

27 The Perfect Mac Home Office

Your friends work at home. The neighbor next door who could never program his VCR has become conversant in Internet-ese. Everyone at work is chit-chatting in the lunchroom about their new tax deductions.

A world gone mad?

Nope, it's a world gone home—home to its Mac offices for fun, convenience, and profit, and we intend to help you get in on the action.

In this chapter, we'll discuss how a perfect Mac home office can benefit you, such as providing you with more leisure time, helping you organize your affairs, and even possibly adding to your bottom line.

In that spirit, ask yourself these questions just to see if you need a home office: Do you keep track of your budget, money, and taxes by hand? Do you bring office work home with you each night? Do you collect things and keep list after list trying to catalog them? Does your home business involve considerable record-keeping?

If you answered yes to any of these questions, read on!

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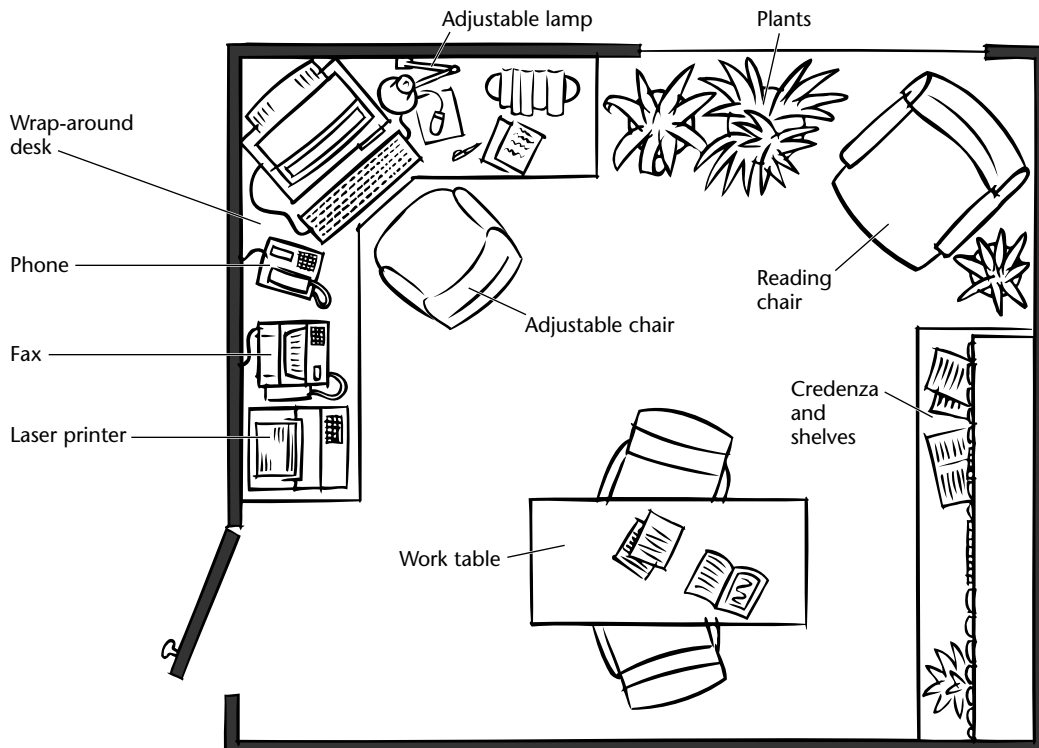
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Defining and Managing the Macintosh Home Office

SOHO (Small Office Home Office): What a dumb acronym. But we are stuck with it, I'm afraid. Some wags have even proclaimed 1996 as the year of SOHO. And it's certainly the case that more folks than ever will be taking the SOHO plunge in 1996, especially smart SOHOers-to-be, a.k.a. Macfolk. Re-equipping existing home offices. Starting new home office-based businesses. Telecommuting from their home office into their corporate HQ. And generally, doing more work at home and requiring the right office environment to make that work. All driven by the Macintosh and Mac OS, thank you very much.

Any home office can be made better by the addition of any PC, of course. In fact, the best place to start is with a computer. And the best computer to start with is one running the Mac OS (otherwise, you'd be reading *The PC Bible*, right?). You start with a Mac, of course, because it's a multipurpose device capable of handling many chores, and the whole point of any home office is to maximize your working potential while minimizing your need to hire temporary or permanent help.



Why A Mac-Based Home Office?

Without too much effort or expense, you can equip your Mac with the appropriate hardware and software so it can handle everything from telecommunications to printing to access to the World Wide Web (see [Chapter 23](#) for more on the World Wide Web). In this chapter, we'll take a look at how and why you do all that, as well as lay out some basic advice, tips, and help in setting up every aspect of the Perfect Mac Home Office.

Running a business from your home gives you considerable freedom and a de facto comfortable environment, but to really maximize the experience (both in terms of efficiency and comfort) you need to spend some time deciding on just how to equip your home office. Ask yourself some basic questions:

- What sort of business do I plan to run?
- How dependent am I upon timely and accurate information?
- Will I be keeping all of my business and financial records myself?
- How much space do I have to devote to a home office?
- How big is my budget?

Once you have answered these questions as completely as possible, you will be well-armed to take on the task of equipping your workspace with the right technology.

In the table, "SOHO Hardware," you will find a listing of the kinds of gear that you may want to consider for your particular Mac home office. Not every office needs each of these items, and some offices will need ones we have not included. But this list is a good place to start your shopping process. The table, "SOHO Software" lists the best and most useful SOHO Mac software.

What Kinds of Businesses Run Well at Home?

The kind of business you can run at home is only limited by your imagination, but a few do particularly well in the home domain, where electronic connections can practically define the business. These include electronic (World Wide Web, Internet, or BBS-based) and direct marketing, virtually any kind of consulting, freelance writing, graphic design and prepress, as well as accountancy, and most professional activities. If you have a business or plan a business that will require lots of client contact, though, consider carefully before setting up a home office. Home offices are often not well-suited for meeting lots of clients, unless you can arrange the proper room with proper outside access.

Top Ten Reasons You Should Create the Perfect Mac Home Office

10. You're tired of working on tray tables in front of the TV.
9. Your clients are tired of sitting in your living room while you interview them.
8. You're taking that big early retirement package at Big Bucks Corporation and putting the money into a real home business.
7. You're embarrassed that you kicked your daughter off her Mac (right in the middle of her search for Carmen Sandiego, no less) so you could reconcile the budget report due in the morning to your boss.
6. You've been running your freelance consultancy out of your car for so long that you have permanent seat imprints where the sun don't shine.
5. Your accountant has hounded you for years to quit your day job and really put that Psychic Friends Network connection to work for you.
4. How are you going to take the home office deduction if you don't have a home office?
3. It will let you fit in and stand out.
2. So you can buy all that cool office stuff out of the *Hammacher Schlemmer* catalog and have a nice place to put it.
1. Because it's really tough to run a proper home business without a home office!

