2.5.2 WHEN PROFESSIONAL STANDARDS ARE LAX:
THE CONFIRM FAILURE AND ITS LESSONS
by Effy OZ

In 1988, a consortium comprised of Hilton Hotels Corporation, Marriott Corporation, and
Budget Rent-A-Car Corporation subcontracted a large-scale project to AMR Information
Services, Inc., a subsidiary of American Airlines Corporation. The consulting firm was to
develop a new information system (IS) called CONFIRM, which was supposed to be a leading-
edge comprehensive travel industry reservation program combining airline, rental car and hotel in-
formation. A new organization, Intrico, was especially established for running the new
system. The consortium had grand plans to market the service to other companies, but major
problems surfaced when Hilton tested the system. Due to malfunctions, Intrico announced an 18-
month delay. The problems could not be resolved, however, and three-and-a-half years after the
project had begun and a total of $125 million had been invested, the project was canceled.

In a letter to employees, Max Hopper, American Airlines Information Services chief, wrote:
“Some people who have been part of CONFIRM management did not disclose the true status of
the project in a timely manner. This has created more difficult problems—of both business ethics
and finance—than would have existed if those people had come forward with accurate
information. Honesty is an imperative in our business—it is an ethical and technical imperative.”
Apparently, the clients were misled into continuing to invest in an operation plagued with
problems in database, decision-support, and integration technologies [7].

Undoubtedly, software developers, as experienced as they may be, may legitimately run into
technical difficulties. The questions we, as IS professionals, should ask are: does a failure of this
magnitude have to happen? If the developers realize they are facing technical problems, should
they notify the client? How severe should the difficulties be to warrant alerting the client? If
management does not share information with the client, are the individual members of the
project team expected to blow the whistle?

These questions should be addressed by professional codes of ethics and standards of
conduct. The purpose of this article is to present the case and examine how IS codes of ethics
address the issues raised. We will also try to draw practical lessons for providers of IS services
and their clients.

Background

In 1987, a potential market caught the attention of AMR: centralized hotel reservations. As
the company discovered, only 20% of hotel reservations were made through a centralized
service, while in the airline business 80% of the reservations are made through a central system
like AMRs SABRE. The company decided to take advantage of this situation in the form of a
new, comprehensive system.

CONFIRM was the name given to an IS that was supposed to be the most advanced
reservation system in the combined industry of travel, lodging, and car rental. The clients relied
on the professionalism of the specialists who developed the highly successful airline reservation
system SABRE. SABRE was a classic example of how an IS can gain strategic advantages for its
user organization.

There are more than 85 hotel companies in North America. The major national hotel chains
are Marriott, Hilton, Hyatt, Westin, and ITT Sheraton. The ease with which travelers can make
reservations is vital to this industry. Over the past 16 years, each of these chains -acquired a
computer-based reservation system. The systems provide information to travel agents throughout the world. Some chains developed their own systems: others had vendors develop their systems. The systems varied in efficiency and effectiveness. For example, Marriott's MARSHA has been recognized as one of the best in the industry, while Hilton's NORTH dated from the early 1900s, and was inadequate and inefficient.

Like the major hotel chains, airlines, too, have acquired reservation systems. The most notable are SABRE- and APOLLO. SABRE- was developed by AMR, the parent of American Airlines corporation; APOLLO was developed by United Airlines corporation. The former has gained acclaim as the world's most successful airline reservation system. The system was installed in 1976 and has since been continually upgraded.

In 1986, AMR formed AMRIS, the information system's arm of the corporation. AMR's chairman hired Max Hopper to head AMRIS and offered him "a chance to combine running the SABRE business and expanding it into other businesses, really leveraging it." AMRIS was to exploit its success with SABRE- for business in other areas. But, unfortunately, the success of one system does not always guarantee the good fortune of a more advanced system. What follows is the chronicle of the events that led to the CONFIRM "disaster." The information is taken from media reports and the lawsuit filed by Marriott [151.

