Unisys
and the
Growth of Computing
Ron Smith
Unisys – A Historical Perspective

• Unisys Corporate History
• The Evolution of Mainframes
• Modern Computing Trends
Elmer A. Sperry (1860 – 1930)

John Mauchly & J. Presper Eckert

June 2015

Ron Q. Smith
William S. Burroughs (1855 – 1898)

American Arithmometer Co.

1885 St. Louis, Missouri

1903 Detroit, Michigan

June 2015

Ron Q. Smith
Large Scale Digital Computing
Starts with ENIAC
Commercial Computing Starts With UNIVAC
1950 ElectroData division of Consolidated Engineering Corp. in Pasadena, California

1954 ElectroData Corp.

1956 ElectroData Division of Burroughs, Corp.

1946 Burroughs Research Center in Philadelphia, Pennsylvania

Datatron
UNIVAC 1107

- Exec I – Multiprocessing
- Exec II – Multiprogramming, Job Scheduling
- Assembler and FORTRAN
UNIVAC 1108

- Exec 8 – Multiprocessing, Real Time, Transaction Processing
- MASM, FORTRAN, COBOL
Mainframe Programming

Grace Hopper
• ALGOL and FORTRAN for Scientific
• COBOL Dominates Business
• 1100 Assembler for Real Time
What Are They Used For?

• Engineering and Scientific Applications
• Real Time Control and Messaging
• Late 1960s and The Rise of Business Applications
  – United Airlines Transaction Interface Package (TIP) on 1108 Exec 8
  – COBOL becomes the programming language (mostly)
The Migration To Business

• Engineering/Scientific Customers Migrate to Super Computers

• Businesses Start to Automate Processes
  – Transaction Processing
  – Security
  – Recoverability
  – Availability and Reliability
1986 Unisys Is Formed

Burroughs and Sperry Merge

• Burroughs Corporation makes offer in December 1985

• Merger Completes September 1986
What’s In A Name?

• Unisys is chosen
  – Employee contest
  – Suggested by a former Burroughs employee
    UNiversal Information SYStems
  – Unisys is not an acronym says the corporation

• Former Sperry employees say it means
  “UNivac Is Still Your Supplier”
After The 3\textsuperscript{rd} Generation

• Systems Get Larger Faster
  – Semiconductor technology accelerates
  – Globalization of industries
  – Competition, the Internet, and efficiency

• Applications and databases scale up
  – Massive investment in application modernization
  – E-business
ClearPath Plus
On To The Future

- The ClearPath 2020 Program
  - Planning for what systems will look like in 2020
  - Design teams working now
ClearPath
Platform Investment Focus

CMOS Platforms... Focus on high-end performance

Foundation attributes...
- Scalability, flexible I/O and memory
- Code compatibility
- Enterprise-class reliability

Architectural evolution...
- Specialty engines
- Distributed functions
- Secure partitioning

NextGen Platforms... Leverage Intel technology

Commitment
unisys

{Editor’s Notes:
1. Ron Q. Smith retired from Unisys, Roseville MN as a Unisys Fellow – he was a member of the Club’s Legacy Committee.
2. Lowell Benson retired from Unisys, Eagan MN as a Senior Staff Systems Engineer – he was co-chair of the Legacy Committee.
3. These slides are from the commercial business aspects of Unisys, independent of the defense business aspects that were sold to Loral, then Lockheed Martin. }