

Issues in IT Law: A Proactive Approach



The legal landscape as it relates to IT is a moving target. Missing the target could result in lawsuits and fines. Get ahead by adopting a proactive approach to IT law.

info-tech research group

602 Queens Avenue, London, Ontario, Canada, N6B 1Y8
Tel: 519-432-3550 Toll Free: 1-888-670-8889 Fax: 519-432-2506 www.infotech.com

Legal Issues Facing IT: A Proactive Approach

- 1 Introduction2**
- 2 Legal Matters IT Managers Need to Be Aware Of2**
- 3 Examples of Legislation That May Affect Your IT Department.....3**
 - 3.1 Privacy Legislation 3
 - 3.2 Software Licensing 4
 - 3.3 Financial Reporting 4
 - 3.4 E-Commerce 4
- 4 The Proactive Legal Approach5**
 - 4.1 The Home Court Advantage 5
 - 4.2 Public Perception of Lawyers 5
- 5 Educating Staff6**
 - 5.1 Scenario A..... 7
 - 5.2 Scenario B..... 8
 - 5.3 Scenario C..... 8
 - 5.4 Scenario D..... 9
 - 5.5 Scenario E..... 9
 - 5.6 Scenario F..... 9
 - 5.7 Getting advice early will get you ahead! 10
 - 5.8 It is Never too late! 10
- 6 Action Plan 10**
- 7 Conclusion 11**
- 8 Additional Web Resources 11**

1 Introduction

Businesses often take legal risks, unaware that they are doing so. It is one thing for a business to accept a risk - legal or otherwise - based on an understanding of the risk and the results of a risk/reward analysis. It is another thing to take on a risk because one does not know that it exists.

A business may understand certain legal risks and procedures it should be dealing with based on its history and experience. Laws do change, however. This is of particular concern for the IT department given the rapid and constantly accelerating nature of technological change in organizations.

As well, laws are not applied in a vacuum. Sometimes changes in a business's operation, business plan, or products that seem minor can have significant legal repercussions.

For example, changing a software sales model from licensing software to customers to hosting it as an application service provider may seem like a simple change. That change, however, results in very different legal issues and risks for the business. Those issues and risks can be dealt with, but won't be if a business does not understand the legal ramifications of that change.

The business may venture into a new arena and not understand that new arena carries with it differing legal risks. This is a common issue when a business starts to use the Internet. For example, a business that traditionally sold within its state or province now may be selling to the world over the Internet. Suddenly, it is potentially exposing itself to the varying laws of hundreds of different jurisdictions. If a business takes a proactive legal approach, its legal counsel will be aware of the changes in the business's focus, and will be able to alert the business to those issues at the outset.

2 Legal Matters IT Managers Need to Be Aware Of

Specific legal matters that should be of concern to IT managers include (but are not limited to) the following:

- **Software Licensing.** Software vendors, and software organizations, such as the business software alliance (BSA) or the Canadian alliance against Software Theft (CAAST), take the matter of unlicensed software very seriously. If a business is using more copies of software than they are licensed to use, and these authorities find out through making inquiries or performing an audit, the business could suffer embarrassment and significant financial expense.
- **Outsourced Service Provision.** In an ASP or outsourcing situation, if things such as service levels, privacy or security are not properly documented, the business can find itself without the level of performance it requires. It could also be found in breach of laws regarding privacy and of agreements regarding confidentiality.
- **Maintenance Agreements.** If software maintenance agreements are not properly negotiated up front, ongoing maintenance fees can get costly and impact future IT budgets.
- **Use of Contractors.** To the extent that contractors perform work for the IT department, it may be unclear who owns the material being created. If it is not clearly documented at the outset, the uncertainty can have serious future

ramifications for things such as the financing or acquisition of the business, especially if the company is in the business of creating software.

