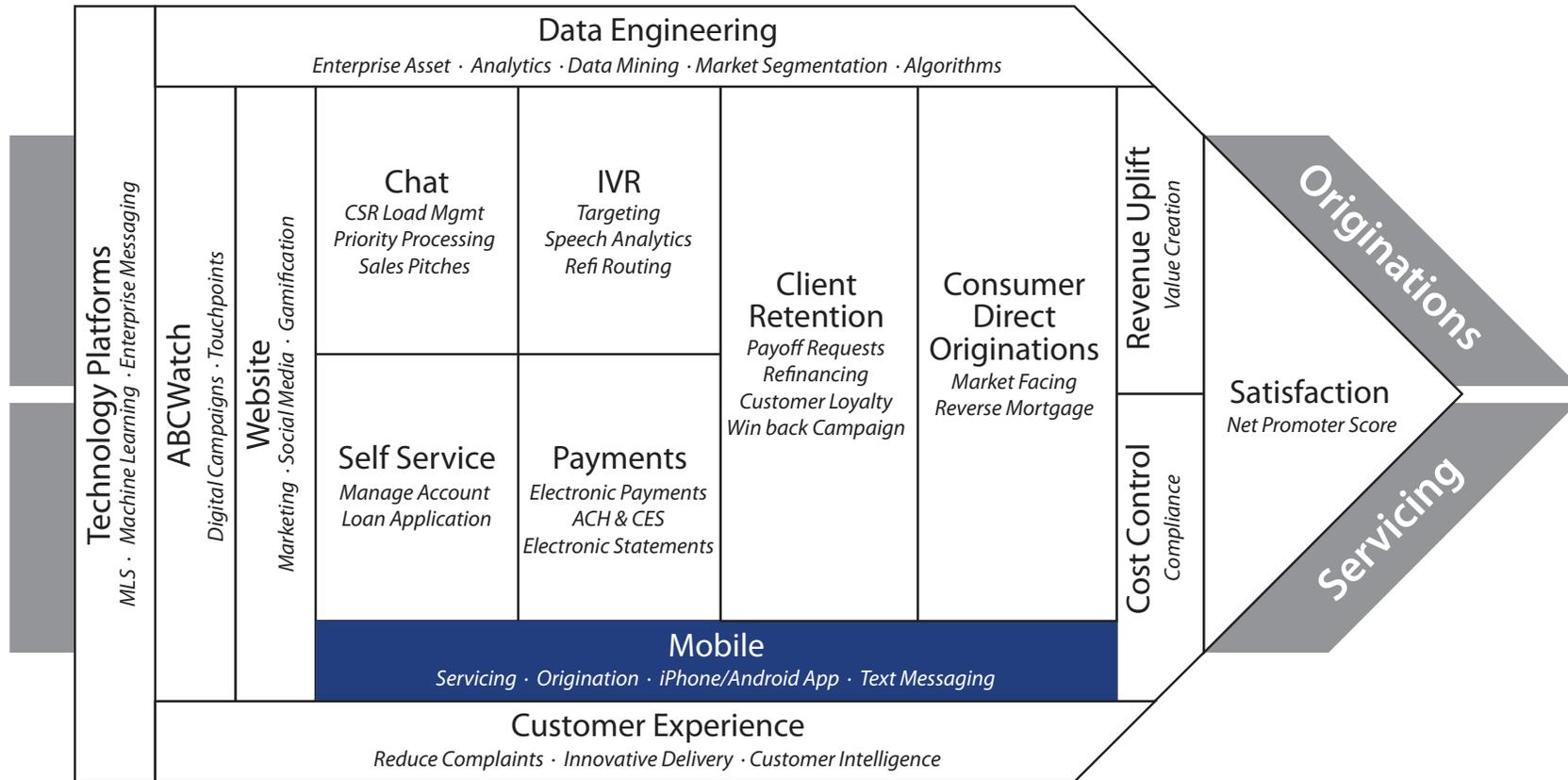


ABC

OMNI-CHANNEL TECHNOLOGIES



Omni-channel example:

1. Data Engineering determines who is likely to refinance their home.
2. ABCWatch calculates refi savings and different options and sends email
3. IVR gets loaded with a refinance message for that audience
4. Chat invitation gets activated next time customer logs in to discuss refi offer
5. Customer Experience analyzes conversion rates and messaging best practices
6. Payoff requests automatically activate ABCWatch email, chat invite and IVR message
7. Website presents ABCWatch information on login and it encases chat window
8. SMS text message sent to customer on refi opportunity

