



Wechat Bible for Brands

Foreword

This document is a “verbose” version of a 31Ten presentation used as part of our training programs. It is intended for creatives, digital producers, project managers, product managers and business owners with a minimal understanding of Wechat’s business use cases who want a reference document they can go to for an overview of the app functionalities and capabilities. This presentation will be updated regularly along with Wechat’s new functions : please leave us your email if you want to receive its updates or other Wechat related documents.

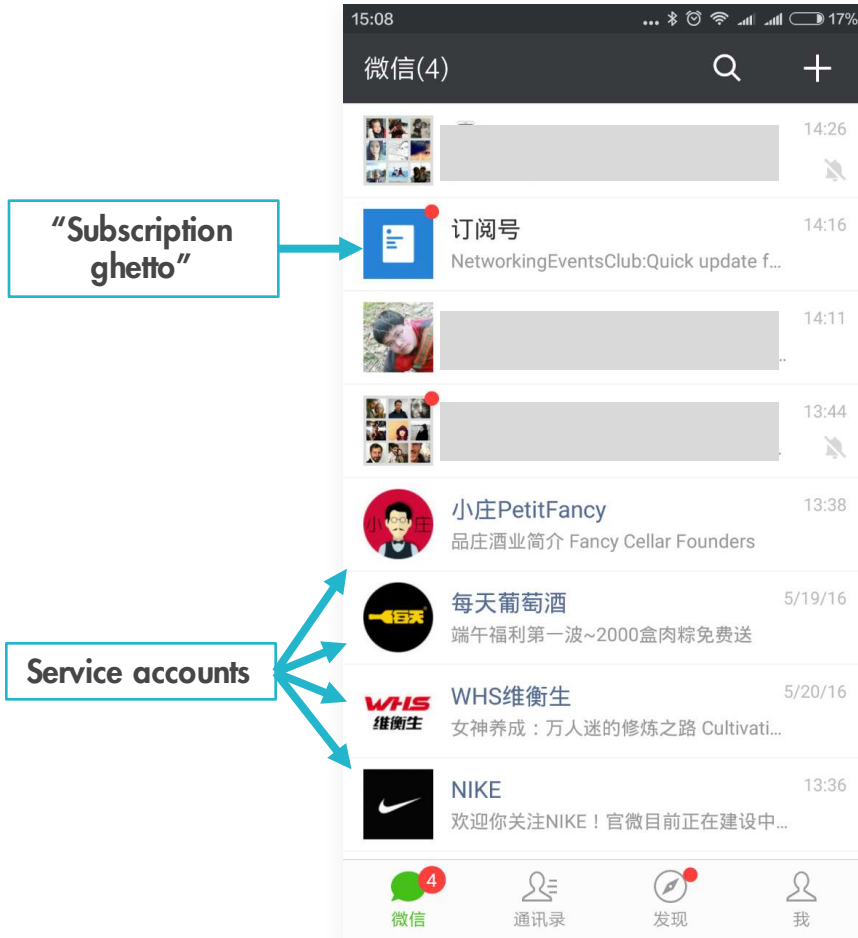
About 31Ten : We specialize in helping brands navigate the complexity of China’s digital ecosystem. We provide our clients with trainings, tailor-made strategies and digital solutions to reach ever more connected, agile, and informed Chinese customers

1.

NATIVE OFFICIAL ACCOUNT FEATURES

User / Brand Interaction Features
Specific to Wechat

Subscription Account or Service Account?



Subscription Account or Service Account?