The CONFIRM Chronicles

On March 13, 1987, AMRIS representatives made a presentation to Marriott executives about a new reservation system they were preparing to develop. The system, named CONFIRM, would be superior to any existing reservation system in the industry. The representatives claimed it would be a state-of-the-art reservation System meeting all business needs of hotels and car-rental partners in the joint venture. According to the proposal, AMRIS, as a managing partner, would be in charge of the design and development of the system. The hotels would pay for this effort and would input the necessary data.

The partners, hotels and car-rental businesses, would use the System for their daily operations. In addition, they would join AMR in an effort to market customized versions of the system to other hotel and car-rental companies for profit. AMRIS was to operate the data processing center of the system.

From May through August of 1987, Marriott and other potential partners met with AMRIS executives to negotiate the deal. AMRIS people repeatedly assured the partners that CONFIRM would be superior to any current reservation system, while not more costly to use. They also promised that the project would be completed in time to outpace the competition in the hotel and car-rental industries.

On September 2, 1987, Marriott, a major partner in the venture, agreed to consider the AMRIS proposal although it already had an excellent system. The company's vice-president emphasized: "Marriott is pleased with its current reservation system ... we have one of the best reservation systems in the industry in terms of both functionality and cost." Thus, he said his company would join the venture if "the joint venture can develop a reservation system that is functionally richer than the system we intend to operate [and that Marriott costs] will be less than the costs to operate our proposed system."

The first three partners to the joint venture were Marriott, Hilton, and Budget Rent-a-Car. In October 1987, they formed a consortium and named it Intrico. In late 1987 and early 1988, technical representatives from the four partners started to plan detailed performance capabilities of the new system. On May 24, 1988, AMRIS issued a press release announcing the
commencement of the CONFIRM design process. In the meantime, the Intrico partners funneled large sums of money into the project. By September of 1988, Marriott alone spent more than $1.45 million on the preliminary design.

In September 1988, after a year of negotiations, Marriott, Hilton, and Budget signed a partnership agreement with AMRIS. According to the agreement, the objectives of the joint venture were:

- to design, develop, operate, and maintain new "state-of-the-art" reservation-processing system to be marketed worldwide;
- to design and develop "interfaces" with airline computer reservation systems so consumers could make airline, hotel and car rental reservations through a single, computerized system;
- to market the reservations system and other communication services to customers for a profit; and
- to convert each of the partners’ reservation systems to the newly-developed system.

AMRIS was designated "Managing Partner, Development" of CONFIRM. The agreement made the company responsible for all aspects of the design and development of the new system. The four partners undertook to pay AMRIS $55 million for the development.

Each partner was to appoint a professional team that would be stationed in Dallas, at AMRIS headquarters, so that the partners would provide input as to what functions were needed, and also test and evaluate the system as it was developed.

The agreement stated two phases: the design phase and the development phase. The design phase was to take seven months, and the development phase was to be completed within 45 months after the agreement was signed. Thus, the deadline was the end of June 1992.

The contract provided that the total expenditure to develop CONFIRM would not exceed $55.7 million. AMRIS warranted that it had "no reason to believe" that the development costs would exceed this amount. The company also undertook to develop the system so that operation costs would be limited to $1.05 per reservation.

On December 30, 1988, AMRIS presented a "base design" of the system. Marriott claimed the functional specifications were not adequate. A 1992 internal audit by AMR's SABRF-personnel stated that “these documents describe the expected functionality in general terms: they do not provide sufficient detail for a developer to understand what the user is expecting.”

In March 1989, AMRIS declared the functional and technical specifications were complete. Late that month, the company circulated a preliminary development plan. The plan was unacceptable to the partners. The next six months were devoted to revision of the plan. During this time, AMRIS executives reassured the partners that the system would comply with all the requirements, and that it would be ready on time.

