

A look at Harbor's
perspective on
an IoT platform
that has evolved
in a unique context

C3 IoT

C3 IoT is re-defining enterprise software with the Internet of Things. Our profile details the core strategy, value proposition, competitive differentiation and growth prospects for this Smart Systems market leader

July 2016

**Harbor
Research**

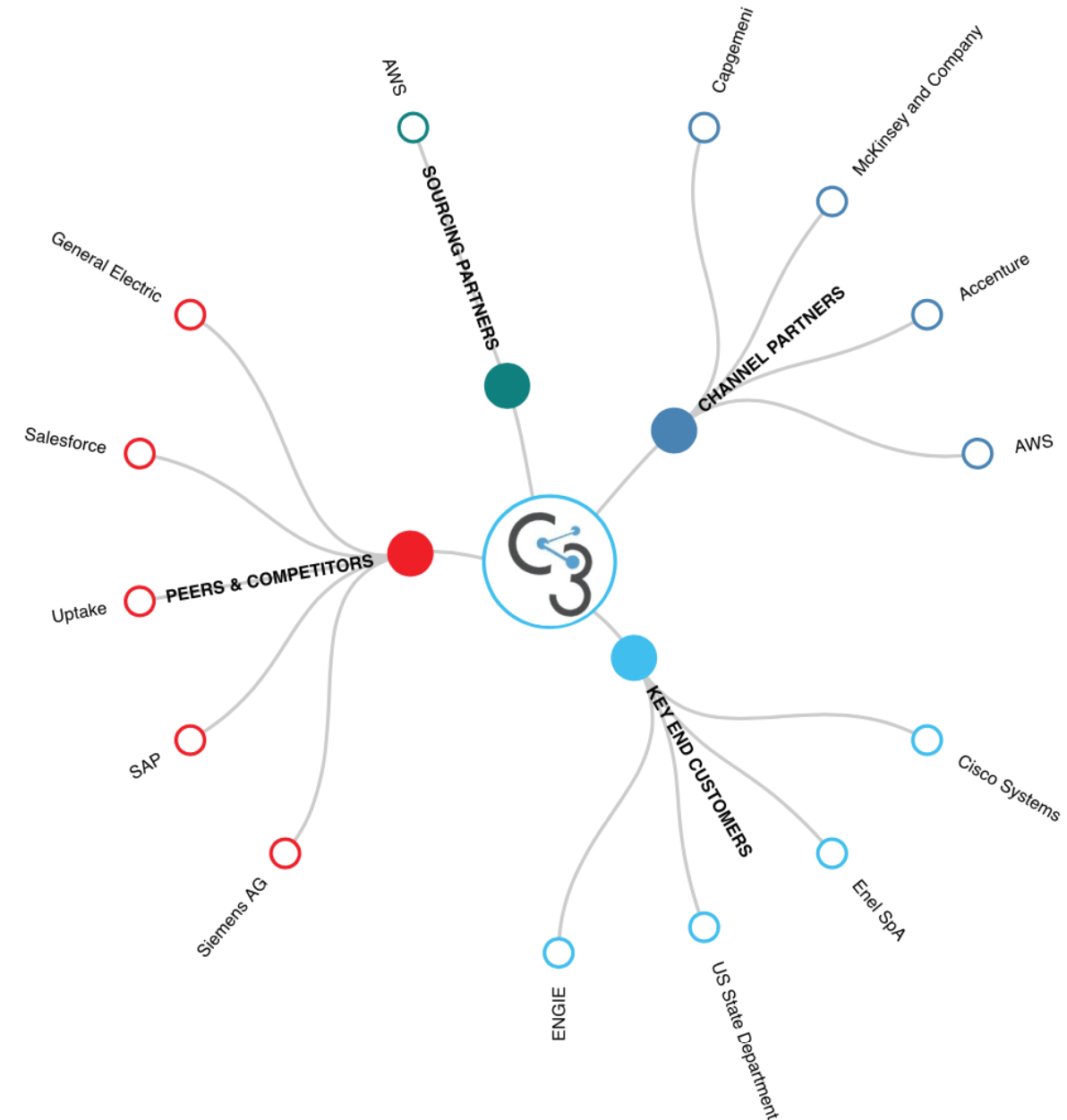
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C3 IoT AT A GLANCE

