WHAT IS A BOT?
HOW CONVERSATIONAL UI IS CHANGING TECH

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by MIMI AN

Table of Contents

01 /

INTRODUCTION

What's the big deal?

"Should I care about bots?"

If you follow technology-focused news sites and blogs, you've likely seen a [number](#) of [articles](#) heralding the [arrival of bots](#). And as the conversation continues to unfold around this emerging technology, it's hard not to wonder what to make of it. Many people don't even know what a bot is, let alone understand how or why they should be using it.

But the potential for bots is pretty enormous. If tech innovators and bot start ups have their way, there's a good chance bots will significantly impact your online life, and the way you do your job.

02 /
WHAT ARE BOTS?

Bots are defined as software designed to automate things that you do. But that definition on it's its own is not very helpful -- what does that actually relate to in real life? The type of bots getting the most coverage use conversational UI and interface with an existing messaging application. They help the user of the app find information or get something done in a seamless, automated way through text-based commands (think typing out: "Hey, Pizza Hut bot! Send me a large pepperoni pizza" and the pizza shows up at your door 30 minutes later).

In North America, the best known example of a messaging app is Facebook Messenger. Whatsapp, also owned by Facebook, features bot integrations, too. And the list doesn't stop there. In fact, there are a number of messaging apps and platforms -- Slack, Twitter, etc. -- investing in a bot platform and ecosystem. But for the sake of simplicity, our examples will focus on Facebook Messenger.

Time to connect the two concepts: Let's say a third party company, like Lyft, creates a bot that interfaces with Facebook Messenger. When a Messenger user needs a ride, she can summon the Lyft bot and order a car to pick her up directly through her Messenger app. In other words, she doesn't need to switch to the dedicated Lyft app to use Lyft's service.

Facebook hopes to entice more companies to build bots on its messenger platform. And why would companies want to do such a thing? Facebook's incredible reach and user base. With a bot integration, any company can provide services to over 900 million active Facebook Messenger users. And by creating its own bot platform, Facebook instantly made its Messenger app stickier -- who wouldn't want to order a pizza, book a flight, talk to a customer service rep, and chat with their best friend all on the same application? Thus, the industry freakout.

03 /

WHAT ABOUT APPS?

The App platform is in decline

The bot play is coming at a time when the app platform appears to be in decline. There are still plenty of apps, but according to analysis from Comscore, app fatigue has set in. There are 1.5 million total apps available now in the Apple Appstore, but in this increasingly crowded landscape, most smartphone users can't be bothered to add new apps to their roster. App downloads have slowed to a trickle in recent years -- today, a smartphone user downloads zero news apps a month.

FIGURE 1

App fatigue has set in

Average number of new apps downloaded each month per person

2008

10

apps a month

2016

0

apps a month
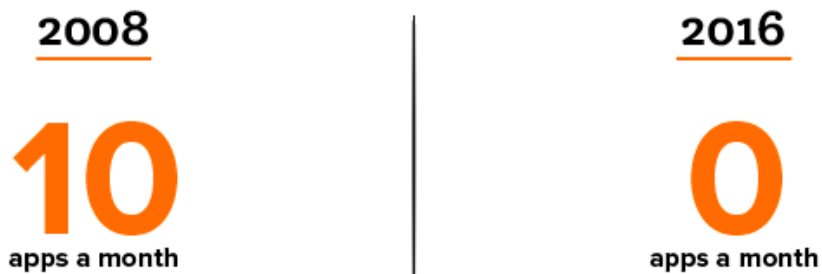
Source: Comscore

Comscore also calculated that 80% of a person's mobile time is spent in just three apps. And the the space is increasingly dominated by big players -- as of April 2016, nine out of the top 10 used apps were made by Google and Facebook. App leaders like Facebook, who want to guarantee that people spend most of their time in their apps, are placing big bets on aggregating content and collecting bot integrations to keep users active and engaged.

FIGURE 2

9 of the 10

most popular apps are made by

Google and Facebook

Source: Nielsen, as of April 2016

04 /

USE CASES FOR BOTS

Bots have major implications for Ecommerce, customer service, content creators, and business enablement companies.