But before we get to any of those tables and the verbiage behind them, though, consider why you'd want a Mac home office at all (see "Top Ten Reasons for Why You Should Create the Perfect Mac Home Office").

Don't forget the budget. As you're getting yourself all worked up to create that Perfect Mac Home Office, don't forget the money. How much will it take to do what you want? How much do you have? And how easy will it be for you to get your expectations in line with your fiscal realities? The Perfect Macintosh Home Office ain't cheap, but it doesn't have to bankrupt you either.



| SOHO Hardware | | | |
|------------------------------|--|--|--------------------|
| Device | Key Vendors | Benefit | Price Range |
| Thermal fax | Panasonic, Murata, AT&T, HP, Brother, Toshiba | lower cost than plain paper | \$250–\$500 |
| Plain paper fax | Same as above than thermal units | higher quality | \$500–\$3,000 |
| V.34 data/fax modems | Best, IBM, Supra, Hayes, Global Village, US Robotics, AT&T, Intertec, Motorola | turns Mac into fax machine | \$90–\$350 |
| V.34 data modems | Same as above | enables you to connect to the Internet and on-line services | \$50–\$250 |
| Laser printers | Panasonic, IBM (LexMark), Apple, HP, Texas Instruments, Brother, Epson, Okidata, Canon | quiet, high quality text and graphics | \$300–\$5,000 |
| Inkjet printers | Same as above | quiet, good quality text and graphics, cheaper than laser printers | \$200–\$900 |
| Label printers | CoStar, Seiko | quiet, fast at labels, handy where labelmaking is important | \$150–\$900 |
| Personal copiers | Xerox, Canon, Panasonic, Minolta, Ricoh | handier and cheaper than running to a copy center | \$150–\$2,000 |
| Electronic organizers (PDAs) | Apple, Casio, HP, Pilot, Sony | portable organizational tools that interface with your computer | \$250–\$800 |

Creating a Home Office

You can have a home office without a home business. But you can't have a good home office without a good home office plan. If you plan to run a home business out of that home office, you'll also need a business plan. Fortunately, once you have a basic office set up—a Macintosh, a phone, and some software—you can create a business plan that will get you seed money, incorporation, and even partners, if you need them. *[Of course, if your home business is a fairly straightforward one without employees, subcontractors, or inventory—and if you don't have big plans to expand that business—there's no rush to spend hours putting together a business plan.—KH]*

The key is to have the right idea and then find and use the right software to build a formal business plan from that idea. We can't give you the right idea, but we can tell you about the right software. That software is Tim Berry's **Business Plan Toolkit**, version 6, which works as a set of linked Microsoft Excel templates and it works very well, indeed. Once you have it, read the manual thoroughly, and you'll see immediately how to take your hot home business and turn it into a plan.

Getting Help for Your Home Office

(DC/KH)

Sorting out a proper home office will take more work than reading this chapter, or even in reading a dozen more. Before you spend your cash on a home setup, consider getting professional advice, either from a home office consultant (a good place to look for such people is by checking with your local Mac user group) or through vendor-supplied consultants. Depending upon your needs and situation, home office products vendors will provide free consultations. Ameritech, Apple, AT&T, Sears Business Centers, HP, Nynex, OfficeMax, Office Depot, PacTel, and other vendors offer such services either over the phone or through their walk-in storefronts. Keep in mind that any product vendor is likely to be biased in their appraisal of technologies and products that compete with their own. For that reason, it's a good idea to consult an independent home office consultant even if you decide to get vendor help, too.

Talk to your friends, your suppliers, and your clients—in fact, talk to anyone you know who works in an office of any kind. People who work in basements may long for sunshine, your neighbor may have designed a nifty corner workstation out of plywood, and one of your clients may need projects delivered via Zip rather than SyQuest disks. Listen to what people say about shelving and comfy chairs, about disability insurance and how to keep children or pets from wreaking havoc. Ask people in the appropriate on-line forums; that's quicker than trawling the Web. Ask everyone for their favorite tip (whether software or desk height) and for the thing they'd most gladly change or get rid of (whether their modem or the long walk to the bathroom). Always keep three things in mind, and not necessarily in this order: efficiency, comfort, and enjoyment!

You'll also want to check the World Wide Web to find out what all the other home office folks already know. A good place to start is the *Chicago Sun-Times* Web site (<http://www.suntimes.com>), where you will find an access link to the columns of syndicated financial columnist and broadcaster Terry Savage, who has much to say about home offices, as well as the Small Business column of syndicated columnist Jane Applegate.

If you want to actually build or remodel home space for your new home office, there is no substitute for learning from the experts, such as Robin Hartl and Dean Johnson of PBS's popular *Hometime* program. You can get that help on the Web at <http://www.hometime.com/ps/95/ps2office.html>.

SOHO Informational Resources

Believe it or not, this *Macintosh Bible* chapter doesn't offer the last word on creating the Perfect Mac Home Office. The following are other resources you should check out:

Books

The Macintosh Way and *How to Drive Your Competition Crazy* by Guy Kawasaki (Harper-Collins and Hyperion, respectively)

The Macintosh in Small Business by Cynthia Harriman (Brady Books)

Fear Computers No More by Danny Goodman (Brady Books)

The Home Office Guide by the editors of *Home Office Magazine* (Home Books Press)

The Internet for Busy People by Christina Crumlish (Osborne McGraw-Hill)

Working From Home by Paul and Sarah Edwards (Macmillan)

Organizing Your Home Office for Success by Lisa Kanarek (Prentice-Hall)

Lighting Handbook by The General Electric Corporation (GE Books)

Healthy Computing: Risks and Remedies Computer User Needs to Know by Dr. Ronald Harwin and Colin Haynes (Prentice-Hall)

US West Home Office Resource Guide by US West (US West Publications).

