



The Journey of Commercialization

Build, Partner, Sell

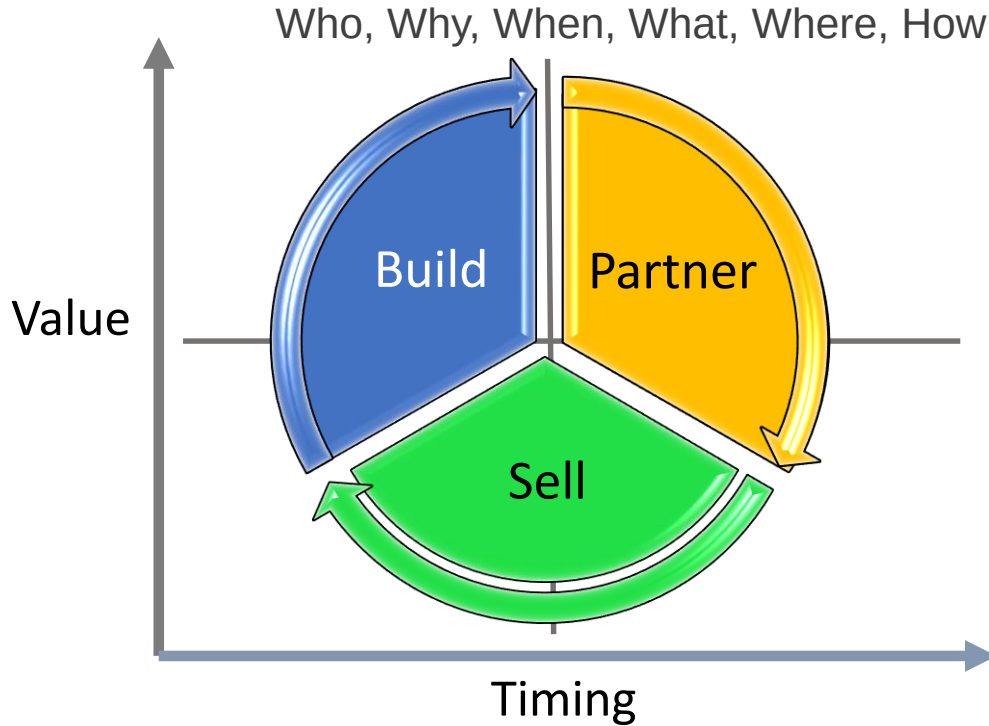
Mike Broeker
April, 2018

The Intelligent Workplace

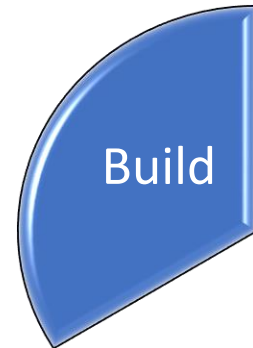
- The Robert L. Preger Intelligent Workplace, built in 1997, is a 7000 square foot living laboratory of office environments and innovations located on the campus of Carnegie Mellon University.



Journey of Commercialization

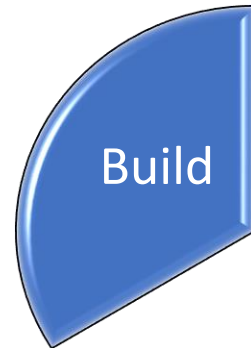


BuildFIT R&D Project Examples



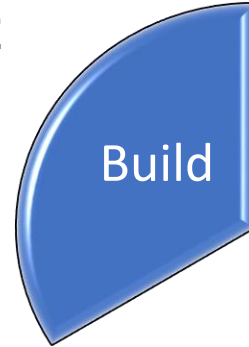
- 2011 CMU Research Project – Azizan Aziz
 - School of Architecture - Energy Management project
- 2014 - Building Performance Optimization Through Continuous Monitoring and Diagnostics
 - 171st Air National Guard Communications Squadron
- 2015 - SEED Platform and Automated Green Button Data Collection
 - District of Columbia Department of General Services
- 2016 Energy Savings Research
 - US General Services Administration
- By 2017 - 6 Key Pilot Customers, 7000 Buildings, Ready for Commercialization