- **Use of IT Assets by Employees.** If a business does not have technology use policies saying what employees can and cannot do with company systems and how the company can monitor such use, the business faces potential difficulties in disciplining employees who use the systems and potential lawsuits for such things as unlawful dismissal.
- **E-Commerce Transactions.** Transactional Web sites need to be designed to reflect the laws of “offer and acceptance” and consumer protection statutes. If this is not done, at the very least the business will suffer because of the lack of user friendliness of the site. The business may also be liable for errors on the site, such as listing a thousand dollar item for \$10.00 or for sanctions for breaching these regulatory requirements.
- **Privacy.** Many jurisdictions are passing privacy laws, which may be general in nature or limited to certain industry sectors or activities. If a business fails to have a privacy policy that complies with the relevant legislation, it can expose itself to civil and criminal penalties and public embarrassment for the improper collection, use, and dissemination of personal information.
- **Online Promotions.** It is not unusual for businesses to try to attract traffic by giving away items or running promotional contests on their Web sites. The laws of various jurisdictions restrict and control lotteries and gaming. Those laws affect how promotions must be handled on a Web site, as well as promotions generally, and can lead to criminal sanctions.
- **Third-Party Material.** A Web site that posts third party material or that allows others to post material must be cognizant of its liability for copyright infringements. In particular in the U.S., the Digital Millennium Copyright Act (DMCA) provides for specific requirements, notices and procedures. Failure to follow those can result in civil and criminal liability.

3 Examples of Legislation That May Affect Your IT Department

Described below are examples of the types of legislation that may directly or indirectly impact the IT operations of your organization. This is not meant to be an exhaustive list, as the legislation that affects your organization will depend on the type of business activities that you undertake, and the legal jurisdiction(s) in which you operate. Consult your legal department or counsel to identify and review the legislation that is relevant to your situation.

3.1 Privacy Legislation

- **Financial Services Modernization Act (U.S.).** Also known as the Gramm-Leach-Bliley Act, this legislation added new regulations in four main areas relating to financial services: disclosure of privacy policies; "opt-out" of information disclosures to non-affiliated third parties; non-disclosure of account information; and standards to protect security and confidentiality of consumers' non-public information.
- **Health Insurance Portability and Accountability Act (HIPAA) (U.S.).** There are two sections to this U.S. legislation. HIPAA Title I deals with protecting

health insurance coverage for people who lose or change jobs. HIPAA Title II includes an administrative simplification section, which deals with the standardization of healthcare-related information systems. In the information technology world, this section is what most people mean when they refer to HIPAA. HIPAA establishes mandatory regulations that require extensive changes to the way that health providers conduct business.

- **Children’s Online Privacy Protection Act (U.S.).** This legislation requires parental consent to collect personal information on children under the age of 13.
- **Personal Information Protection and Electronic Documents Act (PIPED) (Canada).** This legislation sets out requirements for dealing with personally identifiable information, including concepts of requiring consent to collect, use, and disclose how the information is to be used.
- **European Union Data Privacy Directive (Europe).** This Directive has two primary objectives - to protect the fundamental right of privacy and promote the continued free flow of personal data between Member States. The Directive will prohibit electronic transfer of personal information about European citizens to countries with privacy protection laws that are deemed inadequate.

3.2 Software Licensing

- **The Uniform Computer Information Transactions Act (UCITA) (U.S.).** This legislation puts in place a uniform commercial code for software licenses and other computer information transactions. UCITA puts information age industries on a par with the sellers of traditional goods by codifying the legal rules applicable to contracts for their products. It plays the same role for software licenses that the Uniform Commercial Code plays for the sale of traditional goods.

3.3 Financial Reporting

- **The Sarbanes-Oxley Act (U.S.).** This legislation applies to all companies that are required to file periodic reports with the U.S. Securities and Exchange Commission (SEC). Developed to strengthen corporate governance and make corporate accounting more transparent, the Act contains a number of significant changes relating to the responsibility of directors and officers, and financial reporting obligations.

3.4 E-Commerce

- **Electronic Signatures in Global and National Commerce Act (U.S.).** This legislation places electronic contracts and commerce on the same footing as traditional paper-based contracts.
- **Electronic Commerce Act (Ontario).** Similar to the U.S. Electronic Signatures in Global and National Commerce Act, this legislation places electronic contracts and commerce on the same footing as traditional paper-based contracts. Similar legislation is in effect in several other Canadian provinces.

Being aware of existing legislation that affects your situation is only the first step. Given the rate at which Information Technology is changing, be sure to instruct counsel to keep you informed of proposed or pending legislation that relates to your operations. This will help maximize the lead-time available to manage any changes that may be required in order to comply with new or pending legislation.

4 The Proactive Legal Approach

The reincarnation of a proactive legal approach is emerging on today's legal scene. Its goal is to inspire all companies - from the Joe's Barbershops to the Microsofts of this world - to take an inventory of where they stand legally, and plan around, rather than react to, legal issues.

This approach is not new, but is embraced by far too few organizations.

This proactive approach has been labelled in different ways, including preventative law, a risk management approach to law, preventive medicine, and a team-based approach. Think of it as a quality control program.