Magazines

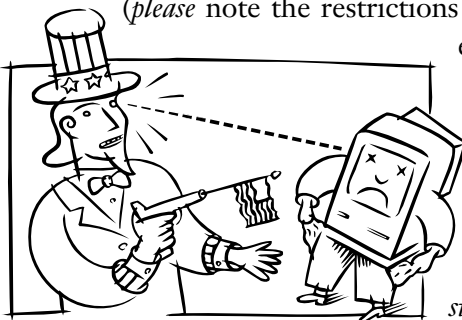
You'll also want to subscribe to a variety of topical magazines, including *MacHome Journal* (monthly), *Mobile Office Magazine* (monthly), *PC/Computing* (monthly), *MacUser* (monthly), *MacWEEK* (weekly), *ComputerLife* (monthly), and *HomePC* (monthly)

Getting the basics. The Perfect Mac Home Office should incorporate the following:

- Adequate space and storage. Don't pick a small room and hope you'll make do. Remodel space if necessary to get it right. You'll need copious shelf, cabinet, worktable, and other storage space, too. *[Still, you have to start somewhere. Maybe you can't have the Perfect Mac Home Office in your current sardine can; maybe you're starting a home business in order to escape the place next year, or maybe your landlord went berserk last time you defiled his wall by nailing into it! Even if you have your heavenly Mac in an infernal space, find out how to best arrange the space you've got.—KH]*
- Isolation from family and home activities. This is workspace, remember?
- A reasonable, efficient equipment layout. It's not a good idea, for example, to have your copier at the opposite end of your office from your printer. *[Likewise, if you're putting the computer itself under your desk to create a clear workspace, make sure you can easily reach to turn it on and off, insert disks, and that sort of thing.—KH]*

- Well-balanced and generous lighting. Both overhead and spot lighting. *[And, if you can manage it, sunlight! But watch out for glare on the monitor, no matter what your lighting source.—KH]*
- Enough separate phone lines (never mix them with your home lines) for voice, data, fax, fax modem., and so on. The key is to get the most flexibility you can out of your phone system. *[If you're just starting out and are low on funds, and especially if you don't have a lot of clients calling or a small child who delights in answering the phone, you can get away with just one phone line. But keep a log of your business calls (some people use separate long-distance companies for business and personal calls), and be sure to set your telecommunications software so that call waiting doesn't cause a problem when you're online or faxing. You'll also want to limit your on-line time to hours when clients are least likely to call.—KH]*

The home office and the IRS. According to our friends at the Internal Revenue Service, if you use your home office regularly and exclusively for business purposes



(please note the restrictions the IRS imposes in their instructions), you may be entitled to a tax deduction for the business use of your home and depreciation of your equipment.

[A few quick tips: First, don't make it obvious that your home office doubles as a guest bedroom! Second, get those games off your computer before the IRS drops in for a visit, or it's likely they'll reject your deduction for an otherwise Perfect Mac Home Office. The IRS is very strict in its definition of what constitutes a deductible home



office, and neither beds nor recreational software are included unless your business depends on one or the other.—KH]

Your accountant, tax attorney, or the IRS can give you much better advice than we can on how to qualify for this deduction and whether you should take it. To get the basics, read these IRS publications:

Publication 529 (Miscellaneous Deductions: Home Office, Depreciation sections)

Publication 587 (Business Use of Your Home)

Publication 534 (Depreciation)

Publication 946 (How to Begin Depreciating Your Property)

You can get these and other publications from the IRS at little or no cost by calling 800/829-3676.

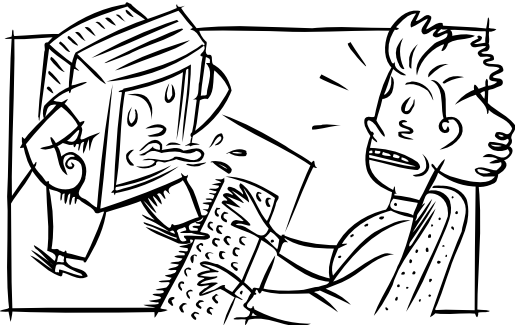
When you're done reading, call those tax advisers and make them give you a straight answer!

Perry Mason 101. There is a lot more to starting a home business than simply creating a home office and hanging out a shingle. You need to hook up with a good small business attorney to determine the following issues:

- Where and when do you file a *DBA* (doing business as) statement?
- How do you file for an *Employer's Identification Number* (EIC) from the Social Security Administration?
- How do you file your tax return? As a sole proprietorship under Schedule C?
- Is it worth it to incorporate? How do you do it? What does it buy you and what are the legal and tax consequences?
- How do you protect yourself from legal business liabilities?
- Can you even legally run a small business out of your home? You need to check with the local civil zoning board and also find out about permits, business taxes, and the like.

See why we recommend an attorney for this stuff?

Equipment versus people. It's easy to think you'll never need to use other professionals or hired help in your quest for The Perfect Macintosh Home Office. But you



simply can't do everything with Macs, nor can you with all the other goodies you'll use to equip your office. The time will come when you have to hire other pros (especially an attorney to take care of incorporation and zoning issues, an accountant to keep you square with the IRS, and a contractor to remodel your office space).

Don't try to turn such needs into an adversarial relationship with your office and equipment. They did not let you down and they are not to blame. Once you get that chip off your shoulder, you can go about the most important aspect of creating a home office—buying the right Mac and software.



Buying the Right Mac(s). Whether you're buying a single Mac or several, the process you should go through is the same. Macs allow you to manage virtually every aspect of your home business, including your cash at hand, your federal and state small business income tax returns, and your business investments, and to organize your business's overall financial life. You really can't have a well-functioning SOHO without at least one Mac to anchor it.

A secondary computer purchase is also a good idea if you plan to travel a lot with your home office-based business. That secondary machine ought to be one of the next-generation PowerBook Epic-class notebook-sized machines that can be had for \$1,500 to \$4,000 ([See Appendix C](#) for more on buying a Mac).

Finally, once you have the Mac or Macs at home safely ensconced in your new home office, make sure that you spend some time configuring the system(s) to handle all of your home office needs.

Taking Your Office on the Road

(JC)

If your business often takes you away from your office, you might consider adding a Macintosh PowerBook to your arsenal of hardware. PowerBooks are capable of doing everything your desktop Mac does including sending and receiving faxes, or e-mail. Imagine working on a proposal, or a customer database while flying at 50,000 feet (an airplane is required).

PowerBooks are also the perfect vehicle for showing multimedia presentations. Using presentation software such as Microsoft PowerPoint you could show your business associates charts, graphs, and pictures, and even run QuickTime movies of your new products. For the finale hook up a tiny video camera and teleconference with the company bigwigs.

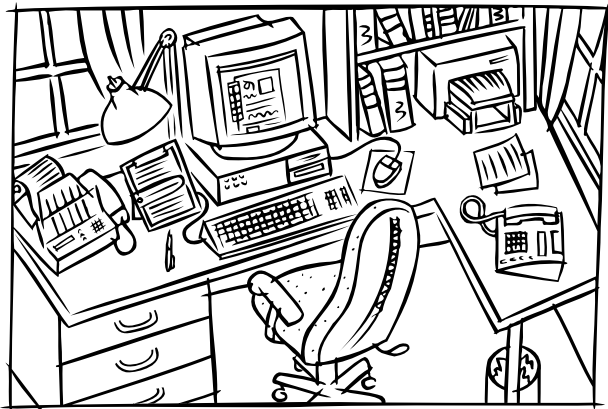
When you're at home you can connect your PowerBook to your desktop Mac through the SCSI bus or network and effortlessly transfer your data using Apple's File Assistant software.

