



International Business and Technology Marketing Excellence



A Marketing Roadmap

Internet of Things (IoT) and
Industrial Internet of Things (IIoT)

Products, Services and Technologies

Includes a special section "The Impact on Business"



International Business and Technology Marketing Excellence



CEO's MESSAGE

In *A Marketing Roadmap*, we present a compilation of marketing principles that will help you create new pathways to business growth. You may know many of them and some may be a different interpretation than you are used to. In any event, we hope this piece serves as a reference guide to help you maximize your sales and marketing efforts.

Since 1980, F H COOPER, an international marketing organization, has bonded with many Fortune companies, mid-sized companies, not-for-profit organizations and government agencies in the business and technology fields. Our principals have technical degrees and real-world marketing and management experience with major companies.

Working seamlessly with your marketing professionals, we focus on developing actionable, market-driven strategies that help you explore and pursue sustainable and profitable growth.

Talk to us.

Together we can make a difference.™

Franklin Cooper
Chief Executive Officer

Background

All the projections for the growth of Industry 4.0 indicate it will be huge in just a few years. Some of the contributing factors to the projected growth of Industry 4.0 are the adoption of IoT in the digital transformation of manufacturing, the rise in the use of industrial robots, and the proportionally higher spend in the Industrial Internet of Things. These facts indicate that a fierce competition is underway on the part of technology vendors for a “piece of the action”. This roadmap deals with the many considerations involved in the planning and implementation of marketing programs that will achieve that goal.

Emerging Technology

Technology has always been the driver of innovation in manufacturing and today’s emerging technologies are no different. The opportunity exists for manufacturers to create products from advanced materials and techniques that will reduce waste, improve quality, and deliver better products in a faster and more cost-effective way. In the book, *Wharton on Managing Emerging Technologies*, (ISBN 0-471-36121-6) there is this thought: “Significant emerging technologies are easily seen after the fact, and companies are then congratulated or castigated for their decisions to pursue them or ignore them. But rarely are the winners clear at the outset. Yet, this is the challenge managers face. From a swirling sea of technological possibilities, they must identify commercial potential and choose whether, how much, and when to invest.”

IoT Security

Organizations will need to bring their security programs to a whole new level to reap the benefits of IoT. By 2025, the IoT is projected to have 75.44 billion connected devices. The recent revelation that Russian hackers penetrated control systems of U.S. power plants, dramatically underscores the need for extreme vigilance. Look into the IoT Security Foundation, a non-profit, vendor-neutral, organization that shares implementation experiences, application and security approaches, and provides best practices to the industry to promote security and privacy.

Market Focus and Positioning Considerations

From the book, *Marketing 4.0* (ISBN 978-1-119-34120-8) this description of market segmentation, “Traditionally, marketing always starts with segmentation—a practice of dividing the market into homogenous groups based on their geographic, demographic, psychographic, and behavioral profiles. Segmentation is typically followed by

targeting—a practice of selecting one or more segments that a brand is committed to pursue based on their attractiveness and fit with the brand....They also help marketers to serve multiple segments, each with differentiated offerings.”

This is especially true with technological offerings. Engineers, integrators, data analysts and others in the technical community are interested in the mechanics and workings of the product or technology, while the executives are interested in the cost, benefits and productivity aspects. Although the technical personnel often play a part in the selection process, the ultimate purchasing decisions are often made by CEOs, CFOs, Presidents, or Vice President of Operations.

Most often the executives look for three things:

- What is the product and what is it going to do for me
- How much does it cost
- How fast can I get it

Hopefully, the product, service or technology is helping the potential customer to do something they were not able to do with what was previously available. The next question is likely to be, “Why should I buy this particular product over what appears to be a better or less expensive competitive product?”

The “Benefits” Focus

There is a school of thought for showing the machine to manufacture the component part rather than the component part itself. We strongly suggest showing the benefit rather than the capability. *As a rule, benefits usually win.* Remember, benefits could be your competitive edge. When explaining or demonstrating the product or technology, try to apply it to existing or legacy equipment. It is a sure bet that the executive in charge is not going out to replace existing equipment before he knows it will work as stated. If there is ongoing technical service available, that could be a “plus” since the plant manager knows he can call on the vendor at any time for help.

Measurable Characteristics

The establishment of measurable characteristics enables progress to be tracked and measured over time to ascertain if the product is performing as described. All these elements provide credibility and help clinch the ultimate sale. Being customer-centric,

by putting the customer first in all things, puts you and your company in the position of not merely wanting to make a sale, but being involved in helping the customer take his program from idea to reality.

IoT and the Home Market

Building automation designed especially for use in the home is known as a “smart home”. For example, it will control lighting, climate, entertainment, appliances, and security. Imagine all these things being able to support your needs and many controlled from your hand-held smartphone.