AMRIS completed the design phase in September 1989 and circulated a proposed development plan for the partners’ review. At this time the company increased the price of the project from $55.7 million to $72.6 million. It also stated that the cost per reservation would be $1.30 (instead of the original $1.05) in the first year of full operation and decline to $0.72 and $0.40 in the fourth and fifth years, respectively.

According to the partnership contract, the three client-partners could withdraw when the development plan was presented. (A penalty of $1 million was involved.) The partners had to-
make the decision at this point. The per-reservation cost was crucial information in their
decision-making.

On August 8 and August 15 of 1989, AMRIS representatives met with those of Marriott,
Hilton, and Budget to review AMRIS’ pro forma financial statements. Two years later, in
August 1991, Marriott found that the statements were false. AMRIS understated the costs of
personnel and other operating costs. The company also used numbers that overstated the total
number of reservations. The actual processing cost per reservation was then estimated at
$2.00.

Based on the 1989 statements the client-partners decided not to exercise their option to
withdraw. To Marriott, for instance, the value of the project declined by $1 million, but still
promised a net present value of more than $3 million. In September 1980, the partners
accepted the development plan. The deadline was revised from June 1992 to July 1992.

The contract outlined four major development phases: the business area analysis (BAA) to
develop business models; the business system design (BSD) to enumerate detailed
descriptions of the application systems; construction of the system's code (construction); and
testing activities (testing).

On October 16, 1989, AMRIS assured the partners, that the project was on time and on
budget. However, in January 1990, the company missed the contractual deadline of
completing the terminal-screen design. In February 1990, AMRIS missed the completion
milestone of the BA-A phase. Apparently, the developers redefined the unfinished work of
this phase to become a part of the next phase.

In February 1990, AMRIS admitted it was more than 13 weeks behind schedule, but
claimed it could catch up and recapture much of that lag. In March 1990, the company began
a six-week “replanning” effort.

Millions of dollars kept flowing into the project. On May 15, 1990, AMRIS made a
presentation to the partners saying the project was still on time and that the system would be
ready by its deadline. At the same time, major players in the development effort were chastised
for delays.

During the summer of 1990, both Budget and Marriott expressed concerns that the project
was behind schedule and that it’s management was ineffective. While employees at the project
office estimated CONFIRM would not be ready in time, they were instructed by management to
change their revised dates so that they reflected the original project calendar. In August of that
year, AMRIS declared the first phase complete, and entered the second major phase (BSD).

When Marriott representatives asked to see some deliverables” of the completed phase, the
developers refused to show or explain their status. In October, the company admitted to the
partners it was one year behind schedule. But company executives claimed they would still meet
the deadline.

In February 1991, AMRIS presented a "Re-Plan" to replace the original development plan.
According to the Re-Plan, only Hilton would be using the system by June 1992, and Marriott
would not receive all the features it was promised before March 1993. Marriott later claimed that
AMRIS executives knew they could not meet the new schedule. The hotel company said AMRIS
forced employees to artificially change their timetable to reflect the new schedule, and that those
who refused either were reassigned to other projects, re-signed, or were fired. The Re-Plan
attached a new price tag: $92 million, far above the original $55 million and the previously
revised $72 million. The AMRIS president resigned in October 1991, and during the end of that
year and the beginning of 1992 about 20 additional employees resigned.
AMRIS employees were dissatisfied with the way management handled the project. They believed their managers kept stating unrealistic schedules and lied about the project status. Many realized the "Schedule" could not be met even with nine-hour workdays and work on weekends. By the summer of 1991, about half of the people assigned to CONFIRM (slightly more than 180 employees) were looking for new positions. A consultant was hired by AMRIS to evaluate the project. Dissatisfied with his findings, a vice-president "buried" the report and dismissed the consultant.