At the very least owning a PowerBook can drastically change your computing environment. Why sit at your desk when you could be working outside on the lawn, or on the floor with your children? PowerBooks are the home office unbound, they go anywhere and do it all—just don't take one with you on your honeymoon!

Equipage: You've Got the Mac, So...

Okay, you've got a room and it's got a Mac in it. What else do you need, from a hardware point of view? [See the table, "SOHO Hardware,"](#) and then read on....

Even if you had an unlimited home office budget, you couldn't begin to buy all the stuff that crowds the big office supply stores. Try cruising stores such as OfficeMax, Office Depot, and others, and you will see what I mean. The sheer volume of cool stuff is enough to make a gadget freak never want to leave!



But leave we must, if we are to get back to our home offices, to make

some more money, so we can go out and buy some more office gear. But while you're there, searching for that perfect combination of first-time home office gear, we have some recommendations. We'd buy the stuff in the order we have listed, because it forms a sort of home office gear triage, if you will:

- Buy the best worktable/desk you can afford. Look for adjustable height, plenty of surface area, built-in monitor stand and bookshelves, a sturdy keyboard drawer large enough to also hold your mouse, and rock-solid feel. *[Don't be taken in by all those cute little so-called computer desks that infest office supply stores. There must be some good ones, but I haven't seen them. If you're tempted by one of these ready-mades, sit down at it with a tape measure and determine whether there's even room to fit your gear on it, let alone arrange that gear efficiently and ergonomically. The three best computer desks I've seen were all L-shaped, with the user facing the corner, and two of those desks (both of which extended along all or most of the adjoining walls, thus creating table space) were homemade. The third, my own, came from a store specializing in used office furniture. I'll bet it cost a lot new, but it only cost me \$125.—KH]*
- Buy the best work chair you can afford. Look for adjustable lumbar and shoulder support, adjustable arms (height and width), adjustable height and tilt, and sturdy construction. Also, go for a five-point star base on wide casters. Make sure the fabric or leather (perforated, your backside will thank you) is high quality and will hide dirt well. Finally, invest in a large chair mat so you can roll around your desk and office without marring the floor or tearing up the carpet.
- Buy a V.34 voice/data/fax modem. And connect it!



Just the Fax—Modem?

(JC)

Fax modems do a great job of sending and receiving faxes, but what happens when you get a document that requires your signature or handwritten notes on the page? Your Mac can handle some of these tasks but you might end up thinking you need a stand-alone fax machine too.

Before you contemplate just where you're going to fit another machine, consider purchasing a desktop scanner instead. Both the **ScanJet 4s** (\$330 mail-order), by Hewlett-Packard and the Visioneer **PaperPort Vx** (\$300 mail-order), are small enough to fit in front of your Mac and take up very little space.

These desktop scanners integrate nicely as the missing link to your fax modem by allowing hard copies of documents to be faxed. Dollar-wise they compete in price with low-cost fax machines but they do offer the additional benefit of storing scanned documents on your Macintosh.

- Buy a multiline telephone and have your local phone company install a second (and maybe third) phone line in your house. Use the second line only for home office business. If you really want to get fancy, install a third line only in your home office, and connect either a fax machine or a fax/data modem to it, along with an answering machine. If you plan to make data and fax connections at the same time, install a fourth line (it's much cheaper than you think). Make sure you set the fax machine or modem to answer the phone if it's a fax machine calling; if not, set it to let the line ring through to an answering machine. You can also buy a special black box to direct incoming calls to the right device. Most phone retailers carry these babies. *[If you spend much time on the phone, or anticipate many calls where you'll be put on endless hold (i.e. computer technical support), get a speakerphone and/or a hands-free headset. You'll save yourself a lot of frustration and prevent painful neck and shoulder injuries.—KHJ]*
- Buy a multiline digital answering machine or sign up for voicemail on all your phone lines. Make sure you can retrieve messages remotely using just a touch-tone phone. The new digital models that use computer memory (instead of tape that can break or wear out) are the easiest to set up and maintain. Voicemail can also be provided through your Mac using Cypress Research's **PhonePro**, **MegaPhone**, **MegaDial**, and **Voice Messenger** software and either an Apple Geoport or voice-capable V.34 modem (a better choice).
- Buy a cellular phone and pager. You need to get calls on the road. Most cellular companies have special monthly airtime packages that accommodate home office folks nicely. Make sure that you buy a phone and pager with enough special features



(such as call forwarding or page forwarding) to meet your needs. Don't cheap out when it comes to cellular products, as price and capability do have a lot in common. *[The idea that you need a cellular phone and a pager doesn't always ring true. The last thing a lot of us need is a cellular phone eating up our cash and contributing to the amount of time our cars spend in the local body shop. Some people—drug dealers and real estate agents, for example—really need cellular phones and pagers. So does a friend of mine who's a private investigator. But I'd say that most writers, musicians, therapists, desktop publishers, translators, word processing mavens, court and medical transcriptionists, and even a lot of computer consultants, just don't need cellular phones. If you really need one, you know you really need one. Otherwise, save your money—KH]*

- Buy a home personal copier. Nothing beats the convenience of making critical copies at home at 3 a.m., rather than running out to a 24-hour copy center. You can also find a copier that doubles as a fax machine and laser printer. If not, buy a home copier that uses the same kind of toner cartridges as your home laser printer. *[Again, think about whether you really need your very own copier. Sure, they're nice (and a lot safer than cellular phones since you aren't likely to use one on the freeway). But how often do you make those 3 a.m. copies? Once a week or once every five years? Some businesses couldn't exist without their own copiers, while others could do nicely without them.—KH]*
- Buy good home office or business insurance to cover all these goodies, plus your computer setup, and to cover your liability as a business owner. For liability coverage, don't settle for anything less than one million dollars per incident. Five million would be better. *[Don't forget health and disability insurance if you're self-employed. Search for good disability insurance, because if you use your computer much, you may well need it. No matter how ergonomic your setup, fast typing and mouse use cause injuries. If your business depends on your using the computer, you need disability insurance now!—KH]*



HOT TIP

To further protect yourself, videotape everything in your home office (and home, for that matter). Then inventory all your gear, so that when some cretin decides to break in, you have proof positive for your insurers of just what was stolen. To be extra safe, keep three copies of the tape and inventory (one with your attorney, one at home, and one in a bank safe deposit box). In addition, I'd install a high-quality monitored alarm system (which includes fire and smoke protection, as well) throughout your home. Both the alarm and the inventory help keep the insurance rider that covers all this stuff from becoming too high. Make sure that you shop around to find the best-priced coverage, which may *not* be from your current home insurer.

