DRIVING
AUTO ACCIDENT
COSTS DOWN

HOW PHILADELPHIA REDUCED AUTO ACCIDENT REPORTING COSTS BY USING THE INFORMATION HIGHWAY.

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The sun is setting on the Schuylkill River as Center City Philadelphia begins to empty after a workday. Gazing more at the rowers on the water below than on the automobiles ahead, a driver slams into the car in front of him, causing an accident that increases the ride home for many commuters—and sets in motion a series of legal and insurance steps.

Such a traffic incident is only one of more than 70,000 automobile accidents reported each year in Philadelphia, and the city's police department prepares a report for each one. Accident reports are necessary for insurance companies to process claims and ultimately pay settlements to their customers. Until recently, processing an accident report was a costly, time-consuming process, taking up to six weeks for a paper copy to become available. Thanks to the efforts of a unique public/private partnership and the power of Internet technology, Philadelphia accident reports are now available to insurance companies in less than one week.

The inception of this project grew out of an effort to develop a criminal justice system for the City of Philadelphia. The system, known as PARS (Preliminary Arraignment Reporting System), greatly improved the flow and monitoring of individuals from the time of their arrest

through their preliminary arraignment before the courts. Working closely with the City of Philadelphia Police Department, CIBER Inc., an information technology consulting firm, developed PARS. Deputy Commissioner Charles Brennan of the Philadelphia Police Department knew there was a need to make similar improvements to the processing of accident reports, a concern stressed by the Insurance Federation of Pennsylvania (IFP), a trade organization of insurance companies doing business in Philadelphia. Shrinking budgets, however, limited the amount of cash investment the city could provide toward a solution.

Representatives from the Philadelphia Police Department, IFP, and CIBER Inc. met in the spring of 2000 to discuss how insurance companies and individuals could receive quicker access to accident reports. They realized that the time lag to receive reports resulted in increased costs to insurers. These costs included storage fees for damaged vehicles requiring repair and rental cars for customers whose vehicles were too damaged to drive. Insurance companies typically paid out nearly $100 each day until the claim was settled. What's more, the potential for insurance fraud increases the longer claims remain unsettled. Finally, customers who are

experiencing frustration and inconvenience in getting their claims processed are more likely to shop their policy with other insurance companies. During this initial meeting, it also became apparent that no single entity had the depth of knowledge or the financial resources to identify and implement a solution. The only way for change to occur was through an alliance of all affected groups—a public/private partnership.

As the representative of most Pennsylvania insurance companies, the Insurance Federation of Pennsylvania took a leadership role in the project. Understandably, all parties had concerns about the roles, responsibilities, and accountabilities of each member in the partnership, as well as the cost and funding of a potential solution.

Led by CIBER Inc., the partnership undertook an initial feasibility study that included an analysis of the current business and technical problems, the identification and evaluation of promising alternatives, and the recommendation of the most feasible solution. The feasibility study recommended a groundbreaking solution: Enable the purchase and delivery of accident reports over the Internet. The proposed solution merged an imaging system, new workflows, an accounting application, and the power of Internet technology. It was to be the City of Philadelphia's first e-commerce application.

HOW IT WORKS

The workflow for the new solution starts when police officers prepare accident reports. The reports are scanned daily, creating electronic images. These images are then indexed and stored in an SQL server database. The indexed images are then linked with associated "incident" information, usually taken from the 911 call system. With images linked to incident information, inquiries and searching can be performed by accident location, time of occurrence, and names of the involved parties. Once an accident report is identified in the database, insurance companies can request, purchase, and receive a copy of the report via a private Internet site. Since the City of Philadelphia currently doesn't have the capability to accept credit card payments, insurance companies set up prefunded escrow accounts for their anticipated usage. These escrow accounts are charged for each accident report purchased. Individuals can use the application to determine if a report exists; then they can download a form to order the report via the mail. While not the optimal solution for the consumer, the application eliminates the need to travel to downtown Philadelphia to buy a

report. Pennsylvania state law establishes the fees municipalities can charge for the sale of accident reports, which is currently $15 per report purchased.

