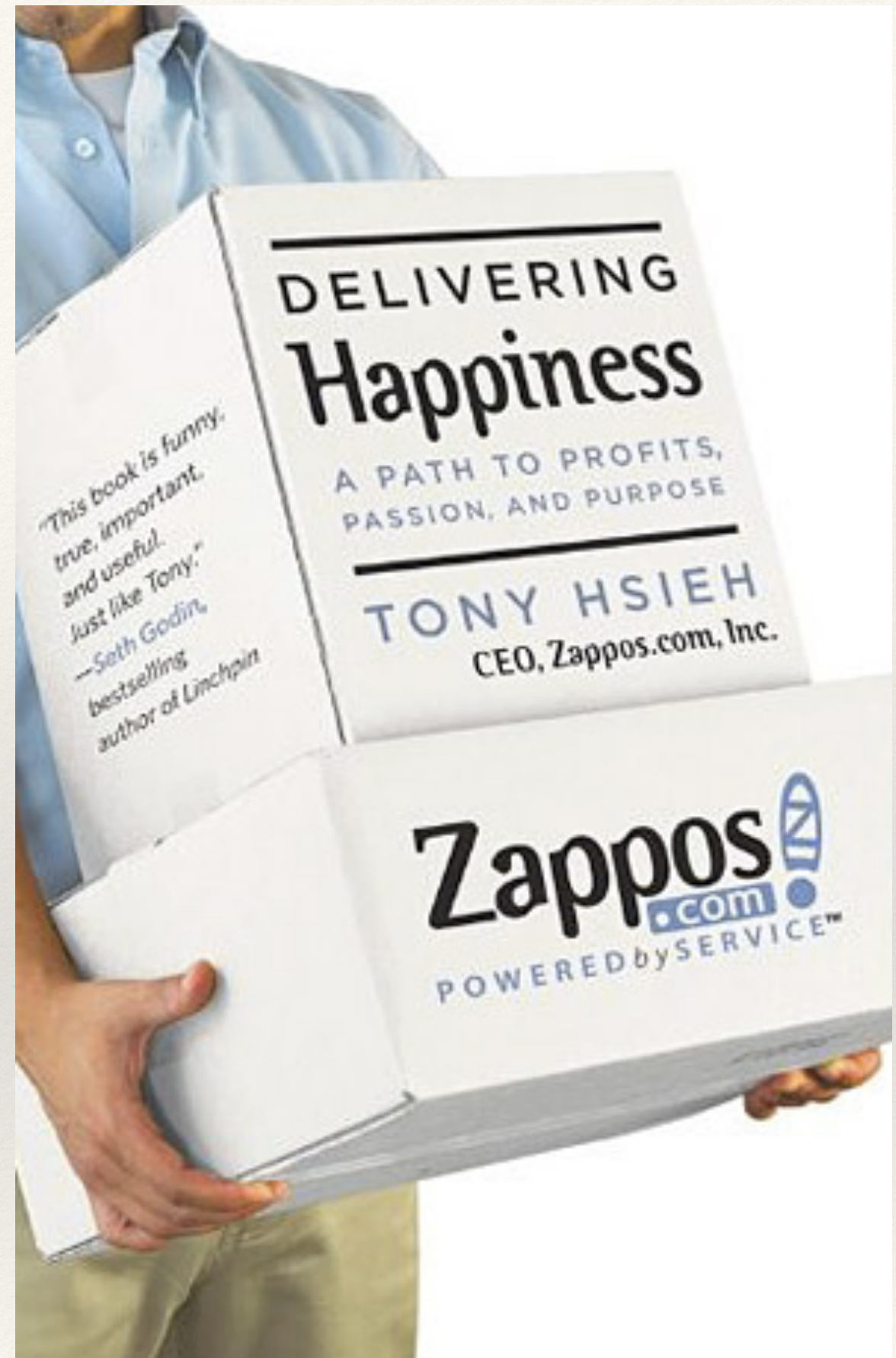

Using Data Science to Improve Customer Service

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“At Zappos.com, we decided a long time ago that we didn't want our brand to be just about shoes, or clothing, or even online retailing. We decided that we wanted to build our brand to be about the very best customer service and the very best customer experience.”

–Tony Hsieh, CEO of Zappos



- ❖ In 2011, Zappos sent flowers to a woman who ordered 6 different pairs of shoes because her feet were damaged by medical treatments
- ❖ Found pizza parlor for client at 2am and made order for client
- ❖ 10 hour and 29 minute customer service call

Does use data science to improve customer service?



- ❖ Zappos uses data to personalize recommendations to clients:
 - ❖ Purchase data says customer likes dark colors...
 - ❖ And weather data says it is going to rain a lot next week...
 - ❖ Zappos sends an email to the customer highlighting dark-colored rainboots!



- ❖ Unmanned coffee shops (Revive Vending + IBM Watson)
 - ❖ offer range of healthy foods, juices and fair trade coffee through vending machines
 - ❖ data captured by vending machines
 - ❖ used to individualize relevant promotions and introduce products
- ❖ Plans to use customer tweets to further improve the customer experience

Call Center Analytics

- ❖ Anticipating customer needs when they call
- ❖ Speech analytics
 - ❖ Monitor for key phrases and prompt agent in real time on appropriate steps to take

What kind of world do we live in now?



- ❖ Customer service is reactive.
- ❖ When you (the customer) come across a problem, you contact the company to resolve the issue.

 **comcast**

 **verizon**



at&t

 **CABLEVISION**



Imagine a world in which...

A business solves your problem
before you (the customer) even
detect a problem.



Sensors Save the Day

- ❖ In the future, sensors will be on everyday things:
 - ❖ coffee makers
 - ❖ clothes
 - ❖ etc.
- ❖ Sensors collect data
- ❖ And that data can be used to predict when a problem is highly likely to arise



Can you imagine?

- ❖ Customer call centers that only do outbound calls...



Tesla



Using sensor data inside each car, Tesla sends car owners a proactive message before a problem will occur

Siemens

Monitors
devices sold to
hospitals and
fixes problems
before they
occur



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