SUBSCRIPTION ACCOUNT

Content centric consumer activation and interaction. Limited features, but best content reach

- Best when publishing >4 articles / month
- Daily push, but notifications are placed in the “subscription ghetto”
- Content is searchable on Sogou (搜狗) search engine
- Original content can be certified and re-shared by other accounts with mention to the original publisher
- Revenue from reader “tips”
- Revenue from display ads on articles



SERVICE ACCOUNT

Full consumer experience capabilities. Best for post-sales interaction and sophisticated activation

- 4 push's / month, push appears as a regular notification
- Follower segmentation
- QR code tracking
- Native E-commerce & payments
- Coupons, loyalty programs
- Can connect to a customer service team (multiway chat)
- API access for follower input processing
- Advertise on Wechat
- Content not searchable on Sogou (搜狗)

Native OA Messaging Interface

TYPE OF INTERACTIONS AVAILABLE

- Official Account side
 - Text
 - Embed
 - Video (Sight, video hosted on Tencent video hosting platform 腾讯视频)
 - Audio (voice message, music message)
 - Pictures (Official Account library currently limited to 5,000 pictures)
 - “Wechat cards”:
 - Single media message
 - Rich media message
 - Message templates : service notices to users, such as product purchase successfully completed (only accessible to verified service)
 - WeChat coupon (微信优惠券), Red envelopes (红包)
- User side
 - Same interactions as with any Wechat contact : text, audio, pictures, Sights, location data etc. except contact cards, red envelopes, transfers
 - Cannot forward content from conversations to official accounts



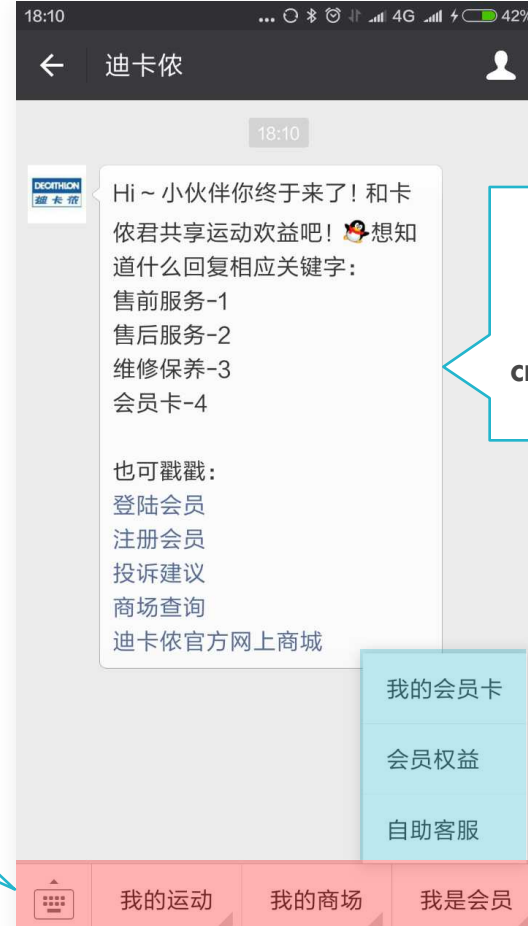
Welcome text message with links

Service message : membership program registration confirmation

Navigation Menu

TWO-TIER MENU BAR

- First level: 菜单
 - 3 tabs maximum
 - 4 Chinese characters maximum (8 letters)
- Second level: 子菜单
 - 5 tabs maximum
 - 8 Chinese characters maximum (16 letters)
- **Different menu items can be shown to user groups, e.g. based on their Wechat language, gender, location etc.**



Best practice : Welcome message.
Can be customized according to multiple criteria e.g. user language, source QR code etc.

2^d level menu : 5 items max

1st level menu : 3 items max

Navigation Menu

MENU ITEMS CAN TRIGGER :

