



## **NEXIS – FROM EMBRYO TO ICON STATUS REPORTED BY THE “FOUNDING FATHER OF NEXIS”**

**BACKGROUND:** In 1974, MEAD Corporation (the paper company) was financially comparable to Texas Instruments, as measured by gross revenues, profit, assets, liabilities and traditional ratios. However, Texas Instruments’ stock was selling at 7 to 10 times higher prices than MEAD’s. MEAD senior management commissioned a Wall Street stock analyst to tell them why. Paraphrasing the reasons given, ‘growing trees is boring - making computer chips is exciting’. The stock analyst recommended MEAD get into something exciting, quickly.

**ACTION TAKEN:** MEAD senior management commissioned their business incubator division, MEAD Technologies Laboratories (MTL) in Dayton, OH, to develop a strategic offering that would significantly enhance the price of MEAD stock and remain aligned with MEAD’s core business strategy. An “outsider with credentials,” John Nelson, was hired as Vice President of MTL, assigned the task and given a year to produce results.

John inventoried and evaluated MTL’s intellectual property, products, services, work in process and ideas still on the drawing boards. John selected a proprietary software asset as the optimum candidate for satisfying the mission objective expeditiously. The proprietary software utilized an inverted file indexing architecture that enabled sub second retrieval of key word searches from massive, free form text databases. The MTL proprietary software had been licensed to various U. S. Government agencies including the National Security Agency, Central Intelligence Agency, Pentagon, Departments of Air Force, Navy, Marines and Army. The technology was being used to gather, store, manage, search, retrieve and display top-secret intelligence for the various government agencies.

Prior to John Nelson’s arrival, the same proprietary software had been used as the foundation for MEAD’s first IT commercial product, LEXIS, the on-line legal research tool. However, MEAD senior management was disappointed with the performance of the LEXIS management team. The expense and time required to hand key the LEXIS database using offshore non-English speaking Asian keypunch operators greatly exceeded budget. Although LEXIS would survive, it was clear that LEXIS would not produce the strategic results MEAD senior management wanted. John Nelson recognized that utilizing the same underlying proprietary software for a new commercial product brought with it the LEXIS baggage. The risk factors would have to be mitigated to gain MEAD senior management approval of a new plan involving the same underlying software.

**RESEARCH:** MEAD’s annual report revealed that newsprint was among the most profitable divisions within the MEAD family. Internal and external prognosticators suggested that the printed page would eventually be replaced by technology and computer screens. If the visionaries were right, MEAD would not fare well as a paper company over the long run. John Nelson developed the hypothesis that MEAD could take the lead in replacing the printed page with technology, utilizing MEAD’s single-source, fully integrated and proprietary software, computing power and networks. Research determined that many publications composed, edited, stored and printed their books, articles and news stories utilizing authors, reporters, researchers, and computers. Financially speaking, publishers were incurring the cost of creating the raw data in digitized format. But they had no market for “yesterday’s news” following publication. This fundamental principal became the economic linchpin. Following persuasive negotiations, the Boston Globe became the test case. Between one and three years of digitized news were transmitted from the Boston Globe to MEAD’s mainframe in Dayton, OH, conditioned for the database and made available to the Boston Globe reporters, their morgue and MTL for demonstration purposes. The process was repeated nightly. The test case exceeded expectations. It all worked beautifully. NewsMedia became the internal working title of the project..



**MARKET TEST:** A focus group market test was executed by John Nelson, who met with most of the major newspapers, newsgathering agencies and publications in the U.S. and Canada. John demonstrated the concepts and capabilities of NewsMedia key word search on full-text using the Boston Globe news database to owners, editors, publishers and lawyers, right in their Board Room. Using an acoustic coupler, dial up phone and their switchboard operator, John connected to the NewsMedia Boston Globe database, located on MEAD's mainframe in Dayton, OH. The "portable" computer equipment required two very large suitcases and an hour to set it all up. However, NewsMedia's impressive ability to instantly recall original full-text Boston Globe articles based on key word search criteria was awe inspiring to audiences. Some doubted it was really happening. John routinely placed the doubter's hands on the keyboard and let them enter their own key word search criteria. Doubt transformed into their desire to be included in the NewsMedia commercial database. To owners, editors, publishers and their law firms, the possibility of turning a commercial profit on yesterday's news became highly desirable, positioning MTL to negotiate very favorable terms. The focus group market test yielded convincing results. John concluded that a robust NewsMedia commercial database could be built and maintained rapidly and economically, utilizing digitized data prepared and submitted by premier publications of MEAD's choosing, at terms highly favorable to MEAD. The contents of NewsMedia could also change rapidly in response to the dynamics of market demand. The high cost of mainframe disk storage devices became the only financial constraint placed on NewsMedia (upper limit set at one gigabyte).

**TWO BUSINESS PLANS:** John Nelson developed two formal business plans. The first positioned NewsMedia as a commercial research tool targeted for use by publications, large corporations and government agencies. NewsMedia would run exclusively on MEAD's mainframe, MEAD supplied computer equipment and MEAD integrated networks. Prices were established in the \$100 per hour range. Original estimates forecasted the user community would grow to five thousand within five years and profitability would be achieved within one year. Longer-term, NewsMedia plans called for expanding the scope of offering and exploiting multi-lingual global consumer markets. The second business plan was code named "Big Bang." It targeted the global consumer mass market, offering access to "yesterday's news," encyclopedias and books in multiple languages. MEAD's private, vertically integrated network would provide all facets of the NewsMedia service except the television set (1975 period). MEAD would rent and install all the equipment necessary to facilitate the service, calculate the monthly usage and invoice the client. Estimated initial user pricing was established at \$2 to \$4 per hour. Although the Big Bang plan would enjoy unique market positioning with no discernable competition, the projected financial break even point ranged between three and five years. Increased business risk tied to modifying consumer habits and a protracted ROI time period were the determining factors that influenced John to recommend adoption of the first plan over the Big Bang. However, it is noteworthy that the essence of the Big Bang NewsMedia business plan did materialize, although not under MEAD's ownership. The World Wide Web, Internet and Google were described in detail within John Nelson's Big Bang plan.

**OUTCOME:** The Board of Directors of MEAD Corporation adopted and funded the first business plan. The NewsMedia working title was replaced with NEXIS. John was promoted to head up the commercial rollout. John and NEXIS were relocated to Manhattan, New York. NEXIS exceeded initial financial projections, became profitable in record time and rapidly became the world's dominant full-text, key word search research service. NEXIS is the longest running, most successful IT research tool of its kind in history, only challenged recently by upstart Google. Thirty-three years following inception, NEXIS remains without peers and is considered to be one of America's all-time brightest technology icons. Not so incidental, the price of MEAD stock rose significantly. The mission assigned John Nelson was fully satisfied. John Nelson is often referred to as the founding father of NEXIS.