An evaluation by Marriott concluded that the developers could not complete the project. However, the hotel chain still gave them a chance: "As a partner, we hope that you will be able to perform as promised. However, as a user, we do not, based on experience to date, believe you can"[15]. AMR, the developer's parent company responded that CONFIRM's development was on target and that the system would be fully functional. AMPIS continued to bill Marriott at a rate of more than $1 million per month.

Finally, in April 1992, AMRIS admitted it was approximately two to six months behind Schedule. Like Marriott management, Hilton management was still hopeful that "whatever has been broken can be fixed to meet the original schedule"[15]. But there was no basis for these hopes. That month major problems surfaced when Hilton tried the system as CONFIRM's first beta-test user [7]. On April 29, 1992 the AM.RIS chairperson wrote to the three partners:

"Unfortunately, things have not gone as planned. Specifically: The individuals whom we gave responsibility for managing CONFIRM have proven to be inept. Additionally, they have apparently deliberately concealed a number of important technical and performance problems. [2] The technical staff, while skilled, has failed in the construction of the very demanding. Interfaces between the systems, and the extensive database, which will both be art of the completed CONFIRM system. The bottom line, gentlemen, is that in our best current judgment the system is 15 to 18 months from completion…” [15]

The company promised to repay 100% of the investment to any partner who wished to withdraw from the joint venture. A senior officer of AMRIS blamed employees for lying and the project management for concealing problems. The project, he said, was actually two years behind schedule.

On April 28, 1992, AMRIS fired eight top executives and replaced another fifteen employees. On May 1, 1992, the company’s vice-chairperson circulated a letter to employees acknowledging that CONFIRM's "system interfaces and databases are inadequate to providing the necessary performance and system reliability." He explained:

Our CONFIRM RS problem has many roots—one more serious than the others. Some people who have been part of CONFIRM RS management did not disclose the true status of the project in a timely manner. This has created more difficult problems—of both business ethics and finance—than would have existed if those people had come forward with accurate information [15].

In July 1992, after three-and-a-half years, and after spending $125 million on the project, the Intrico consortium disbanded. Technically, the developers' main problem was to tie CONFIRM's transaction-processing facility-based central reservation system with its decision-support system.
AMRIS's president admitted: "We found they were not integratable." Also, it was later discovered that the database was irrecoverable in the event of a crash.

Apparently, some of the failure is due to bad management practices of all the four partners in the Intrico consortium. The client-partner teams met with the developer's representatives just once a month. An AMRIS executive said: "You cannot manage a development effort of this magnitude by getting together once a month. Had they allowed the president of Intrico to function as CEO in a normal sense and empowered their senior reps [to] work together with common goals and objectives, it would have worked" [10].

AMR filed a countersuit against Marriott, Budget, and Hilton in September 1992. On May 14, 1993, AMR amended its suit to suggest that its partner-clients changed an approved plan to determine specifications for the common reservation system. Instead of a single system, AMR claims, the developers were encouraged to create three individual systems under CONFIRM. The company accused its clients of being "selfish" [11]. By January 1994, AMRIS had reached out-of-court settlements with all of its partners for undisclosed amounts. Some sources say the firm was facing damages suits of more than $500 million, and therefore agreed to pay about $160 million [18].

What can we learn from CONFIRM and similar cases? Experience shows that one or a combination of the following occurrences are the reasons for failure to develop a satisfactory IS:

1. Unforeseen and insurmountable technical difficulties;
2. Underestimation of cost and completion dates;
3. Failure of the developers to understand the system's requirements, or changing the requirements after the project started.

In its countersuit AMRIS claims the project failed because of the clients' demand to make changes long after the project started. What really happened and who is culpable in the CONFIRM case probably never be determined. It may well be that all of the three reasons contributed to the failure. However, it seems that much of the damage in CONFIRM-like cases can be avoided with several simple principles.

