

"A Walk with Owners" Sustainable Labs Canada

June 19, 2014
Phil Wirdzek, President and Executive Director, I²SL

Presentation Overview

- Fine-Tuning Management
- Inform Behavior
- Living on the Edge
- Music "An Informational System"
- Standardized Communication
- Finding the Stakeholders
- Measuring and Awarding Results



Management Realities

- High-tech buildings, such as laboratories, data centers, cleanrooms, and hospitals are resource intensive.
- On a square-foot basis, labs alone often consume at least four to six times as much energy as a typical office building.
- They are very costly to build, <u>operate</u> and <u>maintain</u>.
- Involve more regulatory oversight, including health and safety, hazardous materials management, etc.
- Often require 24-7 operations.
- Contain specialized equipment, maintain unique processes, and often require a level of higher security.
- Continually influenced by evolving technologies.



Roadmap to Performance

- Many labs and other high technology facilities are not speculative buildings, but long-term investments
- Designed and engineered to attract the greatest intellectual resources that are available.
- Built to meet dynamic and flexible requirements which will influence the building's life-cycle performance.
- To addressing the complexities of these and other buildings, performance demands information that ensures performance and guides behavior.
- Unlike automobiles, buildings have many hands-on "drivers" and no shared guidance, user manual, or "dashboard."
- Nevertheless....



Everyday Dashboards

(performance guides)

Active Diet Management

A		-
Calories 80	Calories from Fat	0
	56 Daily V	sive
Total Fat 0g		0%
Saturated Fat I	Og	0%
Trans Fat 0g		-
Cholesterol Less than 5mg		0%
Sodium 120mg		5%
Total Carbohydrate 11g		4%
Dietary Fiber 0g		0%
Sugars 11g		. 1
Protein 9g		173
Vitamin A 10%	Vitamin C	4.07
Protein 9g		





Active Energy Management

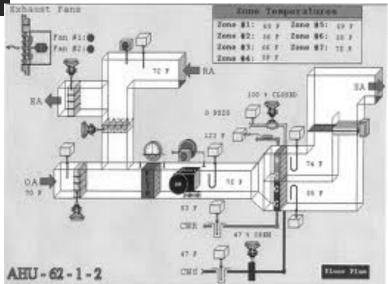


Guiding Behavior



Building Dashboard but No Guidance for or from Others





Training for Behavior

(authority having jurisdiction - AHJ)











Train for an Outcome





Start Early! (authority having jurisdiction)





Customized Planning





Easy-to-Read Signage





Built Environment

(a solution for a single human activity)





Environment for Living

(Solutions for Multiple Activities)



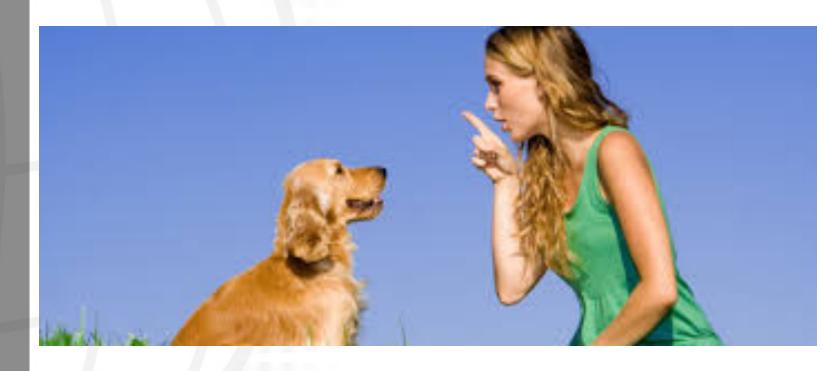


Living on the Edge





Communicating Information





Communicate for Results

- Understandable
- Efficient
- Standardized
- Consistent
- Comprehensive
- Influential



Human Behavior Influenced through Communication

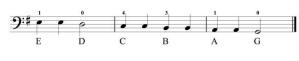
Twinkle, Twinkle, Little Star

very easy arrangements created and edited by Fabrizio Ferrari









www.virtualsheetmusic.com



Low resolution sample

@ 1999-2008 Virtual Sheet Music. Inc.