Building Ideas Group (BIG) – BuildFIT

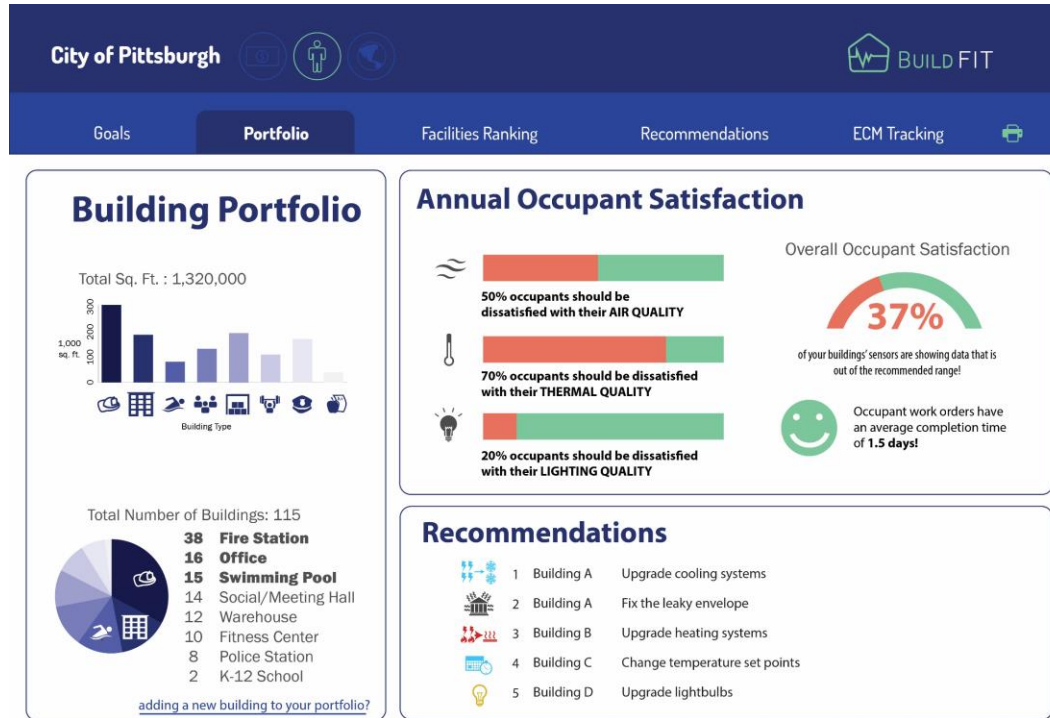
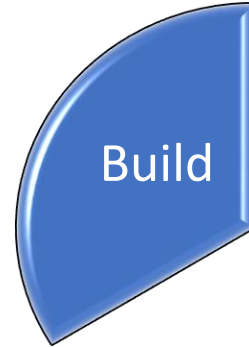


- BuildFIT Software Platform
- Building Portfolio Energy Management
- Energy Management as a Service (EMaaS)
- Building Energy Data Analysis, Visualization, Control
- Subscription Model with Guaranteed Savings
- OSIsoft PI Asset Framework for Building Energy Devices

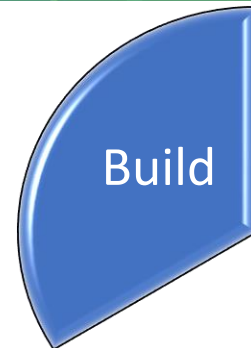
BuildFIT - Building Portfolio Energy Management



