

A vibrant, futuristic digital landscape. In the upper right, a satellite orbits against a starry night sky. The background is a deep blue with glowing circuitry patterns in green and blue. In the lower left, a laptop sits on a dark surface, its screen displaying a view of Earth from space. In the center, a red, arched structure resembling a bridge or a roller coaster track arches over a glowing, fiery horizon. Two small human figures stand on the ground in the foreground, looking up at the structure. In the lower right, a white rocket with a blue nose cone is shown in profile, with a small 'TM' trademark symbol next to it.

TECHNOLOGY FUTURES INC.

Your Bridge to the Future

Introductions and Welcome

Lawrence Vanston, Ph.D.
President,
Technology Futures, Inc.

lvanson@tfi.com

TFI 2019

January 24-25, 2019

Marriott Courtyard Downtown
Austin, Texas

84 Waller St • Austin, Texas 78702
(512) 258-8898 • www.tfi.com

**TECHNOLOGY
FUTURES INC.**

Housekeeping

- Welcome
- Lunch and Reception
- Evaluation Sheets
- Professional Recording and Streaming



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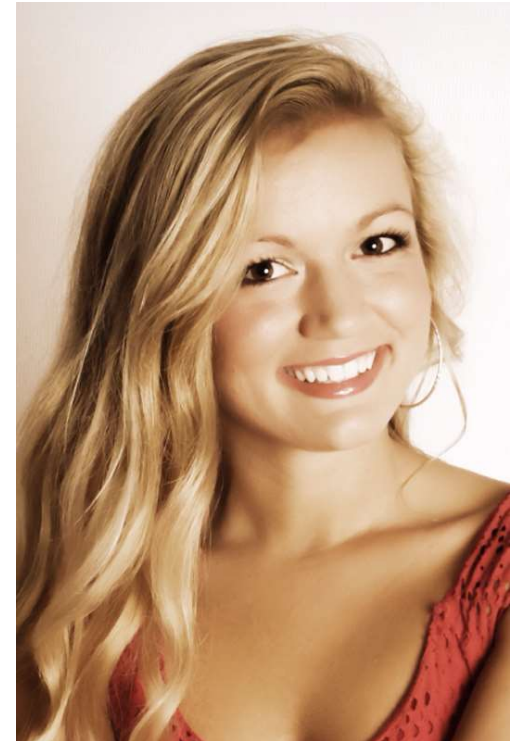
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Sponsor*

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In honor and recognition of
the legacy of Maura Binkley



The foundation's work is to address the issues of violence and hate
in our society, including Maura's Voice Research Fund at
Florida State University.

Only Love Can Conquer Hate

TFI 2019

**TECHNOLOGY
FUTURES INC.**

Thursday, Jan 24, 2019

8:30 am Introductions and Welcome

8:45 am TFI Industry Forecast Overview

- Lawrence Vanston, **President, TFI**
- Ray Hodges, **Senior Consultant, TFI**

9:45 am *Break*

5G WIRELESS

10:00 am 5G: The Big Picture

- Iain Gillott, **President and Founder, iGR**

**10:45 am 5G Equipment: What on Earth does this
Stuff Look Like?**

- Robert Daniels, **Vice President, PHAZR**

11:00 am *Break*

**TECHNOLOGY
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Thursday, Jan 24, 2019

11:15 am Coloring in the 5G Triangle: Super High Bandwidth, Massive IoT, and Ultra High Reliability

- **Robert Heath, Professor of Electrical and Computer Engineering, The University of Texas**
- **Salam Akoum, Principal Member of Technical Staff, AT&T Labs**
- **Robert Daniels, Vice President, PHAZR**
- **Iain Gillott, President and Founder, iGR**

12:30 pm *Texas BBQ Lunch - Sponsored by Maura's Voice*
- Gatehouse

**TECHNOLOGY
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Thursday, Jan 24, 2019

1:15 pm Wireless Futures Research - Connected Aerial Vehicles and Machine Learning for Communications

- Robert Heath, **Professor, UT**

1:45 pm 5G Data Fast: Fiber Optics and Edge Computing - Panel discussion

- Randy Cook, **Sales, Affirmed Networks**
- Jim Stegeman, **President, CostQuest**
- Iain Gillott, **President and Founder, iGR**

2:30 pm *Break*

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Thursday, Jan 24, 2019

2:45 pm The 5G Spectrum Puzzle

- **Brian Goemmer, President, Allnet Insights & Analytics**

3:15 pm The 4G to 5G Transition

- **Iain Gillott, President and Founder, iGR**

3:45 pm Wireless vs Wireline

- **Lawrence Vanston, President, TFI**
- **Iain Gillott, President and Founder, iGR**