Principles to Minimize the Damage in IS Development Failure

Principles for Managers of the Service Provider

1. In the business of software development, you always know when you start a project, but you never know when you will complete it. The consultant responsible for Bank of America's TrustPlus boasted he could complete the system by 1983. Attempts to salvage the system continued until'1988 [3]. When outlining the project schedule, be realistic and include an adequate "slack" time. Technical and other problems may occur. Problems often occur when a project involves interfacing two or more IS. Trying to entice the client with an unrealistically short schedule is not only unethical, but may eventually hurt your own effort.

2. When the phases must be sequential to assure quality, never start phase *n* before you resolve all of the problems of phase *n-1*, and avoid shortcuts. AMRIS left bugs to be resolved at a later time, while it went on with the next phase. Reports of other large scale development failures point out similar practices One executive of Bank of America said:
"There were still bugs, but the users felt they could run with it and work out the bugs as we went along”[3]. You should view the project plan as a part of the contract with your client, even if it is formally not. The client counts on you to manage the project to your best professional ability. Failure to do so betrays the client's trust.

3. Executives should not make any "calming" statements about the project status before they learn the facts. Making uncorroborated statements is not only unethical to the client; it may also send wrong signals to employees.

4. Adopt a Code of Professional Standards and communicate it to your employees. The code should detail what an employee is to do when experiencing a persistent problem with a system under development, to whom he or she should report the problem, and what steps he or she should take if immediate supervisors are not responsive to complaints. A clear policy ensures that both managers and their employees know what is expected of them, and fosters more ethical behavior.

5. Most important: being dishonest may hurt your client, but it may also hurt you and your company. The financial impact of lost business because of a failure due to lies may prove much greater than the lost income from a single mishap. If it is not the monetary gain that drives your judgment but the reluctance to admit professional weakness, think again. Failure to disclose the real status of the project to the client may exacerbate the damage. Unfortunately, honesty is not always in one’s economic self-interest. Often, there is economic incentive to lying (e.g., when the transaction is a one-shot deal and if information of the incident does not spread [1]). But in this age of fast communication, especially in the IS industry, the news will travel fast. And your own employees may follow the bad example: they will lie to their superiors.

Principles for Employees
The first to observe technical problems are, usually, the employees: systems analysts and programmers. Employees have an obligation both to their employer and the client. When you realize there is a persistent problem, notify your supervisor. One wonders how long it took until the first employee stepped forward and did so in the CONFIRM case. However, some employees did complain about the technical problems—several of them paid for this with their jobs.

Principles for Clients
1. It seems that the three partner-clients kept loose vigil over AMRIS. This is surprising due to the fact that they had liaison teams that were supposed to keep track of the project progress. It is tempting to rely on a company that demonstrated success with another system. But this is not the same system. Previous success does not guarantee success with the system that is developed for you. Check the status of the project periodically. If you do not have qualified personnel, hire an independent consultant to do that for you.

2. In a suit filed by AMRIS against Marriott, Hilton and Budget Rent-a-Car, the plaintiff complained that the three client-partners in the Intrico partnership missed a deadline for providing a clear definition of system functionality [8]. Communicate to the developers exactly what your requirements from the new system are. You must realize that later modifications may result in a higher price and a later completion date.

3. Pay attention to alerting signals. When executives and other employees of the developer are either massively dismissed or voluntarily looking for new positions, ask questions.
When the rats abandon the ship, it is probably sinking.

Conclusion
A word of caution before we conclude: as pointed out several times in this article, there is no conclusive data from which to draw hard conclusions about reasons for failure in systems development. Ideally, we would collect data on a large number of cases and find patterns. For obvious reasons, such data are extremely difficult to come by, if not impossible. However, it seems that the CONFIRM case contains many ingredients that are common in cases that have been reported in the media and trade journals.

An ancient proverb says: “You are a wise person if you do not make mistakes; you are a clever person if you make a mistake but do not repeat it; you are a stupid person it you make a mistake and repeat it.” It may be hard to be wise the first time around, but let us not be stupid, either. As professionals, we are expected to learn from our own and our colleagues' mistakes.