If Facebook and other platform's platforms' bet on bots works out, the use cases will not only have a significant impact on users' lives, but they'll also open up a new channel for businesses to reach a large audience. Early players are already exploring the following use cases:

Ecommerce

1-800 Flowers and Spring have made it easy for customers to shop for their products via Facebook Messenger. Both companies created simple conversation bots that directs buyers to the right locations or products, depending on the nature of their request:

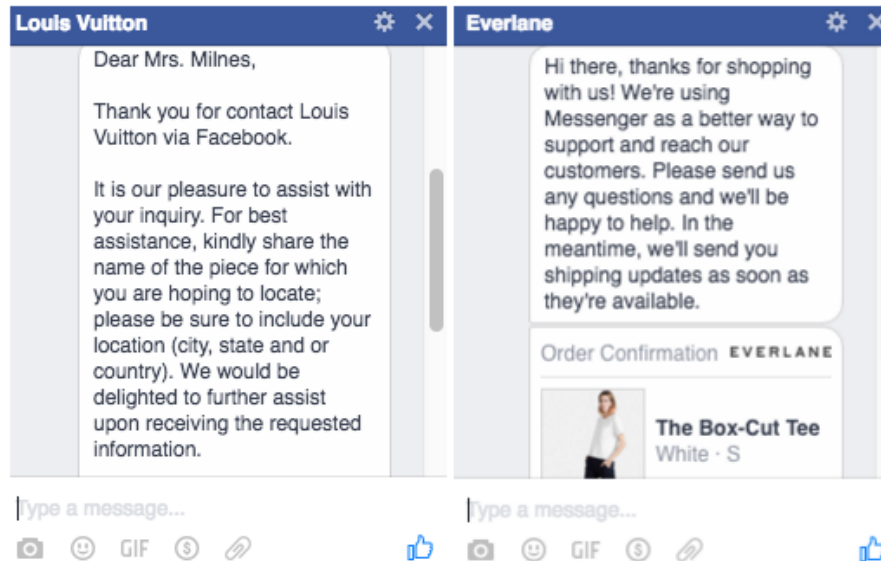### ECOMMERCE BOTS FROM 1-800 FLOWERS AND SPRING
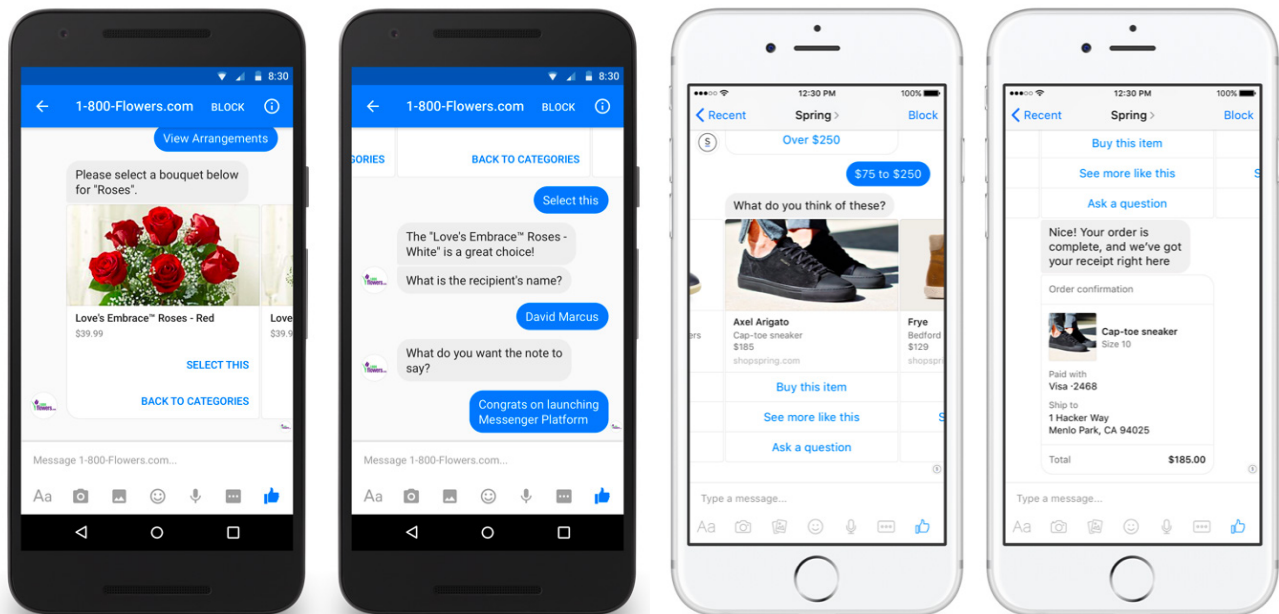
Source: Facebook

Customer Service

Brands can also extend customer service into the Messenger app. In this use case, the buyer experience is very seamless, as all the details of their transaction appear in the same conversation thread.

