Introduction to Paper by Sridhar B. Seshadri, MSEE, MBA, et al, “Prototype Medical Image Management System (MIMS) at the University of Pennsylvania: Software Design Considerations”

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IT IS ILLUMINATING and perhaps a little humbling to review a paper written over 15 years ago and compare it to the state-of-the-art in PACS today. Clearly, there have been astounding improvements in the core technology: increased processing power, higher communications bandwidth, cost-effective storage capacity, and superb display technologies. However, the authors' view (in 1987) that the industry (vendors and customers) needs to focus more on software and systems issues still rings true. Standardization of hardware and software components has come a long way with the digital imaging and communications in medicine (DICOM) and Integrating the Healthcare Enterprise (IHE) standards; without these yeoman efforts, PACS would still be in the dark ages. Also, PACS appears to have “graduated” from being a departmental solution to

becoming more and more integrated into the mainstream clinical information systems from information technology providers.

Despite these great achievements, I think the industry needs to invest more thought and effort into unleashing the power of PACS with revolutionary workflow and process-change around the technology that will help users realize greater benefits. Interestingly, Louis Gerstner Jr., in an interview about his new book, *Who Says Elephants Can't Dance?* says (about the computer industry) “. . . the process of integrating this technology and achieving the benefit is unbelievably painful for companies. The industry has been all about faster, faster, more function, more function. . . .” It appears, at least in this regard, that PACS shares the challenges of the rest of the computer industry!

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