On 5/5/14, 8:22 AM, "Sheryl Sandberg" <sheryl@fb.com> wrote:

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>Adding Fischer and Dan
>I love the basic vision - performance-based ads. Lots of work to do to
>make this happen so we need to prioritize, as Mark points out.
>I think figuring out the prioritization, especially on the
>business-facing side is important. We need to give businesses quick
>and easy - but important ways - to think of their Page or FB presences
>(whatever it might be) as their hub for mobile as there will be a huge
>push to be first in doing this and once businesses start investing,
>easier to get them to do more. The good news is that with 25M SMB
>Pages, we are ahead.
>One other point is that both our ads system and Google's have the
>property that we have built-in incentives for ads to be relevant and
>perform well. We need those for our ad delivery mechanisms too. I
>believe that is part of what mark is saying below - but worth calling
>out as this is so important.
>----Original Message-----
>From: Mark Zuckerberg
>Sent: Monday, May 05, 2014 1:09 AM
>To: Javier Olivan; Mike Vernal; Sheryl Sandberg; Dan Rose; Mike
>Schroepfer; Tom Stocky; Deborah Liu; Sam Lessin; Andrew Bosworth
>Subject: Thoughts on Messenger business ecosystem
>In this note, I'm going to sketch out how I think the Messenger
>business ecosystem will work.
>At the highest level, I believe Messenger will be a performance-based
>ads business. That is, I expect businesses to pay us to get people to
>perform concrete actions within Messenger or within their stores.
>When I say performance-based ads, I am specifically contrasting to two
>other potential businesses: brand ads and payments.
>I do not believe Messenger is a good medium for brands ads because
>people need to choose to open messages, which makes it inferior for
>mass reach of rich content, especially compared with our other products
>like News Feed and Instagram.
>I also do not believe our business will be payments directly, because
>charging for payments themselves will not allow us to price
>discriminate and receive a higher percentage of the value delivered like ads do.
>That said, I do expect payments and transactions to be critical in this
>ecosystem. A great payment system dramatically reduces friction in all
>transactions and therefore significantly increases the value of ads.
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>For example, consider the value of search ads on desktop vs mobile ads today.
>The mobile ads are worth far less because of all the friction to
>transacting: the landing pages are worse and payments are worse.

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>So even though businesses will bid to pay us for performance actions >like getting someone to buy something or getting someone into their >store rather than paying us for the payments directly, building out >payments and transactions is strategically important despite not being >our direct business. In fact, I think our ideal strategy is to give >away payments for free -- or at no profit margin for ourselves -- in >order to build up the transactional capacity of our network so we can >ultimately have the best performing ads business.

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>Like any ads business, the two levers to understand its potential scale >are how many ads you can show and how well the ads perform.

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>I'm going to start by outlining some of the touch points for people to >interact with businesses in Messenger. Further below, I'll outline a >framework for how many ads we can show at different stages in the >evolution of this business.

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>At the most basic level, there are three ways that I expect people will >interact with business content:

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>- A business can send you a message just like a person can today. >Alternatively, you can send the business a message and it can reply.

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>- We will have a discovery tab within Messenger where, in addition to >highlighting organic suggestions like people nearby, we can also >highlight relevant businesses, paid content or suggest apps to install.

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>- While you're in a thread messaging with a person, we can show content >inline if it's very relevant to your conversation.

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>I'll discuss how much inventory will be available in each of these in >more detail below, but for now I just want to call out that while the >first and third touch points will eventually make up the vast majority >of our inventory, they each need to have an extremely high quality bar >before we start inserting any paid content there. The discovery tab >will have much less traffic, but it will be very important for building >this ecosystem by enabling people to engage with businesses organically >as we build enough scale and quality to fill the first two touch points >with good content.

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>You can think about the discovery tab roughly like how we or Google >thought about our right hand column ads before putting ads in News Feed >or on top of search respectively. It's lower volume but enough to start >building quality and building the business.

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>Next, I'll go through each of those three basic touch points in a bit

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>more detail.
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The first touch point is message threads with businesses.
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>This branches into two very different experiences: a business messaging >you out of the blue, and you messaging a business and it replying to you.

