Automate This!
implications for CRM executives

Vinnie Mirchandani
CRM Evolution
Washington, April 24, 2017
Speaker profile

- Market analyst/advisor on enterprise software – Gartner, PwC
- Consulted with 00s of companies, over $10 billion in transactions
- Prolific writer – innovation book, over 1,000 blogs every year
- Work/travel to over 55 countries
The new machine age

“White, blue, red collar are all passé…we all now work in the Silicon Collar economy”

Themes for today

- Machines as Colleagues
- Machines as Overlords?
- Implications for CRM executives
Machines as Colleagues
Book looks at work/tech in 50+ settings
Never before has so much tech made work safer, speedier, smarter

Work being influenced by
- machine learning
- robotics
- autonomous vehicles
- process bots
- satellites
- exoskeletons
- 3D printing
- wearables
- digital media
- platforms
- many others
It is leading to a class of “super-workers”

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>UPS telematics</td>
<td>One accident per million miles</td>
<td>Safety AND customer delight</td>
</tr>
<tr>
<td>Foxconn robots/</td>
<td>Billions of Apple /other devices</td>
<td>Speed AND customer delight</td>
</tr>
<tr>
<td>other equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amazon Data Ctr</td>
<td>50+ AWS price cuts last decade</td>
<td>SLAs AND customer delight</td>
</tr>
<tr>
<td>automation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
It is giving us career choices our parents would have drooled about

- BLS tracks over 800 occupations
- We are changing jobs every 4-5 years
- We are all getting our 2\textsuperscript{nd}, 3\textsuperscript{rd}, later acts
- Warren Buffet: “The babies being born in America today are the luckiest crop in history”
Machines as Overlords?
The sum of all fears

“about 47% of total U.S. employment is at risk”

“one in three jobs will be converted to software, robots and smart machines by 2025”

“next five years, leading to a net loss of over 5 million jobs in 15 major developed and emerging economies”
Flawed analysis

- Very little field checking with automation practitioners
- Little application of tech maturity/economic curves
- No job gains assumed– coding machine learning, repairing robots etc.
- Ignoring history of “Automation amnesia” and panic cycles every few decades
Data from decades of automation

- Grocery checkout
- Drivers
- Knowledge workers
- Many others
Grocery Checkout

- Barcodes first patented as “bulls eye” in 1952
- Mass adoption in grocery industry in late 70s
- Did not kill checkout jobs
- Increased consumer choices, improved inventory control
- Recent QR and other versions used for training, marketing
- Self-checkout kiosks still low adoption
Autonomous vehicles

- Cruise control since late 50s, LIDAR since early 90s, DARPA driverless challenge over decade ago
- Recent Google, Tesla, GM, other advances
- But decades of legal, ethical issues ahead
- Massive infrastructure investment needed – markings, sensors, fiber even as speeding revenues will decline
- Traditional cars becoming safer every year. Audi Q7 has 35 safety features.
- Mazda, Porsche, others betting on continued love of “zoom-zoom”
- Limited scenarios likely – truck platoons, disciplined places like Singapore
Knowledge workers

- Yet, machines still fail Turing Test after 70 years
- IBM Watson and Oncologist assistant – small number even after 5 years
- David Gelernter of Yale – AI has neglected “low spectrum” human mind activities
- Impact of Robotic Process Automation on more junior jobs
Societal “circuit breakers” to automation

- Technology hype cycles
- Adoption bell curves
- Incumbent interests
- Tacit worker knowledge
- Unintended consequences
- “Automation Amnesia”
Implications for the CRM executive
CRM Automation 1.0
CRM Automation 2.0 – several examples in book

- CEO of Grok describes world of digital agencies
- CMO of Plex Software describes lead gen using eloqua and salesforce, Vidyard for video marketing and many other tools
- CMIO of UCSF Medical Center describes robotic pharmacies, surgeries and other automation in healthcare
- ANZ bank describes process bots which supplement human labor in their banking customer care
- GM of Rosewood Palo Alto describes automation even in “high-touch” hospitality
- Many other examples of contemporary automation of customer facing activities
CRM Automation 3.0 kicking off

From Oracle…

Adaptive Intelligent™ Offers
Deliver Highly Personalized Offers for Consumers

1st-Party Data
- Customer Profile
- Orders
- Clickstreams
- Service Inquiries
- Customer Interactions

3rd-Party Data
- Consumer Advertising Profile
- Geospatial
- Calendar Events
- Weather
- Social
- Bots
From IBM and Salesforce....

Two AIs are better than one! Use cases from multiple industries - one from Property Insurance

**Business Problem:** There were 5,412 major hail storms in 2015. During the past five years, claims related to wind and hail damage averaged approximately $15 billion annually.

**Watson brings:** Watson weather data, you can get alerts on a pending storm.

**Einstein brings:** With Salesforce Einstein, Insurance companies can get alerted to proactively notify their at-risk policyholders to move their cars in a garage.

**Result:** Save costs for the insurance companies not having to pay out damage while increasing customer satisfaction with valuable proactive service warning them of the storm.
From Amazon

- As a company
  - autonomous Prime Air delivery drones;
  - the Amazon Go convenience store that uses machine vision to eliminate checkout lines;
  - Alexa, cloud-based AI assistant

- AI services as a technology vendor
  - Amazon Lex (what’s inside Alexa) - natural language understanding
  - Amazon Polly - speech generation
  - Amazon Rekognition - image analysis
From smaller players like Kahuna....

Forget your old campaign process hops
Customer service changing dramatically across industries

- Drone deliveries
- 3D printing of spares in-transit
- Telemedicine
- Robotic restaurants
- Predictive maintenance/self-healing
- No industry untouched
BUT...the customer actually gums up many automation efforts

- Tech savvy consumers like convenience of self-service and other automation
- Majority of consumers resent “the man” for not compensating them
- Many worry about privacy issues
- Mass customization actually leads to more man v. machine in manufacturing and distribution
CRM execs must demand place at automation table

- Not just on CRM projects!
- Lots of automation poorly implemented – expensive, causes worker problems and often customer loss
- Legions of poor implementations – USPS, airlines, banking, many others
Learning from Japan

- Extreme Automation – robots, vending machines, conveyor belt sushi - given massive labor imbalance
- Yet, country supports all kinds of artisans and crafts handed down over centuries
- Humans will always crave the human touch
- Don’t buy into either the extreme hype or hysteria around today’s automation
- Look for ways to create “super-workers” who can delight your customers
- Watch like a hawk for customer interests – too many automation projects ignore or harm them
Exciting next decade for CRM profession!

“White, blue, red collar are all passé...we all now work in the Silicon Collar economy”

Embrace machines as peers – they make us safer, smarter, speedier

Enjoy the book

Thank you!