We Can Play That!





So Can We!





Standard Language





Complex Built on Simple





Trained and Responsible





Drawing a parallel to buildings...

Simple to Complex











Outside is Not the Only Challenge







Major Influences







Say Goodbye



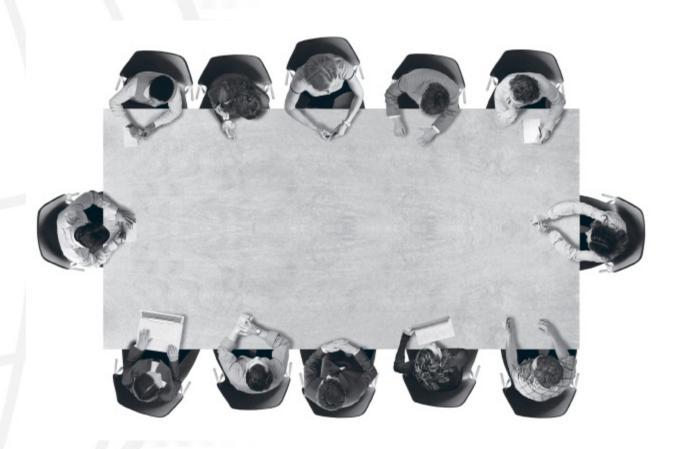


Embrace Fullest Participation





Start Early



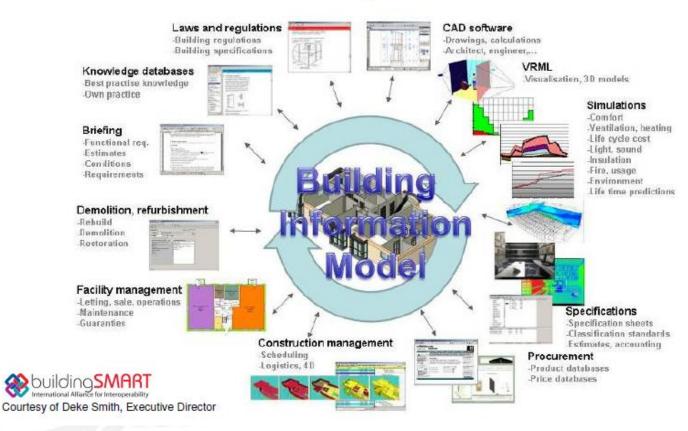


Engage All Stakeholders



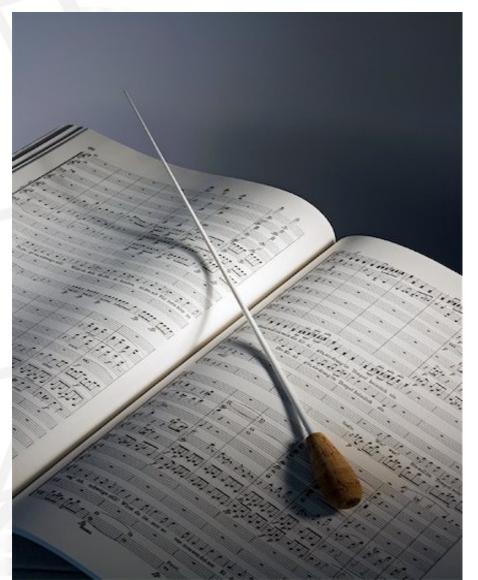


With Tools for Life Cycle Performance BIM Lifecycle View





Using Standardized Communication





To Benefit the Investor



Nutricap Labs President and Founder, Jason Provenzano was featured in today's Executive Suite column of Newsday.



With a Coordinated Solution





For Robust Participation





Communicate for Results

Understandable Efficient Standardized





Consistent Comprehensive Influential



BIM for Life Cycle O&M Award





Thank You

Phil Wirdzek

President and Executive Director

International Institute for

Sustainable Laboratories (I²SL)

Email: philwirdzek@i2sl.org

Phone: (703) 425-1259

or Info@i2sl.org