Business Basics

<p>Founded: 2009</p> <p>Headquarters Location: Redwood City, CA</p> <p>Annual Revenue: \$50M</p> <p>Employees: 120</p> <p>Ownership: Private</p> <p>Primary Investors & Financing: Self-financed (\$220M in product development)</p> <p>Key Leadership: Chairman & CEO: Thomas Siebel CFO: Paul Phillips President & CTO: Ed Abbo SVP Products, Engineering: Houman Behzadi CMO: Jessica Reiter SVP EMEA: Julien Groues</p>	<p>Geographic Coverage: North America, EMEA, APAC, China</p> <p>Venues Served: Energy, Industrial/Manufacturing, Transportation, Retail, Commercial Services, Healthcare, Telecommunications, Aerospace & Defense, Federal Government</p> <p>Player Type: Technology Supplier</p> <p>Technology Stack Areas Served: Analytics, Application Enablement, Cloud Services, Data Aggregation, Data Management, Diagnostics, Monitoring & State, PaaS, SaaS, Prognostics, System Applications</p>
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Recent News and Maneuvers

- » June 2016: [The U.S. State Department awards C3 IoT](#) a contract to manage 22,000 facilities in over 190 countries. [ENGIE selects C3 IoT's platform](#) and applications as the tech foundation for its global enterprise-wide transformation plan.
- » June 2016: [C3 IoT announces it is now an Advanced Technology Partner](#) in the AWS Partner Network (APN). The partnership enables faster deployments and go-to-market initiatives designed to facilitate customer success with large-scale IoT implementations.

Key Partners:

- Amazon Web Services (AWS)
- McKinsey
- Accenture
- Capgemini
- DHC Software

Competitors:

- GE Predix
- Siemens
- IBM
- SAP
- Uptake.io
- Microsoft Azure

Major Customers:

- Cisco
- Endesa
- Enel
- PPL
- US State Dept.
- ENGIE
- Eversource
- Exelon
- Pella
- PG&E

Strategy and Value Proposition

[C3 IoT](#), formerly C3 Energy, is the brainchild of one of the godfathers of modern CRM: Tom Siebel. Siebel built C3 IoT from the ground up to be a market leader in IoT-driven enterprise solutions. Its advisory board includes energy and other policy gurus, technology experts and professors from top-notch universities that together provide invaluable expertise across a range of subjects. The upper management team draws on experience from the likes of Oracle, Goldman Sachs, ABB and, of course, Siebel Systems—the CRM powerhouse founded by Siebel in 1993 that at its peak captured 70% market share before being bought by Oracle in 2006 for \$5.8 billion.

C3 IoT provides a full-stack application development platform that leverages big data and connected devices and systems to drive greater insights into business processes and productivity, operational efficiency, and customer and product behavior. The company has self-financed the creation of its platform with over \$200M committed to development and expansion. From the beginning, C3 IoT has focused on working with larger companies. Founded as C3 Energy in 2009, the company targeted large utilities with massive deployments of smart grid devices and sensors. As the company continued to develop its platform, integrating machine learning and application development capabilities, large manufacturers and retailers began approaching C3 Energy to use the platform in their environments. If C3 IoT can tackle smart grid and power generation applications—environments with highly mission-critical systems, distributed devices and a variety of legacy technologies—it can be successful in any IoT deployment.

In early 2016, the company rebranded as C3 IoT, expanding its target industries to include manufacturing, oil and gas, aerospace and defense, transportation, healthcare, retail, commercial services, public sector and smart cities. The platform’s ability to aggregate and integrate data from a multitude of sources and systems to drive machine learning and business insights is at the center of its push to these new markets. Additionally, C3 IoT’s horizontal applications and development environments for creating custom applications, user interfaces and processes (without coding) allow customers in all industries to use this data in any way they want to create and capture value for both themselves and their customers alike.

By leveraging the data coming from business systems and connected devices, C3 IoT is allowing customers to gain real-time predictive insights and operational intelligence, and to be proactive in interactions with their customers driving increased business value across a variety of industries.

