AI

The Future of Support

TSAnet © FT Works 10/2019

FT Works
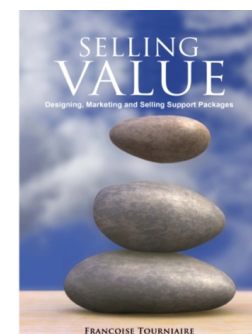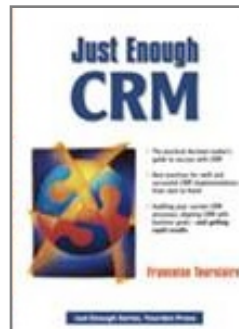smarter support ℠

About FT Works

- A boutique consultancy firm
- Founded in 1998
- That helps technology companies improve their support operations
- A thought leader

What is AI/ML?

Machine learning ▶ Artificial intelligence

- Infers patterns from data
- Requires training data
- Enables AI

- Makes predictions or decisions *without* explicit instructions for how to perform the task

FTWorks
smarter support ℠

The Bad Old Days

- Can you help find stuff in the knowledge base?
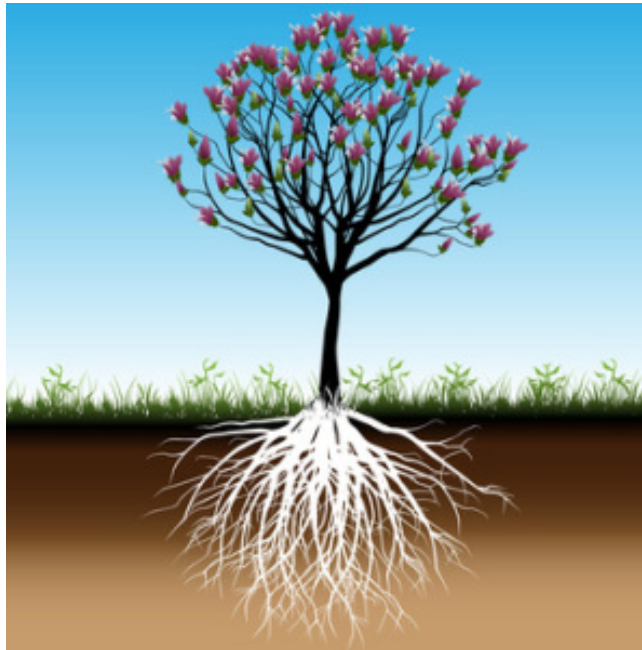- Can you pretend-chat with me?