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>The first experience -- a business messaging you out of the blue -- is >where I expect most of our business to be over time. However, it's also >one of the most sensitive experiences that we need to be careful with. >The whole value proposition of Messenger is that it is a high signal >channel where every message you receive has an expectation of intimacy >and urgency. If we start buzzing your pocket with ads daily, then we >could easily destroy this experience.

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>There are a couple ways around this over the long term. The first is to >not send you a push notification for these messages, so you just see >them in your inbox when you open the app but they don't interrupt you >otherwise. A "silent message" like this is a new behavior we'd have to >build since it doesn't exist today. WeChat and Line both support this >notion today. The second is to make sure the quality is high enough so >people actually want these pushes. My guess is that we'll eventually do >both: we'll have silent messages for most paid messages, but for ones >that are very relevant we will consider doing pushes.

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>As we phase these in, we'll need to make the product perform such that >most businesses pay on a per-action rather than per-impression basis.
>The basic math of this is that even in the limit there will be so many >fewer impressions here than in News Feed < both because total time >spent is lower in Messenger and because the intimacy of the product >affords fewer intrusions < that if we only support the same kinds of >advertiser value propositions we do in News Feed, this will never be as >big of a business for us as we hope.

>

>Instead, I think we will need to do the hard work to make payments and >offers work frictionlessly inline. This can create much higher value >impressions < more similar to search < that take advantage of the >intimate and interruptive nature of the environment. For example, a >business will be able to message people with specific offers when >people are nearby and people will be able to redeem them inline, >include paying right there.

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>Even though this is fundamentally structured as an ads auction, a large
>percent of the work will be doing everything necessary to make the
>payment experience seamless so these offers actually convert and
>deliver value for both people and businesses. It will be easy for us to
>underestimate the amount of payments work required here compared to ads
>work since we have historically focused on ads rather than payments,
>but I expect there will be a very deep thread of work to do to make
>this payments experience integrated enough < both into people's

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>accounts and businesses' workflows < that this experience really works end to end.

>

>If we can pull this off, then we can enable experiences like you're >walking down the street and get a notification for a personalized offer >to a nearby shop based on your identity and history there. You can open >the notification and tell the cafe or store what you want, pay inline, >and have it ready for you as soon as you walk in, all while receiving a >discount and building a profile to have better personalized experiences >in the future.

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>Interruptive examples like this may be the long term, but before we get >there we will likely want to explore silent messages first since >they¹re less disruptive. These can still be a good testing ground for >inserting relevant nearby content when you¹re in the app.

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>Regardless, even silent messages are disruptive to the high signal and >intimate feeling of the product today, so I wouldn't even start there. >Instead, I'd start by building person-initiated threads with businesses >and over time work up to enabling businesses to message people out of >the blue.

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>That brings us to the second experience -- you messaging a business and >having it reply to you. In the Messenger business ecosystem, a thread >with a business is the equivalent of a page on Facebook. It will be >relatively low frequency that a person visits this thread -- just like >it's relatively low frequency that a person visits a business page >directly -- but it's a fundamental part of how businesses exist in the >ecosystem and an organic way that people can interact with them.

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>The next question is how will the business actually reply to messages?

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>The naive answer is that the business owner can reply when they get >around to it. I think we can support this behavior, but this is very >slow and not a great experience for the person messaging the business.

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>Instead, I think we should build an automated system that understands >basic natural language so that business entities can respond >automatically and instantaneously to people.

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>This would enable businesses to respond to both informational questions >like "Are you open now?" as well as actionable questions like "Can you >make me a tall mocha frappucino?". In the first case, the business, >could just answer with the information. In the second, ideally this >would then ask the person to pay inline in the thread and then tell a >barista to start making the frappucino so it would be ready as soon as >you walked into the Starbucks.

>

>There are a few reasons this is a very powerful new way to interact >with businesses, especially local businesses. First, everyone knows >language but people hate calling businesses, so texting is a natural

>way to interact that doesn't require learning anything new. Second, the >payment experience can be stored and optimized, which takes a huge >amount of friction out of these interactions, especially compared with >web-based interfaces or other apps you'd have to install. Third, most >businesses you want to interact with will be on Messenger eventually, >which is vastly preferable to using a large number of different apps.

