

AUSTIN ANNUAL CONFERENCE & SHOWPLACE

HEAS AT THE CENTER

North Carolina

NC's Digital Journey







Who we are...

- Create affordable housing opportunities for North Carolinians whose needs are not met by the market
- Created in 1973 by the General Assembly
- Self-supporting public agency
- 269,000 affordable homes and apartments
- \$21.2 billion in real estate production
- We Care, We Act, We Lead

NORTH CAROLINA

HOUSING FINANCE AGENCY





Housing Opportunities for North Carolina

- Single-Family
 - Low-cost mortgages and down payment assistance
 - Rehabilitation of owner-occupied homes
 - Foreclosure prevention assistance

- Multi-Family
 - Affordable homes and apartments
 - Supportive housing
 - Project Based Contract Administration





2002 - 2012

- Scott
 - Manager of Rental Investment, then Director
 - Executive Director (since Jan. 2017)

- Tim
 - Programmer -> Analyst/PM -> Manager of IT (2011)
 - CIO (since 2014, director since May 2018)



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Today's Presentation

- History of IT @ NCHFA back to 2002
 - Success stories
 - Challenges
- Current approach alignment of IT with the business
- How we innovate
- Success factors





Director Team as of May 2018

Executive Director

CFO

CIO

Director of Administration

Director of Business Services and Solutions Director of Community Living and Rental Asset Management

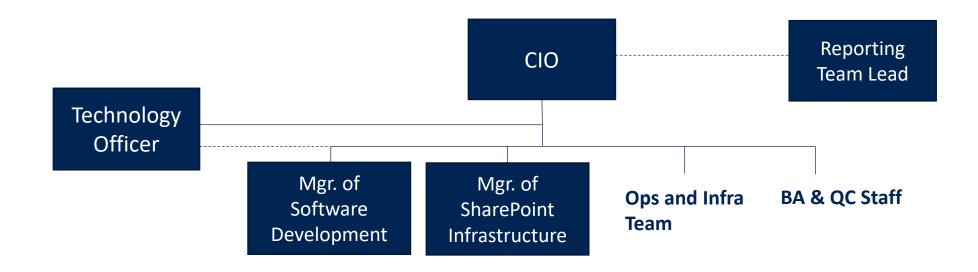
Director of Homeownership Programs General Counsel, Director of Legal Affairs

Director of Rental Investment





IT Structure



23 IT Staff including contractors; 14 software developers

CIO has 10 direct reports; mix of supervisors and staff



2002 - 2012: Successes

- Executive Director support for IT
- Close relationship between the ED and the Director of Policy,
 Planning, and Technology
 - The drive to be successful and accomplish sometimes the impossible
 - Began addressing disparate, antiquated systems, business processes, and Agency-wide reporting needs
 - Vision for custom software applications for lines-of-business, including B2B Portals
 - Push to hire multi-talented and skilled IT staff
 - Introduced project management methodologies



2002 – 2012: Successes

- Focus on software application development
 - Started with online portal for the Federal Tax Credit program in 2002
 - Continued with replacement of legacy systems
 - Vision for a fund tracking system (Fund Control)
 - Vision for going "paperless" (EDRM)
 - Continuous IT support for single-family lending during financial crisis
- Agency challenges drove IT innovation
 - Hardest Hit fund was a game-changer for many reasons
- Switch to Agile software development practice

2002 - 2012: Successes

- Infrastructure Upgrades
 - Virtualization (VMWare)
 - Wireless network
 - New firewall and switches





2002 – 2012: Challenges

- Lack of a common understanding of IT
 - Who's making the decisions?
 - Why is that project a priority?
 - Why does it cost so much?
- Lack of trust between IT and a few key Agency stakeholders
 - Shadow IT

- Too many competing priorities, with various failed attempts to prioritize
- Infrastructure and Security lacked attention



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2012 – Turning Point

- Director of Policy Planning and Technology and Manager of IT worked to create a plan to address major IT gaps in infrastructure and security
- TechVision team created
 - Vision: Shared Knowledge, Governance, Prioritization
 - Building a common understanding was very difficult at times
 - Budget transparency (wow!)
 - Cost of Delay prioritization method
 - Complete IT transparency
- It took a while, but TRUST was established



Most Recently...

