

## **How Small Businesses Can Use Information Technology to Improve their Performance**

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### **What are the benefits of using Information Technology effectively?**

- Improved profits
- Improved customer service
- Improved vendor relations
- Improved employee morale and satisfaction
- Reduced overtime
- Faster training of new employees
- Improved quality of life for the owner/manager

### **Goals for Technology:**

- A system that handles all transactions - quotes, orders, shipments, payments, etc.
- Files/databases of all customers, employees, vendors, leads, prospects, etc
- Ability to quickly answer a question about any transaction or customer, vendor, etc.
- Ability to analyze results over time
- Right hardware, software, & business practices
- Security protection from viruses, spyware, and theft
- Disaster Recovery Plan (Business Continuity Plan) including data backup offsite
- Relationship with appropriate technology service provider
- Effective Internet use

### **Software**

- Office Suites
  - Microsoft Office
  - Corel WordPerfect Office
  - Sun Microsystems Open Office(Star Office)
- CRM, Contact Management
  - ACT, Goldmine, MS Outlook, MS Business Contact Manager
- Accounting Software
  - What is accounting software?
    - Software that takes care of your accounting and the rest of your business
    - A complete information system for your business that also does your accounting
  - Choices
    - Basic accounting products (Quickbooks, Peachtree, MYOB)
    - Mid range (BusinessWorks)
    - High End (ACCPAC, MAS90, MAS200, Great Plains (Microsoft))
  - Most of the Accounting Software products have industry specific versions  
Some examples:
    - Construction
    - Retail
    - Manufacturing
    - Wholesale
  - Many of the Accounting Software products have products that can be added on or linked to the base product for a specific industry

- Vertical Market Software
  - Software designed for a specific industry or similar industries  
Some examples:
    - Medical
    - Dental
    - Industrial Distribution
    - Construction
    - Plastics Injection Molding
    - Legal
    - Retail Sporting Goods, Shoes, Apparel
    - Interior Design
- Custom Software
- How do you decide what is best? Where do you look?
  - Web sites:
    - [www.accountingsoftwareworld.com](http://www.accountingsoftwareworld.com)
    - [www.aicpa.org/pubs/jofa/sep2003/johnston.htm](http://www.aicpa.org/pubs/jofa/sep2003/johnston.htm)
  - CTS offer directories for a fee at [www.ctsguides.com](http://www.ctsguides.com)
    - Accounting, Manufacturing, CRM, Medical, Small Business
    - Their Small Business Guide covers:
      - BusinessVision
      - Netledger Advanced Accounting
      - BusinessWorks Gold
      - QuickBooks Pro
      - Microsoft Business Solutions
      - Small Business Manager
      - Peachtree Complete Accting plus Time & Billing
      - MYOB Complete Accounting
  - Professional Societies sometimes publish lists or directories of software
  - Magazines or Journal of professional societies
    - Steel Fabrication
    - Construction
    - Industrial Distributor
- Internet search on "software surveys"
- How do you evaluate products and software companies?
  - Software sales rep or reseller gives you a demo
  - Obtain a demo or evaluation copy and try it
  - Ask for 5 references from businesses that do what you do and are the same size
  - Call the 5 references and ask a series of questions - see Reference Checklist
- Who will install and support the software?
  - You or your staff
  - Software company
  - Software reseller
  - Consultant who is recommended by the software company

## Computer Hardware

- desktop vs. notebook  
notebooks - road warrior, desktop replacement or both
- monitors crt vs. flat panel  
viewable size issue
- data storage dvd 4.7gb  
dvd double recording to 94.gb  
combo drive with dvd burner & cd burner
- hard drives pc internal speed 5400 rpm 7200 rpm 10000 rpm
- file servers mirrored hard drives
- network attached storage (NAS)  
Quantum  
Snapserver  
Snappliance  
Adaptec
- flash drives, thumb drives, memory stick
- pc purchase strategy that I use for clients:  
  
buy only business class pc's  
buy with 3-year warranty with on site next business day parts/labor  
replace after 3 to 4 years, or, replace the hard drive