>I expect that when you want to interact with a business, you'll search >for them on Messenger and then begin a message thread with them. Before >you send a message, I imagine each business will have some default >message that starts every thread with them. This default message can >outline what things the business knows how to do on Messenger, like >order a frapuccino, buy tickets or so on. This message can also contain >structured links to different functionality directly, so you can do >some things without having to type any text at all. We should look at >what others have done here, like WeChat, for example, has links to >inline ³stores² that graphically list the business¹s inventory and let >you browse and purchase inline.

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>You'll also be able to type whatever you want, and we'll have to build >a system that is smart enough at understanding your input and easy >enough for businesses to configure for themselves that we can take your >input and map it to what the business knows how to do, or at least come >up with some other intelligent response.

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>It will be difficult to build a good natural language system like this >and it will require real investment, but it should be possible. The >technological advantage we'll develop doing this will also be a >competitive barrier for other messaging products like WeChat that try >to compete with us for either consumer attention or business dollars.

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>Over time, it will be possible for our systems to deliver more nuanced >responses. It will also be possible to deliver types of replies that >don't make sense in traditional search- or web-based interfaces, like >time-delayed replies or follow-on replies later when more information >becomes available. You should be able to ask a business a question like >"tell me when a table becomes available" and in addition to being able >to reply immediately to confirm it will do this, it should also be able >to message you at a future point when it has the answer to your question.

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>It's worth noting that time-delayed responses to person-initiated
>messages could be a great way to ease people into getting push
>notifications when businesses message them. We should probably ease
>people into this use case by building organic use cases like this
>before enabling purely paid messages that send push notifications.

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>In addition to being able to message businesses back and forth with >text, we will want the ability to send money and other kinds of >structured data

>-- like loyalty card data -- as well. These kinds of interactions will >be necessary to make sure that businesses actually get value from >interacting with people on Messenger, especially since the branding

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>value will be relatively minimal.
>Payments as a primitive is simple to explain but will be very
>complicated to fully implement. Within a messages thread, anyone should
>be able to either send money to or request money from anyone else.
>Within the UI, this would take the form of another kind of content you
>could attach to a message, just like a photo, sticker or voice clip.
>To make this really work as a social behavior, we'll need to create a
>social norm around people being comfortable sending money through
>messaging. To make this work as a product, we'll need to make it
>frictionless and cheap, which means we'll need credentials on file for
>large percentages of people. Over time, we'll need not only credit
>cards but also bank account information so we can make transfers cheap.
>A whole thread of our strategy is going to need to be focused on
>increasing payments usage and helping people add credentials. We'll
>need to support use cases like person-to-person money transfer to help
>establish this norm, even though it won't be a direct revenue driver
>for our business. As part of this, I imagine we're going to need to run
>constant promotions like WeChat has to encourage people to pay and
>transfer money in different ways -- as gifts on new years, paying for
>taxis, investing in mutual funds, etc. This is a very deep thread of
>work that will require a lot of work, but will ultimately be necessary
>for making the ads and interactions that businesses pay for valuable.
>
>In addition to investment of people on our teams and financial
>resources, we'll also need to dedicate real estate within our app to
>this promoting interactions with payments. At a minimum, I expect
>payments will be a permanent item within the message composer in
>message threads, a major part of the real estate on the Settings tab,
>and initially a large number of the promotions and recommended content
>on the discovery tab. We<sup>1</sup>ll also need to do significant work on the
>business side, probably integrating into our own business-facing UIs
>like Page Manager as well as making sure we support businesses' own payment systems.
>Another example of structured exchange between people and businesses is
>loyalty programs. We should be able to build the best loyalty programs
>in the world based on our understand of people<sup>1</sup>s identity and locations
>coupled with the business interfaces we<sup>1</sup>ve built. If you can message a
>business to initiate a loyalty card / relationship and then ever time
>you go to that business from then on you get a message updating you on
>your status and available offers, that could be very compelling.
>Of course, a lot of the nuance of designing business threads is going
>to come down to important details around how interruptive they can be,
>what they need to do to get permission to be interruptive, how easily
>you can mute them or turn them off, and so on. These rules can evolve
>over time, but making sure we get them right at each stage will be very important.
>Finally, it1s worth noting that even though everything I1ve discussed
>here has been in the context of businesses, these kinds of business
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>threads should be available to anyone who would currently have a page >on Facebook today, including celebrities, politicians, bands and other >types of entities that we don¹t typically think of as businesses but >who produce important content for our ecosystem.