The CONFIRM case draws attention because of the magnitude of resources expended. It is also a case of what seems to be the result of miscommunication at best or grand deception at worst. But there is reason to believe it is only one of many such cases. To minimize the probability of such mishaps, IS organizations have to adopt detailed codes of professional standards. The codes should outline to both managers and employees how to behave when projects do not proceed as expected.

Large development projects rarely proceed exactly as planned. This is true of IS development efforts as well. Management should be deeply involved in the progress of large-scale projects. If the professional team cannot overcome difficulties to comply with promised cost and timetable, it is the professionals' responsibility to duly report to management; then, it is management's responsibility to disclose the difficulties to the client and mutually outline a resolution.

Of course, there is no point in promoting a code of ethics and professional standards if executives do not demonstrate personal example. If not for reasons of moral obligation, at least for utilitarian principles, IS organizations should be honest with their clients. In the long run, honesty, indeed, is the best policy.

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THE COLLAPSE OF CONFIRM
By John P. McPartlin

Last April 29, AMR Corp. chairman Robert Crandall wrote to officials of Marriott Corp., Hilton Hotels Corp., and Budget Rent A Car Corp. regarding the Confirm hotel and car rental computerized reservations system—a massive $125 million joint undertaking the four companies had agreed to fund and develop back in 1988. The letter, the contents of which Crandall and AMR now refute, was perhaps the most straightforward event to take place in connection with Confirm.
With great understatement, Crandall’s missive explained that "unfortunately, things have not gone as planned." The AMR staff responsible for Confirm had proved to be "inept," he continued, and "have apparently deliberately concealed a number of important technical and performance problems."

The bottom line, he wrote, according to court documents filed by Marriott late last month, was that Confirm would not be ready in June, as expected, but instead was at least 15 to 18 months from completion. "In the event a partner is unwilling to continue," he concluded, "we are prepared to refund 100% of that partner's payments."

If the matter had ended there, it would have been a graceful conclusion for what otherwise had been a clumsy, inefficient, poorly managed project from the start. But it didn't.

**On Second-Thought...**

One month later AMRI the parent company of American Airlines Inc., was singing a different tune. After taking a $109 million write off to cover Confirm’s costs, AMR reversed Crandall's original statements, claiming there never was a cover-up, nor had there even been an investigation of a possible cover-up. Eight Confirm managers--including the project's development leader--who had departed AMR the previous month were not fired but had merely resigned en masse. The spin doctors had begun their work.

On Sept. 23, AMR filed suit against its erstwhile partners claiming that from the beginning it was Hilton, Budget, and Marriott that had impeded Confirm's progress by assigning personnel who "lacked adequate knowledge of the industry" and by failing to specify exactly what they wanted from the system.

But there are those who believe AMR’s suit was a defensive measure filed in anticipation of the lawsuit against AMR initiated by Marriott Corp. two days later. Marriott's suit provides a detailed chronicle of Confirm's endless delays and cost overruns and asserts that AMR executives as far up the corporate ladder as Crandall and CIO and senior VP Max Hopper were involved in a concerted, effort to conceal Confirm’s countless problems from the rest of the consortium. Together with interviews of numerous sources associated with the project, a picture emerges of a strategic and potentially landmark IS project bungled by gross AMR mismanagement.

According to several sources present when AMR Originally pitched the project back in 1987, it presented Confirm to hotel and car-rental companies as an opportunity to take advantage of the same systems development expertise that had made American Airlines' Sabre computerized reservations system the first and foremost service of its kind. Once Hilton, Budget, and Marriott signed on to Confirm, however, AMR began recruiting the development team from outside its organization. No one from Sabre was tapped for the job.

"The project was doomed to failure from the beginning," states James Yoakum, former head of IS at Marriott, who left in April 1990 to become senior VP of reservations and IT for Choice
Hotels International Inc. "AMR hired people off the street and proceeded without the right project manager running it."