*I.T. in unique position to see and work across all channels
 I.T. can look for synergies, costs savings and revenue opps*

*Individual channel business leaders (design and implementation approvers) will receive a copy of all decks done for all channel projects
 (can help identify synergies and opportunities)*

ABC

Mobile First

How will the ABC app stand out in the crowd

Text messaging is the most widely used app on smartphones

52% open emails on smartphones, 48% open financial services emails

Texting and push notifications will remind users of the app

57% use their phone for online banking

44% use their phone to look up real estate listings

30% take a class or look at educational content (e.g. how-to videos)

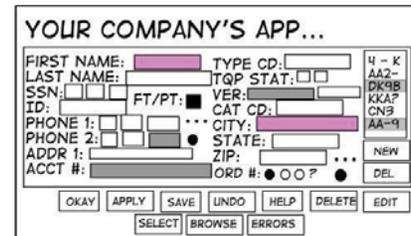
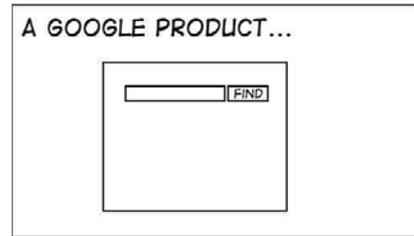
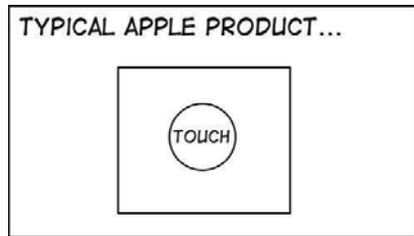
Users already learn, bank and search for homes on their cellphone

49% experience content not displaying properly on their phone

46% have downloaded apps that are not working properly

The ABC mobile app must be bullet proof

It has to be a very simple app to use...



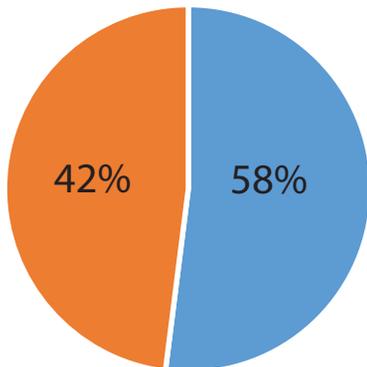
Mary starts as a computer...



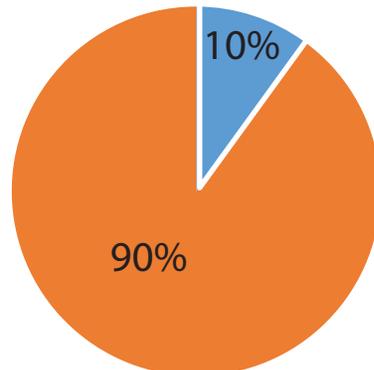
...taken over by human, if needed

It has to be more than just an app...

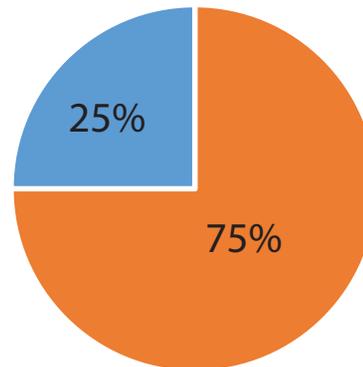
Over 1MM apps in both Google Play and iTunes, but the upper number of apps used by anyone in a month is ~25



42% of all app usage is spent on a user's favorite app

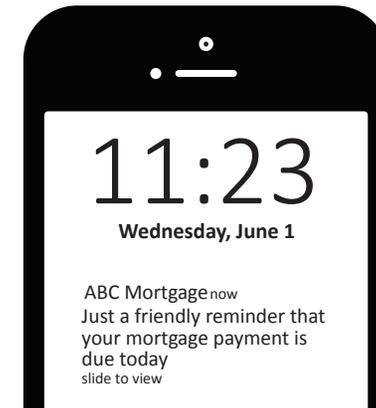


9 out of 10 top apps are from Facebook, Google, Apple, Yahoo, Amazon and eBay



75% of all mobile app usage is concentrated on 4 apps

Push notifications...