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>After message threads, the second business touch point is the discovery >tab.

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>Imagine this tab as a new second tab in the app's main navigation, >between Recent and Groups.

>

>The primary purpose of the discovery tab is to introduce people to new >people, businesses and content that can improve their messaging >experience.

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>This is important because people will not just wake up one morning and >start messaging businesses. First, we need to introduce the idea of >businesses within Messenger to people and show people how they can be >useful. The brute force way of doing this would be by starting to >inject business content into the main inbox that the person had not >directly asked for yet. That seems dangerous and unnatural, so the >alternative is giving people a space where they can discover this >business content on their own and start messaging businesses themselves >rather than just having businesses start messaging them out of the blue.

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>Of course, this presents its own problem: why would people ever go to >the discovery tab? The answer is that we have to include content here >that is relevant not just to the business ecosystem, but also for the >social experience people are looking to have with Messenger.

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>For example, you could imagine an early incarnation of the discovery
>tab being called Nearby and focusing on people and business that are nearby.
>We could use Aura to show friends nearby, highlight friends visiting
>from out of town and potentially even show other people nearby if they
>want to meet new people -- which is a very popular feature on WeChat.
>We could expand it beyond Nearby over time to include friends with
>birthdays or major life events, etc. I think this tab would quickly
>become more useful and more used than the static Groups and People
>tabs, which is why I suggested we'd place it second in the nav above.

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>Once we build an experience here that is organically useful, the second >stage is to insert business-related content to educate people about the >value of the business ecosystem we're building. We could highlight >businesses that can do useful things over Messenger and get you to >engage with those first. Perhaps we'd start by making partnerships with >a few chains or larger companies to increase the coverage of people who >would have relevant business content here.

>

>For example, we might make a nationwide deal with Starbucks that >enables you to order drinks through Messenger. You could tap on

>Starbucks in nearby and it would create a thread that would sit in your >inbox from then on. When you first open the thread, you'd see >Starbucks's default message and maybe some structured menu items, and >you could tap or type to order something, pay inline, and then when you >show up the barista will have your drink ready and hand it to you, >knowing who you are because your identity shows up on an iPad at the cashier.

>

>Beyond Starbucks, another good example could be ordering a cab. This is >worth mentioning because it's how WeChat started building up their >payment base, and we are currently in discussions with Uber about doing >something similar with them. That said, I don't think WeChat made this >a great experience beyond just sending you to the taxi app, so there's >a lot more we'd want to do here as well. I'll get into that more below.

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>Initially, I expect we'd highlight these businesses on Messenger for >free or very cheaply. But once we have a good number in there, then the >third stage of evolution for the discovery tab is to turn this into a >market and start charging for paid placement in addition to showing >good organic people and business content.

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>As I said above, the discovery tab is like the right hand column of >Facebook or Google. It will be enough volume to get some interesting >behaviors going within the ecosystem and to start building the >business, but given the much smaller volume of visits compared the main >inbox, this will never turn into a huge business by itself. This >roadmap by itself is a stepping stone to the main business of >interacting with businesses in the main inbox by getting people used to >engaging with businesses in Messenger.

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>One open question is whether we want to use the discovery tab to only >promote business interactions on Messenger, or whether we want to run >more general ads here, including app install ads.

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>The argument for app install ads is that it's easier and more
>understandable for businesses, especially early on. For example, the
>taxi integration that WeChat did was primarily just about driving app
>installs to the taxi app rather than doing much actual integration.
>It's easy to imagine how we could make some money adding app install
>ads, especially early on, before we had a full business ecosystem.

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>The argument against app install ads is that any space we allocate to >them has a large opportunity cost against building the business we >eventually want in the main inbox. Any app install ad that sends a >person to another app is a wasted opportunity to educate people on >interacting with businesses in Messenger. Arguably, WeChat is stuck at >the stage of running ads in a secondary discovery tab because they took >the easy money and never built out a full enough ecosystem to be able >to monetize the main inbox where most of the traffic is. They're still >doing at a bit more than ~\$3 per person annually, but our goal is to >reach the monetization levels we see in News Feed of greater than \$10 >per person, if not more.