EXAMPLES OF CUSTOMER SERVICE INTERACTIONS

Louis Vuitton

Dear Mrs. Milnes,

Thank you for contact Louis Vuitton via Facebook.

It is our pleasure to assist with your inquiry. For best assistance, kindly share the name of the piece for which you are hoping to locate; please be sure to include your location (city, state and or country). We would be delighted to further assist upon receiving the requested information.

Everlane

Hi there, thanks for shopping with us! We're using Messenger as a better way to support and reach our customers. Please send us any questions and we'll be happy to help. In the meantime, we'll send you shipping updates as soon as they're available.

Order Confirmation EVERLANE

The Box-Cut Tee
White · S

Source: Digiday

Bot enabled customer service can extend to other verticals beyond eCommerce, too. In fact, even those dreaded interactions you have with your cable or internet provider can be simplified by bots, according to University of Toronto professor Joshua Gans. In an article for the Harvard Business Review, Gans recounted an interaction he has with a customer service bot from Rogers -- a broadband Internet service provider in Canada, owned by Rogers Communications. Gans noted that because of the historical record keeping on Messenger, he didn't have to restate his problem when a new service representative took over his issue. There was no need to re-enter account numbers when a different service agent picked up his conversation. On top of the ease of the interaction, Gans noted that the conversation felt personable and friendly, which can make a big impact on the overall customer experience.

CUSTOMER SERVICE INTERACTION FROM ROGERS

Source: *Harvard Business Review*

Content Distribution

Messenger users will be able to summon content on demand via the Messenger app. This will be yet another channel content creators can utilize to connect with their readers. But the platform is ad free so content distributors will have to consider how to monetize their bot integrations, if at all.

## CONTENT ON DEMAND FROM CNN'S BOT
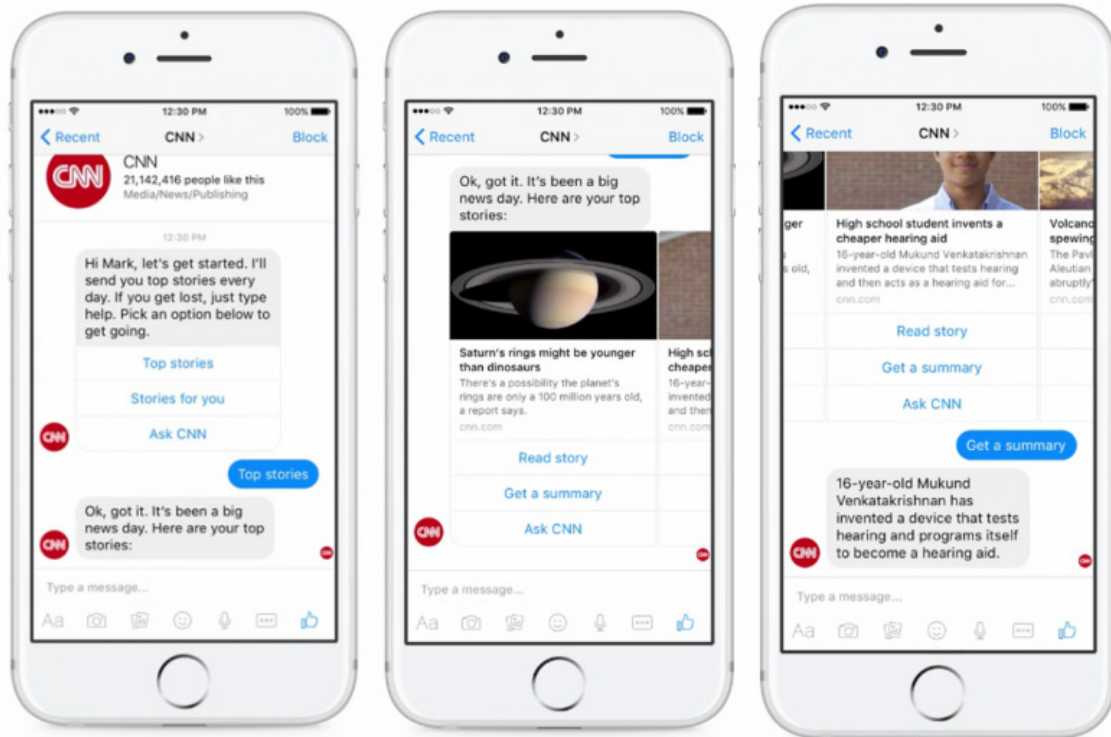
Source: Facebook

Specialized Search and Services

Rather than go to a search engine or a topic-specific app, Messenger users can interface with bots to get answers to their questions. Topics can range from the weather outside to diagnosing illnesses and everything in between.