...and text messaging

2008 chosen to contrast the web before mobile became popular (first iPhone released in 2007)

Mobile ≠ Web: Web users (2008 study) visited 90 sites per day, 45% of these by following links from another site

This is being replaced by a handful of mobile apps

38% of smartphone users have more than 20 apps loaded on phone (7% more than 50)



50% of app users report they use **less than five apps** at least once a week

Only 29.1% of downloaded apps were retained for more than 1 day (**3.3% retained** after 30 days)

In the Google Play Store there are 23,830 finance apps (1MM+ total apps)

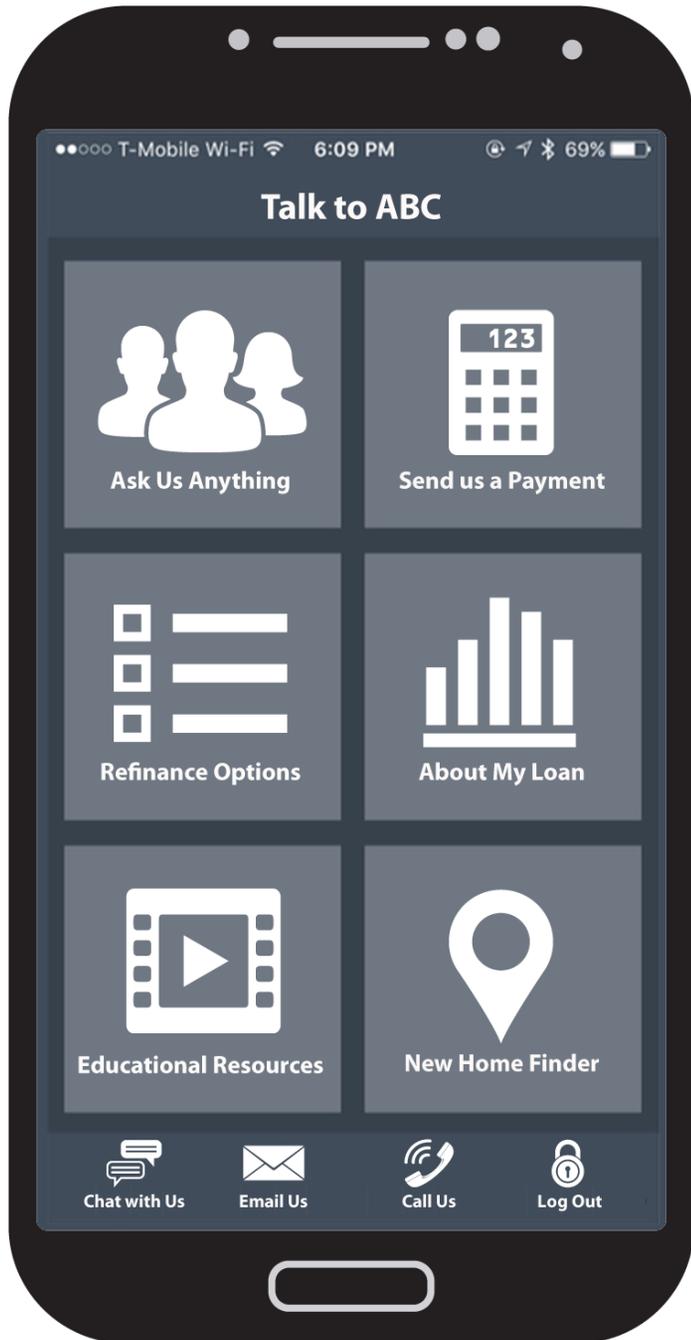
47% of all apps have been **installed fewer than 500 times** (90% less than 50,000 times)

Every customer touch drives user to download the app

IVR: Download the "Talk to ABC" app and chat with us while in line at grocery store
Website: Use the new "Talk to ABC" app to pay your mortgage with your cameraphone
Print material: Download the new "Talk to ABC" app and be entered to win X prize
ABCWatch: Use the new "Talk to ABC" app to try different refinance scenarios
IMP: Current customer? Download the "Talk to ABC" app to manage your loan
Marketing emails: Download the "Talk to ABC" app to speak with one our specialists
Filing a complaint: Thank you for your comments. Talk to us about it with our app "Talk to ABC"
Runs a **sweepstakes/contest** to encourage customers to download the "Talk to ABC" app

Critical: Drive customers to use chat or text messaging using every possible means

Chat gives us a detailed record of every utterance, analytics and future best practices



*Mobile chat will outperform desktop chat
Millennial customers will expect nothing less
<75 years of age can at least use text messaging*

Typical Month in Call Center

Abandoned calls	10,475.00
Average minutes before abandon	0.79
Abandon rate	2.70%
Average hold minutes	2.50