From a technical perspective, the recommended solution uses several new technologies: imaging, the Internet, ASP (Application Server Pages), XML (eXtensible Markup Language), and SOAP (Single Object Access Protocol). There are benefits associated with each technology:

◆ Use of imaging greatly decreases the time to retrieve a requested report, and it also reduces the potential for missing reports. With report storage now online, the need for the city to retain the physical copy of each accident report has been eliminated, saving storage charges.

◆ The Internet has evolved into a standard way to conduct business. Web-based viewing and purchase of automobile accident reports enable insurance companies and the public to do business with the City of Philadelphia on a 24/7 basis, except for scheduled maintenance. Both the insurance company and public accident report sites are dynamically generated as ASP pages, which means that each page is constructed based on user input. The insurance company site requires a user name and password for access, which allows the user to search for accident information and buy images of the reports. The public site enables searches for accident incident information to determine if a report exists and provides information regarding how to download and purchase a report.

◆ The accident report system uses XML and SOAP, two Internet technologies. XML facilitates requests to view and buy reports and returns the data to the requestor. SOAP allow sharing of information between computers at the insurance companies, Philadelphia Police headquarters, the Philadelphia Department of Records, and the public.

Several months after the feasibility study, the City of Philadelphia and the Insurance Federation of Pennsylvania approved the project to develop the system to allow ordering and receipt of automobile accident reports via the Internet. The project was broken up into four tightly linked phases:

1. Develop detailed functional and technical specifications;
2. Make incident numbers available over the Internet;
3. Install and configure the computer hardware and imaging software; and
4. Develop Web pages and components, and integrate the system with the Internet.

These phases were implemented by a team consisting of representatives from the city, insurance companies,

BEFORE PROCESS FOR ROUTINE ACCIDENTS
(approximately 80% of accidents):
(14-26 workdays from accident until insurance company received report)

EVENT	DURATION IN BUSINESS DAYS	BUSINESS DAY
Accident occurs		
Report completed by Police		Day 1
Report approved by supervisor and sent to central location	1 day	Day 2
Report reviewed by Quality Control	3 - 7 days	Day 5-9
Reports copied	1 - 2 days	Day 6-11
Copied reports mailed to Records	1 - 3 days	Day 7-14
Reports copied by Records	1 – 2 days	Day 8-16
Copied reports filed by date and location	1 - 2 days	Day 9-18
Report request processed and copied by Expediting Agency	1 day	Day 10-19
Report taken back to Expediting Agency and copied and processed	1 - 2 days	Day 11-21
Copied report mailed to insurance company	1 - 3 days	Day 12-24
Report received and internally routed to Claims Agent	1 day	Day 13-25
Claims Agent reviews report		Day 14-26

AFTER PROCESS FOR ROUTINE ACCIDENTS
(approximately 80% of accidents):
(4 workdays from accident until insurance company receives report)

EVENT	DURATION IN BUSINESS DAYS	BUSINESS DAY
Accident occurs		
Report completed by police		Day 1
Report approved by supervisor and sent to central location	1 day	Day 2
Accident reports separated from other police reports and sorted by type	1 day	Day 3
Review, scan, and index reports		
Reports available on the Internet; Claims Agent reviews report	1 day	Day 4

and the consulting firm. City of Philadelphia employees from the police, Department of Records, and the Mayor's Office of Information Systems (MOIS) provided subject matter expertise and knowledge of existing City of Philadelphia systems. Insurance industry representatives from a working group of major companies provided expert information related to automobile accident claim processing. In addition, the chief counsel for the Insurance Federation of Pennsylvania was the liaison with the city and the insurance companies. Consultants from the Philadelphia office of CIBER Inc. provided technical leadership and project management.

In the first phase, the team developed business requirements and detailed technical specifications. For most software development projects, adherence to sound project management principles during this phase can save a considerable amount of time and money during the development and implementation phases. The key deliverable for this phase was a System Design Specification document, which contained the details for the custom software that needed to be developed as well as the blueprint for the integration of the custom software. The system needed to be integrated with data from three city databases, two websites, and the Internet. The System Design Specification was reviewed and approved by the City of Philadelphia and IFP.