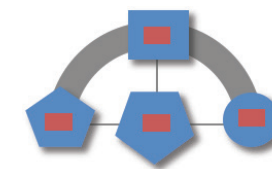
Business Model Analysis

- » C3 IoT offers a cloud-based platform built on Amazon Web Services (AWS). It targets larger companies with big, dispersed deployments in an effort to prove the effectiveness of its solutions with performance-driven customers that are willing to work along side C3 IoT to develop solutions that exactly fit their needs. From here, C3 IoT can gain a significant, positive market reputation that could result in smaller customers seeking the company out for its solutions
- » The company is offering a special-priced pilot program, deployable in 1-4 months with a price depending on the customer’s specific needs. Integrating with AWS, C3 IoT is able to offer a value-based pay-as-you- go pricing model where customers only pay for the computing they use
- » The robust data aggregation and integration capabilities of the C3 IoT Platform enable the vendor to partner and integrate the platform seamlessly with device management and edge processing platforms, allowing C3 IoT to stick to what it knows best while partnering for the rest of the IoT stack
- » By building its own horizontal applications while also offering drag and drop development environments for applications, interfaces and processes, C3 IoT has designed its platform in a way that it can be applied to any customer in any industry
- » Further, the company has effectively future-proofed its platform by decoupling the enterprise application logic from the data processing, machine learning and other platform services such that when the underlying technology is changed or improved, application logic remains intact

Harbor Research Business Model Taxonomy

C3 IoT is a Solutionist

The Solutionist aggregates software applications, data, and services from other providers and innovators. The value that emerges can be entirely new or a simple extension of existing value within the marketplace. The Solutionist can greatly simplify the go-to-market for other players within the space.



Other Solutionists Include



[Learn more about Harbor Research’s business model taxonomy](#)

Strength of Ecosystem and Alliances

- » C3 IoT's ecosystem strengths come in the form of channel relationships. AWS is a key partner for C3 IoT, not only providing the cloud on which the platform is deployed, but also having hundreds of sales reps that are incentivized to sell the C3 IoT solutions to companies in need. AWS, in this way, is a key lead generator for C3 IoT
- » The company also partners with consultants and integrators like McKinsey, Capgemini and Accenture to manage the change in business process required for customers to leverage the C3 IoT Platform. These consulting and integration providers will also recommend the company's platform through process reengineering engagements with their own customers
- » On the technology side, C3 IoT is partnering for device connectivity and edge processing capabilities to extend its platform to the edge. For these capabilities, C3 IoT has a relationship with AWS IoT and is looking into partnerships with device manufacturers

Competitive Differentiation

- » From its time focused on electric utilities, C3 IoT enjoys a 40% market share in the global smart meter market and covers over 70 million devices and sensors in total, from smart meters to generation and distribution devices. More than 80% of European smart meters are under management by the C3 IoT Platform. Compare this to GE Predix's forecast of 500,000 connected devices in 2016 or Siemens' 200,000 devices under management, and C3 IoT is clearly miles beyond its established competitors
- » Uptake.io is a key competitor to watch. A startup founded in 2014 focused on similar markets as C3 IoT, Uptake raised \$45M in late 2015 with an astonishing valuation of >\$1B. Its biggest customer (and investor) Caterpillar relies on the Uptake platform to provide its smart services offerings. Uptake leverages 300+ engineers, data scientists and designers to develop custom deployments for its customers, which presents a threat down the road from a product development standpoint. With this said, at present Uptake is significantly behind C3 IoT in terms of customers and scale of deployments
- » Overall, competitors such as GE and Siemens are likely at least 2-3 years behind C3 IoT from a product development stand point, while all of C3 IoT's competitors have a huge amount of catching up to do in terms of customers and devices under management