## PONCHO'S WEATHER BOT AND MEDICAL ADVICE FROM THE HEALTHTAP BOT
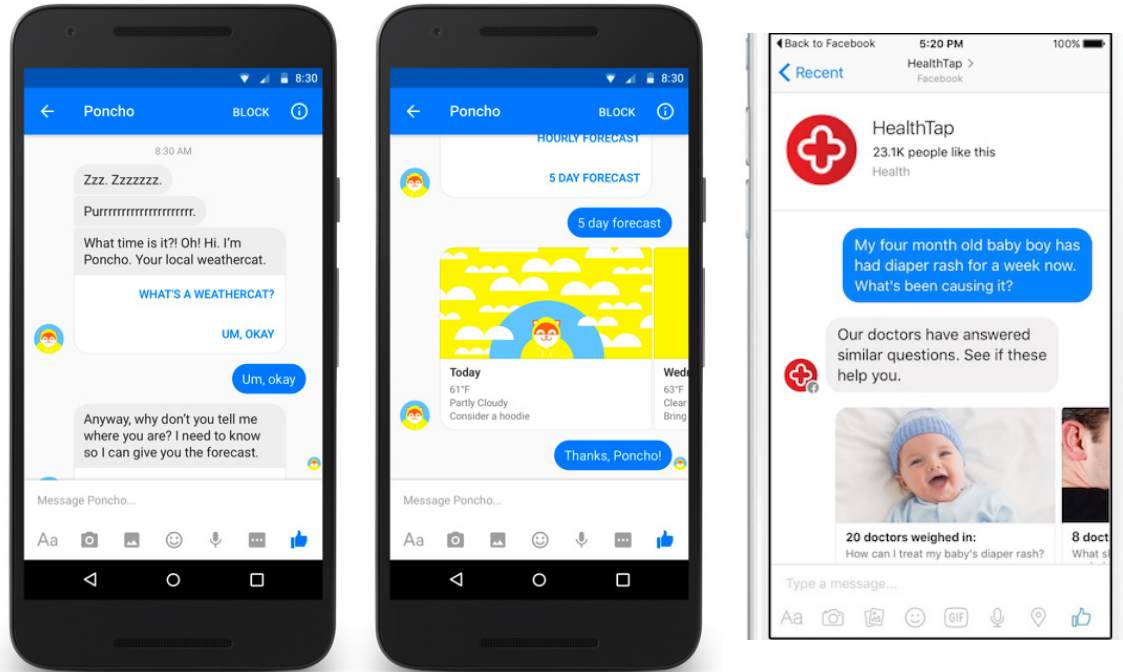
Source: Facebook and Klick

Promotional Content

Marketing teams have already started using the channel to create buzz and promote up-coming releases. Adam Rosenberg, a writer for Mashable, shared his conversation with a bot created to promote the video game Call of Duty. The game's publisher posted a You-Tube video that linked to the messenger bot and teased the potential to uncover a special game code if people interact with the bot.