1. Message interaction

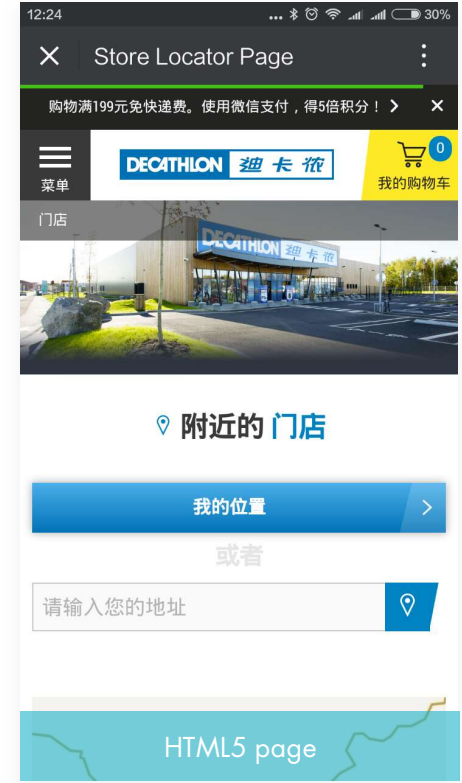
- Text
- Video
- Audio
- Pictures
- “Wechat cards”: single/rich media message
- URL sharing

2. Send to pages

- Web page (preferably optimized for Wechat browser display)
- WeChat coupon (微信优惠券)
- Wechat native membership card page
- Wechat native store page
- Wechat poll page

3. Wechat app functions

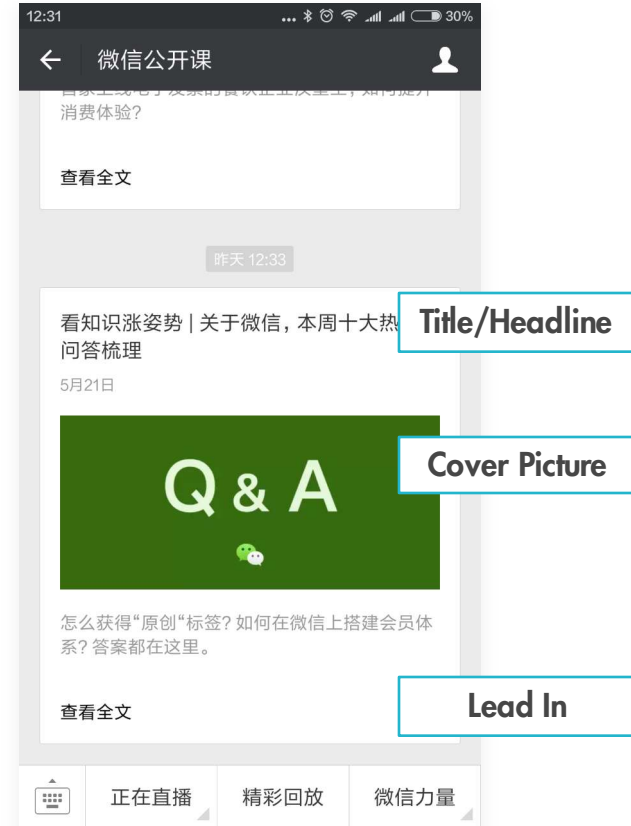
- QR code scanner
- Picture taking / upload interface
- Location picker



Native Messaging System : OA Side

SINGLE MEDIA MESSAGE

- Title/Headline
- Date
- Cover picture : 900 x 500px
- Lead in (导语): can be customized, otherwise the first sentence of the first paragraph is used
- **Can only link to a wechat-hosted article (<http://mp.weixin.qq.com/xx>)**