Growth Prospects

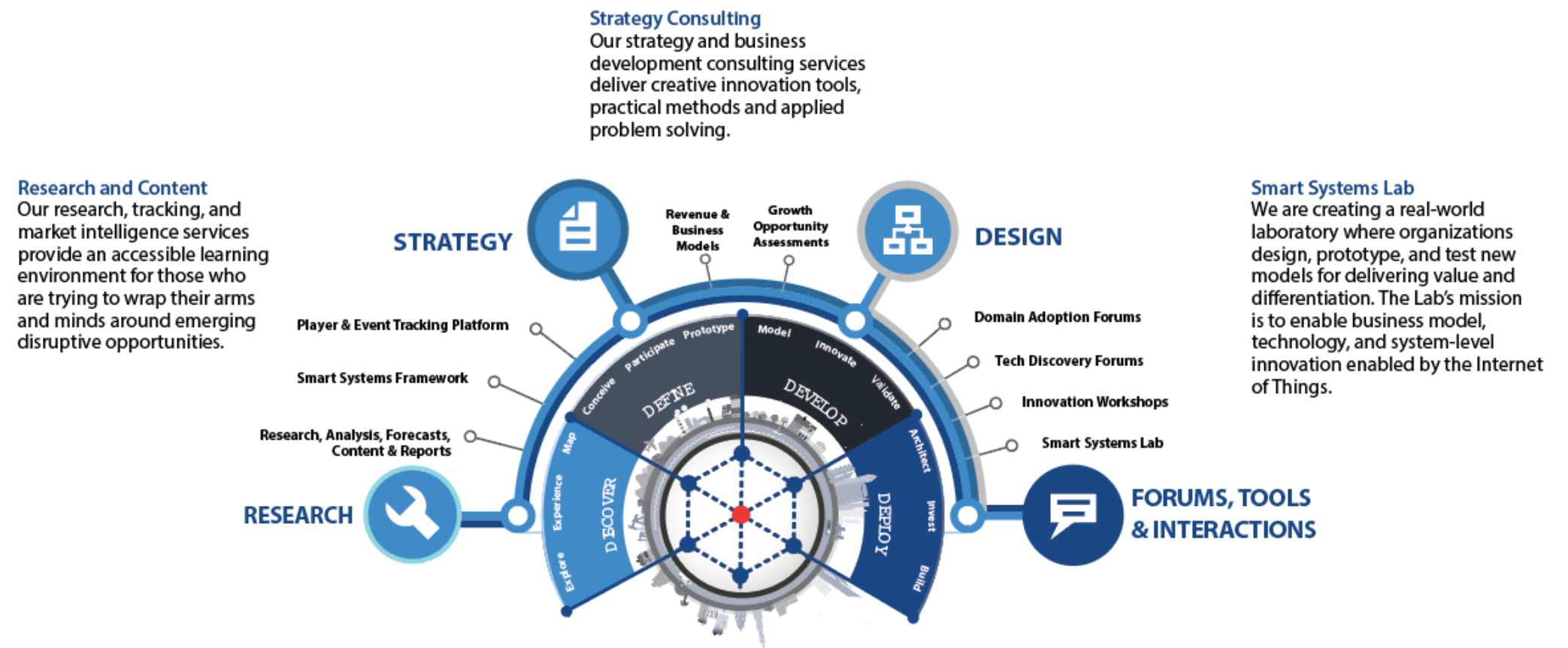
- » As C3 IoT expands its focus beyond utilities to include almost all markets, it is focusing its efforts most heavily on mission-critical environments such as oil and gas, manufacturing, aerospace and defense and transportation. According to [Harbor's Smart Systems Forecast Model](#), these markets represent a large and increasing portion of the total market for the Internet of Things
- » In addition to these markets, the company is beginning to work with customers in retail, the public sector (including the US State Department), healthcare and financial services industries where downtime is extremely costly and security is of utmost importance
- » As C3 IoT takes on a broader market, it will need to stay focused on what it knows best and where it comes from: business intelligence and enterprise software-driven value. In this way, it must continue to develop its partner ecosystem in areas such as channel to market and application development.
- » C3 IoT is a market leader, but must make itself available to customers of all sizes to keep that position. Consultants and integrators will continue to be significant drivers in the adoption of C3 IoT's platform, and it should begin to hire engineers and designers that can help implement its platform for smaller customers that do not have the funds to work with the McKinseys and Accentures of the world.
- » As more equipment and devices are connected and customers in all markets demand increased attention from their suppliers, these suppliers will shift towards service-based business models. C3 IoT, with advanced machine learning at the core of its platform and all markets in its sights, is perfectly positioned to capitalize on this trend and the entire Smart Systems market.

Our approach is simple: help clients create and capture value by combining accurate data discovery and analysis with strategy development and creative systems-thinking

We plan and build new businesses and growth opportunities by leveraging deep analysis, thoughtful interactions and unique systems and business model design and development tools

Harbor Research Inc. has nearly 30 years of experience supporting new business creation and development. We continually strive to generate deep insight into what drives value creation and competitive advantage in our clients' businesses and the economy as a whole. Harbor helps companies outperform their peers and rivals by instilling innovation into the core of their business development processes. We help client's foster creative thinking, facilitate diverse perspectives and unconventional insight and, most importantly, we directly participate. The result is increased certainty around vital new business decisions.