*Abandon rate should go down - customer can multi-task
Hold time reduced - CSRs can handle multiple chats at once*

Agent ACD Calls	368,454
Average talk minutes	4.56
Calls per hour	10.80

*Short calls mean issues could be handled by computer alone
"I need my escrow statement." "Go here." - Robo CSR*

Average agents per day	222.00
Average agent calls per day	76.00

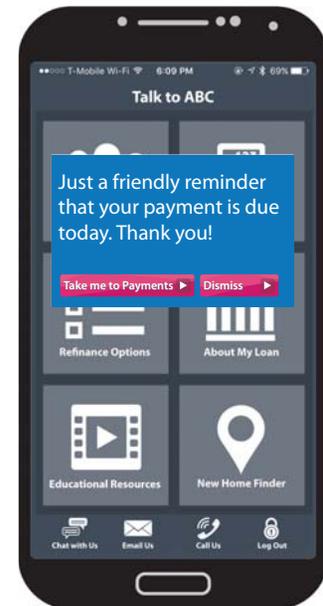
*CSRs get tired over time, frayed nerves, less patient
Will be less apparent in chat (hesitant to type frustrations)
Robo-CSR never gets tired and gets smarter over time*

Percent transferred calls	18.30%
Loan volume	2,137,739
Inbound percentage of portfolio	17.60%

*1 in 5 calls transferred - chat makes this process seamless
Robo-CSR can transition to human CSR with no interruption
Human CSR can transfer chat to specialist with no interruption*

** Example month used - October 2015*

In-App Alerts



ABCWatch alert! We just calculated you can save up to \$432/month!

Take me to Refinance Dismiss

You have an unfinished survey. Would you like to finish it now?

Take me to Survey Dismiss

Tell us how we are doing. We would appreciate your feedback!

Send us a Message Dismiss



Goal is for 80% of overall app usage to be “Ask Us Anything” - nothing simpler, ask us, we will guide you
 Computer will understand initial questions and try to respond
 If the computer cannot compose a response with more than 75% confidence, chat transferred to CSR
 Customer does not know the chat has moved from Robo-CSR to human (may see slight delay in handoff)
 Future releases will have voice recognition (e.g. Siri) so users do not have to type chats

On transfer from Robo to human to specialist, *customer does not have to “retell” entire story (chat logs)*
 In early releases of Robo CSR, human CSRs can watch the chat and take over at anytime...

[Check another flight](#)

Flight status

Flight 105 on Friday, May 13, 2016

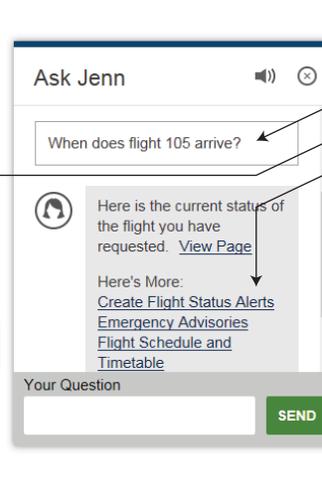
Status	Departure			Arrival		
	City	Scheduled	Estimated	City	Scheduled	Estimated
On time departure	Seattle	8:55 pm May 13	8:55 pm May 13	Anchorage Gate C5	11:20 pm May 13	11:20 pm May 13

Gates and times may change, please check the airport monitors for the latest information.
 Times shown are local for the cities listed and those in red indicate a next day arrival.
 Flight Tracker is available once flight is airborne.

[REFRESH STATUS](#)

[Mobile updates](#) [View reservation](#) [Awaiting seats](#) [First class upgrades](#)

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Ask Jenn is Alaska Air's virtual assistant
 Can ask “When does flight 105 arrive?”
 And be taken to exact page needed
 Ask Jenn also includes useful links

Most CSR questions appear to be simple
 i.e. calls take an average of 4 minutes
 Robo-CSR should be able to help a lot

Stage 1: Human Chat

CSR chat with customers via mobile

Record every utterance to
 train the chat bot

~10% CSR reduction

CSR can handle up to 4 chats
 at one time - higher productivity

From start of chat project,
 learning will take ~6 months

Stage 2: Human Support

Chat bot gives answers to
 CSR to review before sending

On first utterance, bot can give
 customer some helpful links

~15%

Chats go faster because CSR
 has answers at fingertips

CSRs will see chat support w/in
 6-12 months of project start

Stage 3: Bot Handles Early Chat

Robo-CSR tries to handle 1st question(s)

