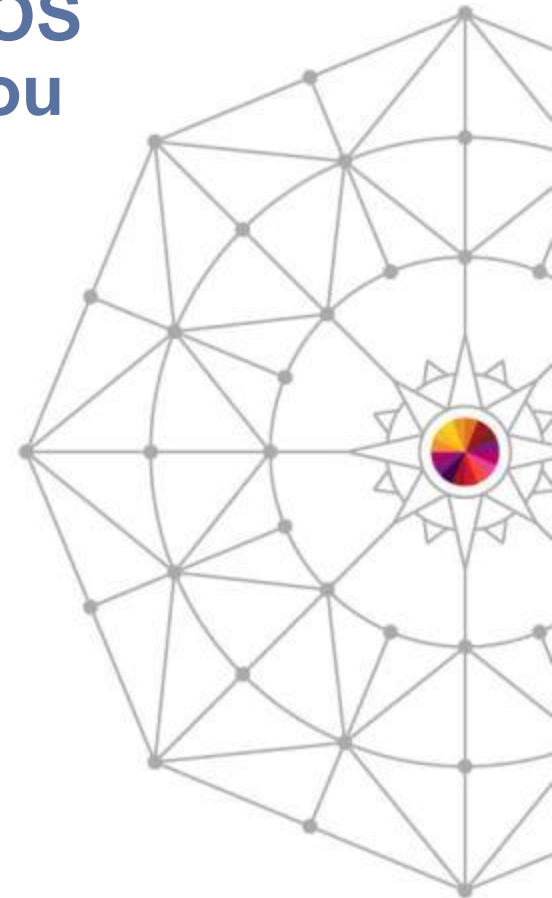


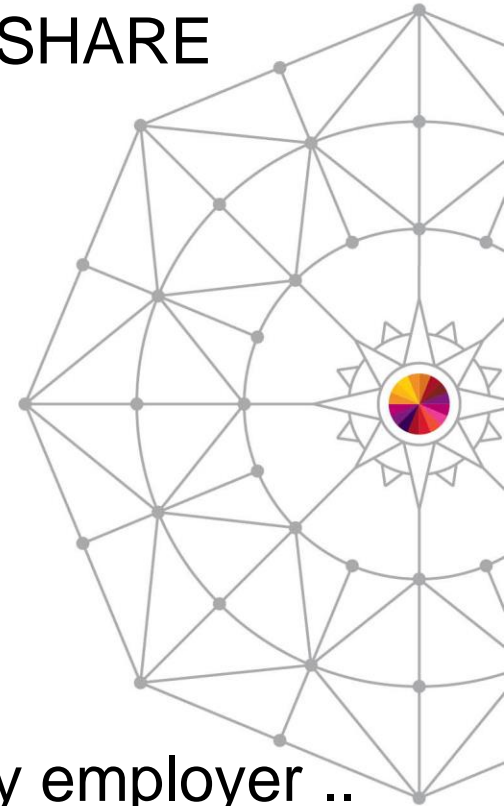
Mentoring the New z/OS Professionals – Do You Have a Plan?

Greg Caliri
BMC Software, Inc.
Lexington, MA, USA



An area revisited....

- Addressed twice, in CMG sessions, and at SHARE
- Always raised some interesting conversation
- Time to bring the issue up again....
- Some revisions...
- Disclaimer – personal views, not those of my employer ..



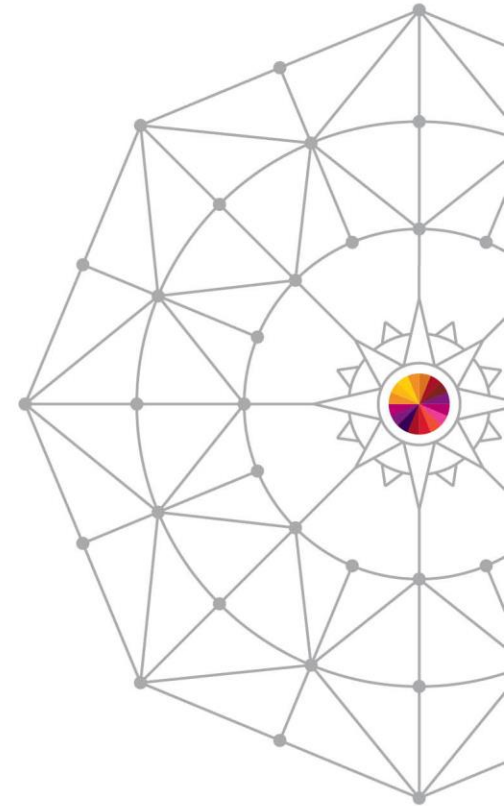
Yesterday's Keynote

- Pat Toole, IBM

Enthusiasm for the future

Good things about the youth movement

More on Academic Initiative later, also
featured a Florida high school

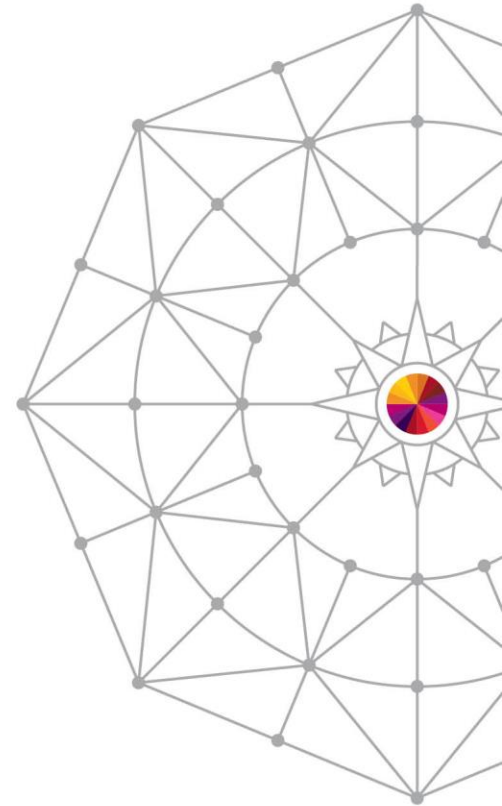


A baseball analogy mentoring and coaching... 2012 vs. 2013...



Brief review

- Where we are today
- The state of the world of the mainframe specialist's career – z/OS, z/VM
- The dilemma stated
- What happened...



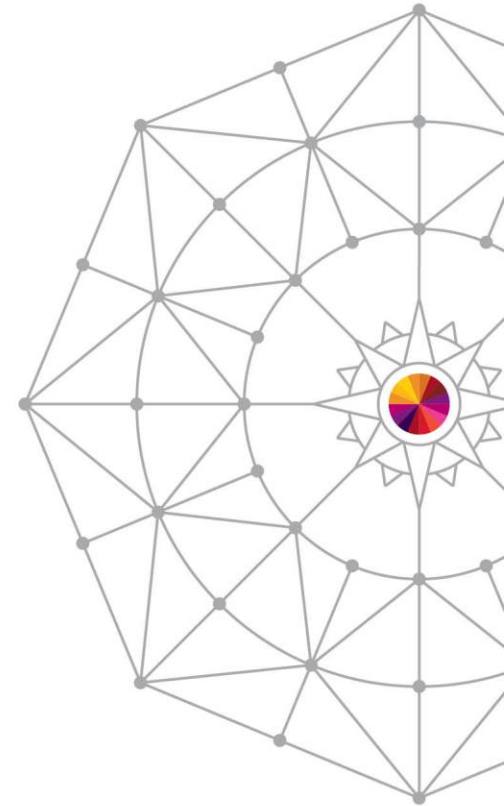
So what's my point?