FT Works
smarter support ᔆᴹ

Shallow Support

~ Kahneman's System 1
Fast
Pattern-matching
Emotional

~ System 2
Slow
Methodical
Differential diagnostic

Deep Support

FTWorks
smarter support ℠

The Bad Old Days

- Can you help find stuff in the knowledge base?
- Can you pretend-chat with me?
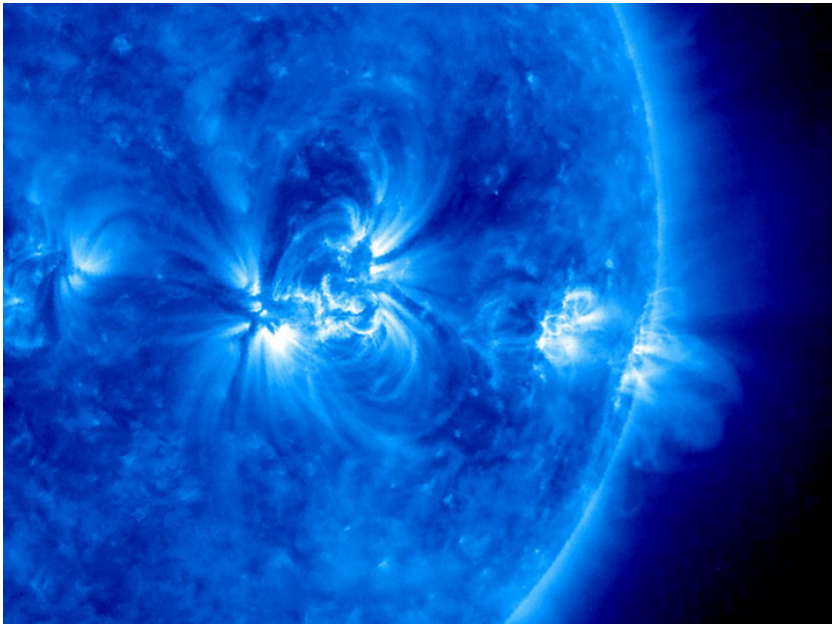
FT Works
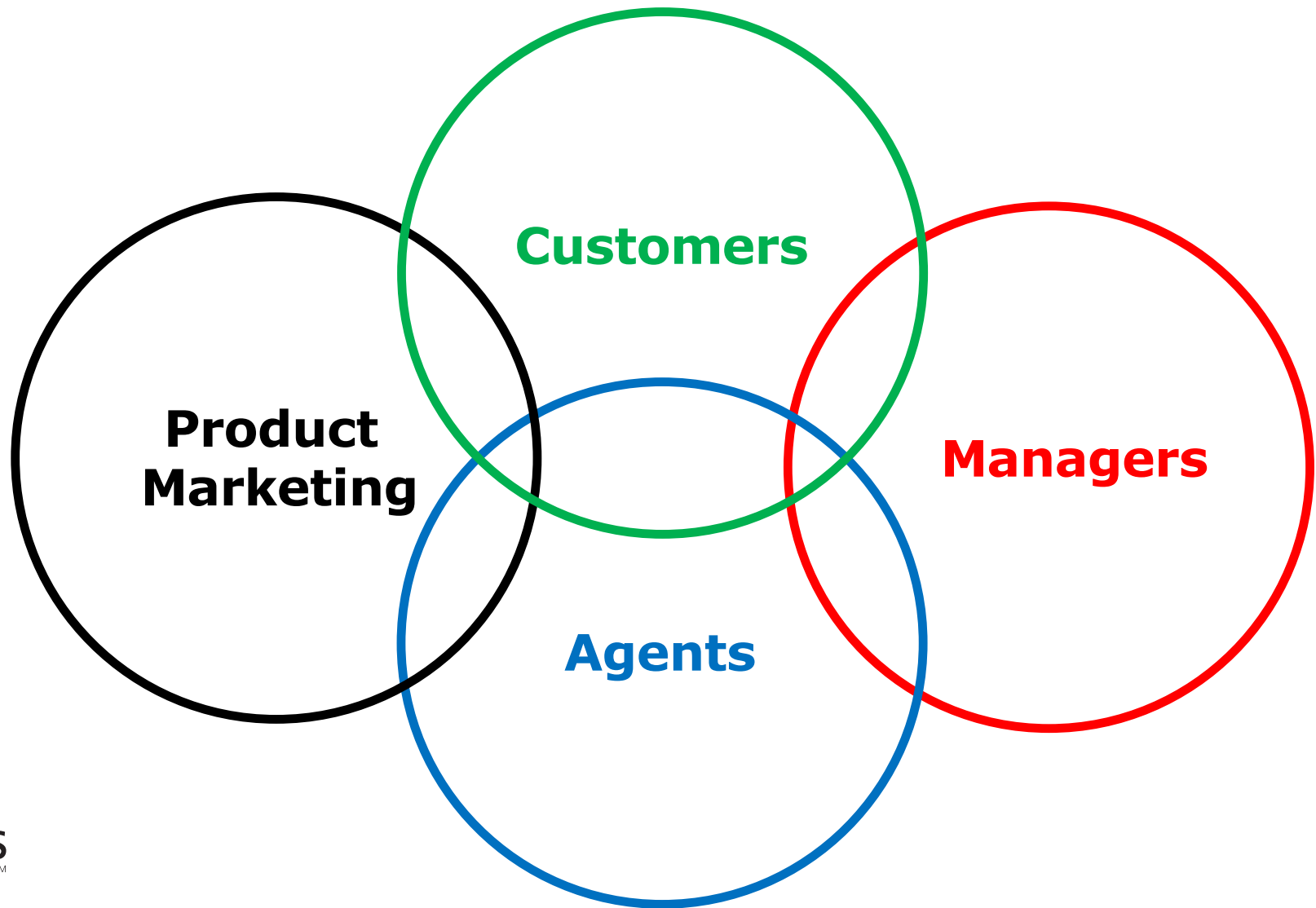smarter support ℠

The Good New Days

- Is this customer an influencer?
- Will this case escalate?
- Can this support engineer defuse angry customers?
- Is the UI of productX confusing?

