Roundtable: Shaping the Future of z/OS System Programmer Tasks Discussion

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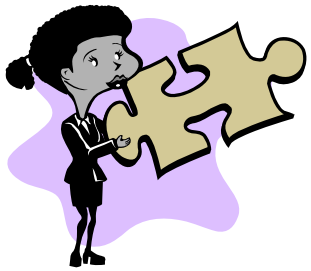
Agenda

- **Mainframe Simplification Initiative**
- **Looking Ahead…**
- **Meet Zach: *Today's* z/OS Senior System Programmer**
- **Meet Casey: *Future* z/OS Senior System Programmer**
- **Additional Questions**
- **Comments or Questions?**

Mainframe Simplification Initiative

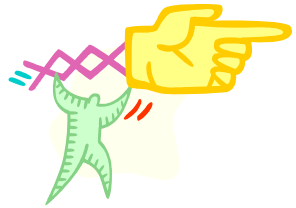
- **An IBM key initiative to simplify and modernize the mainframe for newer and future Information Technology professionals**
- **Simplification strategy**
  - **Optimize System Programmer tasks so a mixed skilled workforce can maximize their productivity and quality**
  - **Help System Programmers who are new to the mainframe become productive quickly**



Simplification Focus Areas: System Programming

Problem Management and Analysis	***Installation, Migration, and Maintenance***	***Configuration***
• Monitoring health; identifying real and potential problems • Analyzing and resolving problems	• Planning, installing, and upgrading z/OS systems and products that run on z/OS	• Adding or changing system components; enabling new features; defining and updating policies that affect system behavior
Simplify and modernize the System Programmer User Experience		
Deliver solutions in a task-oriented browser-based user interface with integrated user assistance		
Information		
Finding the information needed to use z/OS		
Educating z next generation		
Academic Initiative: Training tomorrow's system programmers		

Looking Ahead….



- **Reason**
  - **To ensure we understand the demographics and needs of next generation z/OS System Programmers**
  - **Defining target audience for mainframe simplification solutions**
- **Approach**
  - **Gather feedback from current users and validate what we learn**
  - **Develop personas that represent future z/OS System Programmers**
  - **Gather iterative feedback on personas to ensure we have correct understanding of target users**
- **Consideration**
  - **Challenging to see future needs, consider today's ideals as a basis**

Meet Zach: *Today's* z/OS Senior System Programmer

Zach
Sr. System Programmer

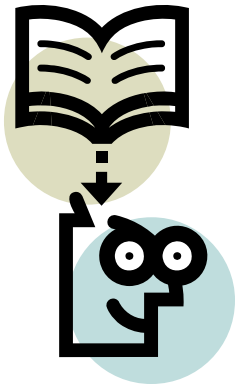
- **20 plus years experience with a lot of on the job training.**
- **Team leader to 3 other experienced System Programmers, 1 junior System Programmer**
- **Responsibilities include**
  - **Running JK Enterprise's mainframe IT environment.**
  - **Maintaining z/OS systems**
  - **Problem determination**
  - **Deployment**
    - **Planning for Installation**
    - **Ordering**
    - **Testing**
    - **Put into production**
  - **Configuration tasks**
  - **Education**
- **Due to the economy, Zach plans to work for a few more years than previously planned. He is now planning to retire in 1 - 3 years.**

Meet Casey: *Future* z/OS Senior System Programmer

Casey
Future
Sr. System Programmer

- **Education: B.S. in Mathematics, minor in music, from ABC University**
- **Experience: 3 - 5 years as System Programmer, 3 years as Operator**
- **Team leader to 3 other experienced System Programmers, 1 junior System Programmer**
- **Responsibilities include**
  - **Runs JK Enterprise's mainframe IT environment**
  - **Maintain z/OS systems**
  - **Problem determination**
  - **Deployment**
    - **Planning for Installation, Ordering, Testing, Put into production**
  - **Configuration tasks**
  - **Obtaining education**
  - **Document processes and procedures**
  - **Mentor new people and understand how to utilize their current skill set to develop their mainframe skills**

Casey's Skills



- **REXX, COBOL, Assembler, JCL, JES**
- **System administration**
- **Understand the business needs**
- **Effective communication across teams and organizations within company and understand how teams work together**
- **Critical thinking, detail-oriented, self-starter**
- **Ability to see the big picture and small detail at the same time**
- **Project Management**
  - **Ability to plan for new releases of z/OS, manage the rollout of a release and other products, and understand how all teams and pieces interact and integrate**
- **Be a liaison between Management, ISVs and Applications Programmers**
- **Ability to justify software/hardware needs to Management**
- **What other skills will Casey need?**

Casey Will Collaborate With …

- **Operators**
- **Subsystem system programmers**
- **Vendors**
- **Management**
- **Automation staff**
- **Storage administration (DASD, Tape)**
- **Security administrators**
- **Network technicians**
- **Performance and capacity planners**
- **Application developers**
- **Vendor support teams**
- **Hardware installers, and more…**

Casey Skills' Gaps in Comparison to Zach

- **Learning what's not documented, such as debugging techniques, relational techniques, etc.**
- **Having to understand environment without adequate internal documentation**
- **Understanding the ramifications of a significant or insignificant change**
- **Understanding programs that are outsourced but written in Assembler, COBOL, PLI, etc.**
  - **Do your System Programmers have to know the programming languages that your applications are written in?**
- **JES skills**
  - **Which specific JES skills?**

To Address Future Skills' Gaps, IBM Needs to…

- **Offer more Computer Based Training (CBT)**
- **Provide short targeted tutorials to help people learn on the job, explain how to do things and make them freely available on the web.**
- **Offer virtual classes like universities do**
- **What else can IBM do today to help address the future skills gaps identified?**

Difference in Casey's Role vs. Zach's Role

- **Keeping current with new technologies**
  - **Shared devices bigger in the future (DASD shared with open systems)**
- **Manage multi platforms**
- **z/OS Simplification efforts**
- **Any other ways Casey's role will be different from today's Sr. System Programmer?**

Additional Questions

- **What does IBM need to do to help future z/OS System Programmers learn their role and be productive faster?**
- **What tasks will Casey wish we could eliminate or automate?**
- **What should IBM consider doing to simplifying Casey's job?**
- **What else does IBM need to consider for the next generation of z/OS System Programmers?**

Thank You

Comments or Questions?