets as a way of comparing, assessing and planning IT across the company.

Technology Organization and Governance in 2006

Early in 2006, Gemstar–TV Guide announced the formation of a new unit reporting to the CEO: the Product Development and Technology group. The group was headed by Steve Shannon, EVP, and had Michael Starkenburg, SVP of Technology, as direct report with particular responsibility for new product development. Both were new hires experienced in technology, as opposed to the media experience of other senior executives. Both had served at one time or another in IT jobs, in Internet startups, and in technology venture capital roles. Shannon described his group as creating a technology roadmap for the company that was consistent with the overall strategy, overseeing the development of all technology products in the company, whether within an existing business unit or as new startups, and insuring the cross-business integration of the core suite of services through an improved technology infrastructure for product support. Starkenburg had particular responsibility for product development.

Steve Griffin’s “Information and Technology Group” (IT) on the one hand and Shannon’s and Starkenburg’s “Product Development and Technology Group” (PD&T) on the other had responsibilities that were discussed and explicitly delineated. CIO Griffin had responsibility for the operational support of the business, particularly those systems removed from direct contact

with the customer, such as accounting applications, infrastructure operations, and help desk. Shannon’s group had responsibility for new systems that touched the customer, and for proposing and planning infrastructure changes that would facilitate cross-platform integration. Starkenburg as Senior Vice President of Technology had a reporting line from product technologists in each business unit. The role was to generate new products which might not be pushed by a business unit for such reasons as high risk or uncertain and long-term returns, and then get funding for those and other new product ideas and incubate them. Eventually, some of these might go back to a business unit or they might represent new businesses.

One manager described the delineation of technology areas between IT and PD&T as follows:

“In one sense when it comes to delineating the technology responsibilities we are bipolar. Like a mature company whose capital investment is IT we want to save money and provide services and measure our ROI. But like a startup in an uncertain area we want to experiment and take fliers based on what we envision, believe, and want to create.”

As they considered how IT and business technology should be delineated and governed, the managers recognized several points:

1. While the current delineation of separation of responsibilities between IT and technology group was clear enough to them, gray areas and ambiguities would arise. One described it as follows:

“This technology business is not like some others, where an Internet website, say, stands alone or in parallel with others. Here things depend on each other. We have a suite of services for guidance that get leveraged by a variety of platforms.”

2. It was crucial that these three executives and the senior management team understand the ambiguities involved in clarifying roles and governance processes. There was the potential for wasteful duplication and conflict or,

potentially, the opposite: hunkering into clearly defined responsibilities and avoiding wrestling with overlaps that, if resolved, could be strategically critical.

