

# **Pinellas County Business Technology Services**

## **Board Meeting**

Partnering to provide the solutions most important to our Customers' Business



# Agenda

1. **Call to Order – Chair, Commissioner Welch**
2. **Designation of Voting Proxies – Chair, Commissioner Welch**
3. **Approval of Meeting Minutes – Chair, Commissioner Welch**
  - **BTS Board Meeting – September 15, 2016**
4. **Selection of Chairperson and Vice Chairperson**
5. **Gartner Symposium – Marty Rose and Jeff Rohrs**
6. **OPUS Project – Marty Rose**
7. **Recognition of Board Service Awards – Marty Rose**
  - **Pam Dubov, Property Appraiser**
  - **Diane Nelson, Tax Collector**
8. **Adjournment – Chair, Commissioner Welch**

# **Pinellas County Business Technology Services**

**Gartner Symposium/IT<sup>XPO</sup> 2016**  
**Marty Rose, CIO**

Partnering to provide the solutions most important to our Customers' Business

# What is the Gartner Symposium?



The World's Most Important Gathering of CIOs and Senior IT Executives

“Gartner Symposium/IT<sup>XPO</sup> is the world’s most important gathering of CIOs and Senior IT Executives, providing a strategic view on the trends that shape IT and business. No other conference in the world attracts more than 24,000 attendees, including 7,000 CIOs.” Gartner

# CIO Survey Results

## Who are the Leaders of Digital Change?

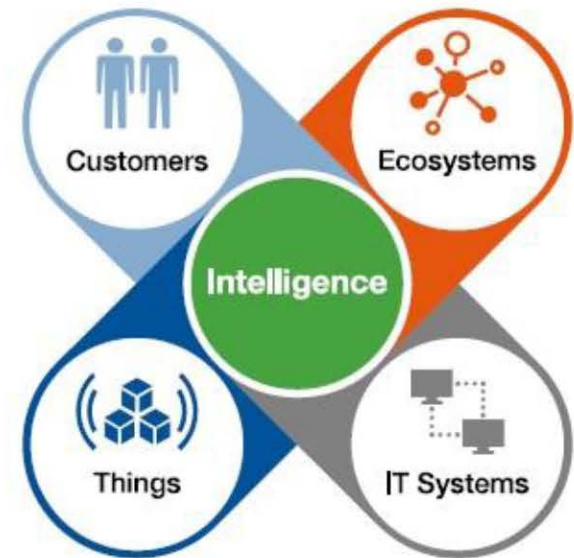
- Chief Executive Officer – 33%
- Chief Information Officer – 30%
- Chief Financial Officer – 10%
- Information Technology Manager – 10%
- Chief Operating Officer – 5%
- Business Unit Directors – 5%
- Chief Technology Officer – 3%
- Other – 4%



The CIO “role” is a “business role” that happens to have “technology” as one of its levers of execution.

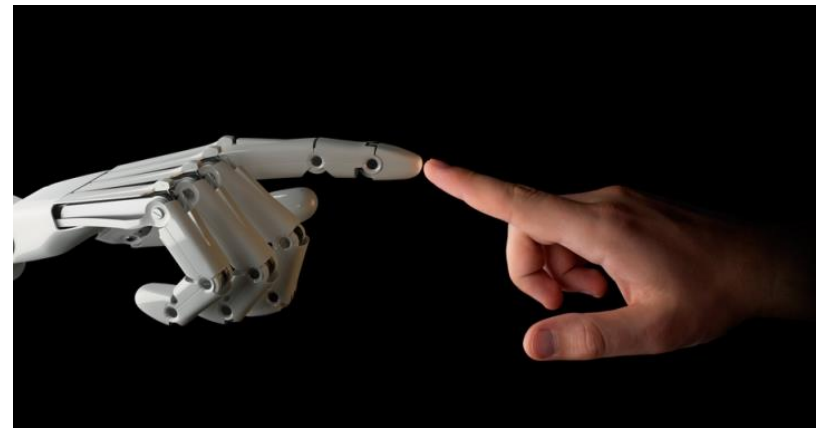
# Building the Digital Platform

- Information Systems Platform
  - Core Systems
- Internet of Things Platform
  - Connected Things
- Ecosystems Platform
  - Partner Interfaces
- Customer Experience Platform
  - Customer Portals and Apps
- Data and Analytics Platform



# Intelligence Anywhere and Everywhere

- Intelligent Sensors
- Smart Appliances
- Smart Medical Devices
- Operational Applications
- Smart Security and Operations
- Smart Enterprise Apps
- Advanced Chatbots
- Virtual Assistants
- Smart Advisors
- Robots
- Drones