This philosophy is relevant to all areas of a business, and can be applied, or promoted to the company as a whole, by IT managers, Chief Information Officers, Chief Privacy Officers, and Chief Executive Officers alike.

Businesses often overlook the "big picture" with respect to their legal issues. They are reactive when a problem arises, but they often neglect issues that are lurking in the wings. Even after a problem arises, many companies don't put the checks and balances in place to ensure that the same problem does not reoccur.

To wait for a problem to arise is akin to tying one arm behind your lawyer's back. If a business only calls a lawyer when it absolutely has to, it is likely paying more for less effective services. In a crunch, it is likely that all any lawyer can provide is a quick-fix solution. Often, time restrictions don't allow a lawyer to get a full picture. He or she has to put blinders on to deal with a specific problem in a very short amount of time. The advice is rushed and less effective than it would have been if the lawyer had been involved from the initial stages of the business's or issue's development. A business gets more value from calling a lawyer in early.

4.1 The Home Court Advantage

Involving a lawyer early keeps the ball in the business's court. The business' fate rests in its own hands - not in the hands of a judge or third-party arbitrator. It is the difference between a helmet and a cast. It has also been described as a fence at the top of a cliff rather than an ambulance at the bottom. Lawyers should be viewed as safety inspectors rather than firefighters.

As examples of litigation costs, the Intellectual Property Insurances Services Web page states that median litigation costs for copyright infringement suits are U.S.\$180,000, and for patent infringement suits U.S.\$1,200,000. An article in the New York Law Journal in 1999 reported that a publishing company was ordered to pay U.S.\$813,724 in legal fees to the winning party in a lawsuit.

The benefits go beyond reducing the risks and costs of litigation. For example, well-drafted customer documentation and privacy policies that are created to fit how the products are actually sold and used, and how the business operates, can save embarrassment, money, brand image, and reputation.

In addition to the external cost factor, businesses generally underestimate the amount of internal time and effort required to resolve a lawsuit or public relations crisis. Counsel will require the assistance of significant internal human resources in order to effectively deal with a crisis situation.

4.2 Public Perception of Lawyers

One reason businesses may not take this proactive approach is the popular image of lawyers as advocates and litigators rather than as risk managers. Perhaps this is partly a result of the

portrayal of lawyers on television and in the movies. Trials, worthy causes, and courtroom dramatics are much more exciting to watch than a lawyer having lunch with their client and listening to business issues, or a lawyer reviewing business plans or drafting documents.

The perception of lawyers as being “guns for hire” or “ambulance chasers” may to some extent be deserved. Perhaps the legal community has not done enough to foster the perception of lawyers as advisors and risk managers with the best interests of their clients in mind.

And of course, it takes a lawyer who thinks and acts proactively for this approach to work. In short, both business and lawyer must work together, have an open dialogue, and think creatively. This is not a zero sum game. Both business and lawyer will benefit from this approach.

Similarly, the business will not be successful with this approach if it (or its lawyer) treats its relationships with its customers, employees, regulators, and suppliers as a zero sum game where there can only be one winner and one loser. It is indeed possible to lessen a business’s risks and improve its relationships with others at the same time.

The value of a litigator once a dispute arises cannot be underestimated, but the value of preventing that litigation, or preventing a business’s embarrassment in the eyes of its customers or shareholders, is equally, if not more, valuable (and cheaper).

A consultation prior to a business even opening is the ideal process. It may seem a little daunting to hear about everything that could go wrong before you even open your doors, but the benefit of having an action plan with respect to avoidance is immeasurable. In many cases, legal effectiveness equals business effectiveness. Sound proactive legal advice and planning won’t save a poor or ineffective business plan, but a sound business plan can certainly be crushed by poor legal planning.

This does not mean an existing business cannot make the transition to a proactive legal approach. An existing business might, for example, perform a "legal audit" of its operations by having a review done of the business, its structure, its products, policies, customer relationships etc. Such a high level review will raise issues to be investigated further. Once those potential issues are identified, they can be reviewed in more detail, prioritized, and action plans developed to address them. Issues that arise out of such a review may range from matters that are relatively simple and inexpensive to implement, to issues that could take significant amounts of time and effort.