4:00 pm *Break*

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Thursday, Jan 24, 2019

4:15 pm Why Does It Matter? And How? A Tax/Valuation Perspective I

- **Ruben Miranda, Director, Tax Services, Duff & Phelps**
- **Gary Wiggins, Executive Director, Property Tax, AT&T**
- **Stephen Yergeau, Director, Property Taxes, T-Mobile**

5:00 pm The IRS and the Data Mess

- **Kim Houser, Assistant Professor, Oklahoma State University**

5:30 pm Day End

6:00 pm Conference Reception - Rooftop (Gatehouse if cold or rainy)

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Friday, Jan 25, 2019

BROADBAND & VIDEO

8:30 am Communications Technology Update

- **August (Augie) Grant, Professor,
University of South Carolina**

9:15 am Fiber Deep: Broadband Industry Risks and Economics

- **Jim Stegeman, President, CostQuest**

10:00 am *Break*

10:15 am Policy Fireside Chat

- **Mignon Clyburn, Former Commissioner, FCC**
- **Jim Stegeman, CostQuest Associates, Inc.**

11:15 am *Break*

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Friday, Jan 25, 2019

11:30 am Why Does It Matter? And How? A Tax/Valuation Perspective II

- Jeffrey Binkley, **CEO, Assessment Valuation Advisors**
- Carl Hoemke, Partner, Valentiam Group
- John Reed, **Sr. Director - Property Tax, Charter**

12:15 pm Last Word: The Assessor Perspective

- Peggy Wardlaw, **Founder, Wardlaw Appraisal Group**

12:30 pm Break

**12:35 pm Box Lunch Discussion - Rio Grande Ballroom
Getting out of the Alligator Pit and Moving Forward**

- Carrie Vanston, **The Energy Accelerator**

1:25 pm Conference Ends

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Just Two Weeks Before the TFI Technology Conference in Austin (Jan 24-25)

🕒 January 13, 2019 📁 Uncategorized 👤 hmvmarek ✎ Edit

Only two more weeks until the 14th Annual TFI Technology Conference! There's still time to register and join us Jan. 24-25 in Austin for the top technology conference on the latest trends impacting communications and asset valuation. Sponsored by Duff & Phelps, CostQuest, and AVA.

Don't miss this opportunity as we tackle:

- The pivotal wireless technology 5G and its tremendous implications for the communications industry. Led by wireless consultant extraordinaire, Iain Gillott of iGR and UT Professor



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**Communications Technology
Forecasting Group (CTFG)**

Communications Technology Forecasting Group (CTFG)

- **AT&T**
- **Charter Communications, Inc.**
- **Comcast Corporation**
- **Cox Communications, Inc.**

Technology Futures, Inc.

- Founded 1978
- Technology Forecasting
- Depreciation and Valuation
- Communications, IT, High Tech, Energy
- First Wave Transitions
- Next Wave Transitions

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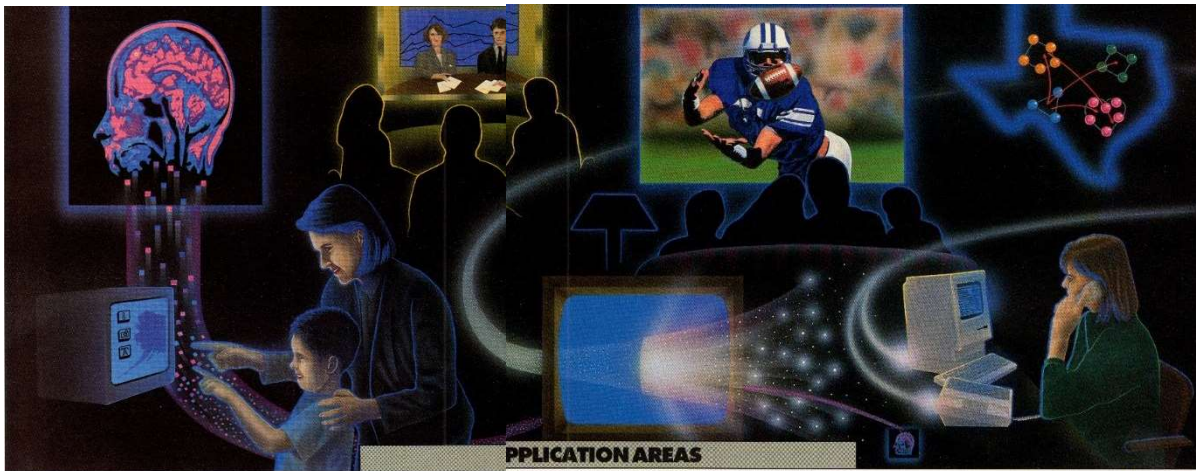
First Wave Transitions - 1990s→

