Information Technology for small businesses

Small businesses do not have the IT resources available to larger concerns, they will not have in-house IT professionals available to manage, troubleshoot and plan. Each issue will very likely be unique and require a new solution instead of having been previously encountered and resolved. There will be no corporate body of knowledge to rely on. Small businesses however need their IT to function effectively and must present the 'aura' of a much larger supplier to corporate customers. The requirements are the same and the budget minimal.

Things are not all bad however, small businesses have more reactivity and flexibility, decisions are made faster by people who actually have to do things and therefore have a clearer vision. With the correct input from an IT consultant a superior solution will be implemented.

In this document we are assuming that the business is already running and has some IT, a new business startup is something of a luxury for an IT consultant as everything is within control.

Consider the existing IT

Overall

The overall performance and suitability for purpose of an IT system will have a major impact on staff morale. How often do you hear 'The computer won't let me', well it's either an excuse or needs to be fixed.
Has the business changed such that a new approach is required eg. multi site.
Do senior managers spend hours of their valuable time looking after IT. Has the recession forced the lay off of IT staff.

Hardware and Infrastructure

The LAN (Local Area Network)
Is the hardware reliable and able to run the various tasks required.
Are the printers well sited. Minimise the cost of disposables. Would a networked printer be useful. Are network tasks operating at speed, opening shared files, database response, internet access etc. There are many reasons for this sort of problem, there must be a solution or a plan for a solution.
Is there hardware maintenance where it is needed or not needed, why pay for maintenance on a PC which can be cheaply replaced on failure.
Is it better to have a network attached storage device than a computer sharing hard drive space.

Operating systems

Is there a need for a server, many of the tasks run by a traditional server can be distributed. Is Microsoft SBS appropriate.
Are the client operating systems easy, business users hate Vista, who knows about Windows 7.

Email, Internet and Remote

The WAN (Wide Area Network).
Is an email server needed on the LAN, email can be hosted externally giving access from any internet enabled device.
Should there be a shared mailbox for the entire team to take responsibility for tasks identified on incoming mail.
Is a shared calendar needed. Should phones be synchronised with desktop clients for email, contacts and calendar.
Is a website or other service hosted in-house, is the upload speed of the ADSL connection a bottleneck.
Is there access to desktops from home or other offsite PCs.
Is there need for internet access from a notebook when out and about.

Network security, Disaster recovery

There must be a firewall, probably as a function of the internet router, possibly as part of a series of servers, each client PC will probably have windows firewall and some sort of anti-malware program.
Some AV programs slowdown a client PC intolerably.
Backup on-site, backup off-site, periodic specimen restore.
Business continuity is not always the same thing as Disaster recovery, you need to get today's emails but will restore the history a bit later.

Desktop Programs

There are a number of alternatives to Microsoft (Word, Excel etc.), OpenOffice is free and many would say superior, all Office file types are supported.
Are licenses valid, is the law being broken.

Shared programs, Bespoke

We are considering programs which 'run' the business : Orders / Invoicing, Stock control, Logistics, Accounts, CRM etc.
These all depend on a database available to users, locally or via the internet.
Each business is unique, reflecting it's products, market and the personalities of its owners and managers. A bespoke add-on to address a core requirement will enhance awkward package software and pay for itself many times if only in payroll savings.

Shared programs, Bespoke ctd.

A large customer will send orders electronically, an online shop often sends orders by email, these are forms of EDI, you really don't want to key data back in.
Are a whole series of spreadsheets updated for stock control, purchasing, bank accounts.

Corporate tools (BI, CRM)

Business Intelligence (BI) used to be the preserve of enterprise level computing, it covers the integration of data processing end-to-end and reporting at a high level. If you sell widgets, you need to know sales volume, value and gross margin, by Area, by Salesman, by Customer, by Product, by Group, etc. You need this data to make good business decisions, and the computer should be able to add up.
Customer Relationship Management (CRM), it is only polite to make sure that your customers get their calls returned, how many different places in the business do you store a mobile number for your IT consultant.

Short, mid and long term plan

It's impossible to resolve all the things discussed here overnight, however introducing some changes should both resolve outstanding issues and move the system forwards. There is then a bit more breathing space to address the mid term and develop a 2-3 year plan.

Summary

It is not the function of this document to resolve specific technical issues, neither is it comprehensive. A series of questions, so many that I haven't bothered with question marks, provokes others. There are more unasked questions than asked. The answers to these and other questions are inter-dependant or holistic.
The IT consultant must ensure the system functions and have a view to replacing those elements which can be economically improved. He or she will be able to cost justify enhancements, either reducing cost to the business, or assisting in increasing business volume by staff productivity.

When Information Technology is good, managers will make more informed decisions. They direct businesses rather than put out fires.

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