Finally, as you set about equipping your home office, keep in mind this simple advice: You can always buy that shiny fax/modem next week (or month, or year...) if you can't afford it today. No matter how much you like a piece of home office equipment, don't get caught up in a feeding frenzy. We know about that problem, only too well!

Working Smarter

Besides these hardware basics, there are a number of enabling technologies that you can invest in that let you get more bang from your home office buck and use your time more efficiently. The first of those is ISDN. The second are the new combo fax/printers on the market.

ISDN. As you use your SOHO more and more, nothing will be as important to you as reliable, fast access to the Internet and World Wide Web for electronic mail and WWW surfing. One way to insure that is to install an *ISDN* (Integrated Services Digital Network) phone line. ISDN lines typically offer two channels of digital data transmission at speeds of 64K bits per second. You can strap both channels together for over 128K bits per second, which is roughly five times faster than the fastest analog line/v.34 28.8K bits per second modem can operate at.

But ISDN can be expensive to install (check with your local service provider) and you have to pay a monthly line charge, as well as message units for the on-line data and voice calls you make. In addition, you'll need a digital "modem" to connect the ISDN line to your Mac, and that will set you back more than \$500 (your existing analog modem won't work on ISDN, because it's an all-digital connection). A good compromise is a combo V.34/digital modem, like the I-Modem from U.S. Robotics (\$699 with software). Finally, if your Internet Service Provider (ISP) or on-line service does not provide ISDN service, the whole point will be moot, since you have to have ISDN connections at both ends of the call. Check out the specifics of pricing and availability of ISDN before you take the digital connection plunge—keeping in mind, though, that it can be a big SOHO win.

Combo Fax/Printers. One new category of SOHO hardware deserves separate discussion—the combo fax/phone/modem/scanner/copier/printers such as the **OfficeJet** (\$680, Hewlett-Packard), **MFC-4500ML** (\$899, Brother), **TF601** (\$650, Toshiba), **WorkGroup 250** (\$499, Xerox), and **MultiPASS 1000** (\$700, Canon). The Brother uses a laser printing engine, while the others use inkjet printing engines. All produce good (HP, Canon, Toshiba, Xerox) to excellent (Brother) printed, copied, or faxed output.

So far, though, the Canon is the most flexible of these machines, because it comes with Windows-based software that really ties it into your PC in a productive way. The MultiPASS 1000 can print, fax, scan, copy, make and receive voice phone calls and even store incoming faxes in digital memory, rather than printing them out, using its PC fax mode. The Xerox and Toshiba also show great promise in this area.

Lessons from the Home Front

(RG)

Three years ago, the siren call of the freelance writers' market beckoned to me. Goodbye, commuting. So long, insane hours from 7:30 am to 9:00 at night. Hello life.

Now all I needed was a working home office.

True, I already had a gleaming teak desk from a brief freelancing stint seven years earlier. But my Mac was an asthmatic SE/30, and my printer was an eye-straining and ear-splitting dot-matrix. Clearly, both had to go. And just as clearly, I knew that today's editors expect their writers to submit copy electronically, turn in crisply printed invoices, and correspond by fax when the need arises. So I made a list of the basics I absolutely had to have before I could turn in my first article: faster computer, large color monitor, laser printer, and modem. Only the computer had been necessary seven years before. Now, they were all fundamental.

And expensive.

To reduce equipment costs, I constantly had to curb my technolust. Sure, I wanted the fastest, the best, and the sexiest, but I couldn't afford it. But I also knew better than to go for the bottom of the technical food chain: Money saved today would be spent much too soon on upgrades. So to balance my needs-to-cost ratio, I continuously asked myself how I would use the equipment. The question is critical. As a writer, for example, I don't use graphic-intensive software, such as QuarkXPress or Adobe Illustrator. I don't perform spreadsheet acrobatics. And I don't need to archive massive files. These factors ruled out a computer with through-the-walls power.

But as a professional writer, I wanted a machine I could use at home, on the road, or

at Spago's while interviewing the subject of my next profile. I needed a laptop. My quandary: whether to buy a laptop and a desktop computer.

I opted for just the laptop. Specifically, I chose the PowerBook 160 (this was three years ago, remember) because I could create a desktop system just by plugging in a large-screen monitor. But which monitor? To find out, I read all of the large-screen monitor reviews I could lay my hands on. The upshot? All of those charts about pitch size and color fidelity were meaningless. But I did learn one important point: Buy the monitor that looks best to your eyes, running the same sorts of tasks you run, under the same lighting conditions. Bingo. Useful advice. I chose a 17-inch Sony Trinitron Multiscan HG.

Next purchase: A printer. Fortunately, I have lots of friends who had already made the jump to freelancing, and had done their research beforehand. I asked about reliability, printing speed, and PostScript Levels 1 and 2. Their advice: The Dataproducts LZR 960, a PostScript Level 2 laser printer that has been trouble-free the three years I've owned it. Unless something goes terribly, terribly wrong, I don't expect to upgrade my 300-dpi printer for many years.

And the fax? This is where I went the cheaper, inexpensive route. Because I needed a data modem anyway, I decided to forego a separate fax machine and bought a data/fax modem instead. Three years ago, my choice was easy, because 9,600 bps was pretty much the standard. Sure, faster modems were available, but they were problematic. I bought a Global Village Teleport Gold, which transmits

data at 9,600 bps and faxes at 14,000 bps. And, oh yes, its fax software was outstanding. That modem would share the same line with my telephone and answering machine. Now I could earn some money.

Upgrade Saga

I soon learned that a data/fax modem just wasn't going to be adequate for my faxing needs. The problems were logistical. For starters, I'd have to manually trigger the "receive" mode for each incoming message (the result of trying to protect telephone callers from a piercing fax squeal). That became particularly tiresome when folks on the East Coast insisted on faxing me in California at 5 a.m.

That's one problem with having a fax modem. Another problem: Sending something that isn't on your hard disk—such as your signature on the contract that just came in. For that, you need a fax machine.

Fax machines range in price, from about \$300 to close to \$900. At the low end, you get those endless rolls of paper that curl into office confetti. At the high end, plain paper fax and a built-in copier would allow me to photocopy my expenses, article clips, and contracts. I bought the Hewlett-Packard Fax-900. And although it doesn't slice or dice, it does hold 50 pages at a time and—attached to my newly installed second telephone line—answers faxes unattached. And, oh yes, I upgraded my modem to a 28.8 Kbps model, from Supra. Life was looking sweet.