Physical Movement → Telecommunications

Analog → Digital Communications

Low Bandwidth → High Bandwidth

Wireline → Wireless



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New Wave Transitions – 2015→

Humans ➡ Robots, Drones, Autonomous Vehicles

People Communicating ➡ Things Communicating (IoT)

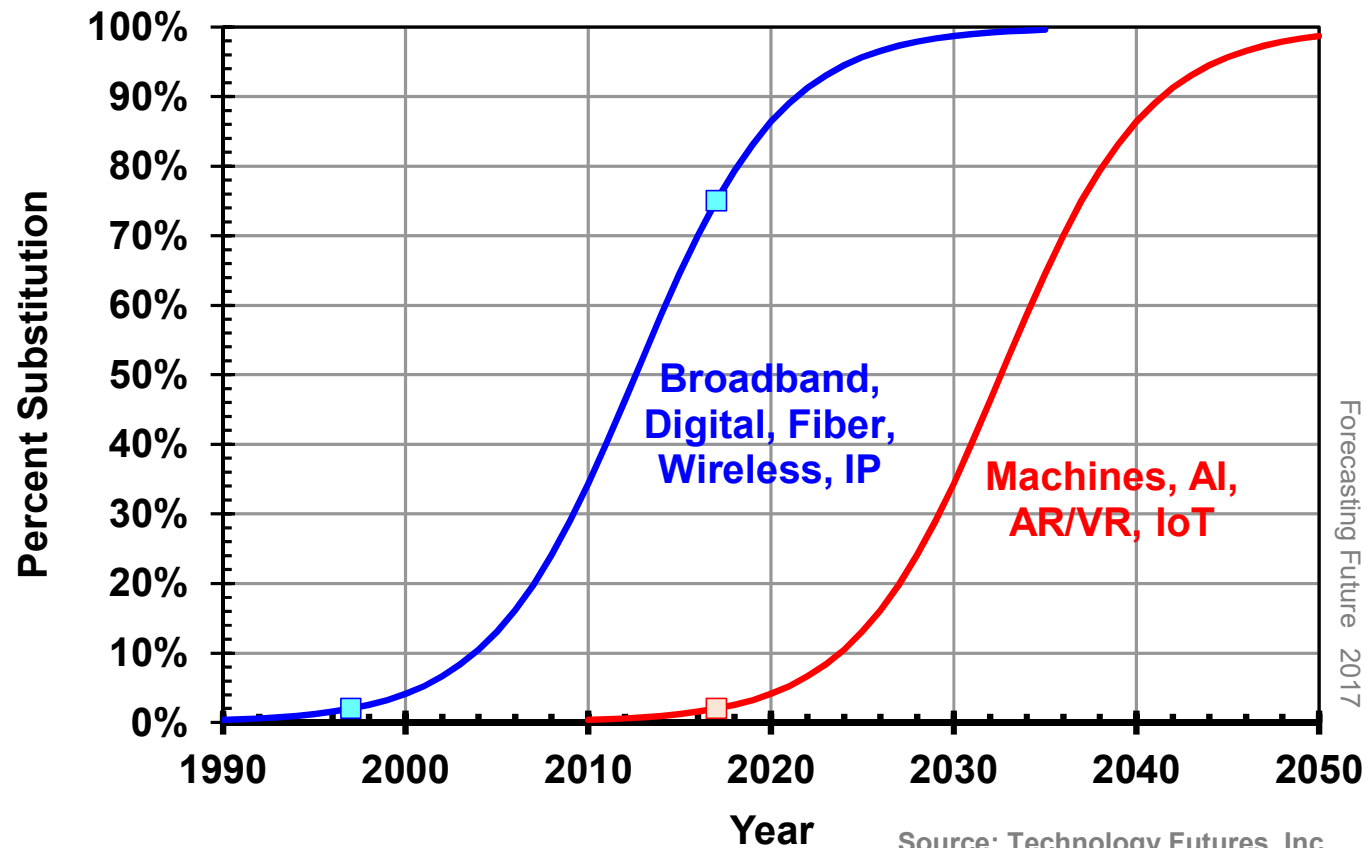
Human Programming ➡ AI /Cognitive Computing

Screen-based ➡ Augmented/Virtual Reality



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Preliminary Forecast for the Adoption of AI and Related New Wave Technologies



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NEXT WAVE

FIRST WAVE

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