# User Experience

- Digital Business – Online, Not Inline
- Mobile Applications - Purposeful
- Conversational Systems – Amazon Echo
- Virtual Personal Assistants
- Adaptive Machine Systems – Car sensors
- Chatbots
- Wearables
- Portal





# CIO Survey Results

## Top Performing Organizations

- CEO/CIO Lead Involvement and Attitude
- 44% are part of mature digital businesses
- 4.6% are increasing IT Budgets
- 79% are active members of the digital ecosystems
- 40% of critical digital components are built in house
- 68% Have Bi-Modal IT
- 77% Focus on Innovation



# CIO Survey Results

## Top Performers Invest In

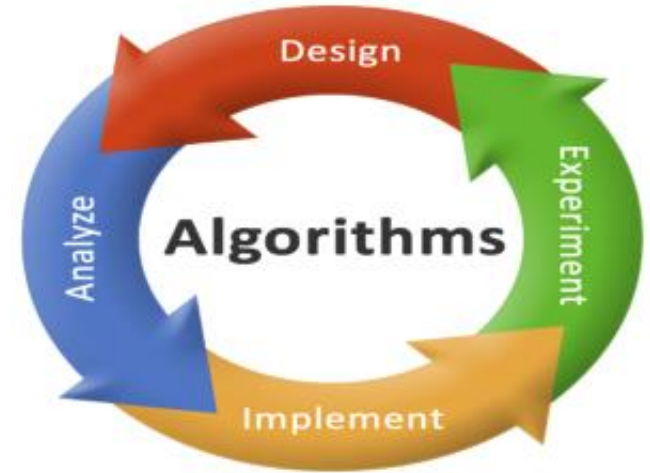
- 47% Business Intelligence/Analytics
- 34% Cloud Services/Solutions
- 20% Digitization/Digital Marketing
- 20% Infrastructure/Data Center
- 16% Mobility and Mobile Applications
- 13% Cyber/Information Security
- 8% Enterprise Resource Planning (ERP)
- 8% Network, Voice and Data Communications



# CIO Survey Results

## Key Technologies Deliver Change

- 81% Advanced Analytics
- 48% Internet of Things
- 43% Digital Security
- 40% Business Algorithms
- 22% Machine Learning
- 19% Virtual Customer Assistants
- 13% Augmented Reality
- 10% Blockchain
- 7% Autonomous Cars
- 6% Small Robots



# Bi-Modal Mindset

Can you change your way of Thinking?

## Nature

Innate personality,  
predisposition and traits

## Nurture

External environment,  
context and influence

Bi-Modal  
Mode 1

Reliability  
Consistency  
Expertise  
Best Practices  
Business as Usual

Agility  
Ambiguity  
Creativity  
Innovation  
Experimentation

Bi-Modal  
Mode 2

# BI-Modal IT Action List

To Do	To Stop
✓ Lead (or Get Out of the Way)	✗ Allowing Short-Term Imperatives to Starve Strategic Thinking
✓ Plan Agile Engagement	✗ Replacing Applications With Applications
✓ Focus on Integration	✗ Customizing COTS Systems
✓ Introduce "Product" Culture	✗ Point-to-Point Integration
✓ Understand and Implement DevOps	✗ Tyranny of the Silos
✓ Engage With SaaS and Cloud	✗ Being a Slave to Your Vendors
✓ Show a Lot of Love to Mode One	
✓ Kill Something Off	

# Using Cloud Services

## Top Three Reasons for Using or Considering Using Public Cloud Services

1. IT Modernization
2. Cost Savings
3. Agility



# Cloud Growth

- IT Spending on Public Cloud Services grew from \$130B in 2013 to \$203B in 2016
- Gartner forecasts the growth in 2019 to be \$313B
- Areas include:
  - Cloud Advertising
  - Application and Infrastructure Services
  - Cloud Management
  - Security Services
  - Cloud Business Process Services



# Cloud Best Practices

• <b>There is No Single Cloud Strategy</b>	• Build a layered strategy for each level of cloud capabilities
• <b>Redesign, Not Redeploy</b>	• Avoid “lift and shift” where possible
• <b>One Workload at a Time</b>	• Enterprise wide cloud migrations usually fail
• <b>Coordinate the Uncontrollable</b>	• Become or use brokers as intermediaries
• <b>Focus on Outcomes</b>	• The only “right” service is the one with business value
• <b>Hybrid Cloud Works</b>	• Expect hybrid to be the norm for years