The Ergonomic Zone

That is, until I developed repetitive strain injury (RSI) in both my wrists. My first signs were

fatigue, followed by burning at the wrists, then nonstop pain. The irony is, I could have prevented my injury if I hadn't been so penny wise and pound stupid. My first problem? That lovely teak desk, with a carriage-return height of 29 inches. My second: My chair, with absolutely no adjustments for back or seat tilt. And my third problem was my wrist rest. ([See Appendix A](#) for more on RSI.)

Having your keyboard more than 26 inches off the ground is deadly. If your desk is higher than that, buy an under-the-desk keyboard tray. This is vital. I just paid \$235 for a slide-out Proformix tray. For that I get a slideout tray for the mouse and a copy holder. It's also infinitely adjustable. When that tray arrives, it will hold my new ergonomic keyboard from Adesso. Identical to the Microsoft Natural Keyboard, it has a hump in the middle that acts as the Great Divide: The left-hand keys occupy one side of the slope, the right-hand keys the other. And on the advice of my occupational therapist, I replaced my mouse with the Kensington TurboMouse. (That clicking and dragging wears down the tendons.) Also on my therapist's advice, I threw out my wrist rests. Surprised? So was I. But it turns out that wrist rests should only be used when you're at rest. I'd mistakenly used the pads while typing.

The chair is a biggie. Because I already have the symptoms, I've opted for a mid-range chair from BodyBilt, with all of the adjustments a body could want. Lumbar support, adjustable arms, tilt seat, back height adjustment, back width adjustment, and height adjustment. All for a low, low price of \$475. And yes, this is the mid-range.

These machines work surprisingly well, despite their jack-of-all-trades underpinnings. And sadly, none yet comes with software that tie them to a Macintosh directly (although that is about to change), but Mac home office folk can still put these convenient workhorses to work, either as standalones, or by running them with Insignia's **SoftWindows** or a PC coprocessor card.

Future technology in the home office. How will the Mac home office of the future be laid out? Will it be along the lines of George Jetson's fanciful cartoon workplace, all plastic and synthesized voices? Or will it have a retro touch to it, returning to a time when wood was wood, and gear didn't mean electronics?

If we knew the answer to that, we'd be inventing the future home office, rather than speculating about it! But we can say what kinds of devices and goodies the future Mac home office will have in it and what we can look forward to in a few years.

The big trend in home office electronics is miniaturization. Smaller this, littler that. That trend will continue, and combined with another trend—the combination of similar devices into one Swiss Army Knife device—means you will be able to get better functioning home office goodies that take up less space and cost less money than the single-purpose stand-alone devices they replace. Expect Apple to be a trendsetter in this domain.

Take the laser printer, for example. It's pretty much *de rigeur* around most Mac corporate offices these days. But at home, it's still often considered a luxury. No more, not with the new combo printers and inexpensive small laser printers that have and will continue to come out.

Cellular phone technology's also becoming much more pervasive in the home office. Within the next couple of years, we'll see PowerBooks and notebook Mac OS clones that come with built-in cellular phones at less cost than today's machines without the phones. Cellular technology also may eventually replace wired telephones in many homes, as it becomes cheaper for phone companies to put up cell towers, rather than burying cables in the ground. Expect combination pager/phone units within a year that offer better range and sound quality than today's units.

The other breakthrough technology for home offices revolves around wireless networks and personal digital assistants (PDAs) like Apple's **Newton MessagePad 130** and Sony's **Magic Link PIC-2000**. Soon, you will be able to set up an instant wireless RF or IR network in your home, that connects together your home computers and any PDAs you might have purchased. The advantage to such a setup is that it extends the home office way beyond its walls.

Say you are making dinner for the family downstairs. Your spouse is out, calling on her own clients, and you have charge of the kids. The office phone rings, and you just can't get to it, but you know it's an important customer calling back. No problem. Your Mac answers the call with a modem and gives the caller a brief message telling them they are transferring the call to you. The computer switches the call to your in-house wireless network and pages your Newton you have stuffed in your shirt pocket. You hit the communicate button and the PDA then becomes an extension phone, a voice transcriber (digitizing your conversation and storing it for later retrieval), and a window into your Mac. You can carry on the critical conversation with your customer, refer to her computer file through your PDA, and later review the conversation (which can be then stored as text on your computer).

The technology for this seemingly Buck Rogers scenario is in place now. Expect it to take a couple more years to become affordable and popular.

Mac SOHOware

Having great Mac hardware alone does not a perfect home office make. You also need good software. Where do you start looking? At software categories ([see the table, "SOHO Software"](#)). Chances are pretty good you'll *need* access to the Internet and World Wide Web, as well as word processor, spreadsheet, and database software.

Back It Up! And you need to use a *daily* backup program. Buy Dantz's **Retrospect** and do a full backup of all your data and software. Then do incremental backups daily on the data. Create a rotating set of backups so that you always have at least three backups (preferable on large scale removable media such as DAT tape) of all your data at any one time (one at the home office, one in your safe deposit box, and one at a trusted friend or relative's house—make sure you keep the home office tape locked in a fireproof container). Don't come crying to us when you lose your data and don't have a proper backup in place. ([See Chapter 5](#) for more on backing up.)

The Internet and World Wide Web. We'll make this simple. You need e-mail. You need WWW access. Get 'em. Either through an Internet Service Provider (InterAccess, Iquest, Netcom, AT&T, SpryNet, etc.) or on-line service (America Online, CompuServe, Prodigy). Once you contact these folks, they'll set you up with the right access and e-mail software. Run it and use it. The Net will help you service your clients better, prospect for new ones, and generally get more work done in less time. ([See Chapter 22](#) for info on telecommunications and [Chapter 23](#) for info on the Internet.)

Buying Software

Buying the right software is a sufficiently complex and personal decision. To make it work, you have got to be prepared to invest some real time and effort. Start thinking about what your computing needs are, what your computing expectations are, and what your computing desires are.

Make a Plan and Categorize

You've got to decide just exactly what it is that you want out of your Mac. Do you expect to prepare your federal income tax returns each year? Perhaps you want to manage your investments, or correspond with your portfolio manager? Maybe you want to prepare and stick with a personal or business budget? Or you might want to catalog and list the stuff important to your home business or just your life. Regardless of what it is you need your Mac to do, unless you can clearly define those needs, you have no place to start from.