But more importantly to whom should the manufacturers of smart products focus their sales efforts? To start with, the architects who design and plan condominiums, homes, office buildings, etc., home building contractors, retrofit contractors who do remodeling or upgrading, and lastly to the consumer with the hope that they will ask their contractor about including smart appliances and other smart products in their building or remodeling plans. The addition of smart products will ultimately make their life easier and more enjoyable in their new or upgraded home.

Even though IoT technology is gaining in recognition, an informative program is needed to educate the professionals and the public on the state of home, car, and wearable personal automation.

One communication tool IoT product or technology manufacturers should use is a webinar targeted to potential resellers. This should illustrate how to position these new IoT products to the ultimate purchaser focusing on the money savings, time savings, and convenience aspects. As many articles have indicated, the IoT sales potential over the next few years will be dramatic. With that said, let’s go to market!

Acknowledgements:

eclipse / A DXC Technology Company
Wharton on Managing Emerging Technologies
John Wiley and Sons, Inc.
Craig Resnick, ARC Advisory Group
Dean Hamilton/ Network World
Marketing 4.0
John Wiley and Sons, Inc.

SPECIAL SECTION

The Impact on Business of the Internet of Things (IoT) and the Industrial Internet of Things (IIoT)

Introduction

The Internet of Things (IoT) is a network of intelligent computers, devices, and objects that collect and share huge amounts of data. The collected data is sent to a central Cloud-based service where it is combined with other data and then shared with the end users. The application of IoT to the manufacturing industry is called the Industrial Internet of Things (IIoT). It enables the acquisition and accessibility of far greater amounts of data, at greater speeds, and with more efficiency than before. The benefits of IIoT for industrial organizations are greatly improved connectivity, efficiency, scalability, time savings and cost savings.

The Bottom Line

Now that we have a brief understanding of how these technologies work, what will be the results of their application? The U.S. has lost a lot of manufacturing to cheap overseas labor. One writer notes that IoT technologies could further reduce costs enough to bring a lot of that “lost” manufacturing back. This rationale could be the basis for a marketing focus aimed at keeping manufacturing in the United States.

Competitive Advantage

This happens when one company offers something that no one else is offering. For example, if IIoT can reduce the cost of producing an automobile, the company that manufactures it has a few marketing choices. It can offer a dramatic price reduction over its competitors, or it can choose not to increase the price of future models. They then apply the savings to bolster their own margins (keeping stockholders happy) and at the same time, stabilize the future market price.

One company sees competitive advantage this way: Businesses need to ask what opportunities exist. For example, early adopters are using IIoT to help develop new products and services; others are reducing errors in production systems by avoiding machine downtime. This can be construed as a competitive advantage since avoiding downtime can affect productivity and profits dramatically.

Unfortunately, when many companies start doing the same thing, the competitive advantage often disappears. It may be possible, however, that these technologies can enable the producer to offer advantages other than price, i.e., increased safety and higher quality.

New Job Creation

IIoT will create new industries and categories of jobs to support these high-tech systems. As with all types of automation, many existing jobs are reduced while new jobs are created. These new jobs need to be skillfully marketed since they now include not only expertise in these new technologies, but also expertise in software, data analytics, system integration and cybersecurity.

Applications Demonstrate Versatility of IoT

The versatility of IoT is demonstrated by its application across a broad range of industries and applications. For example, IoT helps Rolls Royce leverage data from 13,000 engines for commercial aircraft and helps reduce fuel costs. Another application allows health care providers to monitor people who suffer from Parkinson's disease. A custom precision plastic molder uses IoT to reduce man hours and increase efficiency. One critical business function in the cold chain business is the continuous monitoring of the temperature. IoT eliminates the labor intensive manual registration and reduces mistakes.

Epilogue

"In 1980, it took 25 jobs to generate \$1 million in manufacturing output in the U.S. Today, it takes just 6.5 jobs to generate that amount." Brookings

These new technologies will face emerging business and technology challenges. This may require the creation of new strategies to deal with them. There will be more data to support newly created benefits claims. From startups to sophisticated businesses, it appears that all can benefit from the application of IoT and IIoT technologies.

ACKNOWLEDGEMENTS:

Leverage
Cirrus Link Solutions
Wireless Logic Group, Ltd.
Inductive Automation
SAS/Intel



F H COOPER LLC

233 E. Wacker Drive, Suite 3411

Chicago, IL 60601

www.cooperllc.net

fcooper@cooperllc.net

Telephone: 312-965-0540

Together we can make a difference.™



**VISIT F H COOPER LLC
AT BOOTH 8532
THE AUTOMATE SHOW**

April 8-11, 2019

McCormick Place, Chicago, IL