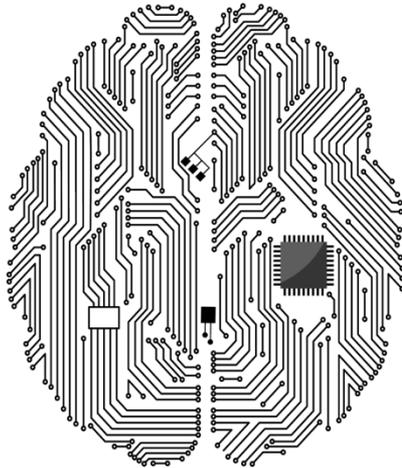


iLUMENS  
BY INNOSYS

# We Make LED Lamp “Brains”

We make these

Hardware  
Firmware  
Software



for these



# Customers Tell Us

## They Want:

- Short Payback
- Maximum Savings
- More Control
- Configurability

## Our Platform & IP:

- Plug-and-Play Installation
- Sensor Integration, Energy Tracking
- Dimming, Programming/Control Software
- Smart and Basic Lighting



**19 Issued Patents**  
**>12 Pending**

# Problem: Dumb Lighting

LED  
Saves  
50%

Not  
Intelligent



Requires  
Retrofit  
>\$

No Energy  
Tracking

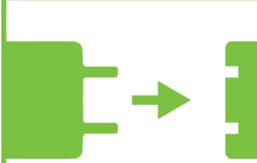
Not  
Connected

No Data

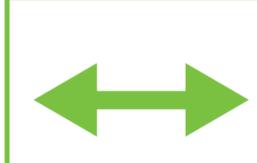
iLumens  
Saves  
up to 85%

# Solution: Intelligent Light

Intelligent



PLUG & PLAY  
INSTALLATION



2-WAY  
COMMUNICATION



CONSTANT  
LUMENS



ENERGY  
EFFICIENT

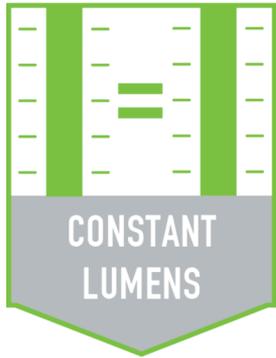


FUTURE  
PROOF

# What's the Big Deal?



- Labor charges double payback time
- Constant light output for all ballast types



Ballast compatible  
AC-Line compatible  
Dual compatible

**RETROFIT =  
PAYBACK X2**

# Future-Proof Technology

- Infinitely upgradeable
- Intelligent lamps = ability to add controls later
- Add sensors, controls or capabilities
- PIR, photocell, CO2, RFID, others
- Dual compatibility



# Sounds Expensive!

- Intelligent lamps for standard lamp prices
- Lower install costs – up to 50% less
- Predictable performance
- Up to >35% added savings = higher rebates
- Long life
- “Future proof”