- We're at a critical point in the history of mainframe computing
 - Many mainframe specialists are approaching retirement or pursuing other interests – or HAVE already retired
 - There's a limited arrival of new people to replace them
 - There are often minimal in-house resources with which to develop or nurture new mainframe experts



How could this have happened?

- Crank the clock back to 1989-1992
 - New platforms emerged and/or matured
 - DEC
 - UNIX
 - Windows
 - MS-DOS
 - s/36-s/38-AS/400
- MBM = “Management by Magazine”
- <squawk> “The Mainframe is dead.” <squawk>



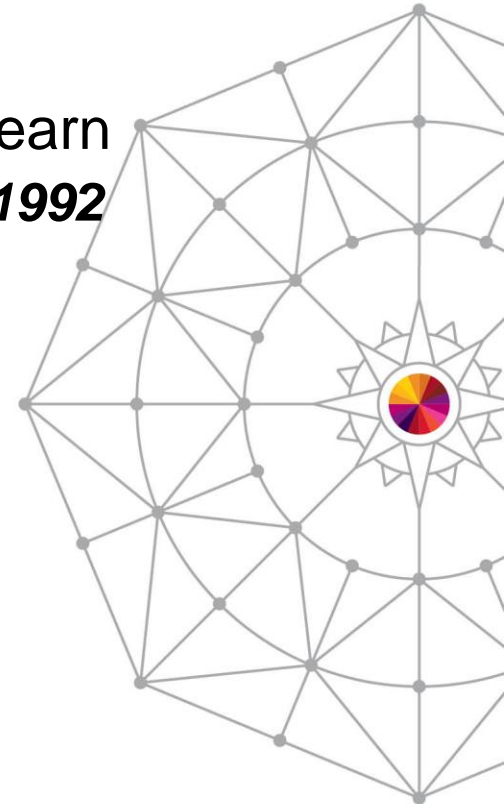
New people entered the systems programming/administration world

- OTHER non-mainframe PLATFORMS
 - More glamorous
 - Easier and more opportunities to learn
 - Systems programming not necessarily a priority
 - Capacity management DEFINITELY wasn't...



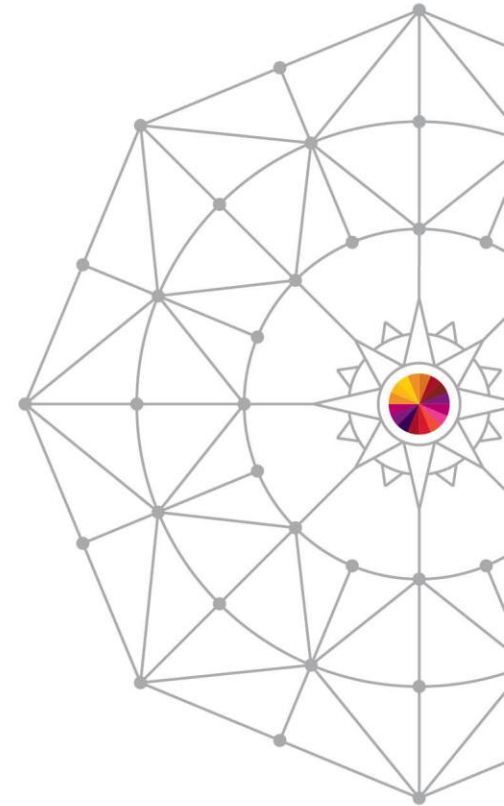
Other cultural effects

- We played into it
 - New challenges before us, new platforms to learn
 - ***“Carpe Diem” – Dr. Bernie Domanski, CMG 1992***
 - Opportunities for “Empire Building”
 - ***“Think about it, your OWN decentralized IS/IT group – with **YOU** as the boss.”***
 - Paradigm shift
 - Career development became a one-sided affair
 - Cuts to training and employee educational resources
 - Free agency



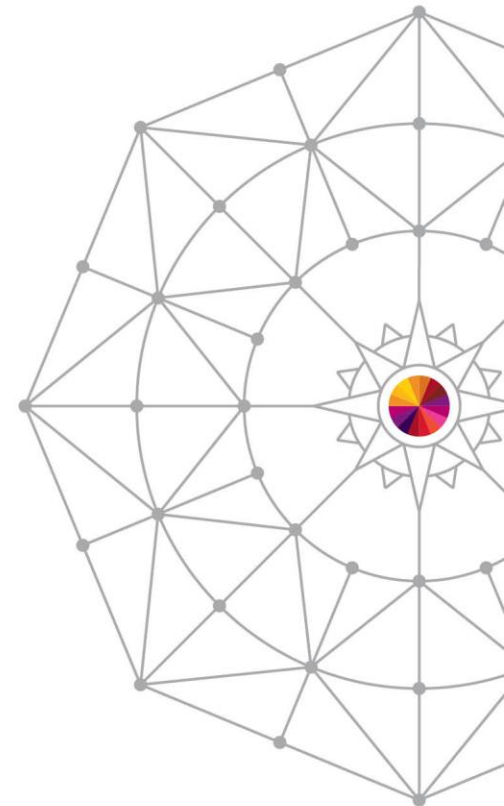
Paradigm Shift continued on ...

- “Free Agency” vs “Farm System”
 - Talent costs are higher **
 - Success % justifies higher salaries
 - Lower overall costs
 - Fewer failures
- Also – if you develop and nurture talent, competitive market situation to RETAIN folks – often perceived as “no win” by management
- Develop/retain, or release and recruit?



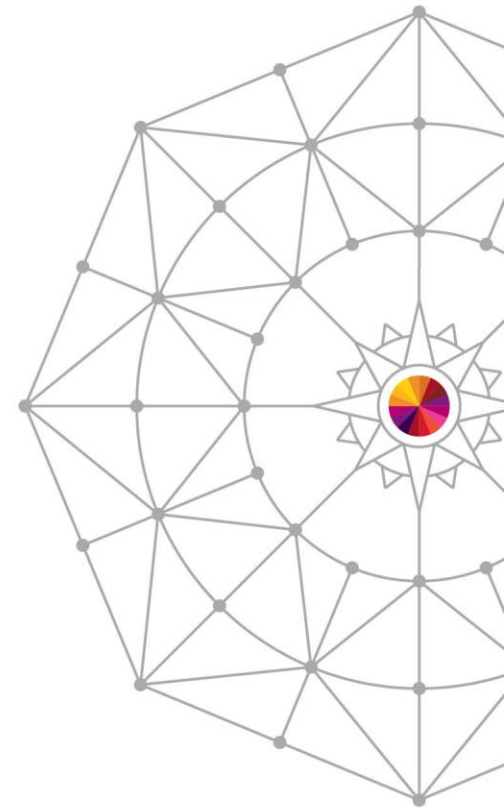
(CPE Perspective) = resource acquisition strategies changed