The deliverable for the second phase was to make "incident" information stored on City of Philadelphia systems available over the Internet. Incidents are essentially any request for police officer assistance, usually through the 911 system. Accidents are a subset of the incident data. These phases proved the XML- and SOAP-based technology could access the data residing on the City of Philadelphia systems and push it to the Internet. This phase also included the initial development of the Web pages, which allowed the future users to experience the "look and feel" of the new website.

The third phase included installation of new computer hardware and imaging software plus custom software development. This phase also included significant testing by future system users from the City of Philadelphia and insurance companies.

The fourth and final phase included the development of all Web pages and the coding to access accident report images and deliver them via the Internet. Initially this functionality was provided to several insurance companies on a pilot basis and then rolled out to all participants. This phase also included the development and deployment of accounting functionality to allow the City of Philadelphia to maintain the system, including these key tasks:

1. Monitor escrow accounts established by the insurance companies for their anticipated use of the system;

2. Create invoices for the actual number of accident reports purchased; and

3. Process payments from insurance companies to replenish their escrow account.

The site was initially launched in November 2001 and is prominently featured on the City of Philadelphia website at www.phila.gov.

"RIPPLE EFFECT" SAVES COSTS

The major benefit of the new system was a reduction in the number of elapsed days for report availability after an accident. Under the previous manual system, it took an average of 20 days for reports to be available for sale. Through the use of scanning and Internet technologies, the new system makes reports available in an average of four days. This dramatic reduction created a "ripple effect" of benefits to all parties in the public/private partnership.

"The City of Philadelphia responds to roughly 70,000 auto accidents each year," said Deputy Commissioner Brennan. "By collaborating with the IFP and CIBER, we are able to create value without any additional burden to the police officer responding to an incident. The technical architecture of the solution is practical in that it supports our current operating procedures. In addition, it has reduced the labor necessary to process an auto accident request from an insurance company, while, at the same time, enabling our citizens to get this information using the Internet from the comfort of their homes."

An unexpected benefit of the new system was pointed out by Brennan, when he noted, "Since the application has been put on the Web, city revenue from accident reports has increased 25% and has held there. The revenue generation figure was a surprise to the city— a happy one."

Insurance companies have been able to increase their level of customer service by settling claims faster through less reliance on the mail and manual processes. This, in turn, has reduced the frustration level of the consumers. Insurance companies have also realized costs savings through several factors:

1. Reduction in the number of reports purchased. Previously, claims offices in different locations for the same company would be unaware that another office had purchased a report and would order their own copy. The new system kept track of a purchase by an insurance company, and future requests for the same report were directed to the already purchased image.

2. Elimination of third-party "expediting fees" to travel to Center City Philadelphia to obtain an urgently needed report.

3. A drastic reduction in out-of-pocket costs incurred while waiting for the claim to be settled, including reductions in automobile storage and replacement rental costs.

4. A reduction in the number of days it takes to settle a claim greatly decreased the potential for fraudulent claims.

"Insurers are always looking at new and innovative ways to improve the claims process for consumers," said John Doubman, secretary and counsel for IFP. "Delays in claims processing make us more vulnerable to claims growing out of delayed processing and also to fraudulent claims because of lack of prompt information about accidents involving our policyholders. This new system will help improve insurer performance on all these fronts."

Based on the success of the application, several enhancements were made in November 2002 to integrate the application with processes in place at insurance companies. Companies can provide access to multiple employees, and users can receive e-mail notification of report availability. In addition, companies can download their monthly transaction history and view their escrow balance online.

"This is an excellent example of the collaboration of private and public entities working together for the benefit of the citizens of Philadelphia and insurance companies' customers," said John Morrissey, area director for CIBER's Philadelphia office. "By developing this new approach, we have eliminated the tedious paper-based system, and claims are processed and settled much faster."

Perhaps automobile accidents are inevitable, but post-accident frustration and inconvenience don't have to be. In Philadelphia, much of the frustration and inconvenience has been reduced, thanks to out-of-the-box problem solving and the use of current technology. ■

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