## INTERACTIVE CAMPAIGN PROMOTING CALL OF DUTY
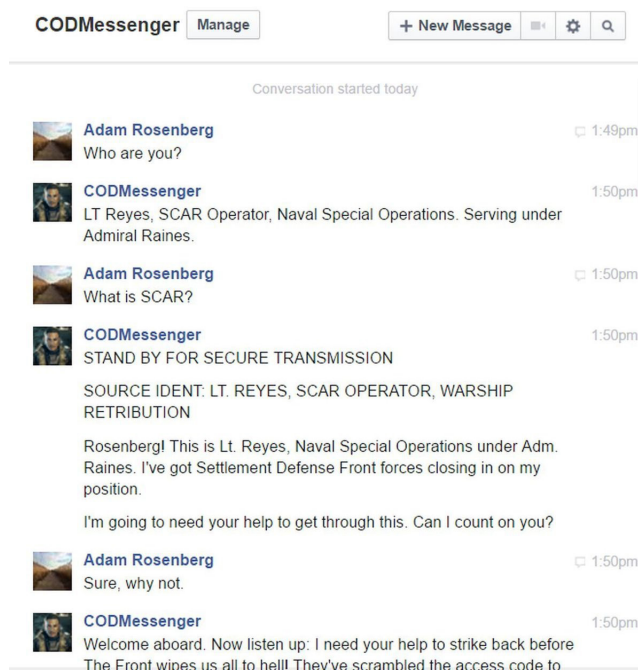
Source: Mashable

Enterprise/Business Enablement

This is a non-Messenger example, but it points to how businesses follow consumer behavior trends. Slack is a business messaging and communication platform that has taken off significantly in the past few years. And they feature an extensive bot store. A number of start ups have begun working on creating enterprise class business, marketing, and sales enablement bots to help professionals get their job done, including Troops, which recently raised $2.6 million dollars to connect Salesforce to Slack.

TROOPS' BOT AIMS TO CONNECT SALESFORCE TO SLACK
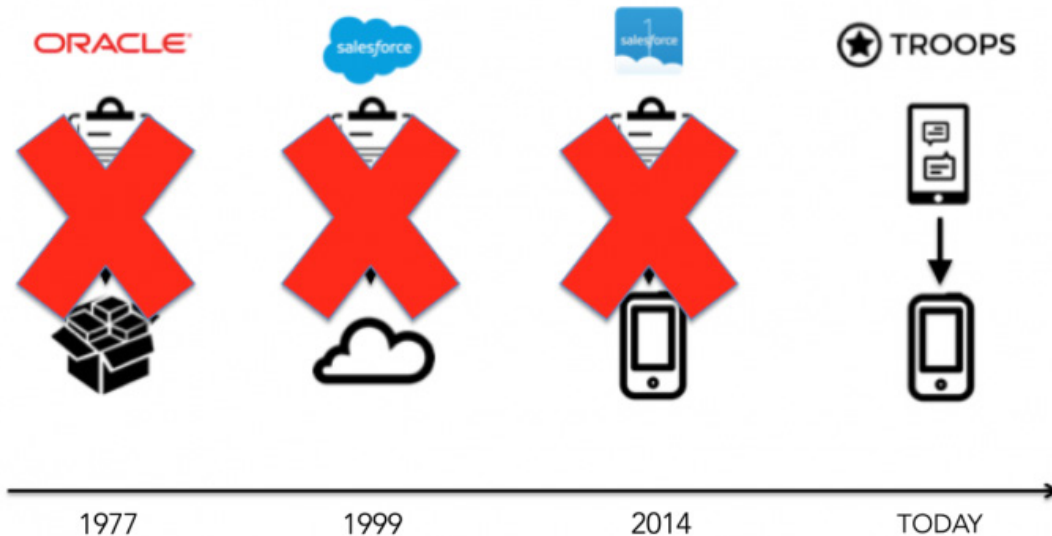
Source: Business Insider

As Facebook rolls out its Facebook at Work service, we expect similar business focused apps to appear on its platform. According to Facebook press releases, bots from Salesforce and Zendesk are in process.

05 /

PROOF POINTS: WHAT IS THE PLAYBOOK?

Facebook and other western vendors are largely replicating a playbook pioneered in China.

Facebook, Slack, and other messaging services based predominantly in the West are not breaking new ground when it comes to pushing bot adoption. In fact, they're mostly replicating a playbook pioneered by China-based technology company Tencent, who created a messaging app WeChat specifically with bot enabled integrations in mind. The strategy led to WeChat becoming one of the most dominant platforms in the region. WeChat has been staggeringly successful in Asia, but has limited penetration in Europe and the Americas. A select few organizations, with Facebook at the forefront, are now placing big bets on bots and racing to capture the North American and European market first.

The scope and breadth WeChat's bot integrations are impressive. WeChat's extensive bot ecosystem provide an example of what we may expect to see in the future if more service providers and business start integrating their services into bot platforms. Famed Venture Capital firm Andreeson Horowitz has an incredibly informative guide to WeChat's success and penetration in China, providing some interesting use cases that we may see in the future.