- Things got simpler, technically
 - WLM & Capacity on Demand
 - Old = Pit one vendor against another
 - *Do your due diligence and capacity planning*
 - *Right-size*
 - *Get it right, or else*
 - New = Plan Ahead
 - *Cost determination / justification*
 - *Not enough? Just buy more*
 - *Non-intrusive upgrades*
 - *Even this has changed – 4 –hour rolling avg MSU*



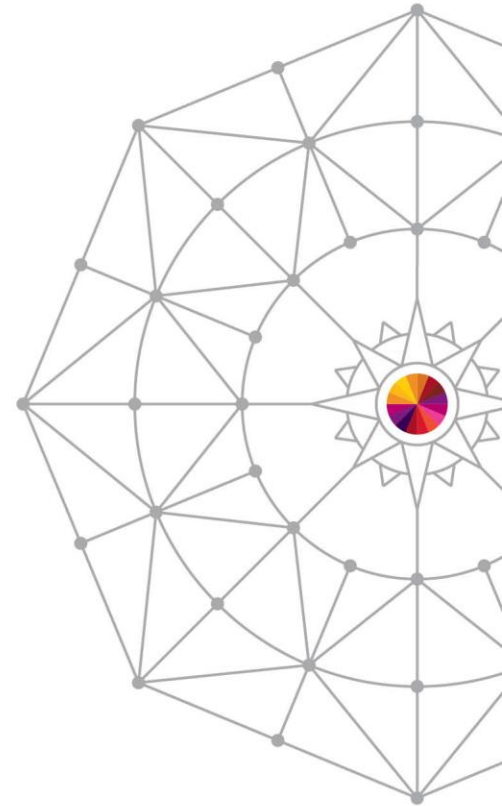
End result

- Fewer people that know the platform, but that was okay
 - MVS and OS/390 and z/OS
 - Fewer systems => Fewer people needed
 - Mergers and acquisitions
 - People were expected to work harder
 - (or “smarter, not harder”)
 - *If the talent was needed, it was out there.*
SOMEWHERE.



End result

- STILL CRITICAL
 - z/OS – z/VM personnel must know concepts and facilities
 - BUSINESS concepts ... Capacity on Demand, IBM pricing models
 - Not just knowing TOOLS to measure and control them!!!!



Other happenings

- Educational systems (Universities)
 - Reduced their mainframe commitments
 - Other, more alluring platforms (UNIX, Windows)
 - Internet wasn't serviced by mainframes at first
- Private schools (“approved for Veterans”)

*“We have met the enemy,
and he is us” – Pogo (Walt Kelly)*



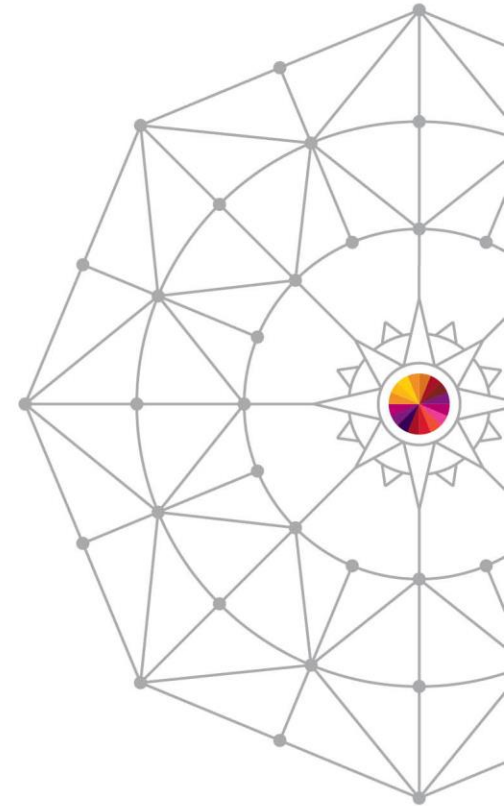
A funny thing happened on the way to the 21st century

- The mainframe didn't die
- The mainframe retained its prominence in the world – supporting the Web...
- It was discovered -- actually, impressed upon people
 - Mainframe is cheaper for large scale processing
 - It's often easier to maintain
 - It's scalable, virtualization is practical



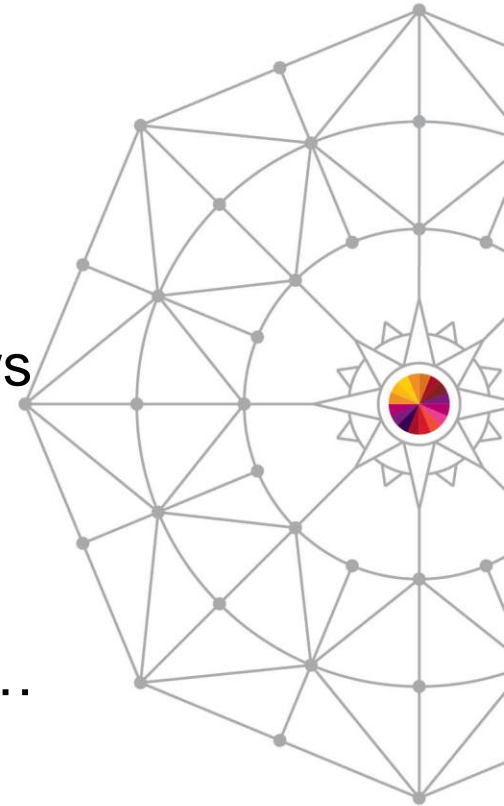
... on the way to the 21st Century

- “TCO”* for the mainframe dropped
- One study – “The Dinosaur Myth”, Xephon, 1992
 - Some processing can’t be converted to non-M/F
 - Cost-effectiveness stronger



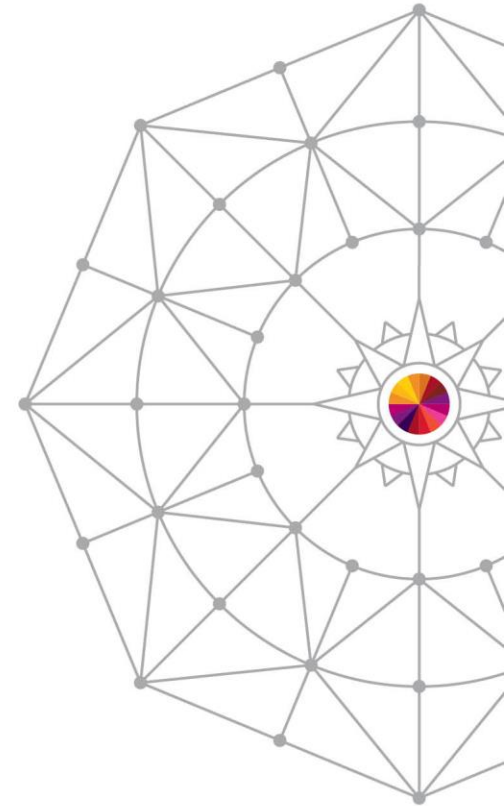
... on the way to the 21st Century

- Reinforced in 2002 and 2005 Arcati Institute
 - Per annum cost per user cited at \$4500 on M/F, \$5400 for UNIX, and \$8000 for Windows users.
 - Can't truly assess a real cost per user in 2013... but...please access their 2013 report...