Hands over to human CSR if bot
 cannot understand customer

~25%

1/4 to 1/3 of all chats started
 and finished by robo-CSR

At 18 months from project start
 Robo-CSR should be handling simple chats

Stage 4: Chat bot

Robo-CSR can handle more
 complex answers and emulate
 a human CSR for ~75% of session

~35%+

50% reduction in CSR staffing
 attainable with virtual chat bots

Within 2 years of project start,
 Robo CSR handling 50%+ chats



Write your check. Take picture with cameraphone. Submit. Mortgage paid. Thank you.
 Would you like us to save your banking information (opt in)? You will not need a check next month.
 You have used mobile pay for the last 3-4 months. Would you like to sign up for auto-pay?
 Users can also schedule a payment for a future date.

Some customers will be nervous about automatic withdrawals, but will tell ABC when to withdraw (Sign up for auto-pay, but tell ABC date to pay)



Can save a lot of check processing time/costs!



This option can direct customer to IMP, but recommend pitching refinance before hand-off
 IMP is originations, Talk to ABC is customer service - this app should drive refi, even if IMP finishes it
 ABCWatch runs this entire part of the app, with all options available and sliders to make adjustments
 Customer can setup notifications - alert me when my savings exceed \$X
Icons can be dynamic - amount of potential savings can be displayed



See payment history
 Request a PIN reset
 Get payoff amount
 Pay toward principal / reallocate payment
 Loan modification request
 Credit score (this could be free?)
 Escrow and other statements



16% of all verbal complaints have to do with customers not understanding how to do or access something
 They get frustrated with complexity
 Find tutorials or (Robo) CSR can send links

Take pic of paperwork (e.g. loss mit), send securely, issue resolved, mail later



Property Price
 Home details, map
 Down payment
 Interest rate
 Property tax,
 Crime/schools
 Open House date
 Contact

Send to IMP app for loan application

User will need to download IMP app



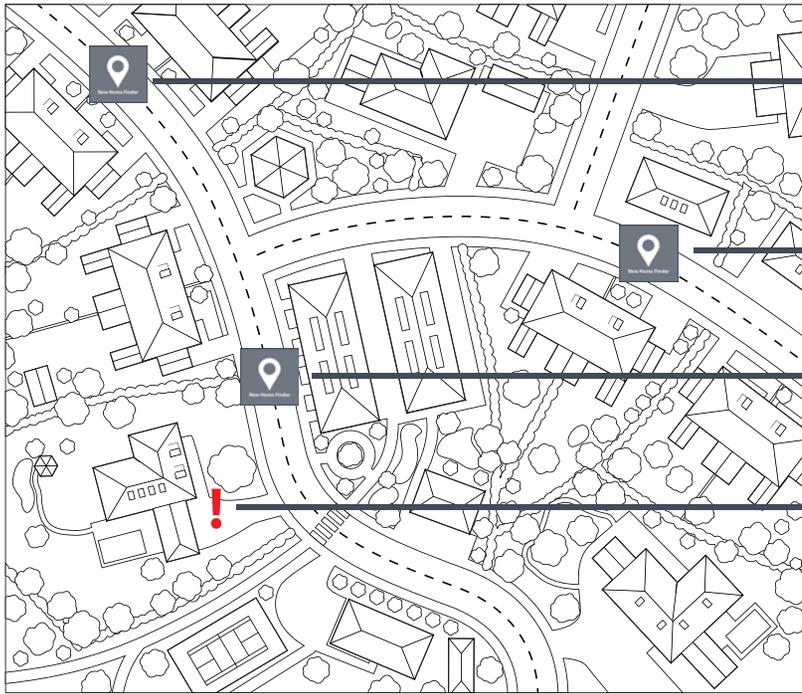
includes option to have ABC call the customer (e.g. Amazon)

Country Ext.