5 Educating Staff

A legal audit may show how the actions of your employees are opening the business up to liability. A business is responsible for its employees. Whether they are dealing with customers, government officials, other employees, or suppliers; their actions are a reflection on the business. The more a business understands the liabilities that can arise from employee behaviour, the easier it will be to teach them to how to avoid unacceptable behaviour. Compliance programs can be put in place to alert employees of legal obligations within their sphere of influence.

If employees understand the basic concepts of the laws in the areas in which they work, it will likely result in the prevention of many contraventions of those laws. Virtually everything that a corporation does has some legal dimension to it that hinges on the ability to conduct the business’s affairs in a legally appropriate fashion. Not knowing what that entails could be disastrous.

What an IT Manager or CIO Can Do

The IT department is often in a similar position to the reactive lawyer. It may be asked to do certain things by business executives, without a lot of explanation about the rationale or the objectives of the initiative. They may also be asked to provide a technology solution that is more time consuming or complicated than the business expects it to be.

The IT department can make its job easier, and deal with legal issues in a proactive manner at the same time.

- When asked to undertake a new project, the IT Manager should take the time to ask probing questions of the business unit about the reasons behind the request, and what the business unit is trying to accomplish. Turn the role into one of a trusted advisor, rather than a mere implementer. This is the same philosophy behind the proactive legal approach, only applied to the IT department.
- At the same time, ask if legal counsel has been involved in the matter yet. If so, get them involved in the IT solution as well as the business issues. If not, encourage immediate involvement of counsel to investigate what legal issues arise from both the business and IT proposals. That can be a distinct advantage to the IT department if the IT solution is created consistent with sound legal and risk management principles, rather than having to be hastily changed near the end of the project after the business unit finally brings it to the attention of counsel.

Setting this example will eventually make the business managers and executives think of IT early on.

- As well, the IT Manager should do whatever possible to keep on the pulse of the business, and in the minds of the business managers.
- To be even more proactive, consider inviting counsel to do a review or “legal audit” of the IT department and on initiatives the IT department is involved in. Widen the scope of that audit as far as possible to encompass issues that may only touch IT peripherally, but affect the business as a whole. In performing a legal audit, counsel asks questions at a high level on all aspects of the business, such as its corporate structure, software acquisition and tracking strategies, customer documentation, intellectual property protection and transfer, privacy policies, Internet use, and Web site use. Have the counsel prepare a list of recommendations for further investigation or action, and deal with those issues before they become problems.

After that audit is complete and recommendations are made, present those results to the appropriate executives.

Yet this does not change the fact that many employees know little or nothing about the most basic legal concepts.

The benefits of being proactive versus reactive with respect to legal issues can be substantial, both for the IT department and the organization as a whole. Consider the following scenarios.

5.1 Scenario A

New software is licensed for which the business is presented with the vendor’s standard license and maintenance agreement.

- **Reactive approach:** The business signs the vendor’s standard documentation with a cursory legal review on the eve of signing. There is little ability to amend the documents, given time pressures and the lack of bargaining power at that stage. A year or two later, maintenance fees are escalating rapidly, and significant additional expenditures are required to

add additional users that are required by the business unit. The IT department is facing questions by the business unit about why it is now costing so much more.

- **Proactive approach:** Legal counsel was brought in early in the software acquisition process. The IT department and counsel have taken the time to talk to the business unit to understand its current and future needs for the software. Counsel understands how the IT department will implement the software. Counsel has addressed the issue of costs for future additional users, and future maintenance costs. The business has been able to quantify and limit future costs by negotiating changes to the license and maintenance agreements before they are signed. A year or two later, maintenance costs are as expected – either because they are not escalating as fast, or because the IT department and business unit understood up front what they would be. Additional users are required, but they are at a lower cost where some no cost or lower cost increases have been built in. In the worst case, costs are the same as in the reactive approach, but IT and the business unit are not caught by surprise, as they have budgeted for those costs.

5.2 Scenario B

The business creates a Web site to sell its products to the public. An error occurs on the site at some point, listing a product for sale for \$5.00, that should really be \$500.00. Orders for the product escalate rapidly as the word spreads on the Net before the business discovers and corrects the error.

- **Reactive approach:** A lawyer is called to advise on whether the business must honour those orders at \$5.00. The lawyer advises that the business is indeed legally obligated to fulfill all the orders for \$5.00.
- **Proactive approach:** The IT department and business unit consult counsel when the Web site is being developed. The lawyer advises on how the ordering process should operate and on the drafting and presentation of legal terms for sales. When called regarding the \$5.00 mistake, the lawyer advises that the business is not legally obligated to provide the product for \$5.00. The business can then make a decision based on customer relations principles as to what position it will take regarding those orders.

