A VIEW OF SSA SYSTEMS
FROM EARLY DAYS TO PRESENT

Dr. Renny DiPentima
Former Deputy Commissioner of Systems
Social Security Administration
• Initial Programs Were All Paper Processes

• Information by Life Cycles Set a Stage for Future Automation

• Independent Files by Lifecycle
  • Account Numbers
  • Earnings
  • Master Beneficiary
• Early Automation - IBM
  Produced First Automated Machines

• 1937-1950s IBM 007 Collator Sorting Machines

• Hollerith Cards, Paper Printout
• In 1950, First Electronic Computing Device, IBM 604 Electronic Calculator to do Benefit Calculations

• By 1955/1956, IBM 705, General Purpose Computer for Accounting Functions

• Followed by Various IMB Larger Computers Throughout 1960s and 1970s
• Software was Assembler Language, Fortran
• No Thought of Integration
• Many Different Data Definitions
• Breakthrough of Tape Drive, Eventually 2 Football Fields

• Bureau of Automated Data Processing
SSI Crisis in 1974-75 Revealed Weaknesses in SSA Systems

• Immediate Need, Not 90-day Lead Time

• District Offices & Payment Centers - All Paper
• Receptionist
• Claims Representative
• Clerical Assistant
• Data Input Specialist
• Teletypist
• First Modernization in 1980s

• Congressman Brooks Confrontation, Old Machines, System Workloads Backlog

• Secured $454 M Budget and Freed from Freeze
• In 1982, SSA IT Modernization Plan

• 3 Phases- Survival, Transition, State of the Art
  • **Survival**- brings earnings up to date and stabilize systems
  • **Transition**- data on disc and daily processing for many internal and external systems
  • **State of the Art**

• **Customer Survey - Prefers Telephone Contact**
• Programs for Modernization

• Online Data to Replace Tapes

• Network to Replace Teletype

• New Computer for Processing Power

• Modern Data Processing Management, New Data Center

• New Software systems for Modernizes Claims Processing
• Intra-agency Teams for Systems, Operations, Policy, Administration, Human Resources

• All with Authority from their Deputies

• Software Un-integrated
• Model District Office

• Two Pilot District Offices - Baltimore & York, PA

• Two Pilot District Offices in Each Region

• Phased Implementation of All Offices
• New Process Flows, Front-end Oriented, Connect to Back-end Systems
• Basic Underpinning of Current Systems
• Followed with Local Area Networks & Wide Area Networks (LAN/WAN), PC on Every Desk
• Online Access to Small Programs like Benefit Estimates and Employer Checks
• Software with On-line, Interactive
Follow-on Modernization has been Basic Upgrades to Hardware and Attempts at DIB Modernization

What is Future Modernization Panel Recommending?

• SSA Business Driven
• More Customer Oriented
• More Intra-agency Integration
Useful Resources

◦ SSA’s 2017 IT Modernization Plan
  ❑ Found here: https://www.ssa.gov/agency/materials/IT-Mod-Plan.pdf

◦ SSA’s IT Modernization Progress (via OMB’s IT Dashboard)
  ❑ Found here: https://itdashboard.gov/drupal/summary/016

◦ SSA’s 2020 IT Modernization Plan Update
PMO Operating Model
(SSA’s IT Mod Plan, 2017, p. 61)
SSA’s Transformation of Clients, Code & Data
(SSA’s IT Mod Plan, 2017, p. 46)