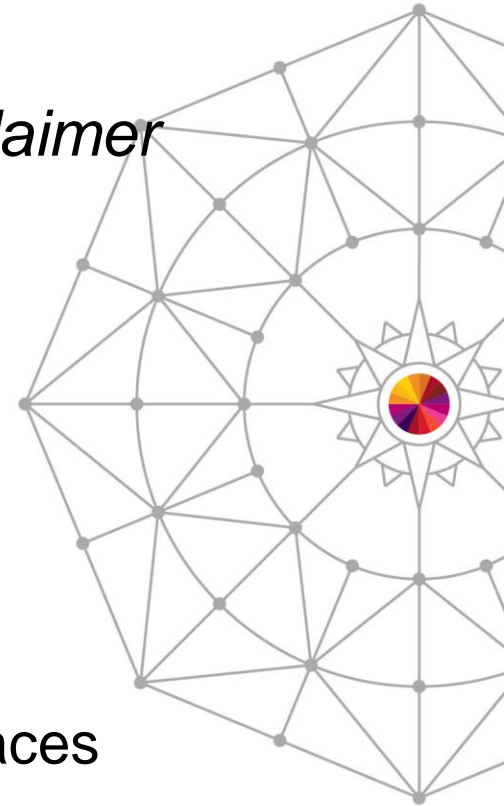
Interesting updates ...

- Can be found there at –
- <http://www.arcati.com/newyearbook13.pdf>
 - Review results of the survey – you'll find respondents indicated growth (late 2012).,,
 - Assuming that Lillycrop and Eddolis were successful at building a microcosmic study – it shows growth directions, continuing to continue!.



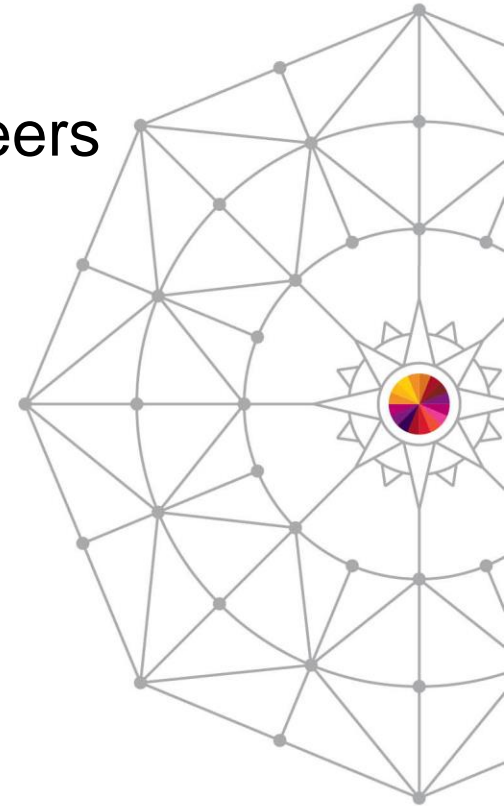
The dilemma – in a few years' time

- Mainframe will be around – and bigger
- Shortage of mainframe personnel?? *** *disclaimer*
- Shortage of those who have the skills and knowledge of z/OS ** *another , yeah, but*
- Baby Boomers
 - 1947 = now 67 * SSI max age in U.S.A.
 - 1951 = now 63
 - 1958 = now 56 * early retirement in many places



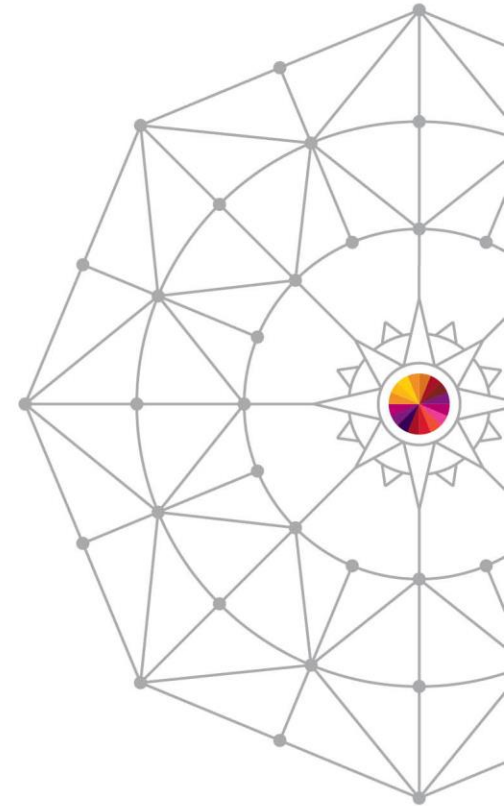
A look in the mirror...and look forward

- A look back at older selves and our own careers
- What's changed?
- Can we apply our experience to bring in our successors?
- What else can we do?



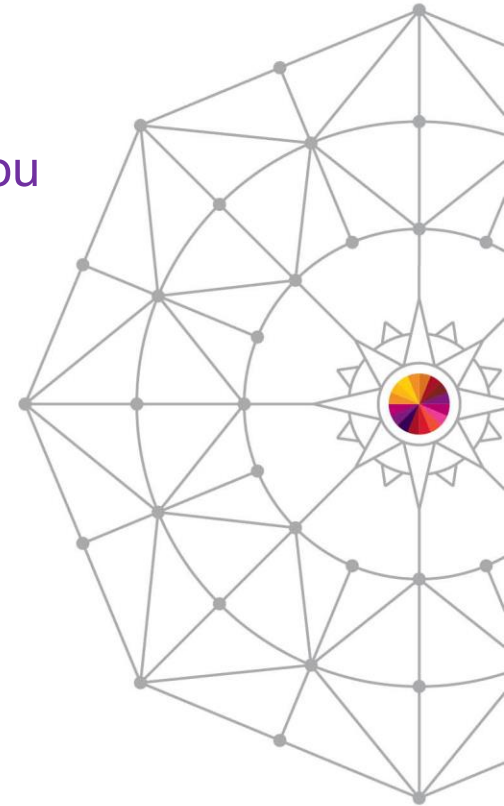
Explanation - how did we start our careers?

- Usually – we latched on to a company
- We worked – and they kept educating us
- Entry-level roles – operations , ops support, programming, internship or part-time work
- Opportunities to learn – always there
- **Mentoring** was common
- Junior people learned from senior people with practical experience



How did we grow?

- Usually home-grown but were allowed educational opportunities
- Experience *** you can't learn z/OS in six months, but you can acquire a practical specialty
- We often jumped ship for better opportunities, not necessarily more money
- We were allowed to make mistakes (*occasionally*)
- *Smooth roads and rocky roads* – we found our best environments for growth



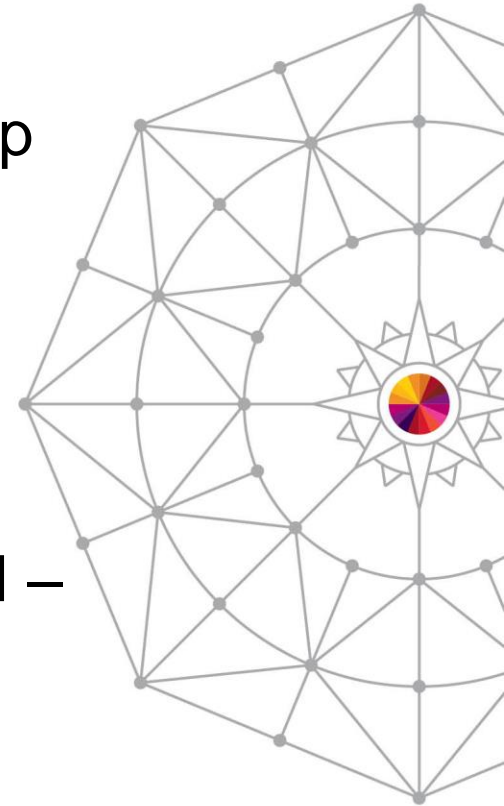
What's missing today ????