BuildFIT – Occupancy Satisfaction



Commercialization – Build



- Product Idea
- Market Analysis
 - Competitors - Pricing / Features / Size / Customer base
 - Market Needs/Gaps
 - Market Size
 - Market Timing
- Business Analysis
 - Pricing
 - Costs – Operating, Manufacturing, Licensing, Hosting, Sales
 - 5 Year Pro Forma
 - Funds required
- Business Plan
 - Market Business Analysis becomes the framework for the Business Plan
 - With a good Vision and Mission!!
 - It will evolve

Commercialization – Partner



- Team Members
 - Shared Vision and Mission
 - Aligned Motivational Fit
 - You will be living with these people more than your family
 - Good communicators?
- Advisors/Board
 - Critical Component for validation
- Industry Partners
 - Vendor & Channel Partners
- Funding Network
 - Friends and Family
 - Advisor Network
 - Local support resources, tech councils

Commercialization – Selling Everyone!



- Team Members
- Advisors/Board
 - Critical Component for validation
- Industry Partners
 - Vendor & Channel Partners
- Funding Network
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BuildFIT - Selling

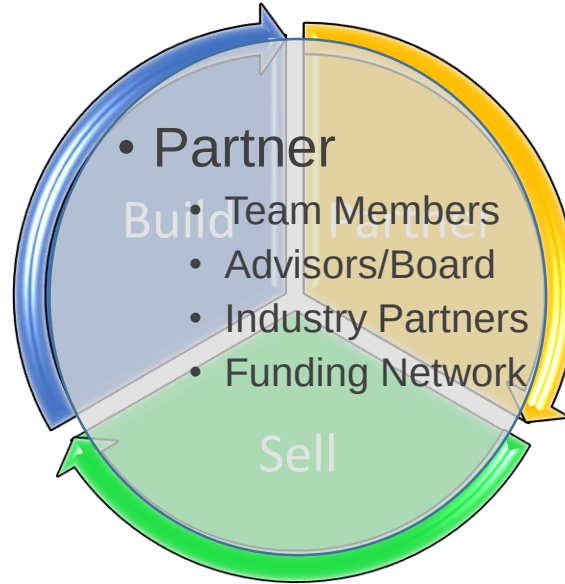


- Team members
 - Including vision, opportunity & options
- Advisory/Board
 - Critical to boarder approach and funding
- Industry Partners
 - Energy equipment vendor partnering
 - Channel partners for rapid expansion of sales channels
- Pilot Customers
 - To become paying customers
- Investors
 - Currently Raising \$2M

Commercialization Success – Providing Value

▪ Build

- Idea
- Market/Business Analysis
- Business Plan
- Team
- Product
- Customer Value
- Investor Value



▪ Sell

- Team
- Advisors/Board
- Investors
- Customers
- Channel Partners

- Single Biggest Reason Startups Succeed
 - <http://on.ted.com/t0cfz>
- Timing !

BuildFit integrates any energy data and information system to visualize energy intelligence and ROI analysis.

“These technologies using the OSIsoft PI System have been developed by undergraduate students, graduate students, researchers, faculty and alumni from across Carnegie Mellon are on the cusp of entering the marketplace.”

Buildfit – A Carnegie Mellon University Start Up Company

- Azizan Aziz and Michael Broeker - Principals

CHALLENGES

This CMU spin-off company is developing systems for data collection, analytics and visualization on energy usage to reveal actionable information for building occupants, managers and owners.

SOLUTION

BuildFit's approach is to analyze energy usage led at the individual occupant level using the OSIsoft PI System to obtain a 35 percent reduction in energy consumption in various pilot projects including 4,250 PNC Bank locations involving 6,500,000 square feet of conditioned area ...as just one of many examples

RESULTS

BuildFit's system scales to enable a review of the energy savings opportunities over an entire portfolio of buildings, and to target investments toward projects with the best return on investment.

Questions

Please wait for the
microphone before asking
your questions

State your
name & company



Merci

谢谢

Спасибо

Danke

Gracias

Thank You

감사합니다

ありがとう

Grazie

Obrigado