Take some time now to sit down and think about what you need your machine to do for you in your new home office. Based on those needs, you will want to categorize your potential software purchases. Some categories are no-brainers: Income tax returns should be done using tax software; catalogs and lists require databases; budgets can be done with spreadsheets or bookkeeping software; correspondence should be done with a bailiwick of a word processor.

But what about the less obvious categories? What kind of software, for example, will you use to handle your need to produce a monthly newsletter for business customers? Yes, you could use a word processor, or go full-bore and try a desktop publishing package, but what about programs that split the difference? Categorizing your software needs often requires the help of "experts"; even your next door neighbor who has been using a home office Mac for a few months longer than you is bound to be an expert about one kind of software. Use this help when you make up your own categories and assign them to your needs.

The Case of Roberta

Consider the case of a home direct marketeer, Roberta. She wants to produce a monthly newsletter for her business, her clients, and potential clients. She has some experience with WordPerfect on her Mac. She has used almost no other software on her Mac, but she has seen PageMaker and QuarkXPress running on a friend's Mac and thinks it might suit her needs. How does she make a software decision?

Well, her computing needs are already pretty well defined, or so it would seem. She needs to produce this newsletter, right? But how big is this thing going to be? How will it be printed? Will it include pictures and graphics? What's the basic design going to look like?

See my point? Roberta knows that she needs to produce a newsletter, so she knows she needs some kind of software to write, edit, design, and print that newsletter. But beyond that, she hasn't worked out the specifics of her needs. She must do that before even thinking

about categorizing the software that meets those needs and before she invests any time in thinking about her expectations for that software.

But once she has considered her needs in depth, and worked up a software category listing, she can think about how the software she wants to buy should work to let her do the job she wants to do. Her software expectations will help drive her selection process, because not all the word processors or DTP programs will work in just the way she decides is best for her.

When she's done ruminating about her software expectations, she will have a short list of programs that will run on her Mac that will do the basic job she wants (newsletter production) in the way she wants to do it. Then it's time for Roberta to consider her software desires.

Desires as Motivation

Desires are tougher to pin down than either needs or expectations, because they reflect the intangible parts of using a computer. Yet meeting your software desires often has more to do with your ultimate software happiness than either needs or expectations (which most people eventually get right anyway). Thinking about your software desires should take you a step back and away from the immediate process.

Ask yourself what is the software that you currently use that gives you the greatest satisfaction. Forget about what it does or how it does it and concentrate on how it satisfies you (at whatever level you can measure). What are those satisfaction qualities? It may be something as superficial as the way the menus look, or as deep as the way the program saves and opens files. Whatever it is, you should think about it and apply it as a criteria to check your software shortlist against (that you created when you ran through your needs and expectations).

Once you've done all this thinking and reflecting, then you'll decide, just as Roberta did, that all you have to worry about now is getting the best price on that one program that will be perfect for you and your needs.

Getting Good Software Service

We hear this lament, often: "I can never seem to get good service from the stores where I buy my Mac software. I either get a line of baloney or worse. What can I do to fix that?"

Buy from stores that actually keep Mac software gurus on staff. Many mass marketers do not, although there are exceptions. Before you patronize a store selling software, ask to speak with their computer techie. If they stare at you blankly, try a different store. Once you find someone who knows a CRT from a BLT, sit down with them and discuss your software needs and decide if their comments make sense and are affordable. If so, lock that store into your software acquisition heart of hearts. Keep in mind that good service costs good money, so don't be surprised if you have to pay fees beyond basic help, or that software costs more at stores where service is a reality and not just a marketing slogan.

Word processing and works software. You also need to write, which means you need a word processor. Ask yourself some basic questions: Do I need to do mass mailings? Then you'll need mail merge facilities in your word processor. Do I need to produce complex documents, with tables of contents, indices, and footnotes? Then make sure that the word processor you buy offers those features. In short, buying a word processor, like buying any software, is an exercise in common sense. Go to your friendly neighborhood software store and start trying out the wares. When you find the package that does what you need to do, and it runs on your computers, and you can afford it, then buy it. The major names to look for are Microsoft Word, WordPerfect, and NisusWriter. Don't forget that your Mac will also come with a basic text processor (a.k.a. SimpleText or TeachText) as part of its "accessories" software.

You can also get a decent word processor if you buy a good integrated package such as ClarisWorks, that combines word processing with spreadsheet, graphics, and communications capabilities in an easy-to-learn-and-use context. In fact, many SOHOers can get along nicely with just ClarisWorks. ([See Chapter 8](#) for more on word processors.)

If you need a number of secondary applications (such as desktop publishing, or communications) to get your home office work done, then you should definitely consider buying an integrated works package first. What you give up over separate, stand-alone single-purpose programs, are some features and some versatility. But you may very well find that the compromise is worth it, since works packages have gotten more feature-laden in recent years. ([See Chapter 12](#) for more on integrated software.)

Spreadsheet and bookkeeping. Besides word processing, most home office setups will need spreadsheet and bookkeeping software for handling all those financial records. Spreadsheets work alike; they really only differ in the fanciness of their features (the more you pay the more built-in financial functions you get). Buy the simplest one that you can get by with. Major offerings include Microsoft Excel, Lotus 1-2-3, and the spreadsheet function in integrated software, the best of which is ClarisWorks.

Bookkeeping or accounting software can be tedious to learn and use and expensive. Unless you buy **QuickBooks Pro** from Intuit. This one is so much better than its competitors it almost hurts. Even fiscal boneheads like us can fly with QuickBooks.

([See Chapter 9](#) for more on spreadsheets and [Chapter 10](#) for more on personal and business management applications.)

| SOHO Software | | |
|--------------------------------|--------------------------|--------------------|
| Software | Category | Price Range |
| *Microsoft Word | Word processing | \$250–\$350 |
| *NisusWriter | Word processing | \$180 and up |
| WordPerfect Mac | Word processing | \$250–\$350 |
| WorldWrite | Word processing | \$190–\$250 |
| *Microsoft Excel | Spreadsheet | \$150–\$395 |
| Lotus 1-2-3 | Spreadsheet | \$250–\$395 |
| Casady and Greene's Let's KISS | Spreadsheet | \$149 |
| Business Plan Toolkit | Spreadsheet | \$150 |
| *ClarisWorks | Works package | \$99–\$149 |
| Microsoft Works | Works package | \$99 and up |
| *Claris's FileMaker Pro | Relational database | \$90 and up |
| ACI US 4th Dimension | Relational database | \$500 and up |
| Mainstay Phyla | Object-oriented database | \$195 and up |
| *Symantec's Norton Utilities | Utilities | \$70 and up |
| *Hard Disk Toolkit | Utilities | \$90 and up |
| *Synergy's VersaTerm Pro | Communications | \$140 and up |
| *QuickBooks Pro | Bookkeeping | \$90–\$130 |
| *Netscape | WWW Browser | Free to \$39 |
| *Eudora | Electronic Mail | Free to \$99 |
| Claris Emailer | Electronic Mail | \$49 and up |
| * = Best in category | | |

Keep it in a database. Another category of home office software that I recommend is a simple relational or flat-file database. With it, you can keep track of your contacts, of your inventory, and all of the other bits of info that any home office has to track that may not fall nicely into QuickBooks, ClarisWorks, or Excel. Most good databases also can use any of a number of third-party templates so that predefined tasks are a snap. Ask your dealer to take a look at Claris's FileMaker Pro, the best of the bunch. (See [Chapter 11](#) for more on databases.)