- Lack of training opportunities in many enterprises
- Little patience for bringing newer people up to speed
- ***Concept of mentoring is oft-missing, even disappearing from the culture***



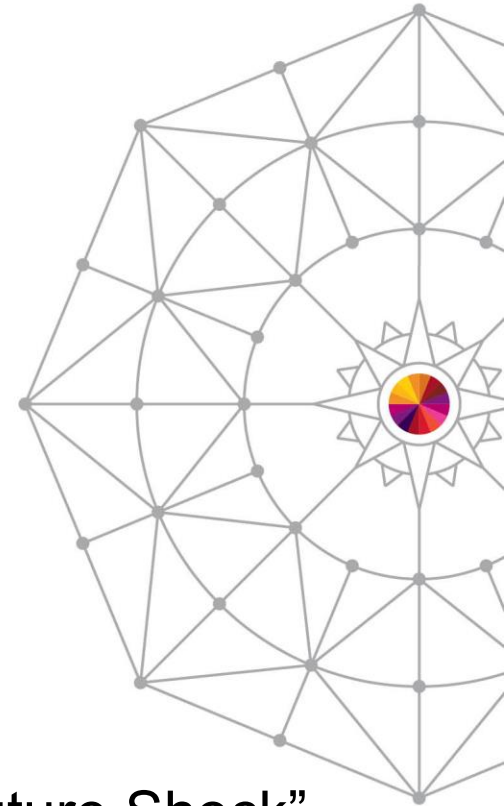
More to think about....

- Convincing the younger colleagues to take up the cause, and stay with it
- What needs to be done
- Younger z/OS people could be overwhelmed – *booth conversation yesterday*



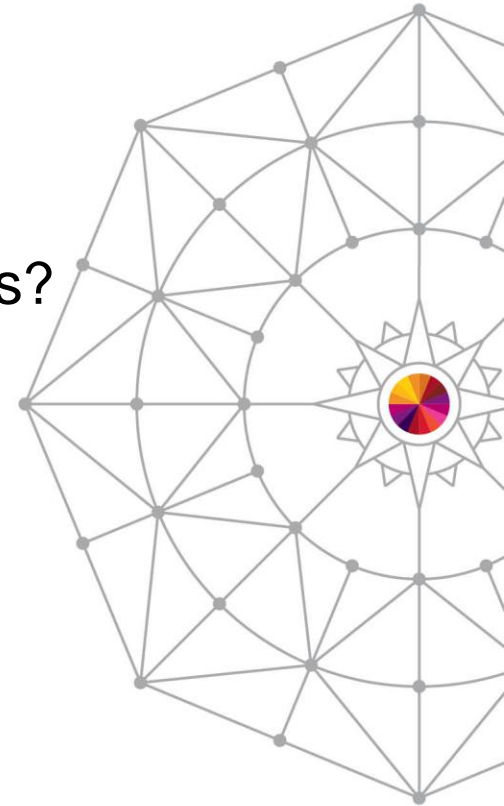
Selling points for newer z/OS staff..

- Irrefutable platform durability
 - Changes, but 50+ years of survival
 - It's not going away
 - It's commercially viable
 - Large enterprises tend to not go away
- Longevity in employment
 - Many mainframers survived in the field
 - Retirements spur opportunities
 - Architecture changes, but not suddenly / “Future Shock”



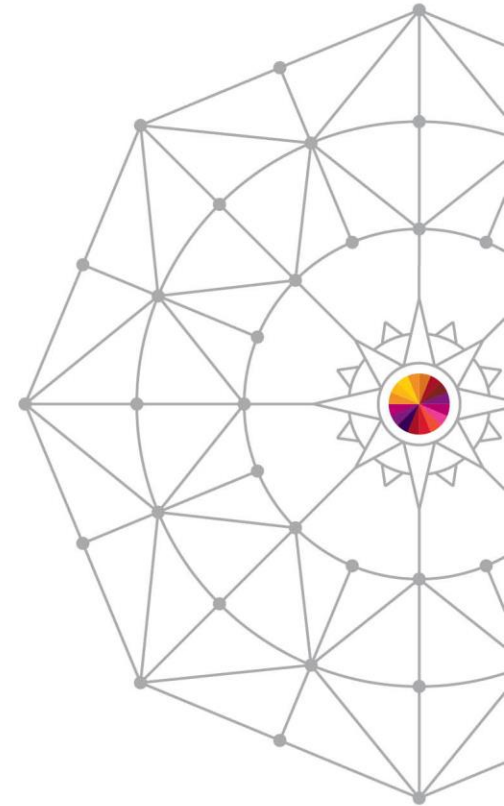
Tooting the mainframe horn....

- Newer technologies melding into z/OS world
 - Virtualization under z/VM, WebSphere
 - Future developments will occur on existing platforms, but will there ever be new platforms?
- Chance to apply familiar skills, transport expertise
 - Database design
 - TCP/IP network topology
 - 4th GLs (SAS) very similar to SQL
 - ***Integration with other platforms***



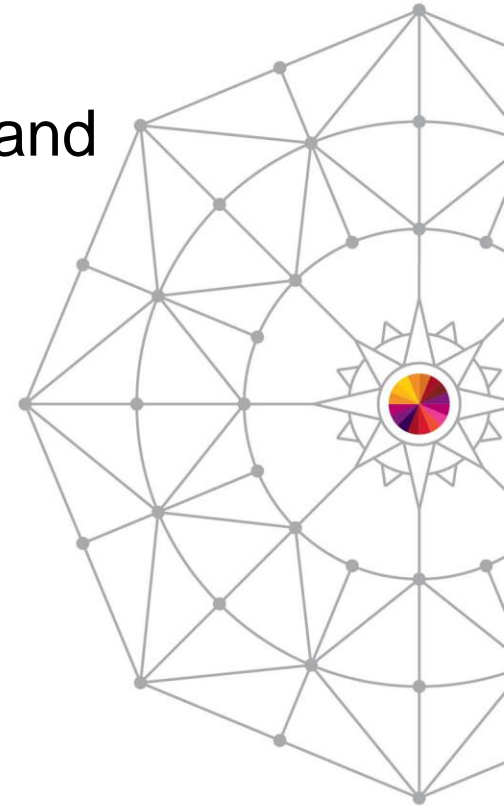
Final talking points – why mainframe as a career?