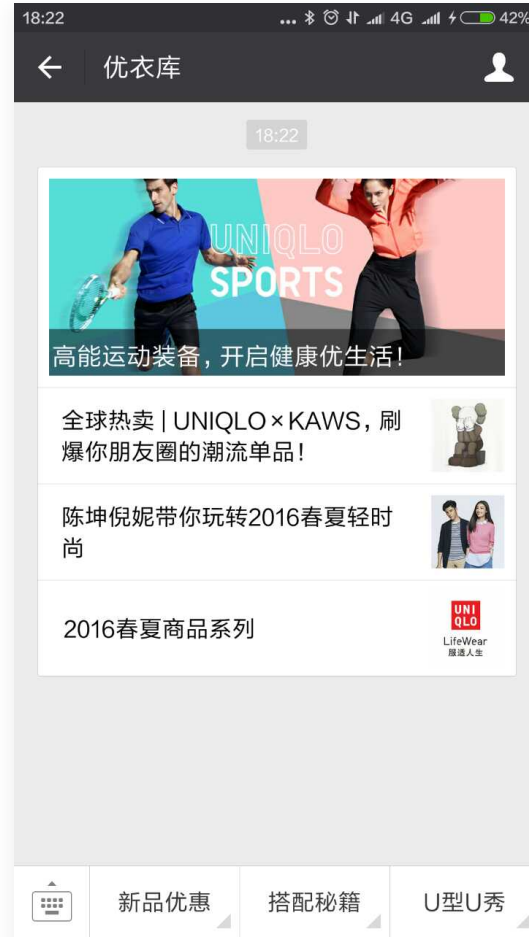
Native Messaging System : OA Side

MULTIMEDIA "RICH" MESSAGE

- 1 Highlighted content + up to 7 sub pieces = 8 pieces max (10 through the API)
- Headline can hide 1/4 ~ 1/3 of the picture's bottom (depends on the length of the headline) => around 120px for a single-lined headline
- Cover pictures : First sub message: 640 x 320px / Sub messages thumbnails : 80 x 80px

ITEMS CAN LINK TO

- Wechat articles
- Web pages (under conditions)



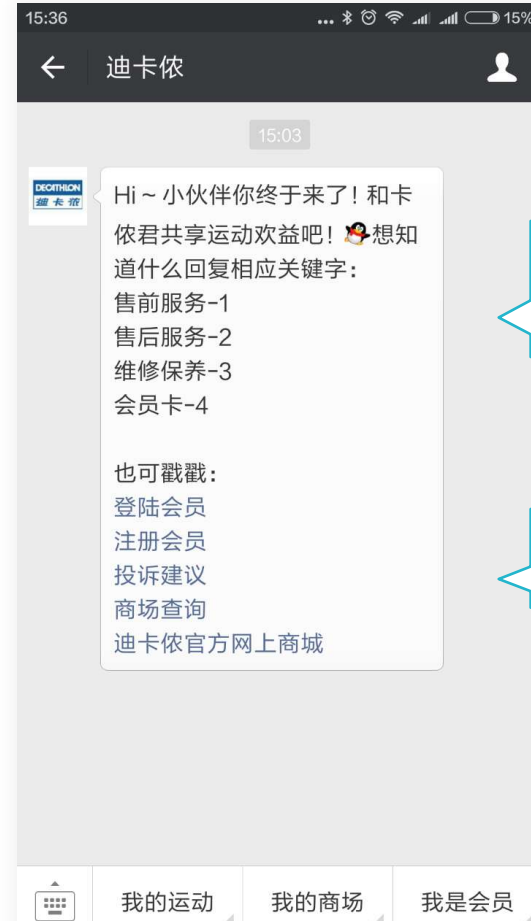
Cover item

Sub pieces

Native Messaging System : Keywords

KEYWORD BASED AUTOMATIC ANSWERS

- When user initiates a dialogue with an official account, the account can send the user an automated response based on
 - keywords the user wrote
 - User info (e.g. location, gender, language etc.)
- Voice messages can be processed to extract keywords (speech to text analysis)
- Rules to determine when and how these responses are sent out :
 - Max. 200 rules
 - Max. 10 keywords per rule
 - Max 5 responses per keyword
 - “exact match” and “partial match”
 - Automatic general response for when user content doesn't match any keywords