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>There are other types of content to consider, like stickers or >in-message games. These could help us make money, but they will also >have the property that they make Messenger better for people and get >people more invested in the product. So these are a different kind of >tradeoff and opportunity cost that we'll have to weigh when we get >there. It's easy to say these things are silly, but I think this is how >WeChat and Line make 30-50% of their revenue today.

>My guess is that we'll want to experiment with all of these things but >will need to be careful. We'll need to be disciplined about starting >off by building a valuable people-centric consumer experience, then we >can add some business content with the goal of educating people that >you can have good business experiences within Messenger. Only after >these two should we really think about adding other content and making >any real money from the discovery tab itself.

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>After message threads and the discovery tab, the third business touch >point is inline during message threads with people you¹re talking to.

>This is different from the ecosystem of interacting with business >entities described in the first two touch points above because in this >case you're not actually communicating with a business.

>Instead, this plays on the technical work we're going to have to do to >understand the context of messages in order to support automatic, >instantaneous replies from business for the above use cases. Once we >have the technical ability to do this, we can use it to show relevant >context in other places as well.

>The basic idea here is that if you ask a friend a question as part of >your message thread with them and we know the answer, it could be >useful for to show you the answer inline in your conversation. For >example, if you ask a friend if a movie is playing or when an event is, >we can quickly add that information to the thread. If you ask your >friend if they want to get dinner but you don¹t know where to meet, we >can also show suggestions inline.

>Intuitively, this seems like it would be useful, but there's a very
>high quality and relevance bar before this becomes annoying. It would
>be very easy to create terrible experiences by inserting the wrong
>information at the wrong times. Because of this risk, we should be very
>conservative about when and how we insert information while we¹re ramping up.

>It's worth noting that what businesses pay us for here will be >different from in the ecosystem above where people interact with >business entities directly. In the ecosystem of interacting with >businesses, person-initiated interactions are free for businesses, and >businesses will need to pay for distribution to get in front of people >in non-person-initiated cases. In a way, this has similarities to a >traditional display ads business. However, this next ecosystem of

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>inserting relevant context inline is closer to a traditional search
>business. We can show only show relevant context inline in response to
>the right prompt, and when that prompt appears, we can show whichever
>bit of relevant context we think is most valuable, taking into account
>both engagement and revenue.

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>Because this is a different kind of business, we could postpone >developing this touch point until later and just focus on the touch >points above for the first few years.

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>However, the technology required to understand natural language context >to power this touch point will be significantly overlapping with the >technology required to build the first ecosystem above, so once we've >developed it I see little reason to wait to get started here.

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>Further, getting good at showing relevant content in response to >contextual cues is something we're already working on in Utility with >After Party, where we show relevant contextual information after you >check in or post with other structured minutia from the composer in our >main app. That means we should be able to take that team's effort, >apply it to Messenger and start seeing an early experience here without >many months of work.

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>Focusing After Party on Messenger is also about where there's the most >leverage. There are currently only ~50 million After Party-eligible >actions in the main composer today, so the ~7 billion mobile messages >in Messenger and >20 billion in WhatsApp should be a more leveraged >surface to redirect this work once it¹s a good experience. Even if only >1% of messages have any relevant context for an After Party experience, >that would still be more After Party actions in Messenger alone than in >the main app.

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>There are other threads of work related to contextual understanding and >inline replies as well.

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>One question I've thought a lot about is how people will find the right >businesses to message in the first place. One possible answer to this >is that you'll search for them. For example, if you want to see if a >restaurant is open or get reservations, you could search for that >restaurant and then ask it your question. But this seems clunky to me.

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>So much of the value in the messages UI paradigm is that it's not search. >If people wanted to use search to find out something about a business, >it's probably easier to just use Google. The reason people would use >this is because it's a more natural and less search-based UI than where >Google is today.

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>There's a good reason to believe the future of search is moving in this >direction -- and it's that even Google (as well as Microsoft and Apple) >seem to think it is. They're all focused on building the next version

>of their search products as digital assistants that you communicate >with by asking conversational questions, and they try to provide you >with answers rather than a list of links.

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>If search companies think that conversation is the future of search >rather than initiating queries by searching, then why would we want our >conversational UI to be initiated by searching? It doesn't make much >sense.