- Analytical capability is required
 - Not just a technician, but an analyst and communicator
 - Learn the BUSINESS as well as the technical side
 - Contract analysis – license charges, understanding
- The CPE perspective =
 - Upper management / executive exposure



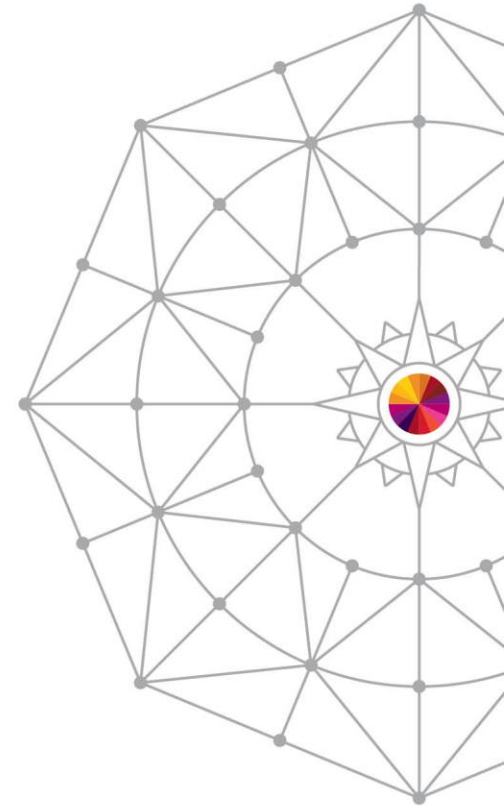
What is needed to develop new talent?

- Selling upper management on the concepts and requirements
- The starting time is ~~NOW~~ was years ago



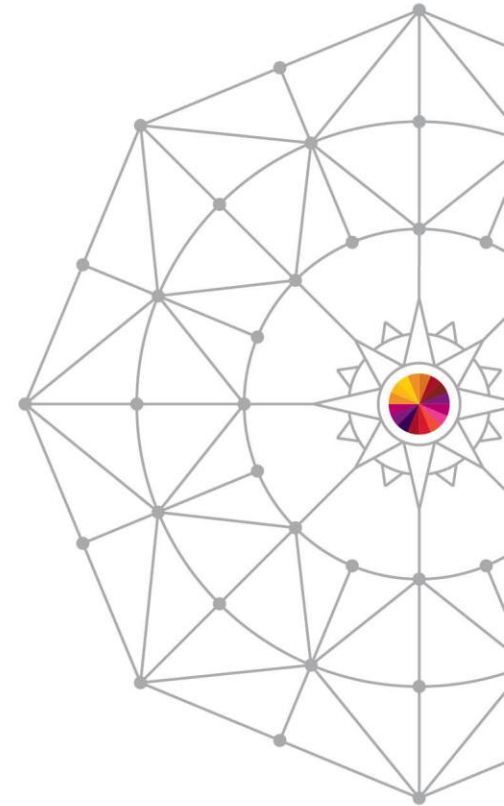
Convincing upper management that this is the right thing to do, mentoring plays a role....

- Employee retention
- Things take time *** z/OS is not a plug-and-play operating system
- Financial incentives
- Long-term continuity & functional assurance



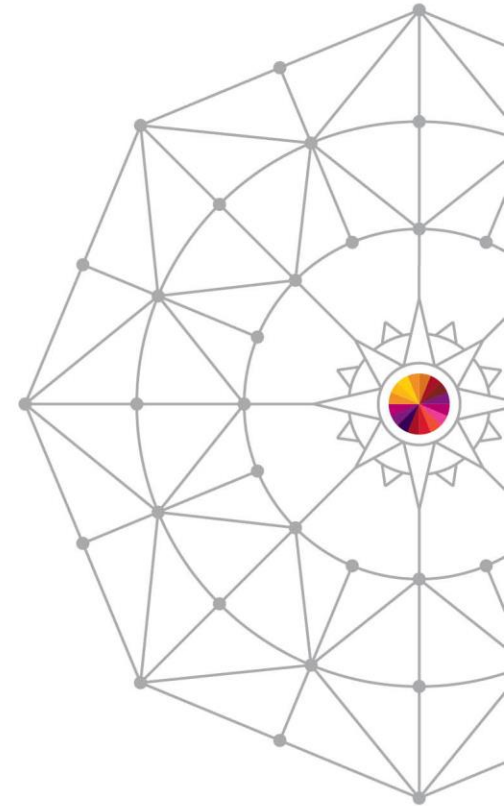
When to start?

- TODAY
- Mentoring, and bringing newer staff along
 - A new “old concept”
 - Can make your final working years more pleasant
 - It benefits all in the enterprise



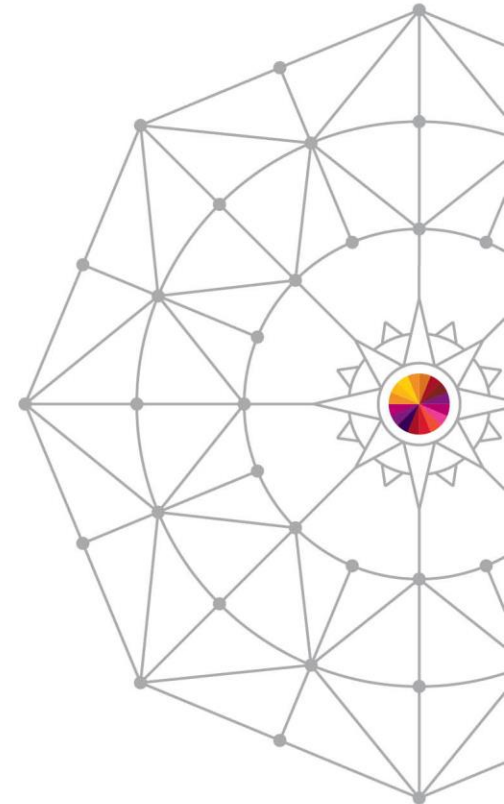
Let's talk about mentoring ...

- What's required ...? *Buy-in*
 - Willing management
 - Willing senior staff
 - Willingness of junior staff to accept mentoring
- Training dollars help.. But the main factor is **TIME !**



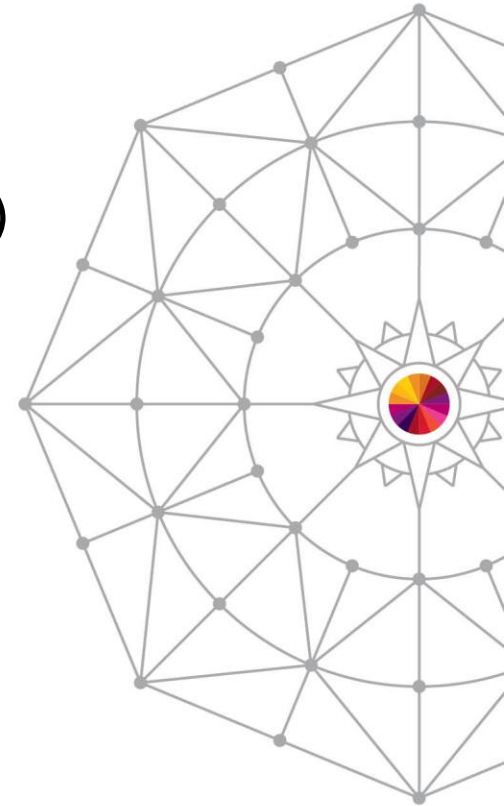
Mentoring...

