Learning About Your Customer

Bobby Kania (with content borrowed from William Lutz and Ryan Splenda)
Who is your customer?

A customer is someone who will buy your product or service to solve their problem.

NOT YOUR MOM WHO BOUGHT OUT OF PITY
Defining your customer

▪ What is their pain/problem?

▪ Who is having the pain/problem?
  - This is your potential customer base

▪ How are they currently dealing with the problem?
Two approaches to Customer Discovery

1. Product First
   - Most common for startups
   - “Disruptive technology” with no known customers

2. Market First
   - Most common for big companies
   - Existing customer base, but no product

Customers don’t know what they want
We’ll focus on the 1st approach, but for the 2nd approach read Ask

“The counterintuitive online formula to discover exactly what your customers want to buy”

http://amzn.to/2nzIQ16
You can use the Design Thinking framework to learn about your customers

**Design Thinking Process**

- **Empathize**: Learn About Your Audience
- **Define**: Construct Point of View Based on User Needs
- **Ideate**: Brainstorm and Come up with Creative Solutions
- **Prototype**: Build Representation of Your Ideas
- **Test**: Test Your Ideas

Get feedback from customers on what they like
First step: Get out of the building and talk to customers

Interviewing potential customers

**Prepare**
- 5 primary questions
- 5 backup questions

**Plan**
- Who you want to interview (C-suite is not always the best)
- Where you will conduct the interview

**Practice**
- Example conversations

**Conduct**
- 15 minute interviews
- Keep notes or ask to record
Tips for interviewing

- Don’t show a demo of your product
  - Biases answers
  - Doesn’t get at the root of the problem

- Play the student card to get interviews
  - Lowers people’s guard so they’ll answer more honestly

- Interview at least 50+ people (100+ recommended)
Interviewing might not tell you everything you need…

- **Recommended Resources:** [guides.library.cmu.edu/entrepreneurship](http://guides.library.cmu.edu/entrepreneurship)
  - **IBIS World:** Industry analysis
  - **Statista:** Data trends (ex. growth of yoga in next 5 years, number of electric vehicle charging stations)
  - **BCC Research:** Reports and publications

- **Google Trends:** [trends.google.com](http://trends.google.com)
Example: Handwashing Clothes
Define hypotheses based on customer interviews

Example for washer machine:
Bobby needs a way to wash his clothes quicker because handwashing is too slow.

Read More:
- http://tlpnyc.com/define-stage/
Brainstorm solutions to your customers’ problems
Build a prototype and test it with customers!

- Concept of the **Minimal Viable Product (MVP)**
  - Just needs to perform the basic functions
  - Imagine this automatic washer machine:
    + a motor to turn the crank

- Iterate on the prototype as you test with customers
Remember...you will only learn about your customer if you actually talk to them
Library Resources
Investigate your Industry, Customer, Competitors: *Secondary Market Research* via Library Databases

*Ryan Splenda*
Business & Economics Librarian
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Why secondary?

- Deep background and history
- Others have done the work for you
- Data-rich
- Less expensive in time and $$
- Wide range of perspectives
What are you looking for?

• Data, statistics
• Analysis
• Trends and projections
• More ideas

ABOUT
• Your customers
• Your industry
• Your competitors

Basically, whether this could be “a big problem with a big market”
Where can you find it?

Google can lead you to:

- **Commercial market research reports**
- **Professional organizations**, **industry associations**
- **Survey research**
- **Governments**
- **NGO’s**
- **Public records, patents**
- **Conferences, presentations, trade shows**
- Company websites, catalogs, literature, investor materials
- **Academic research**
Where can you find it 2?

But I’m going to lead you to:

**LIBRARY DATABASES**

Which have much of the above,

But easier to get to

And free to you
How do you get to them?

Any library web page — http://www.library.cmu.edu/

- Research databases list
- Research guides
- Online catalog
- If you’re not at CMU -
Target Company Lists

Industry Analysis

Customer Discovery

Competitor Intelligence
Databases for Creating Target Company Lists

**Hoover’s** and **ReferenceUSA**

- “Build a list” of companies using the following criteria:
  - geographic location (zip code, city, state, country)
  - Industry (by NAICS or keyword)
  - Number of Employees
  - Total Revenue
  - Company type (public or private)
  - AND MANY MORE
Select this first.

Results: 71,238 Companies
Must click “Update Count” after putting in each criteria.
Databases for Industry Analysis will tell you

- Market size
- Industry performance
- Trends and projections
- Supply chain
- Barriers to entry
- Also about your customers and competitors
Silver lining: Rising IT outsourcing and prevalence of online services will charge industry growth

Industry Definition

This industry provides specialized data processing or hosting activities. Data processing services provide specialized reports from information supplied by clients. Hosting services can include web and application hosting. Services range from automated data entry to processing data.