Energy tracking, easy integration of  
new sensor & control technologies



# Customers are Buying



Large Hospital

Demo Site

Patient Room



Target Sale

\$3M



Large College  
Major School District

Multiple



\$500K

Classroom



\$13M



Consulting Firm

Office Space



\$5M



Home Automation Company

Home Demo



\$6M/year



Military Installation

Work Space

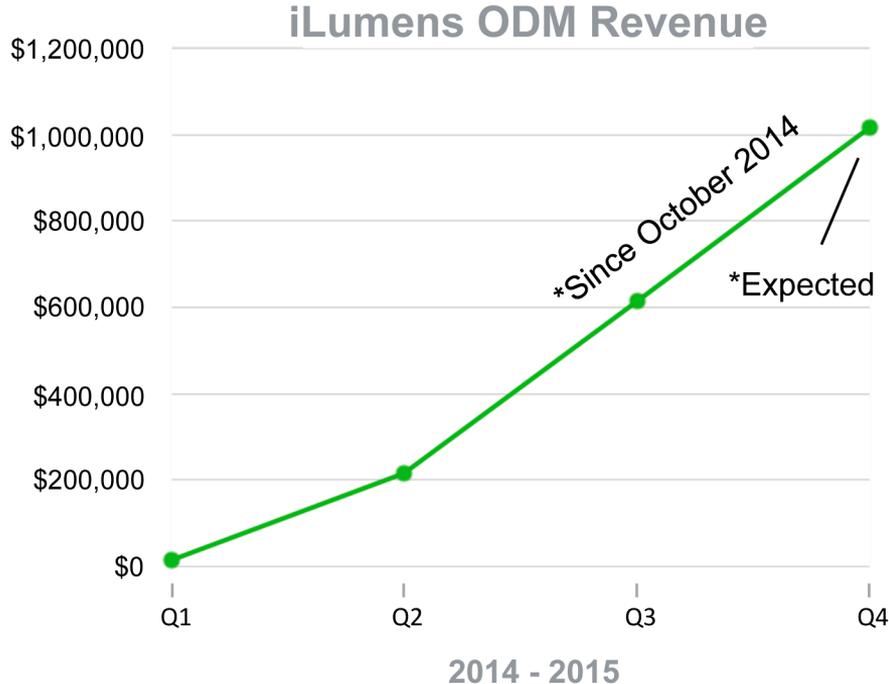


>\$10M

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\$37.5M

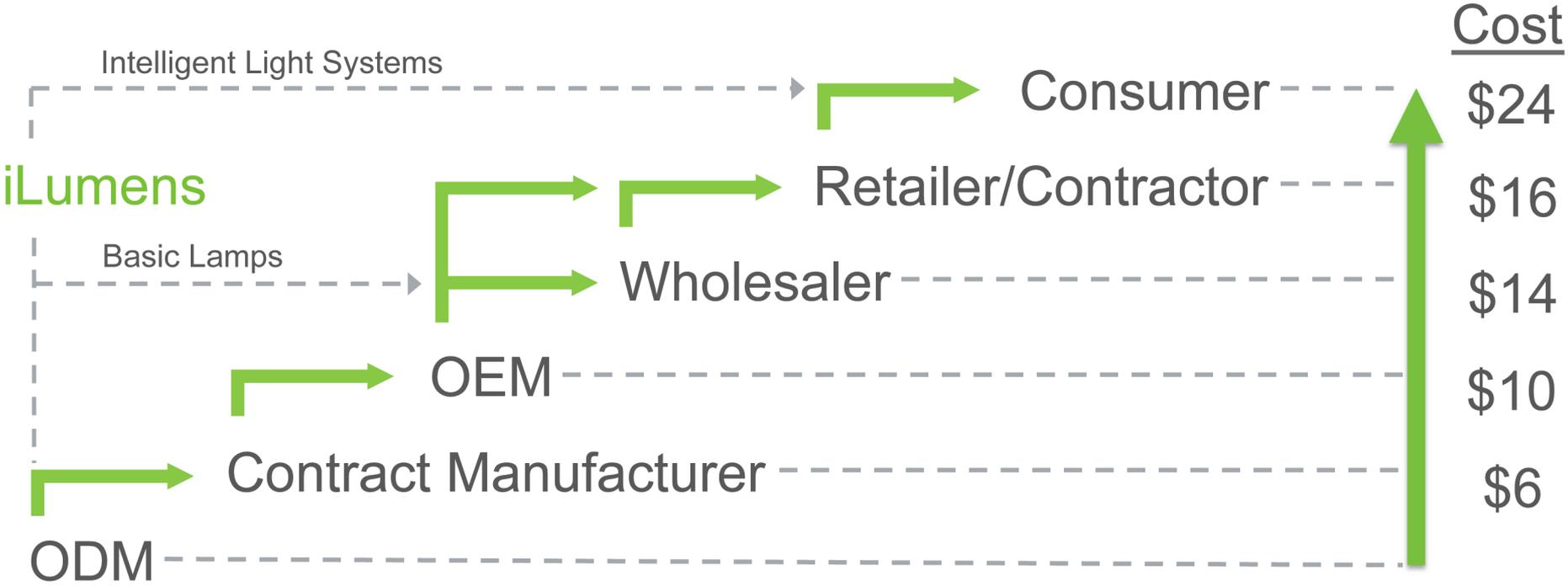
# iLumens – Intelligent Light



**FROM**  
Original  
Design  
Manufacturer → Lamp  
“Brains”

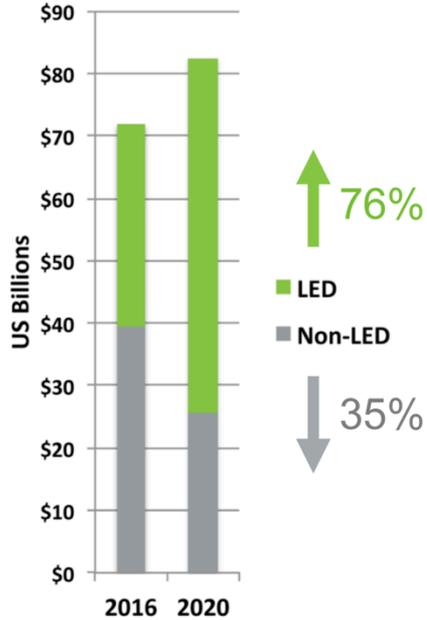
**TO**  
Original  
Equipment  
Manufacturer → Intelligent  
Light  
Systems

