



About the speaker

David Francis

- · Co-Founder / CTO of ICT
- Say Years in Construction

 Has held positions with some of the top mechanical contractors as Foreman, General Foreman, Detailer, Plant Manager, Constructability Manager, Site Project Coordinator, BIM/VDC Manager.
- Manager.

 Has been using technology in all his positions since her started using cad in 1986

 Introduced and involved with Lean Construction in 2001

 AGC BIM Forum MEP Group National Chairperson and MEP LOD

 Committee lead

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Who is ICT

- ICT: Innovative Construction Technology
- Co-Founders Tim Duncan and David Francis.
- Developers of construction technology for use on job sites ICT Tracker is the first of the innovations
- Uses 3D models to capture installation status with augmented reality and Free Flight modes and delivering detailed real-time reporting data
- ICT is leading the march in construction as it works towards finding digital solutions that will increase productivity and

ROI In Technology

- ${\boldsymbol \cdot}$ One of the biggest challenges is to understand the value of certain technology and the cost benefits.
- Technology is not a physical tangible item like a tool, so it is hard to get people to see the benefits.
- The goal of this presentation is to discuss all the facets of technology cost and understanding how to identify and push technology within your company.

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Learning Objectives

- Actual software vs labor costs
- Presenting value in efficiency gains
- ROI charts and using the right numbers Owning vs. leasing technology
- Cost of training and learning curve
- Cost of customization and maintenance blockers
- IT Managers vs technologists
- How companies handle technology costs
- · Influencers vs decisions makers vs

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Goals of Technology

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- Understand the total cost of software
- o The Software is typically the least of the cost!
- Software training
- Documentation of process



Presenting value in efficiency gains

- How to identify value in technology?
- How to measure success?
- Use of ROI: Return on Investment



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ROI charts and using the right numbers

- ROI charts identify the intangible benefits
- Do you have all the costs?
- Training and your labor to be trained
- Implementation
 Customization



Hourly rate vs package rate vs crew rate

- Hourly is what they see on a check
- Package rate is true cost to company
- Medical Benefits
 Vacation/Holiday
- Tayor
- o Burden
- o ESOP/401k
- o Bonuses/Perks
- What is your crew rate?



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The cost of training and learning curve Understand true training costs Be realistic on the learning curve Technology is always changing Technology is always changing

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Cost of customization and maintenance Nothing works right out of the box Continue to sharpen the saw Every software is beta Upgrades Customization Support Maintenance Resources

Documentation and in-house training

- Give employees time to learn
- Keep documentation simple, make it visual
- Internal vs External Training
- Use A3 format for training



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IT Managers vs Technologists

- IT Manager
- o Company standard for infrastructure
- Not intimate with all technologies
- Technologis
- o Tech is about humans
- o Eliminate silos of data
- o Thinks strategy before implementation
- o Solve issues with process



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Understanding your companies' actual costs

- Technology is an overhead cost
- What is your technology budget?
- Who is paying for it?
- Who all does it affect?



How companies handle technology costs

- Burden rate
- Project rental
- Leasing
- DAAS: Desktop as a Service



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Owning vs leasing technology

- Technology changes every two years
- o Moore's Law
- o Nope it is more like 6 months
- Leasing Equipment
- Renting Equipment

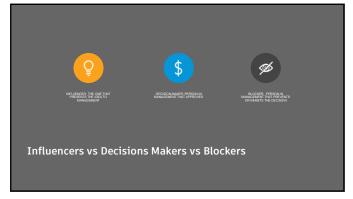


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Example: Calculating computer rental cost

- Don't forget software cost
- Don't forget tech support cost
- Don't forget labor





Making it their idea...

- Selling it to management
- Empower them to make the decision
- Answer their question:



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