The Supply Chain

Key Economic Drivers

- Number of mobile internet connections
- Percentage of online sales
- Demand from internet publishing and broadcasting
- Corporate profit
- External competition for the Data Processing and Hosting Services Industry

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<tr>
<th>Title</th>
<th>Publish Date</th>
<th>Report Details</th>
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<tbody>
<tr>
<td>Biometrics: Technologies and Global Markets</td>
<td>2016-01-05</td>
<td>IFT042E</td>
</tr>
<tr>
<td>This BCC Research report studies the global as well as regional markets for biometric technologies and devices, identifying newer markets and exploring the expansion of the present application market for various types of biometric devices. Includes forecast from 2015 to 2020.</td>
<td></td>
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<tr>
<td>Mobile Wallet and Payment Technologies: Global Markets</td>
<td>2016-06-30</td>
<td>IFT070B</td>
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<tr>
<td>This BCC Research report provides a detailed analysis of the global mobile wallet market, and discusses the mobile wallet value chain, drivers, challenges and advantages. Forecasts provided through 2020.</td>
<td></td>
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<tr>
<td>Smart Cities: Growing New Markets for Information Technology</td>
<td>2015-06-16</td>
<td>IFT115A</td>
</tr>
<tr>
<td>The BCC Research report provides an examination of smart city projects around the world and related investments in smart city projects, including a study of regional trends, national programs and individual city projects. Includes forecast through 2019.</td>
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<tr>
<td>The Internet of Things</td>
<td>2015-09-29</td>
<td>IFT118A</td>
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<tr>
<td>This report highlights three verticals in the IoT market, where there is significant traction today. These verticals include the smart home (home automation), industrial smart devices or industrial Internet of things (IIoT) and wearables (smart devices). These verticals are discussed and analyzed in detail, while the segments for the devices and chipsets used for IoT within them are sized and forecast (through 2020) in terms of revenue opportunity.</td>
<td></td>
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</tr>
</tbody>
</table>
The global wearable computing market will grow from $16.9 billion in 2015 to $22.6 billion in 2016 and should reach more than $171.2 billion in 2021, with a compound annual growth rate (CAGR) of 50%.

The consumer market should reach nearly $18.1 billion in 2016 and $104.7 billion in 2021, with a CAGR of 42.1% through 2021.

The non-consumer market should reach nearly $4.5 billion by 2016 and $66.5 billion by 2021 with a CAGR of 71.6% through 2021.
Hype Cycle for Emerging Technologies, 2016

Analytical(s): Mike J. Walker | Betsy Burton | Michele Cantara

- Connected Home
- Blockchain
- Smart Robots
- Micro Data Centers
- Gesture Control
- IoT Platform
- Affective Computing
- UAVs
- VPA
- CII
- 3D Volumetric Displays
- Smart Workspace
- Personal Analytics
- Neuromorphic Hardware
- Context Brokering
- 802.11ax
- General-Purpose Machine Intelligence
- 4D Printing
- Smart Dust
- Cognitive Expert Advisors
- Machine Learning
- Software-Defined Security
- Autonomous Vehicles
- Nanotube Electronics
- Software-Defined Anything (SDx)
- Natural-Language Question Answering
- Enterprise Taxonomy and Ontology Management
- Augmented Reality
- Virtual Reality

Plateau of Productivity

- Technology Trigger
- Peak of Inflated Expectations
- Trough of Disillusionment
- Slope of Enlightenment
- Plateau of Productivity

Plateau will be reached:

- less than 2 years
- 2 to 5 years
- 5 to 10 years
- more than 10 years
- obsolete before plateau
Takes you to relevant statistics on this topic.
Databases for Customer Discovery will tell you

• Demographics
• Psychographics – opinions, attitudes, lifestyles
• Technographics
• How to identify, locate, and describe your potential customers
Search results (267)

- **Forecast wearable device unit sales in the U.S. 2016, by category**
  Statistic | Projected unit sales of wearable devices in the United States in 2016, by category (in millions)

- **Sales of wearables to dealers/retailers in the U.S. 2012-2015**
  Statistic | Wearables wholesale sales in the United States from 2012 to 2015 (in million U.S. dollars)

- **Number of wearable device users in the U.S. 2014-2019**
  Statistic | Number of wearable device users in the United States from 2014 to 2019 (in millions)
The Market for Smart Wearable Technology
A Consumer Centric Approach

This report takes a look at the market for smart wearable technology worldwide. Within the market is broken down into its segments such as sports & fitness, hearables, personal medical and assisted living, fashion, augmented reality and smart watches. The report focuses on the market potential from a user standpoint and also takes a look at some obstacles such as data privacy, charging and battery life and cleanliness of devices.

Recommended studies and dossiers

- (Smart) wearables - Statista Dossier
- Wearable Tech: Leveraging Canadian Innovation to Improve Health
- Health wearables: Early days 2014
- Morgan Stanley Blue Paper: Wearable Devices
- Crowdfunding in Europe - Statista Dossier

Contact

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More statistics about...