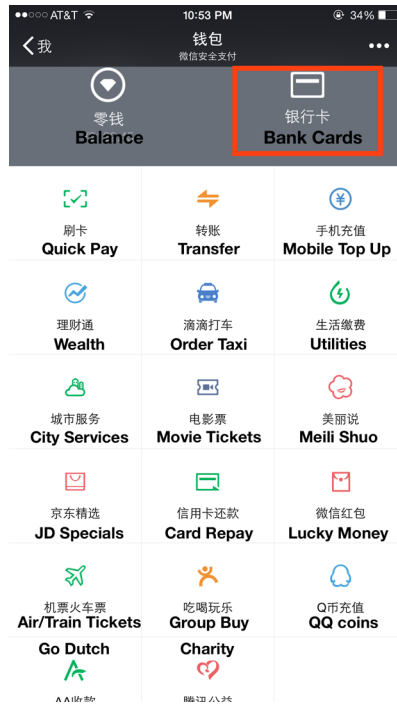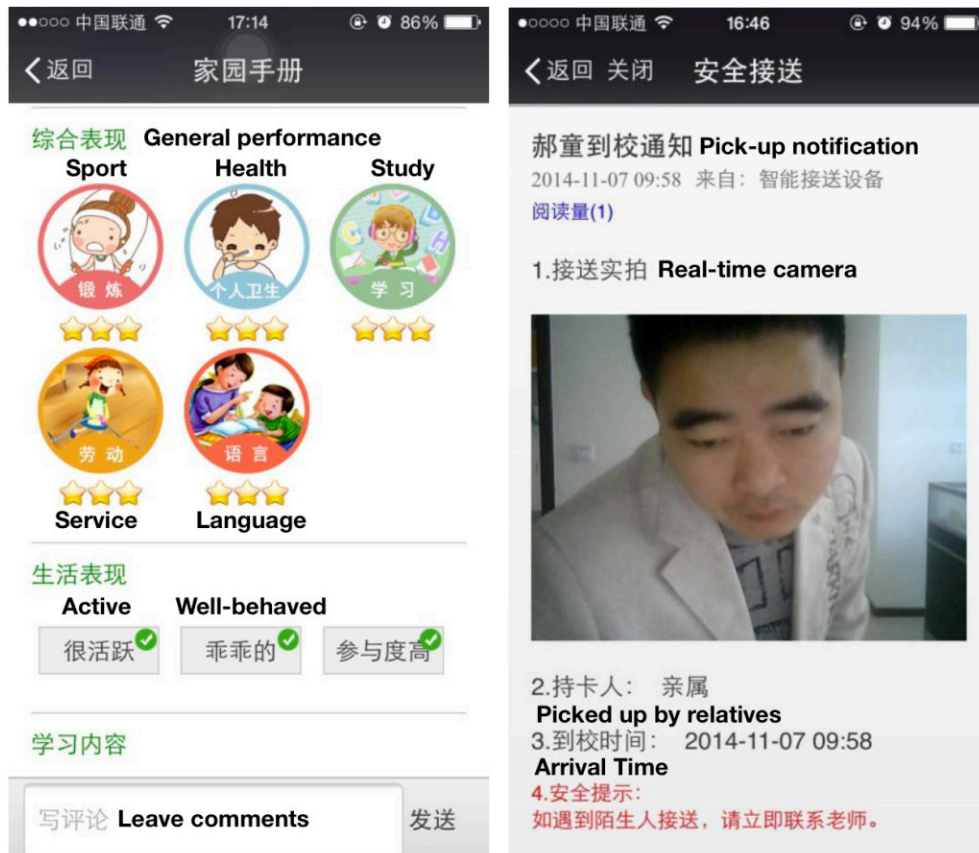## SCHEDULING A DOCTOR'S APPOINTMENT IN WECHAT

Source: Andreeson Horowitz

WECHAT'S BANKING AND MONEY TRANSFER INTEGRATION

Source: Andreeson Horowitz

USING WECHAT TO MONITOR CHILDCARE AND SCHOOLING

Source: Andreeson Horowitz

06 /
FINAL TAKEAWAY

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Andreeson Horowitz observed that bot-enabled apps like WeChat took off because Asia-based internet users prefer having apps that include multiple functionalities. In contrast, apps in the West developed as very specific, siloed tools that do only one thing. The big question is will western consumers adapt and embrace apps chock full of capabilities, or will they reject them in favor of point solutions? Obviously, companies like Facebook, Microsoft, and Twitter, among others, are betting big on bots, but there are some counterpoint opinions. Needless to say, it is still early -- many have noted that bot technologies have not been sophisticated and the rollout has been rocky. But now you're primed on bots, and you can watch (and make business plans) with us as the technology develops and adoption progresses.