Your number () -

No need to know ABC phone number - dials from app
 Chat same as "ask us anything" - either will work
 Emails are **secure** emails, signed and sent via app
 Emails are stored in a "document center" for later recall
 Can save user name, but must provide password each time





Location services on by default when user installs app

In front of house for sale? Open Talk to ABC and get full listing record
No need to do a search, GPS knows you are in front of house

*Most of app may be custom built, this service could be **licensed** from vendor*

House not for sale? Go into home finder sitting in front of a house
Pulls up property tax record and gives you detailed information

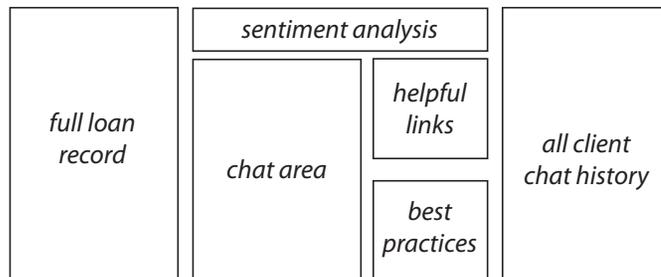
In front of school? Open app and get latest school report card
Or be at home and get report card alert as soon as it comes out

House within a 1/4 mile of yours is listed for sale
Within a day, you get an alert with full listing record

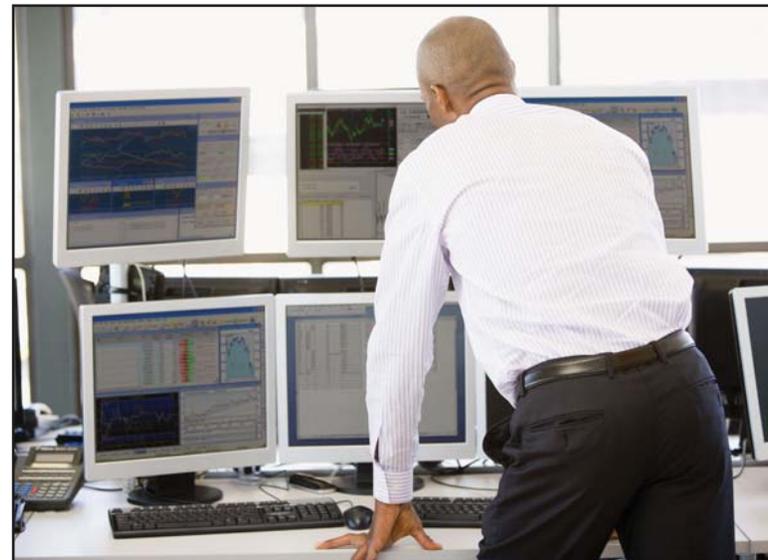
Wait, doesn't Zillow do this type of stuff? So what...

*The more ABC offers, the more traffic, the **more loyalty***

At the end of each day, all CSRs are evaluated and ranked
Evaluated on number of utterances, averages per customer, etc.
All customers asked to review CSR (including Robo) at chat end
Textual analysis correlates best practices to survey results

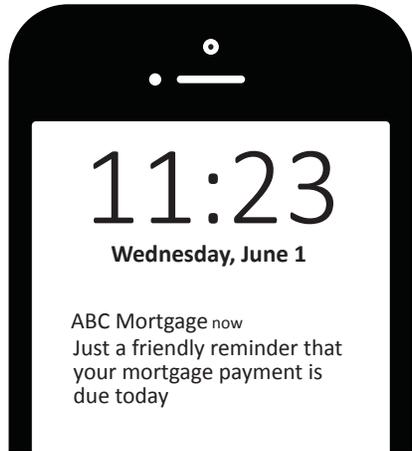


Even when CSR takes over, Robo-CSR makes suggestions
Links automatically loaded based on real-time conversation
Responses from best practice chats are shared with CSR
Sentiment monitored in real-time for CSR and customer
CSR has entire chat history, with search box

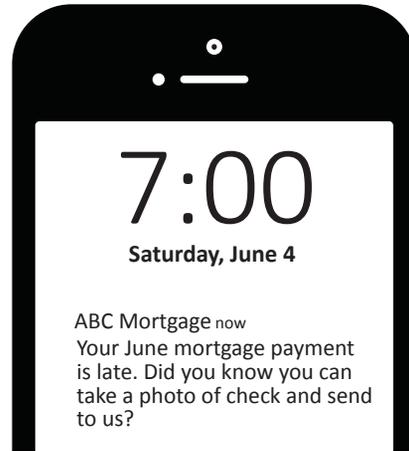


*Entire call center (chat) can be monitored from a single workstation
Management can join/monitor any chat at anytime
Certain keywords flag management for intervention (bad language)
A manager can cut off a CSR at anytime and take over conversation*