Number based message interaction tree

Links to web pages

Example : Triggering Information Display



Number based message interaction tree

Latest seasonal products

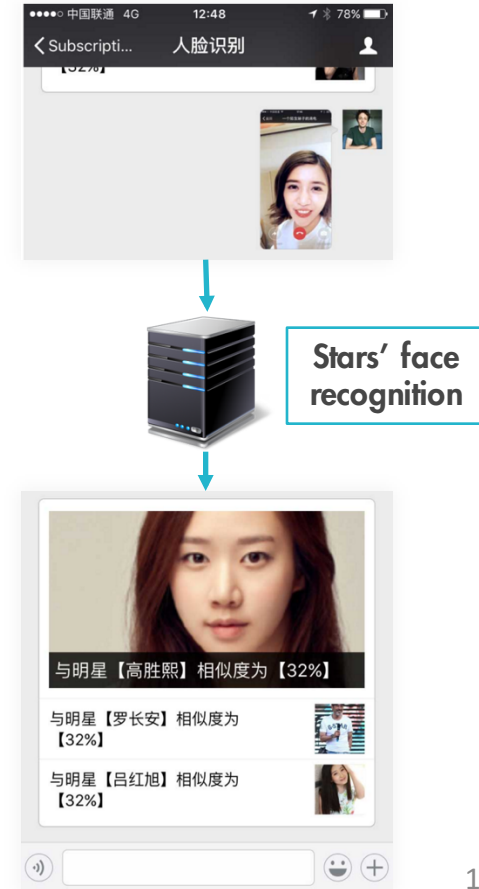
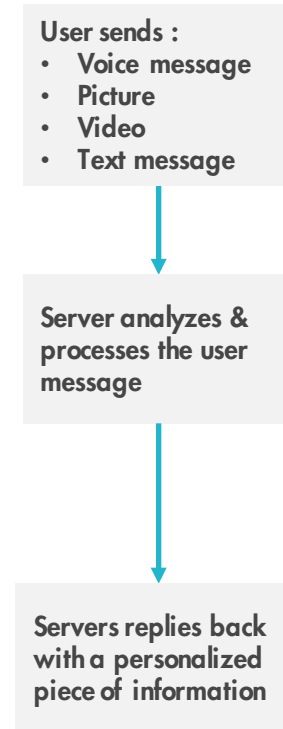
Example : Simple Quiz



Native Messaging System : Processing API

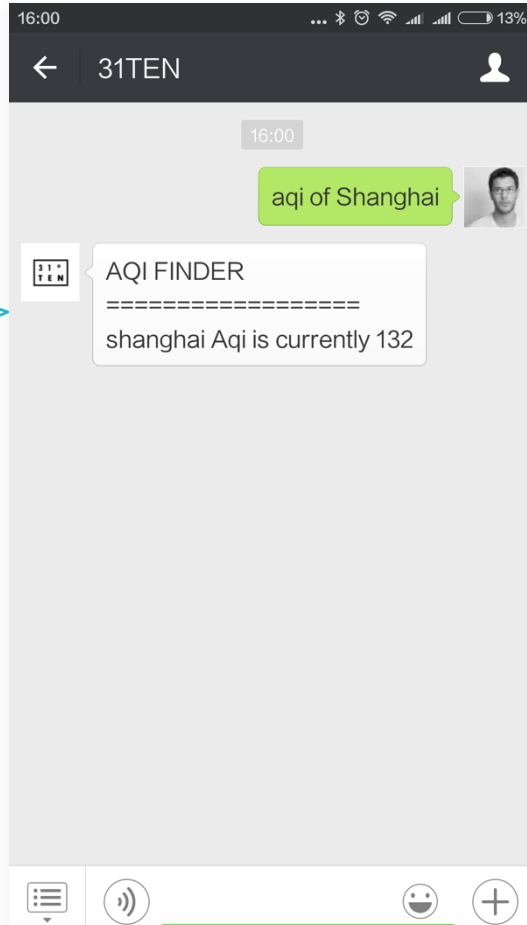
EXTENDING THE NATIVE MESSAGING SYSTEM CAPABILITIES BY INTERFACING THE OA WITH A SERVER

- Allows virtually unlimited, enriched interactions with the user :
 - Voice based “concierge” type of automated services
 - Sound & video processing (cleaning, auto-tune, face recognition, translation...)
- Server side data limitations:
 - Pictures : JPG 128k
 - Voice : AMR 256k
 - Video : MP4 1M
 - Thumbnails : JPG 64k
- **Only one server can be linked to an OA : if multiple user input treatment logics are required, a routing mechanism needs to be implemented at server level**