FT Works
smarter support ℠

The Crazy Dreams

- Eliminate all cases
- Diagnose brand-new issues
- Identify problems without reading logs
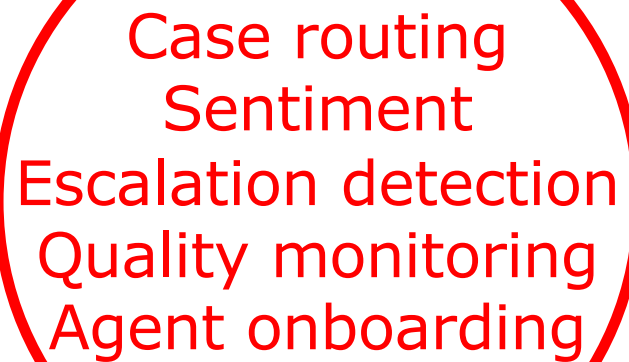- Outperform support engineers at all tasks

FT Works
smarter support ᔆᴹ

Customers

Product
Marketing

Managers

Agents

FT Works
smarter support SM

AI for Customers

Self-service

Tailored suggestions

Real-time urgency

FTWorks
smarter support SM

AI for Customers

- AI-powered search
  - Unified search
  - E.g. Coveo, IBM Watson
- Suggestions based on history
  - Watch this video
  - Purchase this service
- Determine the urgency of a request
 - Based on description, customer history

FT Works
