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2002 TECHNOLOGY DEVELOPMENTS

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Technological developments march on. This past year's focus is less on the system's brain or foundation, but rather developments on the options that can be connected. The main computer component [the CPU, or brain] continues to increase in speed, but we may not be aware of the many ways to add to a computer's function.

One device called PDA or 'personal digital assistant' has been available for a number of years now but has also been a little slow to catch on in practical application or broad accepted use. Consistent with a trend toward small and mobile personal information, these devices originally carried the users' calendar, phone book and task lists. Recently the applications and options have significantly increased of course. One interesting product called PhotoTREK™ is a wireless digital imaging communication system via a PDA/PocketPC PhotoTREK™ that attaches a digital camera to a handheld (PDA or PocketPC), take a picture [for instance a set of job photos] and send them via GPS or GPRS protocol to any valid email address in the world in less than one minute. Other PDA products to put tremendously portable processing and data collection in the hands of those in the field such as Punch List®, Primavera's Project Manager®, Meridian's Prolog®, OnTrack Scheduler® and ComputerEase's FieldEase® allow a variety of field events, such as claims information or standard daily job progress information, to be

recorded and either transferred later to the main computer or transmitted wirelessly.

Wireless and cellular technology has improved and costs to connect using that capability has decreased. Most cellular services offer long distance at no extra charge and 'roaming charge' is becoming an unfamiliar term. More users are getting their email away from their desk, sending the field information to the office from outside, accessing Internet information seated in a plane, car or waiting room of any office. Battery technology continues to provide longer life with less weight, expanding the comfort and practicality of using these related devices and techniques.

Cell phone technology and features are blurring previous distinctions. Pagers become less important, email access and advisories, news articles all become part of a cellular phone service. Something might need to be done when a middle office manager looks more like a policeman with many electronic devices clipped around the waist – and a wire hanging from their head.

Small and portable has found its way to digital imaging such as cameras, digital video and expanded purpose cellular phone features which has increased the speed and ease of populating web site images and otherwise increased the amount and quality of information that is collected by inside management. The combination of this greatly expanded photo capability and capacity with common CD

burning equipment produces so much greater detail that can be captured during a project or an entire company's operation. These images are easier than ever to transmit with expanding email and speed.

So we come to another greatly increasing capability, at least for most of us. Another common albeit occasionally frustrating to obtain technology is broadband Internet connection. A cynical view is that it offers nothing new since the user can still access the Internet without. While that is true, the actual impact arises from the increased practicality of accessing many different sites and pages is so short a time. Even devoting no additional time to Internet activities, a multiple more tasks can be accomplished and often the user changes how they accomplish many things. Perhaps with the old dial up connection they would not take the time to wait for the screens to show them their recent bank and loan history, credit and utility account transactions, investment portfolio status, news and project site weather, innumerable email responses, research many issues and topics. And whatever task set is completed in minutes.

Another area we all watch for technological developments is pricing. The combination of technology advances and economic conditions continues the trend of more for less. Generally, a new system with mid-range capabilities available at the time has cost about the same for a number of years, something less than $1,000. However, the specifications of that mid-range system continue to increase. A 1,000 system today brings you a 2.0MHz, 80GB drive, 64MB video RAM, choice between Rewritable or DVD CDROM, Windows XP, sound, modem [needed less with the preponderance of DSL] and network capability included. A year ago that 1,000 included 1.4MHz, 40GB drive,

32MB video RAM, standard CDROM, Windows 98 and sound.

While perhaps and inaccurate statement, somehow it seems that the last year or two has not seen lightening or astounding changes such as seen the few years before that. This is a perception which would be based on the observers' capabilities and view. Perhaps this is a good time for user skills to catch up to existing technology, for us to expand our implementation of new and faster technology. This will increase our ability to assimilate further enhancements in the future. So we come to the technology of education and training which benefits as well from enhanced multimedia features such as a proliferation of increased graphics and sound systems, CDRW and DVD play and even record functions in more end users' hands.

Even if nothing new were introduced, if we learned better how to use existing technology would in effect also result in increased implementation. In the writer's experience, users do in fact become more sophisticated and skilled all the time. It would seem logical that a significant basis for the tremendous boom of the 1990's rested on the level of new technology implementation – changed conditions that allowed more work to be completed in less time. So perhaps we could consider it our patriotic duty to better learn how to use more of what we already have installed. So when you upgrade to a new software version or program, take the time and invest the resources to learn it beyond a 'just-get-by' level. In addition to the certain economic benefits, you will also better enjoy what you have.