

# The Internet of Everything

## Smart Lighting

JANUARY 2015  
MP104-15

© Copyright Semico Research, 2015. All rights reserved.

Reproduction in whole or part is prohibited without the express written permission of Semico.

The contents of this report represent the interpretation and analysis of statistics and information that is generally available to the public or released by responsible agencies or individuals, but is not guaranteed as to its accuracy or completeness. The reader acknowledges that they use this information at their own risk.

# Table of Contents

---

<b>TABLE OF CONTENTS</b> .....	<b>I</b>
<b>LIST OF FIGURES</b> .....	<b>II</b>
<b>LIST OF TABLES</b> .....	<b>IV</b>
<b>EXECUTIVE OVERVIEW: WHY INVEST IN IOT NOW?</b> .....	<b>5</b>
<b>METHODOLOGY</b> .....	<b>6</b>
<b>IOT OVERVIEW: AN EVOLVING MARKET</b> .....	<b>7</b>
<b>IOT MARKET DRIVERS</b> .....	<b>14</b>
<b>Eliminating Waste</b> .....	<b>15</b>
<b>Startups</b> .....	<b>16</b>
<b>Changing Demographics</b> .....	<b>17</b>
<b>Population Analysis</b> .....	<b>19</b>
<b>SMART LIGHTING: THE GATEWAY DRUG</b> .....	<b>23</b>
Acuity Brands Lighting .....	27
Daintree Networks.....	28
Digital Lumens .....	29
Enlighted Inc .....	29
Hubbell Building Automation .....	30
Lutron .....	30
OSRAM.....	31
WattStopper.....	32
<b>BIG DATA: LIVING IN THE CLOUD</b> .....	<b>33</b>

## List of Figures

---

Figure 1: Semico Forecasting Methodology .....	6
Figure 2: The Smart Transportation Industry .....	8
Figure 3: The Smart Home, To Go .....	10
Figure 4: Computing Trends Toward Mobile .....	11
Figure 5: IoT Patent Publications .....	12
Figure 6: Percent Change in Annual Patenting .....	13
Figure 7: Top Filers for Patents .....	13
Figure 8: Good Time to Invest in Energy Efficiency .....	14
Figure 9: Azbil Energy Savings via Minimizing Outdoor Air Intake .....	15
Figure 10: Smart Factories 2013 vs. 2022 .....	16
Figure 11: Life Expectancy at Ages 65 & 85 .....	17
Figure 12: Percentage of Elderly in U.S. Nursing Homes Within a 2-Year Frame .....	18
Figure 13: Number of Elderly in U.S. Nursing Homes Within a 2-Year Frame.....	18
Figure 14: Median Household Wealth for Elderly in Nursing Homes.....	19
Figure 15: Worldwide Households by Country and Region .....	21
Figure 16: World Population by Country, with EU Broken Out (2013).....	22
Figure 17: Smart Lighting Forecast vs. Installed .....	24
Figure 18: New Lighting Capabilities and Features .....	24

Figure 19: Lighting System Using Digital Content to Communicate and Control..... 25

Figure 20: Smart Lighting Mapping a 3D Space ..... 26

Figure 21: Acuity Brands Revenues & Profit ..... 28

Figure 22: Daintree Lighting & Control Integration ..... 29

Figure 23: Enlighted Solution ..... 30

Figure 24: Lutron Smart Grid ..... 31

Figure 25: IBM Patent 8,639,809 Express Lane for Cloud Data ..... 34

## List of Tables

---

Table 1: Population by Country and Region, Number of Households (Units in M) ...	20
Table 2: Number of Households by Country and Region (Units in M).....	22
Table 3: Smart Lighting Shipments and Installed Base (millions) .....	24