5.3 Scenario C

The Business Software Alliance shows up at your doorstep demanding to do an audit of your software licensing practices to determine if all of your software is properly licensed.

- **Reactive approach:** It is discovered that the business has several instances where it is using software that it has not paid for as the use of the software has increased beyond the licensed parameters. The business must pay for the necessary upgrades and faces possible penalties, embarrassment, and legal action.
- **Proactive approach:** Counsel has already performed a legal audit. During the audit, questions are asked regarding how the business tracks its software licensing and use. Systems and policies are implemented to track license requirements and compare them to actual use. The business can readily assure and convince its vendors that it is fully licensed.

5.4 Scenario D

A business is about to launch a new product.

- **Reactive approach:** At the last minute, the lawyer is asked to review customer documentation prepared by the business. The marketing material has been prepared and the product is ready to launch. The lawyer is concerned about fundamental issues regarding the form of the document and the way the relationship has been structured or the technical solution has been implemented, and believes that there is a better way to approach the issue - but to do so at this stage will result in a delay of the product launch. A business decision is made to make only some minor adjustments and launch the product on time without addressing those risks and issues, eliminating the opportunity to consider better alternatives. After launch, the business's chosen branding is found to offend someone else's trademark.
- **Proactive approach:** The lawyer is familiar with the business or, at the very least, has access to relevant information about the business's plans, products, and direction. The business has contacted the lawyer in the early stages of product development and IT solution. The lawyer has made suggestions that guided the process all the way along. An alternate approach to the customer documentation that better protects the business and is more user-friendly for the customer is implemented at the lawyer's suggestion with no extra cost or complexity. Trademarks are chosen for the product that do not conflict with other marks, and are easier to protect.

5.5 Scenario E

A party that is contracting with the business wants changes to the business' standard documents or provides their own documents for the transaction.

- **Reactive approach:** The lawyer makes revisions unfamiliar with the full context of the deal. The lawyer provides the business with a number of comments that frustrate and delay the deal. Many of the points, while legally sound, are not relevant to the deal or the broader interests of the business. The business may become reluctant to deal with the lawyer (or other lawyers) in the future, as the legal advice is perceived as an impediment to the deal. This exposes the business to increased liability on this and future deals.
- **Proactive approach:** The lawyer is familiar with the context of the business and the deal. The lawyer is able to have brief discussions with the business to narrow his or her comments to those relevant to the business. The lawyer's role is perceived as useful as the comments only deal with issues that are important to the business, and facilitate quicker resolution of the deal.

5.6 Scenario F

The business decides to acquire equity financing by selling shares in the business.

- **Reactive approach:** The lawyer will scramble to answer diligence issues raised by the investors or underwriters. He or she may have to determine, among other things, who owns the business's intellectual property, what privacy policies are in place and what obligations there may be with respect to creditors. For example, documentation will have to be hastily created

(and other parties located and convinced to sign) to confirm technology ownership and to create privacy policies.

- **Proactive approach:** Some of those issues have been contemplated and dealt with. The business or its counsel simply has to retrieve the policies or documentation to show the prospective investor. The business appears much more organized and professional. Working together ahead of time has saved the lawyer time and the business money, and made it more likely that the investors will view the company in a positive light.

5.7 Getting Advice Early Will Get You Ahead!

Having your lawyer involved from the start gives him or her the opportunity to provide you with better legal advice. The advice comes from someone who knows about your goals, your philosophies and your worries. He or she knows the context in which any problem arises and the context in which future problems can be prevented.

5.8 It Is Never Too late!

When a legal problem arises, it is not too late to implement a proactive approach. It just becomes necessary to broaden the scope of the business' legal questions. Instead of asking "How do we fix this?" ask, "How do we fix this and make sure it never happens again?" This method should, for example, be employed in contractual situations. It is not always necessary or desired to dissolve the relationship between the parties after there has been a breach. Instead, a lawyer can advise how to resolve the initial breach and redraft the contract to lessen the chances of similar problems arising again.