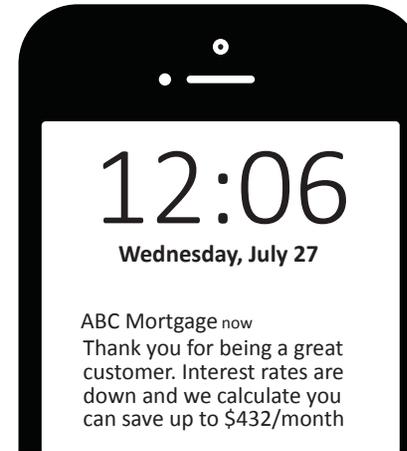
Installing "Talk to ABC" app not enough - need to engage users once on their phone



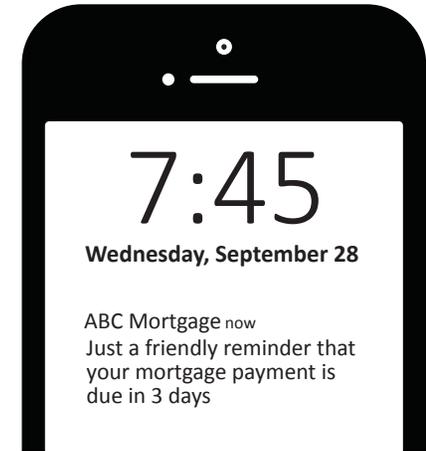
Only for customers who don't always pay on time



Push notifications can be used as part of delinquent process



~ every six months, send a refi offer via push



Consistently late payer may need an early reminder



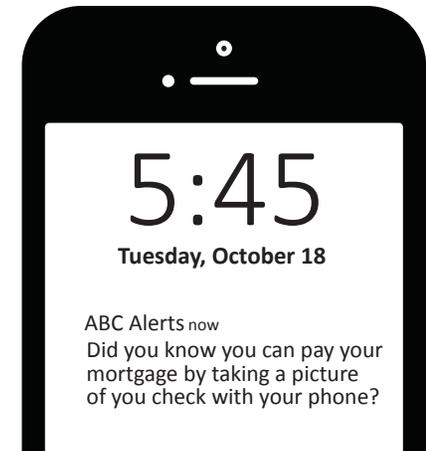
Value-add that will be remembered at new home time



*Value-add, good for branding
Customer may recommend app*



*Survey rates should go up
Can do in checkout line*



*"Did you know" messages
2-3 times per year*

Try to send 1-2 (proactive) push notifications per months, depending on loan status
Users can turn off push notifications by going into settings on their phones

Recommend customized push notifications and text messaging (via robust CRM system)

Virtual chat bot handles all outbound (marketing) communications between ABC and customer

If the customer sends a custom text, call center can be alerted to respond to text message (using chat console)

Customers are segmented into multiple groups, including on-time payers, late payers, non-performing loans, etc.

Always pay on-time

Sent after 6 months of on-time payments

ABC Mortgage: Wanted to reach out and say thanks for being a great ABC customer! If you ever need anything, don't hesitate to text me back - Mary Smith

Sent after 12 months of on-time payments

ABC Mortgage: You continue to be a great ABC customer. We appreciate you and your business. I am always here to help if you need anything. Just text me back. Thanks! - Mary Smith

Text messages are sent every six months reminding excellent customers they are important to ABC

Consistently 2-3 days late

Sent on the 1st of each month

ABC Mortgage: Just a friendly reminder that your mortgage is due today.

Every 3 months, add this...

ABC Mortgage: Also, did you know you can take a picture of your check and text it to us? Just make sure we can read everything on the front of your check

Think I did this right? Can you let me know if it did not work?

It worked. We will post your payment. Thanks very much!

Month after first scanned check

You sent us a photo of your check last month. You don't need to send us another photo, if you are using the same checking account this month.

If you would like to use this option, just send "Pay Now" and we will go ahead and process your payment. Thank you for being a great ABC customer.

Pay Now

Users "opt in" to sharing account info

Thank you. Your payment is being processed. Don't forget we have a Talk to ABC app for your phone, if you are interested.

Encourage users to download app

Consistent pay late

Sent 2-3 days before payment due

ABC Mortgage: Just a friendly reminder. Your mortgage payment is due in 3 days. Thank you.

Sent day payment is due

ABC Mortgage: Just a friendly reminder. Your mortgage payment is due today.

After 5 days late

ABC Mortgage: We have not received payment. Can you text us when to expect payment and why you are late this month?