- This is NOT “management” or “supervision”
- Establish goal-related plans !
- * Avoid Paperwork (no Gantt charts, etc.)
- * More of a “spiritual development” than management
- * It’s guidance, leading to employee development



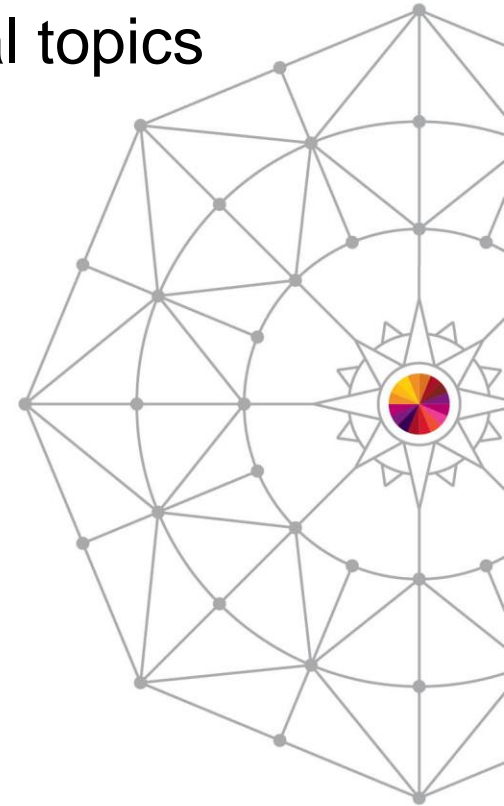
Plan! And plan again!

- Consider –
 - Personal professional goals of your protégé(s)
 - What assistance can you provide – and not provide
 - What other resources are available on-site?



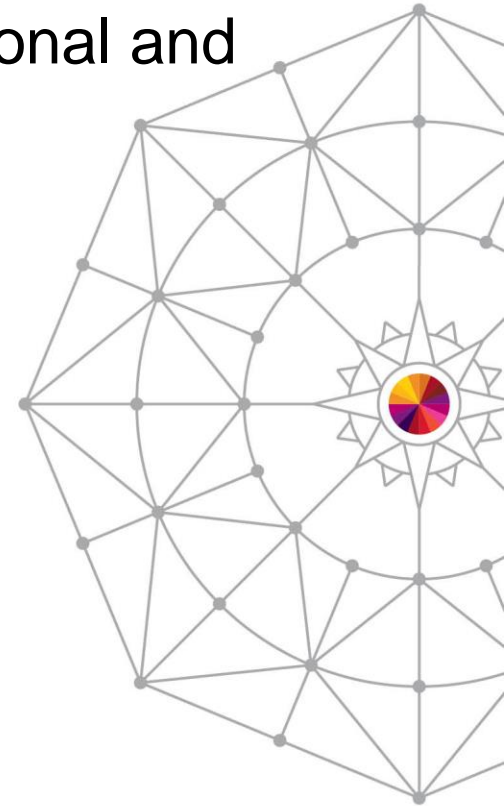
Examples of mentoring efforts....

- One hour-weekly sessions covering technical topics
- Have internal technical exchanges
 - Have each person do one a month (e.g.)
 - Record them if possible
 - More people more knowledge to share
- Brown-bag programs, invite everyone!



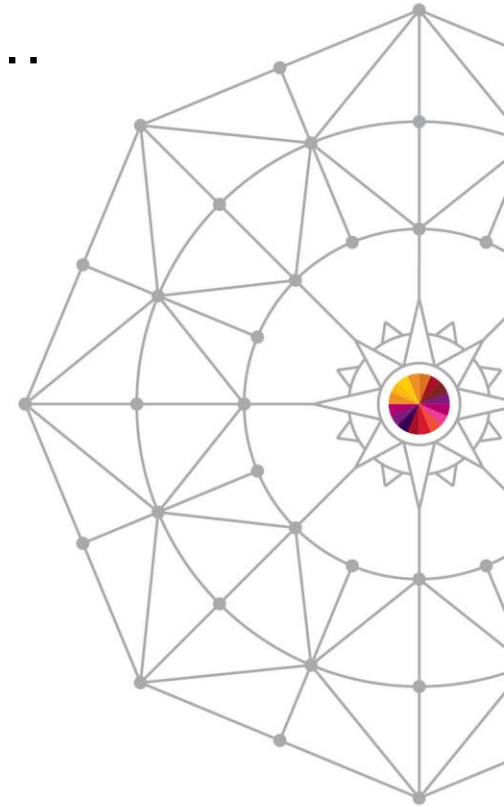
Example of mentoring efforts

- Encourage participation at conferences, regional and international
 - SHARE
 - CMG
 - Vendor user groups and forums



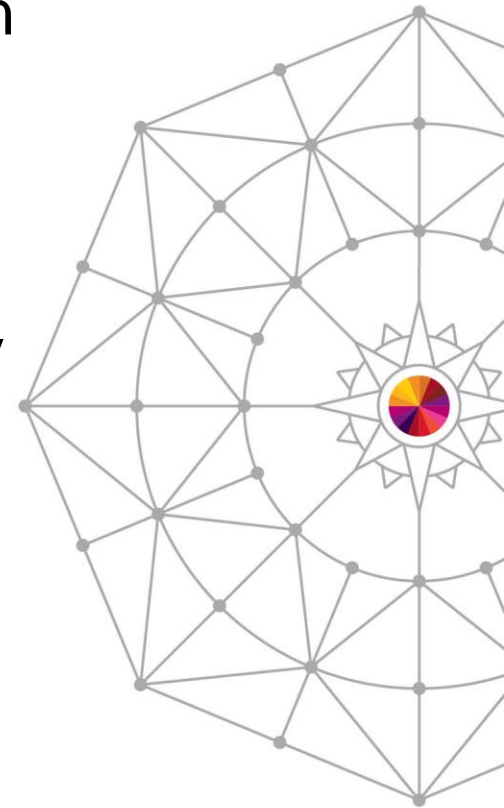
Example of mentoring efforts...

- Outside education – encourage, don't force...
 - IBM Academic Initiative (at a university near you?)
 - Software vendor courses – often available – some free, some paid...
 - SHARE, CMG ... as an attendee



IBM Academic Initiative z/Series Program

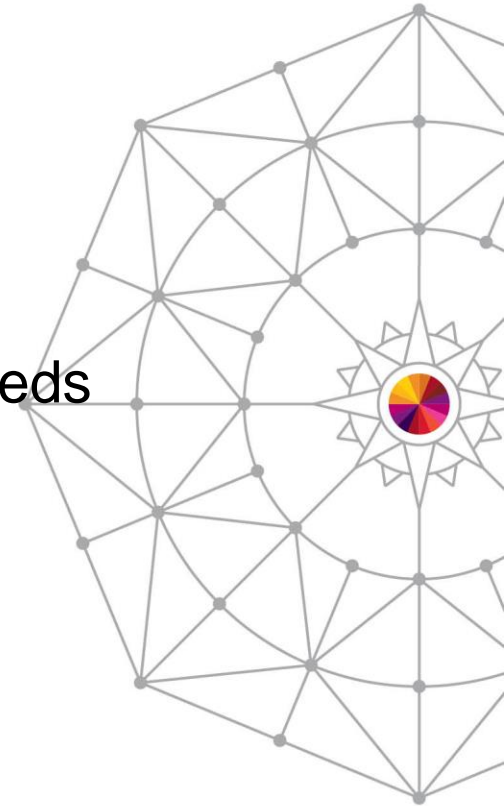
- Use a search engine to find more information (formally called “z program”)
- Seeks cooperation with and provides assistance and materials to university faculty
- Encourages development of mainframe expertise
- Certifications, examinations, and even potential job matches