smarter support ᔆᴹ

AI for Managers

Case routing
Sentiment
Escalation detection
Quality monitoring
Agent onboarding

FT Works
smarter support SM

AI for Managers

- Case routing
  - Eliminate queue managers
  - Route by description, customer background, recipient
  - E.g. route demanding customers to experienced agents; bypass level 1 for expert customers
- Sentiment management
  - Faster (and more effective?) than case reviews
- Escalation detection
  - Transform a reactive escalation into a proactive one

FT Works
smarter support SM
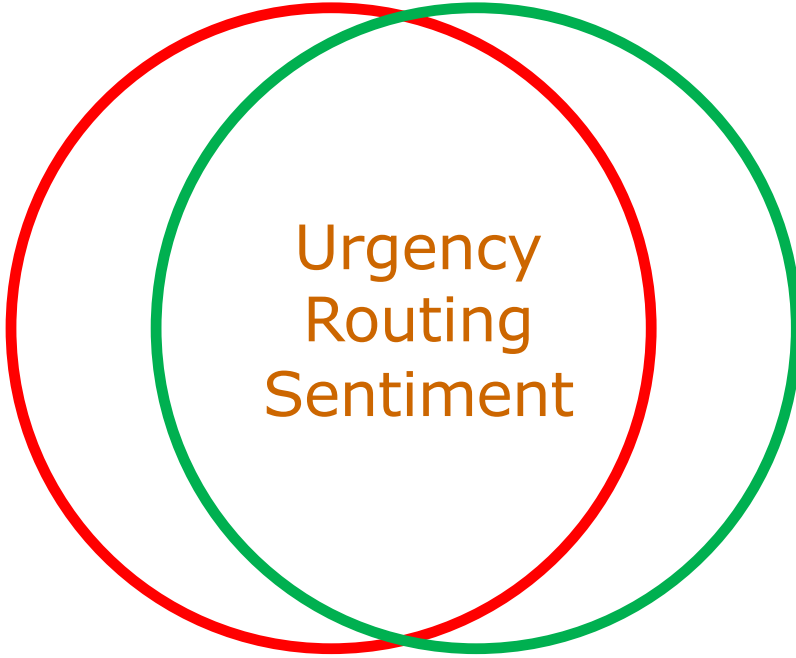
Sentiment & Escalation Detection
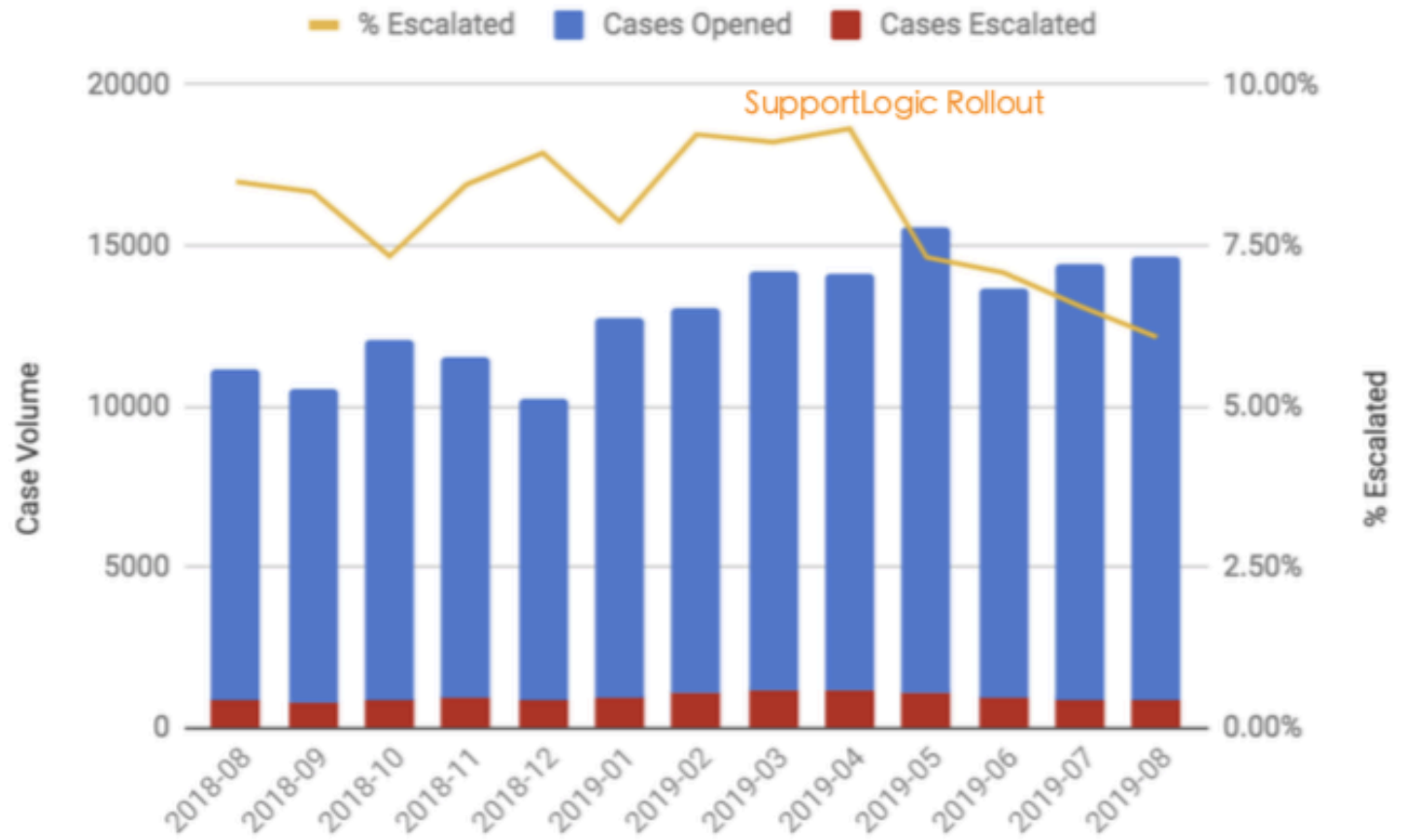
AI for Managers