# Economics of Lighting

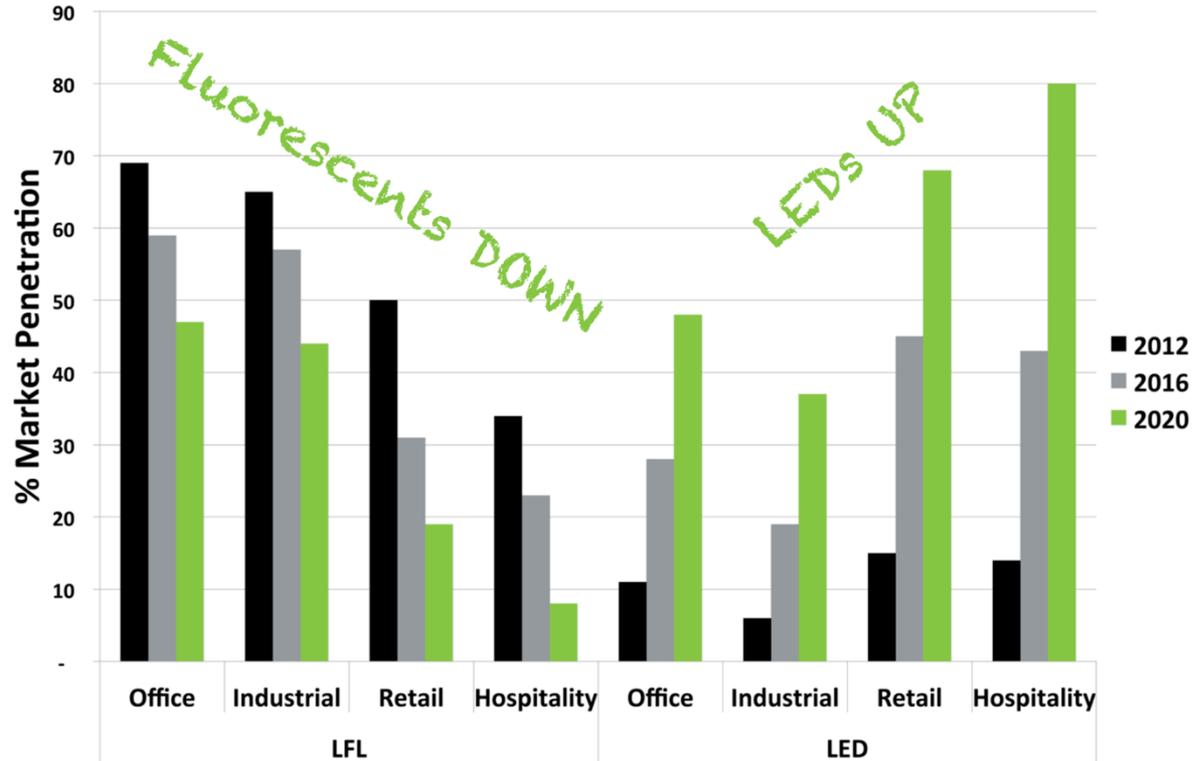


# Market and Opportunity

Global Lighting Market:  
2016-2020  
(McKinsey & Co.)



Global Market Penetration Trends: 2012-2020  
Linear Fluorescent Lamps (LFL) vs. Total LED