- trend
- market development
- wearables
- wearable technology
# Table 3.1 Computer spending, 2000 to 2012

(average annual household spending on computer hardware, software, and information services for nonbus category, 2000 to 2012; percent change in spending, 2000–06, 2006–12, and 2010–12; in 2012 dollars; ran

<table>
<thead>
<tr>
<th>Average household spending on computer equipment and services</th>
<th>2012</th>
<th>2010</th>
<th>2006</th>
<th>2000</th>
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</thead>
<tbody>
<tr>
<td>Computer information services</td>
<td>$547.87</td>
<td>$487.64</td>
<td>$397.26</td>
<td>$359.23</td>
</tr>
<tr>
<td>Computers and computer hardware</td>
<td>336.30</td>
<td>300.23</td>
<td>200.94</td>
<td>81.81</td>
</tr>
<tr>
<td>Computer software and accessories</td>
<td>162.71</td>
<td>152.23</td>
<td>162.39</td>
<td>250.43</td>
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<tr>
<td>Internet services away from home</td>
<td>3.89</td>
<td>17.78</td>
<td>24.71</td>
<td>23.32</td>
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<tr>
<td>Repair of computer systems</td>
<td>8.25</td>
<td>1.96</td>
<td>1.87</td>
<td>–</td>
</tr>
<tr>
<td>Portable memory</td>
<td>5.52</td>
<td>7.68</td>
<td>7.35</td>
<td>3.67</td>
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<tr>
<td>Computer systems installation</td>
<td>3.76</td>
<td>7.43</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Computer systems installation</td>
<td>0.44</td>
<td>0.33</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>
Databases for Competitor Intelligence will tell you:

• Who are they?
• Where are they located?
• How are they doing?
• What do they offer your customers?
### Figure 4. Vendors’ Product Scores for Webinars Use Case

#### Product or Service Scores for Webinars

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adobe</td>
<td>4.30</td>
</tr>
<tr>
<td>Cisco</td>
<td>4.30</td>
</tr>
<tr>
<td>Microsoft</td>
<td>3.95</td>
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<tr>
<td>IBM</td>
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<tr>
<td>AT&amp;T</td>
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<tr>
<td>Google</td>
<td>3.35</td>
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<tr>
<td>Blackboard</td>
<td>3.25</td>
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<tr>
<td>Citrix</td>
<td>3.20</td>
</tr>
<tr>
<td>Vidyo</td>
<td>3.15</td>
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<tr>
<td>Fuze</td>
<td>3.05</td>
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<tr>
<td>PGi</td>
<td>2.70</td>
</tr>
<tr>
<td>Arkadin</td>
<td>2.40</td>
</tr>
<tr>
<td>InterCall</td>
<td>2.10</td>
</tr>
</tbody>
</table>

As of August 2014

*Source: Gartner (January 2015)*

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**Vendors**

**Adobe**

The Adobe Connect platform is a premium offering that is well-suited to buyers that want a high degree of flexibility for deployment—from on-premises to managed services in the cloud. It uses a strong ecosystem of channel partners that augment the service for everything from audioconferencing to global content delivery networks. In addition, Adobe uses other parts of its portfolio, including Adobe Analytics and Adobe Experience Manager, to make Adobe Connect more capable for tracking participant engagement. Adobe Connect has an extensive collection of “pods” or modules to enhance the platform, and this, combined with its rich set of APIs, makes it one of the strongest possible offerings for enterprises interested in a high degree of customization. Adobe Connect addresses most use cases well, but, as a stand-alone offering, can sometimes be seen as a less essential option for internal collaboration for those organizations that are already licensed for Web-conferencing products they feel are good enough.

**Arkadin**

Like some of its competitors in the conferencing space, Arkadin offers a full complement of products to...
To start your search...

Click on the headings to the left to start your search. If you are uncertain what to search for, look for Search Tips within each section to help you along the way.

To further customize your search, select the Record Type you would like to search below to ensure you get the records you are looking for.

**Record Type**

- ✔️ Verified Businesses (Phone verified and quality checked)
- ️ Include Unverified Businesses (Not yet fully verified, may not be accurate)
- ️ Include Closed / Out of Business Records (Suspected to be out of business)
WEARABLE M.D.

Authors: DUFFY, JILL


Document Type: Article

Subject Terms: COMPUTER software
WEARABLE technology
PEDOMETERS
SMARTWATCHES
DIGITAL technology
DIGITAL electronics

Abstract: The article offers information regarding the development and application of state-of-the-art wearable health devices. It discusses the increasing use of wearable fitness trackers, such as the Fitbit Charge, Jawbone UP, and Basis Peak.
Books and e-Books
Guide to Entrepreneurship Research at CMU

guides.library.cmu.edu/entrepreneurship
Questions??