## Technology Service Providers

### Network Specialists

- Install & maintain network file servers, network operating systems, network components, & network cabling
- May also sell equipment and network operating systems like Microsoft Windows 2003 Server or Novell Netware
- May also sell, install & support pc's
- May also sell, install & support commonly used software:  
MS Office  
MS Exchange (network email)
- Normally configure and support data backup, system maintenance & upgrades

### PC Support Tech Specialists

- Install, maintain & support personal computers and office software
- Do not have the training or skills to install & support network file servers

### Custom Software Developers

- Design, program and install custom software
- Will often design & program custom software add-ons or modifications to commercial software products

### Systems Integrators/VARS/Resellers

- Sell, install & support a package of related products:
- Some software product( Accounting, Retail, Medical, etc)

- Have a sales reseller agreement with the software company
- Also sell, install & maintain network file server and any other technology components the customer may need
- They are just like the Network Specialist but include some specific software product
- Will often offer training and software modifications for the software
- May have multiple software products:  
for example, I have worked with a firm that is a reseller for these products:

#### Software Trainers

- Offer installation & training for a specific software product
- May also offer support

#### Web Designers

- Will design, install & maintain web sites
- May not have the skills to develop web sites with an interactive database

#### Web Developers

- Will design, develop, install & maintain web sites that have an interactive database

#### Multimedia Developers

- Focus on design and development of web products that have a multimedia content such as motion & sound
- Used for training, education & product support

#### Technology Firms

- Firms may offer a single focused service, or, may offer several services and and several different skill sets on staff

### **Data Backup**

- backup to tape, cd-r, cd-rw, dvd-r
- take backup media offsite
- remote backup service like eVault & LiveVault

### **Disaster Recovery Plan/Business Continuity Plan**

1970 disaster recovery - recover computer files

1980 disaster presentation - prevent disruption, fire, theft

1988 continuous availability - keep system running during a disaster

1990 business continuity planning - plan for space and people needs as well as computer processing during a disruption to keep the business running

### **Security**

#### Virus protection

- Norton Internet Security, McAfee, CA
- pc based
- network version

### Spyware protection

- Webroot Spysweeper
- Computer Associates PestPatrol
- Spybot Search & Destroy
- Adaware

Firewall either hardware or software

Acceptable use policy

### Internet Issues

web options

online brochure

content site

e-commerce site some optios: Shopfactory Pro, Yahoo Small Business

message or discussion board to create an online community

email

use your domain name in your email address, [jv@vangsness.com](mailto:jv@vangsness.com).

shows that you have a domain name and maybe a web site, and many people will go to web site just by seeing your email address

### Other

voice over IP

calls through the internet

example: Skype at [www.skype.com](http://www.skype.com)

on line meetings

Webex, Groove, Verosee

remote access  
or remote support

PC Anywhere  
gotomypc  
win xp option  
Windows terminal services

### Resources

Web sites

[www.news.com](http://www.news.com)  
[www.smallbusinesscomputing.com](http://www.smallbusinesscomputing.com)

Newspapers

*Chicago Tribune* James Coates article on Mondays  
*New York Times*  
*Wall Street Journal* On Technology, Walter Mossberg on Thurs in Sec B

Books

Information Technology for SMB's

**Technology Solutions for Growing Businesses**

Author: Ray, Ramon

**Managing Information Technology in Small Business: Challenges & Solutions**

by Stephen Burgess (Editor)

Backup & Business Continuity Planning

**Contingency Planning and Disaster Recovery : A Small Business Guide**

by Donna R. Childs, Stefan Dietrich

**The Backup Book: Disaster Recovery from Desktop to Data Center**

by Dorian Cougias, E. L. Heiberger, Karsten Koop

Internet Marketing for Small Business

**Low-Budget Online Marketing**

by Holly Berkley

**Small Websites, Great Results**

by Doug Addison