Yoakum, who says Marriott's decision to go along with Confirm was the main reason he left the company, maintains that even if Confirm could have been properly implemented, to make a profit the consortium would have needed an impossibly large number of customers. In addition, he says, AMR’s position as both a partner and a service provider to the Confirm consortium created a serious conflict of interest that may have contributed to undermining the system.

From the start, sources say, the Confirm development team, led by, John Mott, then president of the Travel Services unit of AMR Information Services Inc. (AMRIS), AMR’s data processing and computer services subsidiary, was in way over its head. Development schedules were overly optimistic and relied on outmoded and unrelated technologies that were not up to the task (see story that follows). If employees spoke up about the problems, Marriott’s suit alleges, they were quickly reassigned.

When time ran short, Confirm's managers quietly began eliminating functions from the system to speed up the process. The Marriott suit logs case after case where it expressed concern over Confirm's development and was in turn repeatedly assured by AMR executives that everything would be ready on time.

This past April, almost four years after the project began and only two months before the system was scheduled to go on line, Chuck Biebighauser, VP of operations at INTRICO, the Carrollton, Texas-based consortium established by the four companies to oversee Confirm's development and marketing, went to AMRIS president C.J. Atteridge and told him there were major flaws in a pilot project set to commence at Hilton in June. In response, Atteridge arranged for a team of 15 Sabre technical experts to audit the situation at Confirm. Their conclusion, announced a month later, was that the system was still 18 months away from completion. The jig was up.

Gone, But Why?

Shortly thereafter, the eight top AMRIS executives associated with Confirm, including Mott, were gone. Marriott's suit says they were fired for concealing information about the project. Mott insists he merely resigned and that there was no cover-up. He agrees with the assertions in AMR’s lawsuit: that the indecisiveness of the three other partners impeded the progress of the system's development.

“Everyone was just too involved,” he says. "They were investors in a great idea, they should have just sat back and let someone run it.”

Mott characterizes the four years of Confirm's development as a “continuous debate” and asserts the partners really didn't know what they wanted in the first place. Not so, says former Marriott CIO Yoakum. “Hilton and Budget worked for years before they signed up for Confirm and presented
AMRIS with a list of specs that literally stood six-feet high," he says. "That's a pretty darn good definition of knowing what you want."

AMR officials, including Crandall and Hopper, declined to be interviewed for this story.

In the end, Hilton, Budget, and Marriott shelled out more than $125 million on Confirm. For their trouble, the three companies are now significantly behind the curve in CRS technology.

For Hilton and Budget, the post-Confirm situation is even more bizarre. When they signed on in 1988, they also chose to outsource their mainframe data processing and reservations systems to AMRIS, planning simply to migrate to Confirm once it was completed. Now that Confirm is dead, the two companies are left fighting a legal battle with their former business partner, AMR, which is also their outsourcer.

Big Name In Hot Water?
As a direct or indirect result of the Confirm debacle, more than a dozen highly placed IS executives at AMR or its' subsidiaries have left within the past 12 months, and there may be more departures to come. Rumors abound that Max Hopper, one of the best known and most highly respected IS executives in the world, may be on his way out. Information Week has learned that at least one highly placed IS executive at a large U.S. company has been contacted by an executive recruiter claiming to be seeking qualified candidates for Hopper's job at Crandall's behest.

"The press reports so far make it sound like Hopper was sent over to Confirm as a white knight to clean things up," says one former AMR executive who requested anonymity. "But let's face it, he should not have been outside the loop. He should have known what was going on."

Moreover, AMR may have yet to feel the full extent of Crandall's wrath. "When Crandall is unhappy about the performance of some- thing, he is not reluctant to express his feelings about the situation," says Thomas Logman, an analyst at New York's Bear, Stearns' & Co. Inc. "Is that a diplomatic enough way of putting it?"