# A Hybrid World

1. Cloud and traditional data center models will be part of a continuum of complementary digital solutions
2. Need to build and manage multiple delivery models in a complex hybrid target state for the foreseeable future
3. Success in the hybrid world requires new capabilities in I/O Services, Processes, Organization, Governance, Roles and Technology



# Big Business Intelligence Versus Self-Service BI

Big BI (SAP, IBM, Oracle)	Self-Service BI (Tableau, Qlik, Microsoft)
<ul style="list-style-type: none"><li>• 50% of Market Share</li></ul>	<ul style="list-style-type: none"><li>• 6.2% of Market Share</li></ul>
<ul style="list-style-type: none"><li>• Declining BI Revenues</li></ul>	<ul style="list-style-type: none"><li>• Growing Revenues 78%, 17% and 9%</li></ul>
<ul style="list-style-type: none"><li>• Months to Implement</li></ul>	<ul style="list-style-type: none"><li>• Days and weeks to Implement</li></ul>
<ul style="list-style-type: none"><li>• IT-Centric Deployment</li></ul>	<ul style="list-style-type: none"><li>• Business-Centric Deployment</li></ul>

# Keynote Speakers

***Dr. Robert Gates, former CIA Director, Secretary of Defense and President of Texas A&M University***

- “Disruptive Leadership”
- “Technology advantage is a shorter timespan now, 20 years is now 5 years”
- “Use digital technology to enhance the customer experience”
- “A good leader develops good followers”
- “Responsibility of follower is to speak up with new ideas – but then help implement decision”
- “Leadership begins with character not training”
- “Pace of change doesn’t allow for complacency (Always asking, what can I do better?)”
- “Transparency is important when leading change – the more people are involved in the planning stage, the more acceptance during implementation”

# Keynote Speakers

## ***Satya Nadella, Microsoft CEO***

- “We will use Artificial Intelligence to augment human capabilities”
- “Be bold and be right, If you’re not bold you’re not going to have a future, and if you’re not right you’re going to be dead”
- “One of the hardest challenges of this digital transformation is that there are a lot of technologies that just feel like a dud until they’re not”

## ***Jeff Smith – IBM CIO***

- “Collective wisdom will always outweigh individual insight”

## ***Pat Riley, Miami Heat President and Hall of Fame Coach***

- “Change is sanity”
- “Play at the rim”
- “Leadership is about trust, sincerity, competency and dependability”

# **Pinellas County Business Technology Services**

**Gartner Predictions  
Jeff Rohrs, CTO**

Partnering to provide the solutions most important to our Customers' Business

# 2017 Ten Strategic Technology Trends

- Intelligent
  - Advance Machine Learning and Artificial Intelligence
  - Intelligent Apps
  - Intelligent Things
- Digital
  - Augmented and Virtual Reality
  - Digital Twin
  - Blockchain and Distributed Ledger
- Mesh
  - Conversational Systems
  - Digital Technology Platforms
  - Mesh App and Service Architecture
  - Adaptive Security Architecture



# Gartner Predictions - By 2020

- 100 million consumers will shop in Augmented Reality
- 30% of web browsing sessions will be done without a screen
- 20% of brands will abandon their mobile apps by 2019
- Algorithms will positively alter the behavior of billions of global workers
- A blockchain-based business will be worth \$10 billion
- 40% of employees can cut their healthcare costs by wearing a fitness tracker



# More Gartner Predictions

- By 2021, 20% of all activities in which an individual engages will involve at least one of the top seven digital giants
- Through 2019, every \$1 that enterprises invest in innovation will require an additional \$7 in core execution
- By 2018, through 2020, IoT will increase data center storage demand by less than 3%
- By 2022, the IoT will save consumers and businesses \$1 trillion a year in maintenance, services and consumables



# Digital Disruption Scale

Scale	Disrupter	Secondary Effects
DD5	Autonomous Artificial Intelligence (AI)	Urban Design, Insurance, Laws, Car Ownership
DD4	3D Printing	Organs, Manufacturing, Compete with China?
DD3	Conversational User-experience and Bots	Teaching, Literacy, Social Engagement
DD2	Remote Drones	Delivery, Surveillance, Inspection, mapping, imaging
DD1	Augmented Gaming	More Games



# Self-Driving Vehicles

- Most major manufactures are developing the autonomous technology
- Michigan is moving towards allowing self-driving cars

<http://www.usnews.com/news/business/articles/2016-09-07/michigan-may-not-require-a-human-in-self-driving-test-cars>