- 2014 Manager of IT promoted to CIO, first CIO for the Agency
- 2015 CIO was invited to the Director Team and Board meetings
 - Although not a director, was viewed as key Agency strategic resource
- 2016 Information Security became Agency strategic goal
- 2018 Org change to promote the CIO to a director and establish IT as a stand-alone business group, formerly a part of the Policy, Planning, and Technology business group



IT As A Business Partner

- Early IT presence in all Agency initiatives:
 - Example: Hurricane Florence new rent reimbursement program for rapid rehousing
- Provide business analysis, not just system analysis
- Provide project management
- Strong IT helpdesk that works closely with staff
- Open door policy all staff ideas are welcomed
- Annual and ad-hoc meetings with Agency leadership to brainstorm technology needs, ideas, and innovation opportunities



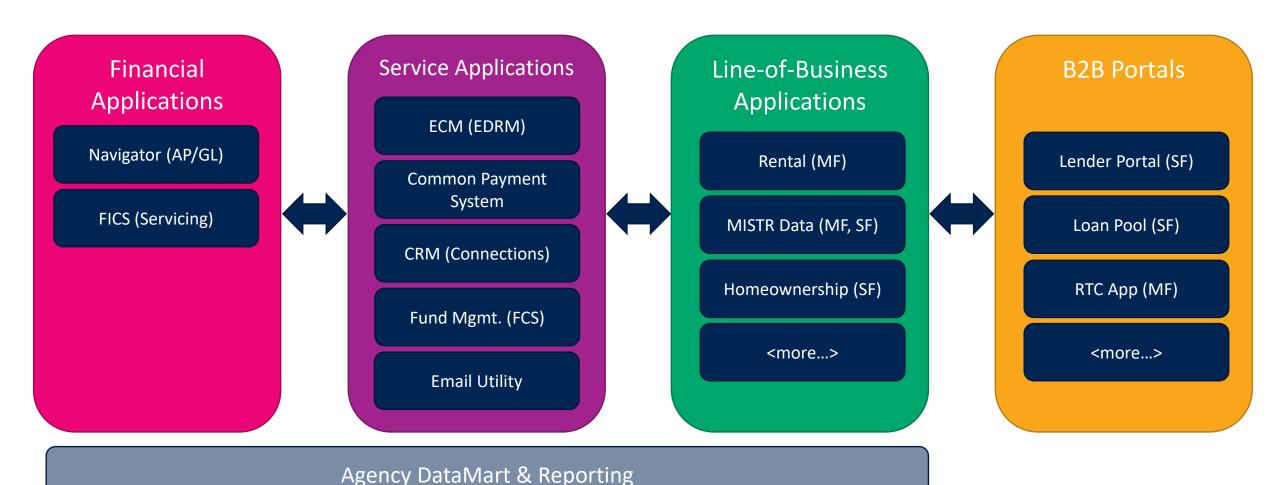
Always a Priority

- Enabling our staff
 - PC refreshes
 - Laptops for working remote
 - Upgraded phone system
 - Upgraded printing, copying, scanning, and faxing capabilities
 - Technology in conference rooms and common working areas





Application Infrastructure Overview





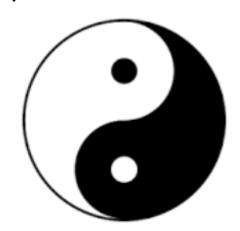
How do we innovate?

- Early adopters of Agile software development
 - Scrum, Kan Ban
- Staff training budget commitment
- "Innovation Day"
- Research and Development (Exploration); Pilot projects
- DevOps
- SaaS



Role of our Technology Officer

- Technical guru
- Works with all teams; consults
- Architect for all new software applications
- Architect and key decision maker for all software development environments (production, development, test, QA, etc.)
- Leads DevOps initiatives
- Mentors and coaches team members
- Stays current with technologies





Success Factors

• IT is no longer seen as an impediment, but an enabler

- Continued investment (stable budget, slight increases)
 - Custom software application development
 - Instructure and security
- Customer Service always a focus for IT



Success Factors

- Trust of IT by business staff:
 - Solid relationships between IT and business staff
 - Example: security changes/implementations (transparency why?)
 - IT Team Members wear many "hats"
- TechVision

Decision Transparency!



Thank you!

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