- Quality monitoring
  - Review *all* cases, immediately
  - Aggregate across teams
- Onboarding
  - What do new hires really need to know?
  - Leverage case routing to assign easier cases
- And also
  - Scheduling
  - Dynamic reassignments

FTWorks
smarter support SM

Blending

Escalation detection
Quality monitoring
Agent onboarding

Urgency
Routing
Sentiment

Self-service
Training suggestions

FTWorks
smarter support SM

AI for Agents

Contact intel

Case management

Troubleshooting

FT Works
smarter support SM

17

AI for Agents

- Contact intel
  - Is the customer technically knowledgeable?
  - Is the customer demanding?
  - Does the customer prefer chat or phone?
  - Does the customer escalate easily and when?
  - Is the customer upset?
  - Did the customer just start a new job?
  - Is the customer an industry influencer?

FT Works
smarter support ℠

Exploit internal *and* external repositories

AI for Agents

- Case management
  - What case should I work on next?
  - Should I transfer this case? To whom?
  - What are my outstanding commitments?

- Troubleshooting
  - Automated log analysis
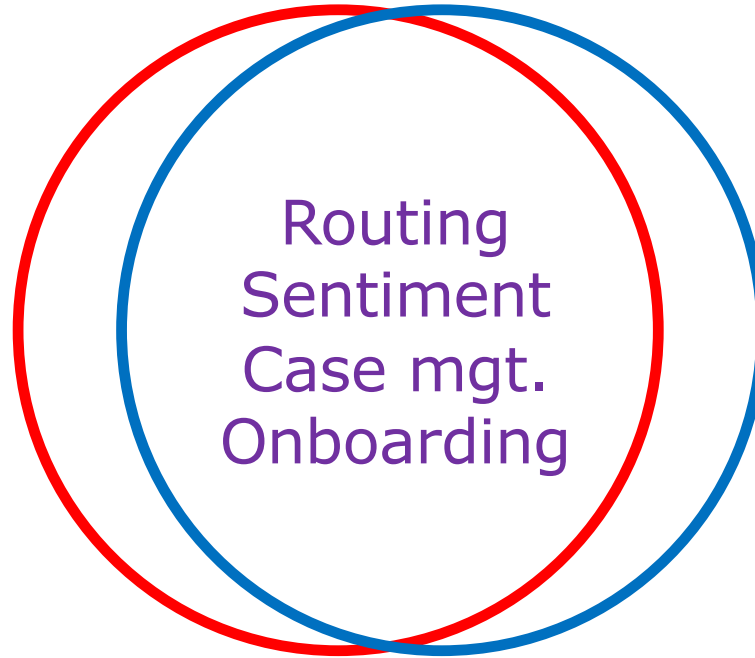 - Deep problem solving/differential diagnostic

FT Works
smarter support SM

Blending

Case management
Troubleshooting
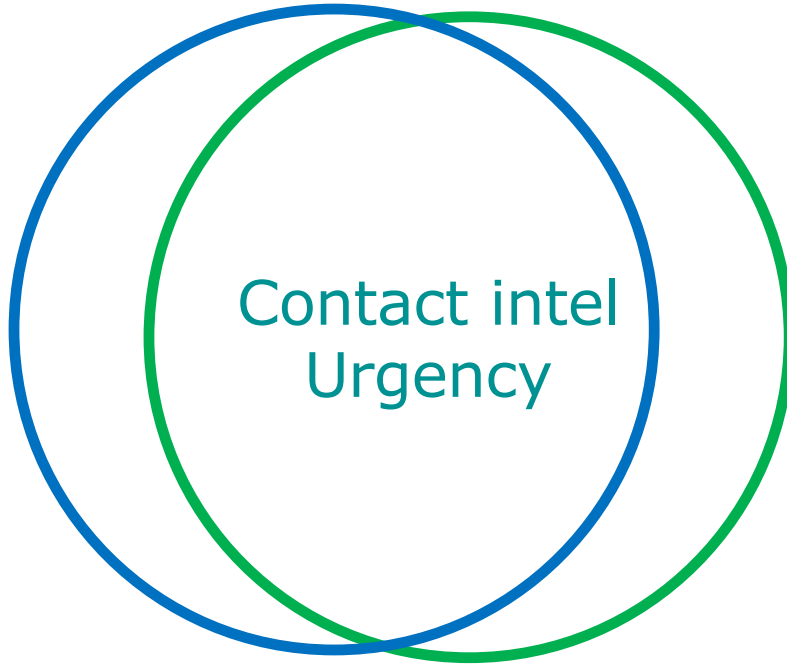
Contact intel
Urgency

Self-service
Training suggestions

FT Works
smarter support ℠

Blending

Escalation detection
Quality monitoring

Routing
Sentiment
Case mgt.
Onboarding

Contact intel
Troubleshooting

FTWorks
smarter support [SM]