>

>Instead, what makes more sense to me is that we'd develop our own kind
>of assistant that lives inside Messenger. Think of it as the entity
>"Facebook" and you could message it just like you'd message any other
>business in this system. The only difference is that this entity
>performs one special task that the others don't -- it mediates between
>all of the other entities. If the other business entities act as
>digital assistants for interacting with those businesses, then the
>Facebook entity is a sort of meta-assistant that helps you interact
>with all of those other assistants. This means that instead of ever
>having to search for a business, you could just message the Facebook
>business entity and it will connect you with the right business entity directly.

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>For example, you could ask this special entity when some business is >open until, and this entity would be able to do two things: first, it >could communicate with the other entity in the background and answer >your question for you; and second, it could connect you directly to the >right entity to talk to in the future so you don't have to search for >it yourself.

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>This may sound very abstract and complex, but I actually think it would >be relatively simple to build once we had the technology we needed for >business entities to make automatic, instantaneous replies themselves, >which is required to build this ecosystem anyway.

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>Once we have that technology, then we'll already be able to understand >the meaning of many questions. We'll also already have a registry of >what businesses know how to answer which questions and do which things, >since this is required for us to have them reply automatically. With >these pieces, building this meta-assistant is just a matter of enabling >our special Facebook entity to answer any question that has a >registered response from any other entity in our system.

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>The biggest technical problems we'd have to solve would be figuring out >which of the entities that say they can answer a question are actually >the best to do it.

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>For example, if I message Facebook and say I want a taxi, then we will >likely know of multiple services that have registered with us to be >able to answer queries about wanting a taxi, so we'll need to decide >which one is best and connect you with that service. The solution here >will be a mix of machine learning reputations and quality scores for >the different entities, plus figuring out how we accept financial bids >in our system. I assume that if we are in a position where we're

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>deciding which taxi service you're going to use, then we will make
>money from whichever service we send you to.
>This meta-assistant vision may seem far-fetched right now. It's
>possible we don't need to start working on it today. But I would. From
>two different perspectives, this seems like the right approach. First,
>digital assistants from Google, Apple and Microsoft are becoming more
>useful and important over time, so I don't see why this metaphor
>wouldn't hold for us too. Second, this really is the simplest way to
>interact with all of the different businesses in our system. It's much
>better than searching and starting a thread yourself.
>If we follow this approach, I think there's a good chance our
>meta-assistant could become the most useful of all. Google and everyone
>else are building their assistants by trying to have a single
>search-like system understand everything. We're taking the opposite
>approach by having everyone create individual entities, and then we're
>just linking all those different entities together.
>In the real world, there doesn't tend to be one person or assistant
>that you want to ask all your questions to. There are lots of different
>people you ask different questions to. We're constructing our system
>the way people interact in the real world. There would be one
>meta-assistant that could help you navigate who you talk to, but in
>general you'd be asking questions and interacting with different domain
>experts rather than always with a single assistant.
>If we can succeed in building the most useful assistant -- for which
>the most important step would be getting as many businesses as possible
>into Messenger -- then this could actually be the future of search in
>addition to a big part of the future of advertising and commerce.
>-----
>Those are all of the main touch points for people to interact with
>businesses in this ecosystem.
>Now here's a list of all the different threads of work that I discussed
>above.
>1. Business entities

    Entity accounts and scaffolding

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   - Natural language response system
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   - Menus and structured stores
   - Loyalty programs
   - Policies around when businesses can message and interrupt you
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>2. Payments
   - Basic primitives of sending and requesting money
   - Optimizing friction, credentials and rates for people
   - Integrating with businesses' workflows
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   - Promotions and deals to drive adoption and credentials
>3. Discovery tab
   - Nearby people recommendations
>
   - Business entity recommendations
   - App install ads
   - Other content, like stickers and games
>
>4. Inline content suggestions
   - After Party for messages
   - Inline games
>5. Meta-assistant
   - Registry of all entity knowledge and actions
>
   - Mediate requests with multiple handlers
   - Special UI for meta-assistant
>6. Ad system integration
   - Auction for inbox messages and discovery space
   - Performance-based bid options
>7. Language technology investments
   - Natural language research
   - Voice recognition improvements
>Thanks for reading all the way through this. I know it was very long,
>as I tried to be as detailed as possible. I'm looking forward to
>discussing further soon.
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