6 Action Plan

Chances are your legal department is not proactive when it comes to dealing with legal issues. Follow this guide to minimize the costs and consequences of IT-related legal issues in your organization:

- Explore legal issues early. If your organization has a legal department or in-house counsel, arrange to meet with them and review any contracts that relate to the IT department, and identify any contracts that should be in place, but are not. When asked to start a new project, an IT manager should meet with, or gather information from, the relevant areas of the business. Find out if legal counsel has been involved. If so, involve them in the IT solution. If not, get counsel involved in the entire project. Fill counsel in on all aspects of the business needs and IT solution.
- Keep lawyers informed of business context and goals. If your business has in-house counsel, make sure you keep them informed of what your department is doing. Consider making a member of the in-house legal department part of your IT planning team, or invite them to key planning meetings. If you do not have in-house counsel, consider providing the business's external counsel with whatever documents you have to keep them apprised of your plans.
- Remember that "garbage in - garbage out" applies to legal advice just the same as to computers. Don't just tell legal counsel what you think they need to know. Let them know the big picture.

- Develop a plan that keeps employees, customers, suppliers and other relevant parties informed of the business's and your department's plans and policies. Issues that may seem to be unimportant may have significant legal implications for your organization or for third parties that deal with you.
- If a legal problem does arise, in addition to asking counsel, "How do we fix it?" ask, "What can we do to avoid future problems like this?"
- Take time to brainstorm with your lawyer about the business's goals. Invite him or her to lunch, (or convince your counsel that he or she should invite you to lunch) and talk about issues in general that are important to you and the IT department, and where your department is headed.
- Review the business to uncover legal issues before they become a problem. Have a "Legal Audit" performed on your business to obtain a snapshot of issues that may exist, and then create an action plan on how to investigate those issues further and address them. Info-Tech offers a comprehensive [Technology Law Audit](#) that can provide you with the tools and expertise required to identify legal issues and develop a more proactive IT department.
- See the [IT Law](#) section of our McLean Report Web site for more information and resources that can help you improve your understanding of legal issues affecting the IT operations of your organization.

7 Conclusion

Preventative law means better legal advice. A business will benefit immeasurably from bringing a lawyer in early in the game. A business will also get more value for its legal dollar. Litigation is expensive. Preventing litigation is comparatively cheap. Giving the business a better image in the eyes of its employees, customers, and investors is invaluable.

The proactive approach does not guarantee that a business will never have a dispute, or an embarrassing legal incident, or never have to scramble to accomplish something. It does however lessen those risks considerably.

8 Additional Web Resources

- Harrison Pensa llp
www.harrisonpensa.com
- Legal Landmines In E-Commerce
www.legallandmines.net
- Meritas Law Firms Worldwide
www.meritas.org

About The Author

David Canton advises on information technology and e-business matters, such as software licenses, outsourcing agreements, consulting agreements, intellectual property, technology transfer, privacy, the Internet, Web site and e-business issues, both for those creating and using technology.

Prior to joining the law firm Harrison Pensa, Canton was Senior Corporate Counsel for a major financial institution where he focused on information technology law. He has advised and negotiated agreements with companies such as AOL, AT&T, Aliant, BAE, BCE Emergis, Bell, Boeing, Brinks, CGI, Ceridan, Computer Associates, Cisco, EMC, Electronic Arts, Epic Games, Equifax, Ericsson, GE, IBM, Imoney, Intuit, Keane, Kodak, LGS, Lotus, Lucent, Mastercard, Microsoft, Moore, Motorola, NB Tel, NCR, Novell, Oracle, Peoplesoft, RIM, Reuters, SAS, Solcorp, Sun, Symcor, Telus, Tivoli, Unisys, Vantage, and Xerox.

info-tech research group

We are the **technology advice people** providing high quality research, advice, and services that have a measurable, practical impact for more than 14,000 information technology professionals.

Info-Tech White Papers deliver comprehensive information and advice on selected topics of keen interest to information technology managers. The Info-Tech Research group specializes in creating concise directions that busy technology managers and professionals can put to use right away. Subscribers to our [Info-Tech Advisor](#) product receive more than two dozen White Papers like this one annually.

More Products and Services. Every IT Manager must make critical decisions. Info-Tech's [Custom Research Reports](#) provide you with unbiased customized research and advice on demand. Also, check out these Info-Tech products:

- [Strategic IT Planning](#)
- [E-Business Strategy](#)
- [Mastering Management](#)

Info-Tech clients include most major corporations across North America. For more about The Info-Tech Research Group, and how we might help you, see our Web site at: <http://www.infotech.com>.

Note: All Web links in this document were checked for accuracy and functionality at the time of publication. We cannot, however, guarantee that referenced Web sites will not change the location or contents of linked materials and will not be held responsible for such changes.

© The Info-Tech Research Group, 2003.