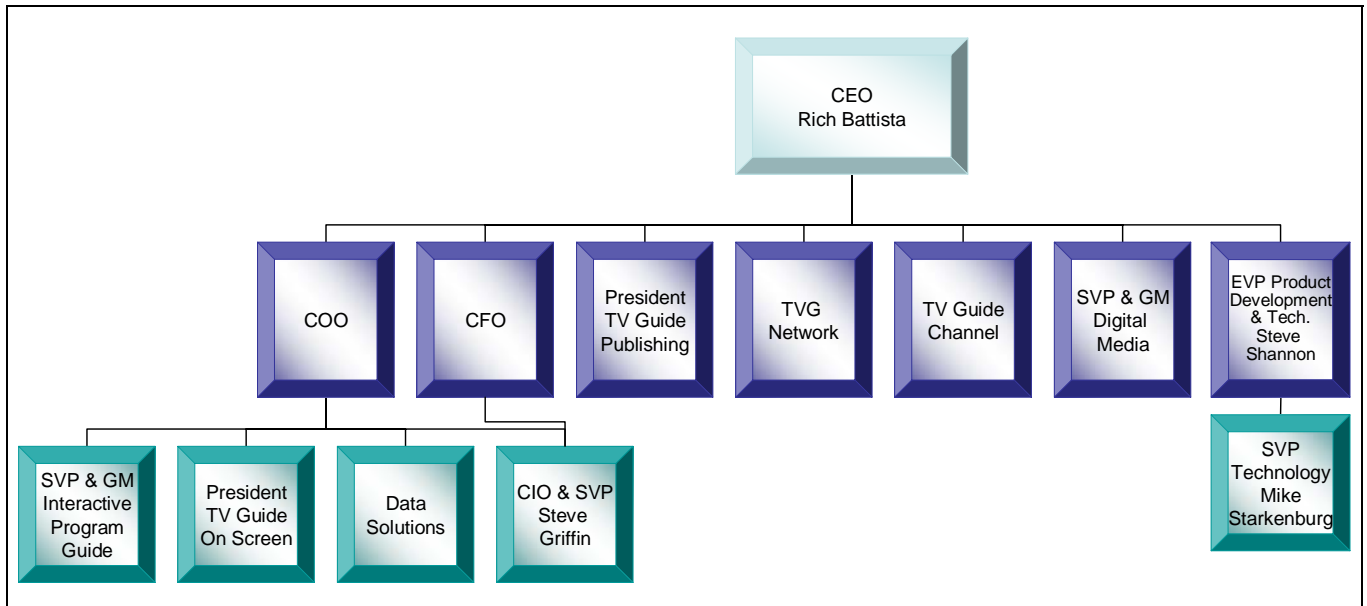
3. The company vision and strategy set a very important context and touchstone for decisions on technology governance as well as other decisions. As Steve Griffin put it, “The vision and strategy statements that came from Rich [Battista] and the business teams’ deliberations last year have been tremendously helpful in giving us a common purpose and direction. You can sense it throughout the company.”
4. Along with the unifying effect of the strategy, the sense of collaborative teamwork among senior executives was a positive context for moving technology forward. There was the need to build and maintain trust and good personal relationships. CEO Rich Battista had changed the bonus rewards for business unit executives from being entirely based on business unit performance to a balanced formula based on corporate performance, business unit performance, and personal performance. IT and PD&T leaders’ personal performance evaluations were based entirely on their bosses’ evaluations. Beyond the formal incentive structure, it was clear that the executive team put a positive emphasis on teamwork, and being a team player was important in the CEO’s evaluations.
5. There needed to be investments both for cost savings and more efficient infrastructure for sharing among existing businesses and those for new ventures. The two kinds of investment called for very different criteria. The formal criteria for the CIC would not necessarily apply to key investments in “R&D” for new products. At the same time, a fixed slush fund was not an option. One individual likened the new products investment decisions to venture capital funding.
6. To some extent, in evolving formal roles and governance in uncharted territory, the experience and particular skills of managers determined roles and responsibilities, rather

than the job being defined in detail and a person hired to fill it. As one put it, “At a senior level every hire is a reorganization.” Or when it came to deciding on a new investment with high but uncertain potential returns and high risk, “You can’t analyze it to death. You can’t wait for others to test the waters. You need an advocate that can synthesize the trends in technology and consumer usage who says, ‘This is my vision. This is where we need to go with this...’ You’ve got to have passion and key competencies as well as looking at the numbers.”

7. A big plus for the company was the availability of investment resources. The Board had shown itself open to both hard return investments, such as the Oracle system and consulting support for it, and to investment in some longer-term, less measurable new ideas. The implicit message was: when there is enough money, there is less conflict.
8. There was mutual dependency between Griffin and Starkenburg. The latter needed the former to support the growth of his unit and provide infrastructure such as PCs, connectivity and development environments. Griffin needed Starkenburg to look ahead for new infrastructure that would make operational systems support more reliable and efficient.

All those involved directly in technology at Gemstar–TV Guide agreed that its governance was a work in progress that would evolve. Rather than be cast in stone at the outset, as roles and practices for investment and responsibilities evolved and proved successful, they would be formalized for purposes of decision-making efficiency and for clarity to all the players and others in the organization.

Exhibit 1
Partial Organization in March, 2006



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CONTACT INFORMATION

Center for Information Systems Research
MIT Sloan School of Management
3 Cambridge Center, NE20-336
Cambridge, MA 02142
Telephone: 617/253-2348
Facsimile: 617/253-4424
<http://web.mit.edu/cisr/www>

Peter Weill, Director	pweill@mit.edu
David Fitzgerald, Asst. to the Director	dfitz@mit.edu
Jeanne Ross, Principal Res. Scientist	jross@mit.edu
George Westerman, Res. Scientist	georgew@mit.edu
Nils Fonstad, Research Scientist	nilsfonstad@mit.edu
Jack Rockart, Sr. Lecturer Emeritus	jrockart@mit.edu
Chuck Gibson, Sr. Lecturer	cgibson@mit.edu
Chris Foglia, Center Manager	cfoglia@mit.edu
Administrative Assistant	cisr-aa@mit.edu

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