AI for Product Marketing
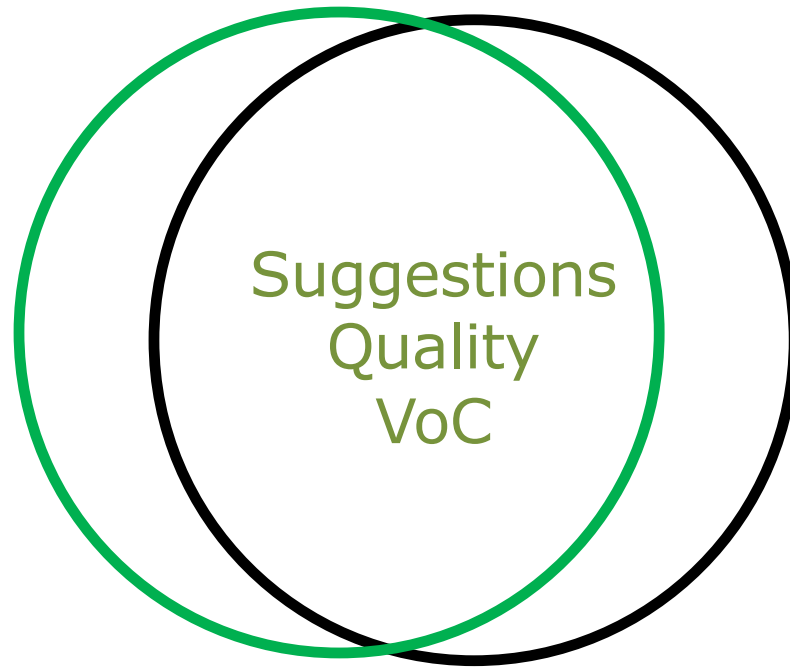
Quality

VoC
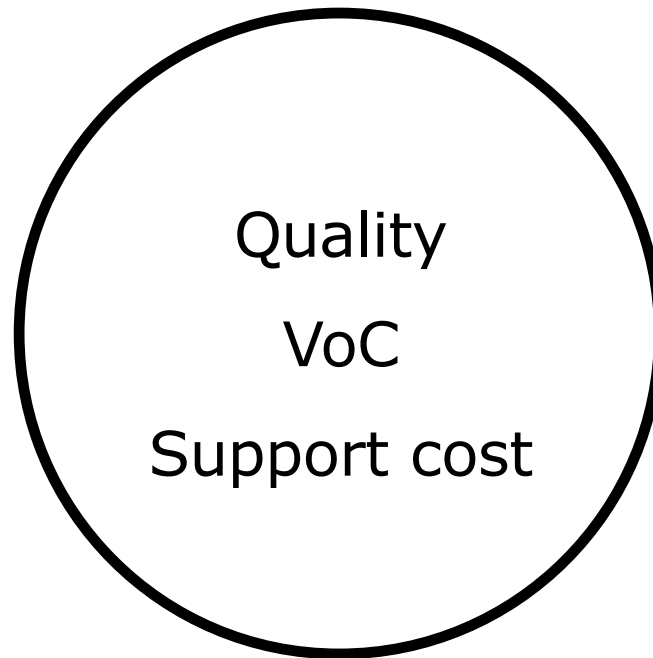
Support cost

AI for Product Marketing

- Why do customers contact support?
- What product changes matter most?
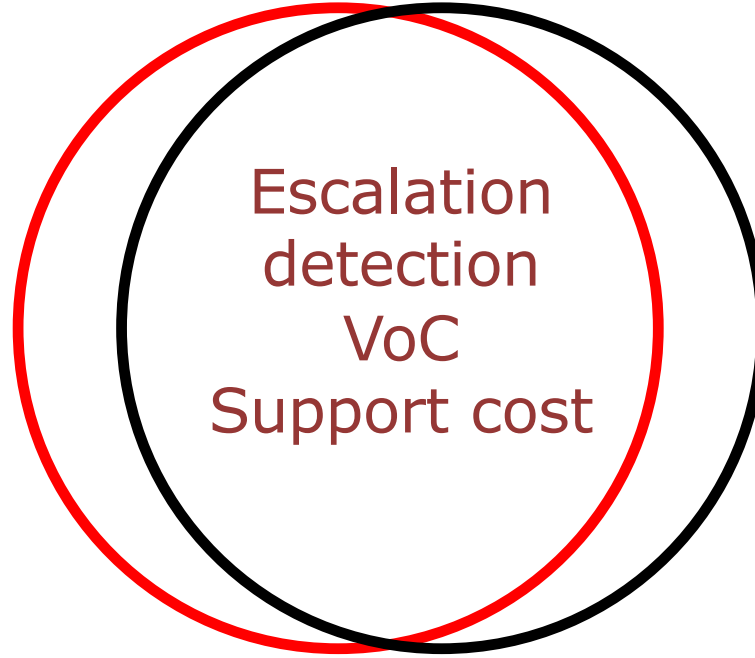- How much does it cost to support release 13.2?

Without manual tagging

FT Works
smarter support SM

Blending

Self-service
Urgency

Suggestions
Quality
VoC

Support cost

FTWorks
smarter support [SM]

Blending

Routing
Sentiment
Escalation detection
Quality monitoring

Escalation
detection
VoC
Support cost

Quality

FTWorks
smarter support ℠

- You need a large set of training data
- You need to understand the data and the business deeply
- Classification matters

FT Works
smarter support SM

- Confirm your goal(s)
- Develop a model
  - Vendor
  - Your own
- Train the model
- Enjoy

FTWorks
smarter support SM

??

FTWorks
smarter support SM

Thank you

FT Works
smarter support ℠

Francoise Tourniaire

FT@ftworks.com

www.ftworks.com

(650) 559 9826