Office suite software. If you want big productivity, the conventional wisdom goes, get big software. And biggest of the big are the office suite packages. The two exemplars are **Microsoft Office** and Lotus's **SmartSuite**. Unfortunately, the brain trust at Lotus has not migrated SmartSuite to the Mac. So, the choice for now is Microsoft Office. It's big and powerful, but surprisingly easy to use, and a bargain over what it would cost to buy the individual applications it comprises. MS Office has good integration (relying on MS's object linking and embedding [OLE] technologies). MS Office also offers a Power Macintosh version, which you'll want if you own a Power Mac, since the 68K Mac version is pig slow.





If you think you'll use both Microsoft Word and Excel, buy Microsoft Office instead. It's cheaper, it also comes with the excellent PowerPoint presentation package, as well as an e-mail client, and some other goodies for \$299. Make sure you buy the CD-ROM version. Installing the jillion-floppy version would drive a teetotaler to hard liquor.

Extending Your Business

Once you've defined your Perfect Mac Home Office, built it, and have been managing it and your allied business for a few months it's time to think about extending your business and the reach of your Mac home office. But first, do a reality check.

Can you honestly say that you have done your best to protect and secure your business data you keep on your Mac? Have you organized your daily and weekly work schedule as well as you can? Are you keeping track of your customers and potential customers as well as you can? Are all your connections with the outside world working OK?

If you answered yes to each of these questions, move ahead and consider how to grow.

Net and Web and Keeping in Touch

The places to start are with a local area network and with the Internet and World Wide Web. If you have but one Mac, consider getting a second and maybe even a third and networking them together with Ethernet and the built-in filesharing of System 7.5.x. You can buy an inexpensive four-port Ethernet minihub from Farallon, for example, for about \$100.

Along with RJ-41 type connectors and four-pair twisted pair wires, you can connect each of these Macs (assuming they have built-in Ethernet ports) to this minihub, fire up the Network control panel and pick Ethernet, turn on personal filesharing on each machine while setting up a standard access name for each machine to the other and you are on your way. That way, you can grow your business with temporary employees, high school and college kids working as interns, or even permanent staffers. You can lock your hired help out of sensitive files via the Sharing command in System 7.5.x or you can go for something more bulletproof, by installing file security software, such as Folderbolt Pro, on those sensitive Macs.

By connecting to and using the World Wide Web, you can prospect for customers, tap into rich reference and research sources, and become familiar with who you are trying to market yourself to. For that you need as fast a network connection as you can muster (V.34 28.8 Kbps modem or ISDN line) and the Netscape browser.

Using clever Web utilities such as Nisus Software's **MailKeeper**, CE Software's **WebArranger**, or the new Now Software **Now Up-to-Date Web Publisher** and **Now Up-to-Date Contact 3.6**, you can use the Net and Web as your business's organizational tour de force.

Of course, you can also choose to keep organized with less sophisticated strategies and software that don't use the Web. Good calendar/organizer programs include Attain's **In Control 3.0** and Claris Organizer.

Each of these programs makes it easy to record and display your appointments in monthly, weekly, and daily views along with to-do lists for managing your daily tasks. They all provide multiple alarms to remind you of upcoming events, so long as you remember to input your schedule and to-do lists conscientiously.

Project Control and Management

Another way to grow your business is by managing each project more carefully. In Control can handle outlining projects task by task, determining the order in which to complete tasks, and assigning your staff to complete these project tasks.

If you need more project management prowess than In Control, you can switch over to something such as **Microsoft Project** or even Claris's **MacProject Pro**. Project management software, of course, is the real thing. It takes a very formulaic, structured approach to planning, scheduling, and task completion, but it can help you get real growth into your business by letting you tackle more complex client work.

Keeping Your Customers Informed and Happy

Maintaining good rapport with customers and potential customers is a must for any business, large or small. To do it right, you need to supplement your calendar software with a contact manager.

If you're using Now Up-to-Date the choice is easy—Now Contact. And the new version 3.6 can be published on the Web (just like Now Contact 3.6) so that you can keep your business's calendar and contact list current while traveling, without file copying and synchronization—just open your private Web page!

If you are not a Now devotee, you can go with a full metal jacket contact database such as **ACT!** from Symantec, or use a slimmer all-in-one such as **Claris Organizer** or even the TouchBase/Datebook combo.

No matter what sort of contact software you choose, however, you've got to be nearly religious about using it if you're to reap its business growth benefits.



Keeping Yourself Happy

(KH)

Whether you're putting together your first home office or revamping the old one that no longer answers your needs, always ask yourself what's really appropriate for your needs. Think about your needs today; balance that with what your needs may be one or five years from now. If your home office today is really an adjunct to an office elsewhere, you probably won't need to equip it as heavily as if it were the nerve center of a business—but maybe you want to start your own business in that same office. In that case, think about future needs. And if your current home business is a modest one, it may not be wise to go into debt expanding—but at the same time don't hamstring yourself by buying equipment that you'll immediately outgrow. Remember, you aren't General Motors, Standard Oil, or Apple Computer, but if your work requires QuarkXPress, 4th Dimension, and a speed-of-sound laser printer, you won't be well served by cheaper alternatives.

No matter what your line of work, your home office should be a pleasant and comfortable place. Make sure you have light that's easy on the eyes *and* makes the room look appealing to you. If you meet customers in your home office, think of the impression you want to make on them, but don't forget that ultimately it's *your* office. Make it please *you!* Paint the walls a color you like (a tip: sponge-painting in a couple of shades is quick, easy, really cheap, and looks like you hired a designer); add pictures or plants if those please you, and add an armchair or rocking chair if there's space. Always keep comfort, efficiency, and your own tastes in mind and you can't help but create a great Mac home office.



[If nothing else has convinced you of the benefits a Mac home office can provide, consider this: Nearly everyone who had a hand in creating this book—from editors and contributors to illustrators and layout specialists—has a Mac home office. Coincidence? I think not.—JJ]