Ironically, after all this some say AMR still may try to go ahead with Confirm by courting a new set of partners once the lawsuits are settled. "AMR, when they made their announcement, said they were 'suspending development,'" notes David Mellinger, VP of finance and the sole remaining employee at INTRICO. "They chose that word very carefully. I think they still hope they can overcome the technological problems and revive the project with other partners. That's AMR's logic."

With the Confirm debacle now headed for a nasty court battle, that seems like strange logic indeed.

EDITOR'S NOTE ON THESE CONFIRM PROJECT STORIES
Time passed between the original publication (October 1992) of the Confirm collapse story that you have just read and a 1994 story pre- senting the resolution of that collapse. We present the resolution story after this note. The first Confirm story in this book, 'When Professional Standards Are Lax," was also published in 1994, but I focused primarily on the early events rather than the resolution.
During that interim period, the Confirm story by no means disappeared from the pages of the computing press. There were many letters to the editor of Information Week concerning the story and the project, some approving of the story and its conclusions, some not.

Sample comments of letter-writers reacting to the 1992 story include:

- From a representative of American Airlines: “... Flawed and distorted supermarket tabloid view of what happened.” “A huge disservice to all the AMRIS employees assigned to Confirm.” The letter makes the point that Confirm customers changed requirements and sought individual competitive advantage, even against their own Confirm partners. It also objected strenuously to statements that there was a cover-up.

- From a former employee of AMR Travel Services: “I am pleased to ‘confirm’ that your publication has captured the pertinent facts and reported them in an accurate and forthcoming manner.” “The project had several fatal flaws, but the ones that did not get corrected were the arrogance and incompetence of the AMR Travel Services senior executives in charge of the project.”

- From a disinterested party: "With regard to 'The Collapse of Confirm': Should it be Con Firm?"

- From another disinterested party: “… most enlightening.” Hope IW will maintain its crusade.”

We have commented earlier in this book on the fact that much of the observers viewing an incident can see things quite differently. Obviously the letter-writers above fit that phenomenon!

And now, for the final chapter of the Confirm story.

**BUMPY RIDE, SOFT LANDING**

By John P. McPartlin

A lawsuit that began with a bang seems to be ending with a whimper, probably to the relief of AMR Corp. Only days before a potentially embarrassing trial was set to begin, AMR has reached out-of-court agreements with its three partners in the ill-fated Confirm hotel and rental car reservation system.

Thus ends AMR’S two-year-old battle with its former business partners Hilton Hotels Corp., Budget Rent-A-Car Corp., and Marriott Corp. to assign blame for the collapse of the $125 million project. AMR is the holding company for American Airlines, which developed the Sabre reservation system.

In its original lawsuit, filed in October 1992, AMR claimed its partners continually changed the requirements for the system and demanded too many individual features to make Confirm financially feasible.
The partners then countersued AMR, claiming the holding company misled them about the level of expertise of its system developers and the final costs of the completed system. Confirm’s costs rose rapidly from the original projections made when the project was first discussed in 1987.

Terms of the settlements are sealed, but all parties acknowledge that the 11th-hour negotiations helped lead to a mutually acceptable conclusion. “The parties have settled their differences,” says William Brewer, an attorney with Dallas-based Bickle and Brewer, who represents Budget in the dispute. AMR will reportedly pay some $160 million to the three companies, although details of the agreement preclude any discussion of the financial settlements.

**AMR's Non-Airline Business Grounded?**
A spokesman for Marriott says the hotel chain reached a deal with AMR late last month but made no announcement. It's unclear when Hilton settled. And Budget, the last holdout, came to an agreement with the company last week.

It's not known what effect the conclusion of the case will have on AMR, which has experienced severely rocky financial years due to the turbulence of the airline industry and several internecine price wars. The settlement may reflect badly on its ability to provide third-party systems development and integration work, a significant part of its strategy to expand non-airline businesses.