Call center monitors text exchanges and can step into text conversation at anytime

All text messages should **change from time to time**, so it does not look like an automated text message

Consider using generic sender names (e.g. Mary Smith) that record/analyze the type of communication

All utterances are recorded for later analysis and to have at fingertips if conversation goes over multiple chats

Having historical chat logs very valuable

Can search for what customer is claiming was said

Critical: Don't overwhelm customers - use algorithms to decide when/if to send messages

Cost savings are significant

Mobile chat will exceed desktop chat - it's an extension of text messaging
Expect 15%+ call center savings, with chat running, but before robo-CSR launched

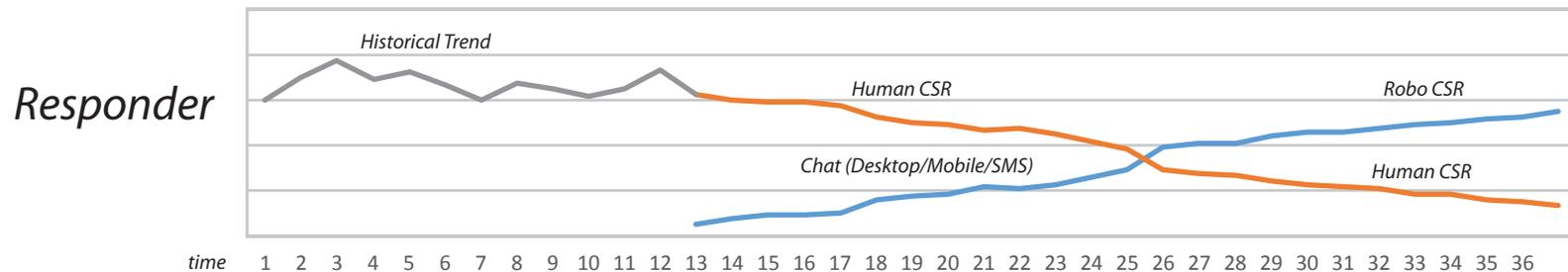
CSRs can handle up to 4 simultaneous chats, where calls are 1 to 1

Additional call center savings after robo-chat is launched

Most calls are 4-5 minutes long and can be handled by the computer alone

If Robo-CSR gets in trouble and cannot compose answer, seamless transition to CSR

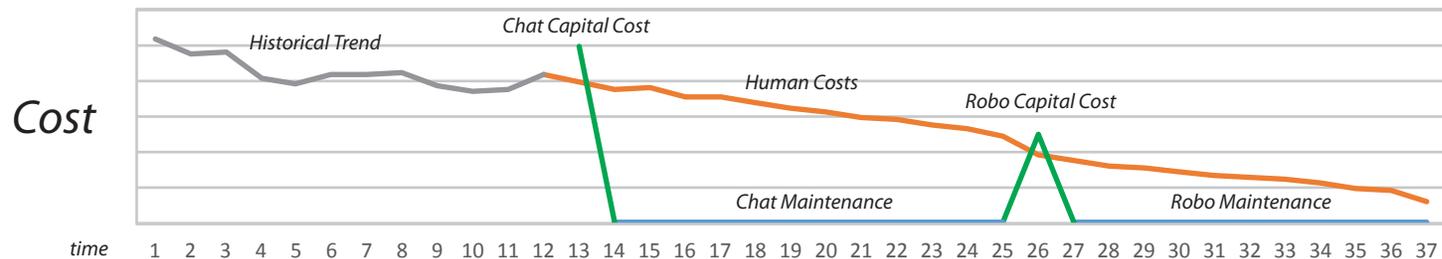
Originations Call Center will also see savings (push refi within the app/chats)



If customers don't download app, can still use text messaging (SMS) to communicate

Customers get 1-2 text messages from ABC per month - can add ABC as contact in phone

Human Costs versus Technology Costs



Technology is "write once, use many" - once **written**, maintenance costs **very low**

Should be able to run call center with ~100 CSRs within 24-30 months

Expect significant telephony cost reduction offset by slightly higher data costs

Complaints reduction will be significant

CSRs can get aggravated over the phone and add to customer frustration

Chat will bring more civility to the conversation - CSR feels more on record

Algorithms monitor every utterance for probability a complaint forthcoming

CSR on phone has to handle entire call, but with chat "Mary" can be 2 people + computer



Robo-CSR improves over time with more training and feedback

Robo-CSR can handle all the low hanging fruit - simple questions, simple answers

Can instantly detect frustration and transfer to specialist with **authority** to prevent complaint

Escrow, etc. may not be in call center, but can join chat from anywhere, as needed

Asynchronous vs Synchronous Execution

With calls, CSR has to wait for call to finish to take the next call (synchronous)

With chat, CSR can move to another customer while still working with original one