IBM Academic Initiative (directly from the website)

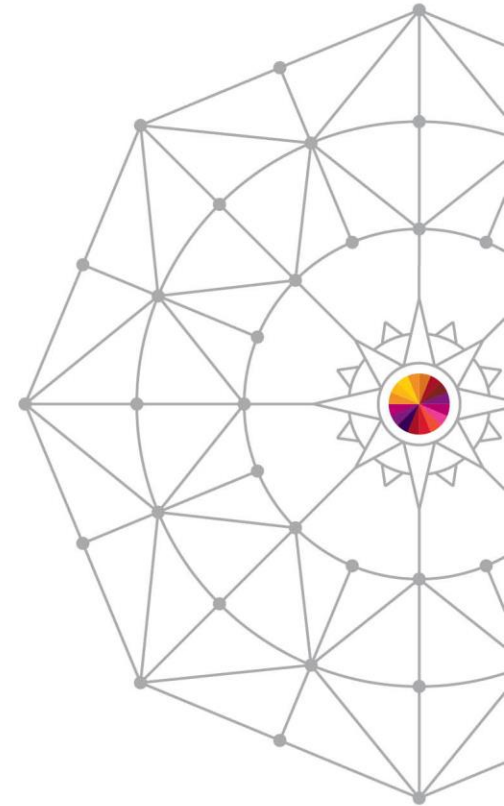


- For universities:
 - Stronger relationship with businesses
 - Access to industry technology experts
 - Faculty training on latest mainframe facilities
 - Comprehensive curriculum to meet market needs
- For Business Partners:
 - Access to qualified mainframe talent
 - Strengthened collaboration with academia
 - Development of targeted work-study programs



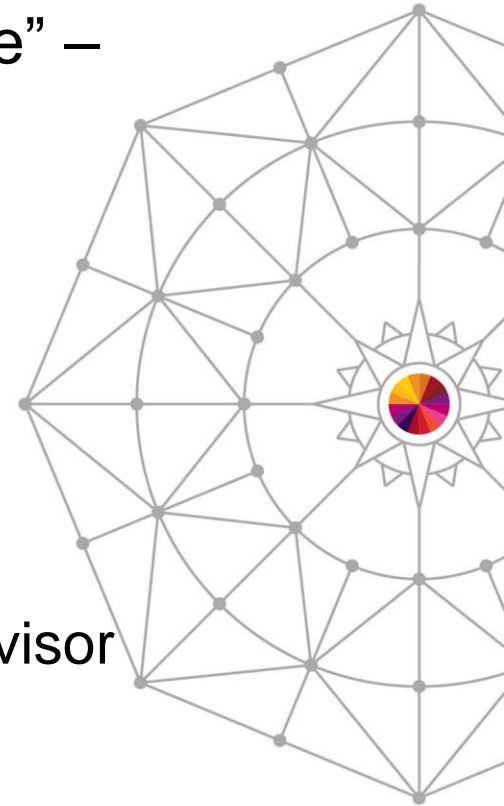
Examples of mentoring efforts...

- “Indoctrination” – harsh term but applicable.
 - Every company’s business is different
 - Every company’s corporate culture differs
 - Every company department may have a different culture
- It’s the mentor’s role to inform and instruct



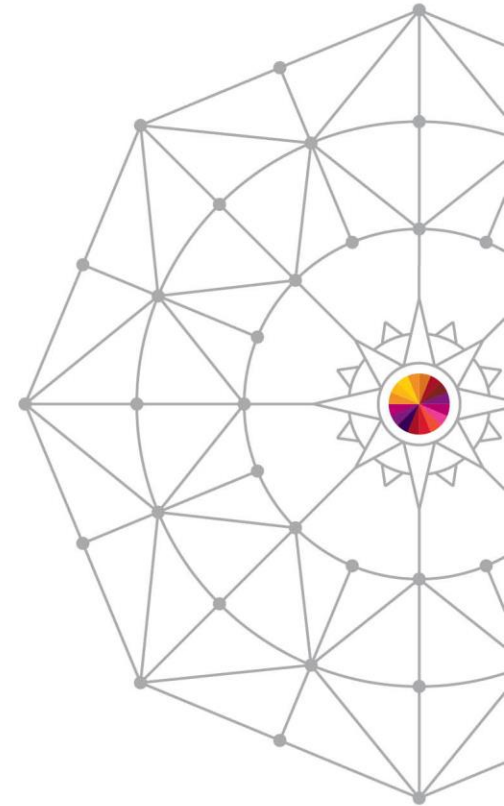
Overall benefits

- The younger z/OS * z/VM tech feels “at home” –
 - Part of a team
 - Respected
 - Self-respect
 - Confidence (* new job jitters?)
 - Modeling your example
 - Someone, other than management, as an advisor



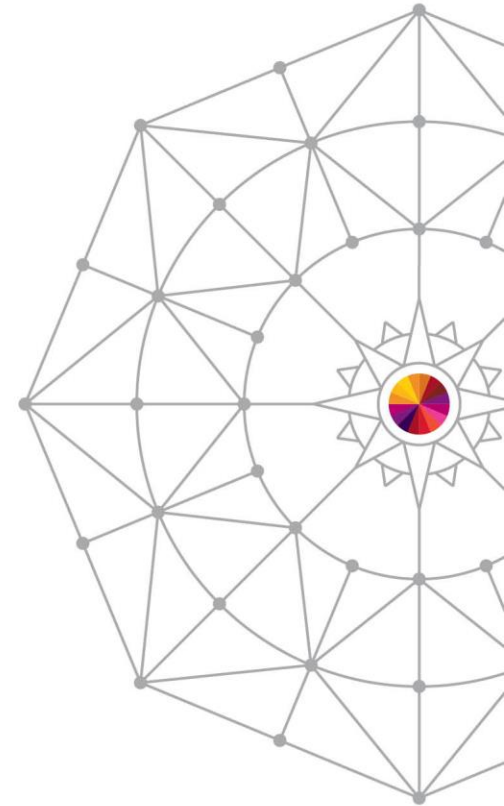
The conclusion – your role as a mentor

- Developing those junior people who are receptive to receiving encouragement and assistance
- Sharing your knowledge, and, yes, your WISDOM with others
- Doing whatever can be *practically* done within your enterprise
- Be someone that people want to approach



What not to do?

- Don't practice rejection
- Don't promulgate negativity – that spreads...and doesn't make the grass grow in a workplace
- Don't “fix” someone else's career path for them – a 20-something doesn't want that
- Don't look for bad stuff because you feel you have to “balance” off the good and bad.



It's all about teamwork....and the rewards can be great.



Conclusion

- We may have come full circle – mentoring, in-house, and outside education WERE the norm a generation ago
- “It’s déjà vu all over again” – *Yogi Berra*
- Just food for thought!
- What worked before CAN work again!
- Many thanks!