- Uber testing self-driving cars in Pittsburg, PA

<https://newsroom.uber.com/pittsburgh-self-driving-uber/>

- Columbus, OH was awarded the U.S. DOT “Smart City Challenge” \$50 million dollar prize for multi-modal public transportation

<https://www.transportation.gov/smartcity>



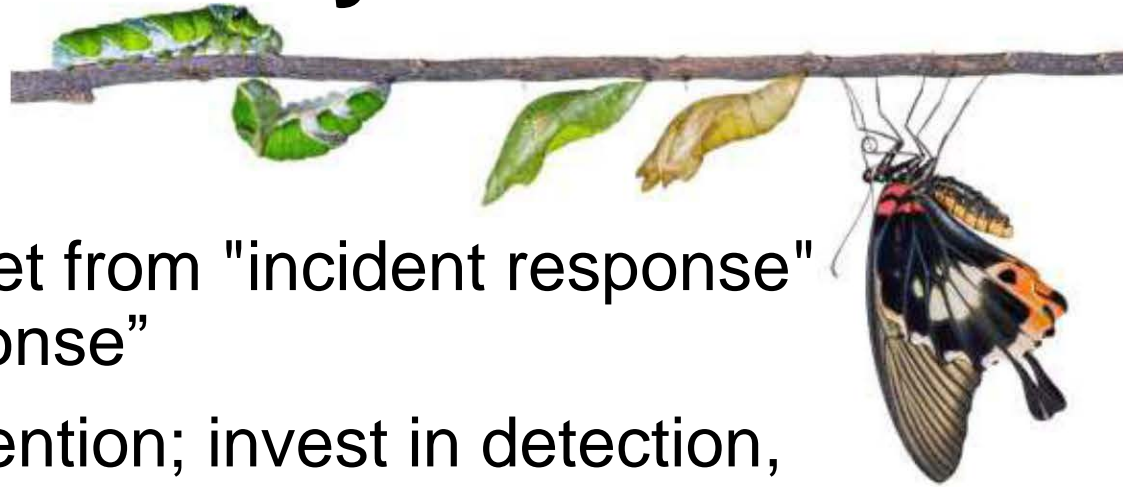
# Hillsborough Area Regional Transit

HART is partnering with FDOT on Marion Street shuttle service in 2017.



<http://www.tbo.com/news/transportation/driverless-marion-street-shuttle-will-serve-tampa-bus-riders-starting-next-year-20161028/>

# Adaptive Security Architecture



- Shift security mindset from "incident response" to "continuous response"
- Spend less on prevention; invest in detection, response and predictive capabilities
- Favor context-aware network, end-point and application security protection platforms
- Embrace a security operations center model
- Architect for comprehensive, continuous monitoring at all layers of the IT stack

# What is Appropriate Risk?

- You can spend every dollar and not be completely protected
- Move from check box compliance to risk based decision making
- Risk is a legitimate business decision but not one everyone can make
- Risk Engagement vs. Risk Awareness
- Security requirements will just become and requirement
- By 2020 60% of the enterprise IT Security budgets will be allocated for rapid detection and response

# **Pinellas County Business Technology Services**

**OPUS 5 Year Anniversary**  
**Marty Rose, CIO**

Partnering to provide the solutions most important to our Customers' Business



# What is OPUS?

- Oracle Project Unified Solution (OPUS) is an Enterprise Resource Planning (ERP) solution by Oracle called Oracle E-Business Suite
- ERP systems are modularized software solutions
- OPUS uses the various Finance, Procurement, Project Management, Human Resources, Oracle Learning Management, Payroll and Benefits modules
- BTS Board Resolution No. 09-01 – Created the Oracle Business Application Executive Committee (OBAEC) dated May 21, 2009
- BTS Board Resolution No. 11-01 – Created the membership use of the Oracle Project Unified Solution (OPUS) dated April 21, 2011

# Who Uses OPUS?

- Everyone, except Sheriff and Tax Collector, uses OPUS for Payroll
- All departments under the BCC and most departments under the Clerk of the Circuit Court use OPUS for day-to-day operations
- Forward Pinellas (formerly PPC/MPO), Supervisor Of Elections and Property Appraiser use OPUS for Human Resources, Payroll, and Oracle Learning Management
- Tax Collector uses OPUS for Human Resources and Benefits



# Happy Five Years OPUS!



# Thank You

## *Certificate of Appreciation*

*Pam Dubov and Diane Nelson*

In recognition of your dedication and service as a member  
of the Business Technology Services Board of Directors.



*Awarded By:*

Martin P. Rose, Chief Information Officer  
Business Technology Services

Commissioner Kenneth T. Welch, Chair  
Business Technology Services Board