# Competitive Position

|                                  | iLumens<br><small>BY GE</small> | GE | CREE | OSRAM<br>SYLVANIA | PHILIPS | energy<br>focus | DIGITAL<br>LUMENS | TCP | SHARP |
|----------------------------------|---------------------------------|----|------|-------------------|---------|-----------------|-------------------|-----|-------|
| Plug-and-Play Instant Start      | ✓                               | ✓  | ✓    | ✓                 | ✓       | ✓               | ✗                 | ✓   | ✗     |
| Plug-and-Play Rapid Start        | ✓                               | ✓  | ✓    | ✗                 | ✓       | ✓               | ✗                 | ✗   | ✗     |
| Plug-and-Play Magnetic           | ✓                               | ✗  | ✗    | ✗                 | ✗       | ✗               | ✗                 | ✗   | ✗     |
| Future-Proof (Ballast + AC)      | ✓                               | ✗  | ✗    | ✗                 | ✗       | ✓               | ✗                 | ✗   | ✗     |
| Constant Lumens                  | ✓                               | ✗  | ✗    | ✗                 | ✗       | ✗               | ✗                 | ✗   | ✗     |
| Dimmable with or without Ballast | ✓                               | ✗  | ✗    | ✗                 | ✗       | ✗               | ✗                 | ✗   | ✗     |
| Two-Way Communication            | ✓                               | ✗  | ✗    | ✗                 | ✗       | ✗               | ✓                 | ✗   | ✗     |
| Integrated Energy Tracking       | ✓                               | ✗  | ✗    | ✗                 | ✗       | ✗               | ✓                 | ✗   | ✗     |
| In-House Driver Engineering      | ✓                               | ✓  | ✗    | ✓                 | ✓       | ✓               | ✓                 | ✗   | ✗     |

# Building, Replicating, and Scaling

Domestic Manufacturing: \$2.2M

Software Development: \$1.5M

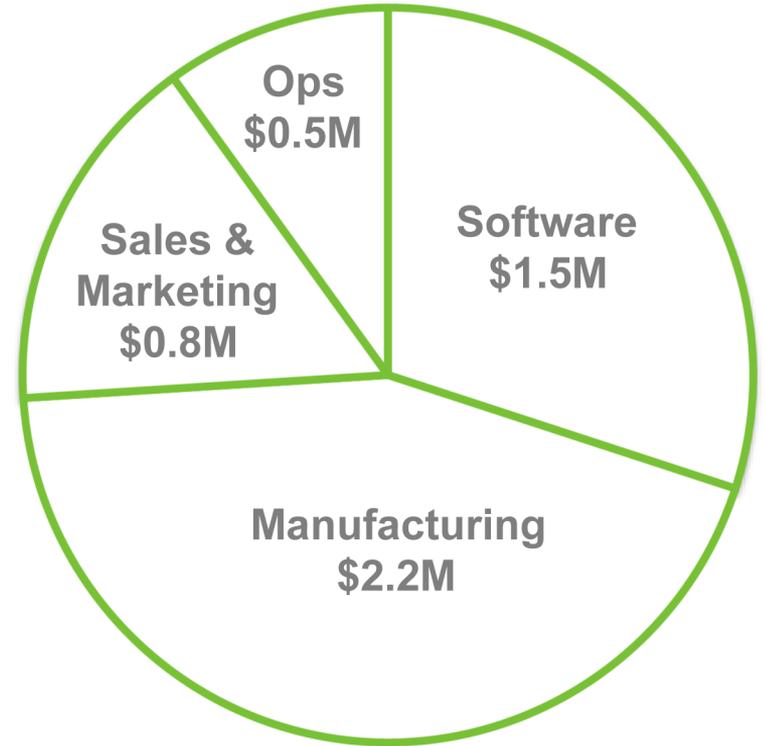
Sales & Marketing: \$0.8M

Operations: \$0.5M

(funded by ongoing revenues)

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**\$5.0M**



# Prototype: Salt Lake City Metro

Power Cost: \$0.088/kwh  
Population: 1.1M  
32M ft<sup>2</sup> Office Space  
124M ft<sup>2</sup> Industrial Space  
34M ft<sup>2</sup> Retail Space



1 Year

Replicate  
&  
Scale



# Leadership Team



**Jennifer Hwu, Ph.D., CEO**

- Visionary Female Executive
- Connected: Asia Supply Chain
- Record of Gvmt. Contracting
- Business Visionary Award



**David Robinson, CMO**

- Renowned Fundraiser
- Powerful Networker
- Influential Leader
- CEO/COO to 7 Companies



**Larry Sadwick, Ph.D., CTO**

- Ambitious Innovator
- IP Multiplier
- Rapid Prototyping
- Utah Genius Award

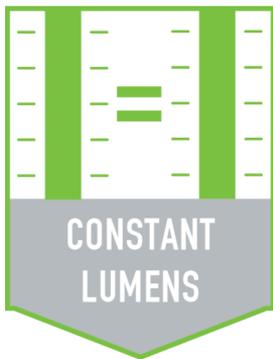


**Trent Mortensen, MBA, DBD**

- Sales Pipeline Filler
- Marketing/Fundraising Content
- Adept Writer
- MS Engineering & MBA

# iLUMENS

BY INNOSYS



Experience. Intelligent. **Light.**

[iLumens.com](http://iLumens.com)