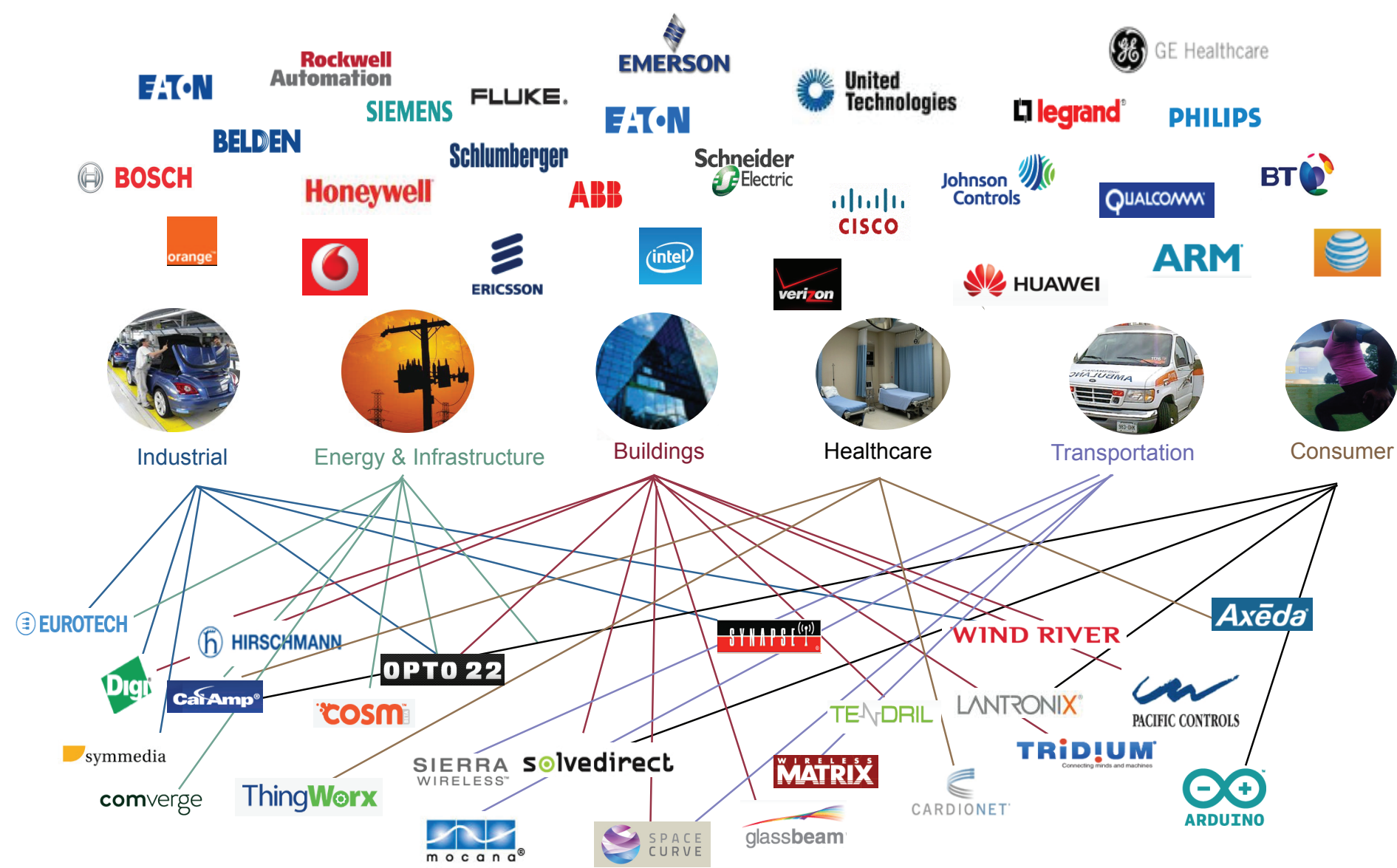
We work collaboratively to help clients come to confident answers today while also building their capabilities for the future - we are passionate about creating lasting impact. We believe that innovation can be driven from systematic methods and that enduring capabilities and processes can be built to reduce the risks associated with new growth ventures. Every solution we propose is informed by a combination of real world experience and unique processes and methods that are tailored to the dynamics of your organization.



To discover, design and develop innovative smart systems, organizations must consider all the elements involved and the context they fit into. The benefits that will flow from the recognition that traditional strategy and product development protocols will not meet the needs of a connected business are nearly infinite.

Value Created From Our New Model Is Informed By Community Interactions

The relationships and interactions we help foster serve as a context for deep insight and more value creation. Every relationship building event, every workshop and platform project, regardless of its focus, is enhanced by the range and depth of these relationships. The Lab intends to be a significant catalyst for migration of industry and technology experience....



Harbor seeks out clients whose strategic and business development mode shows a desire to drive disruption and manage change effectively, both in their organization and through their relationships in the marketplace. These are the forward looking competitors who can benefit most directly from the breadth of knowledge and process skills embodied in Harbor.

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