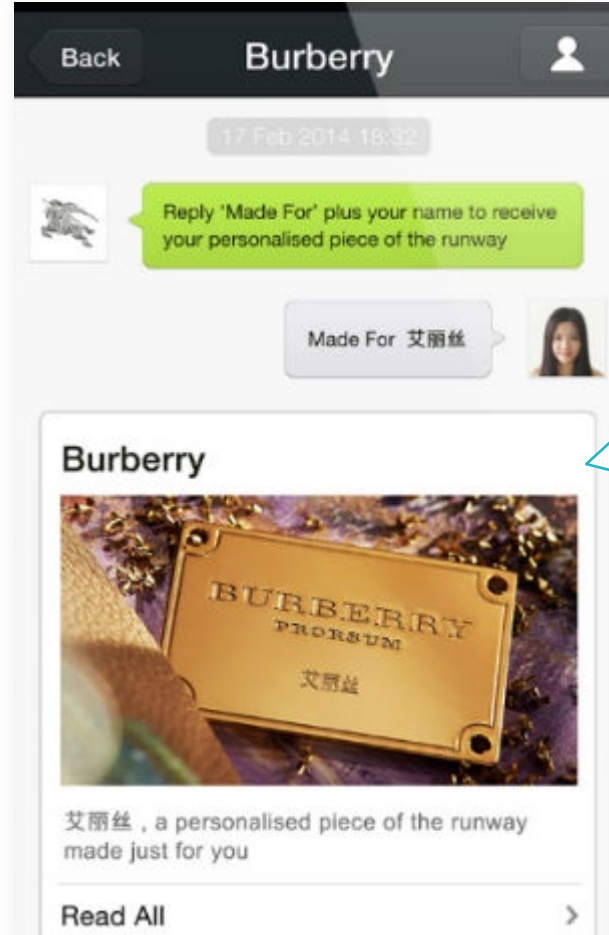
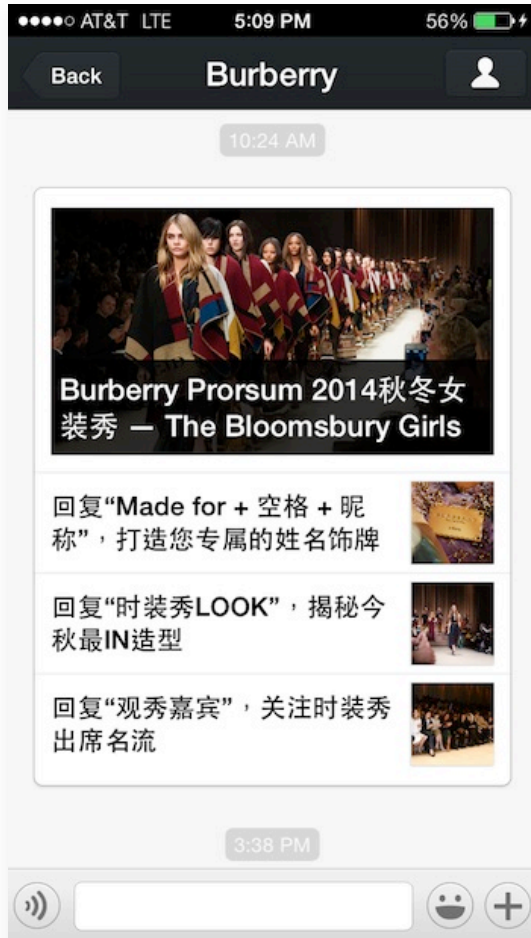


Example : Time Sensitive Information Retrieval

Air quality information



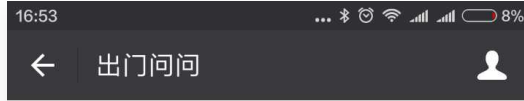
Example : Product Personalization



Send personalized pictures of the brand product with follower's name

Example : Automated "Siri-like" Concierge

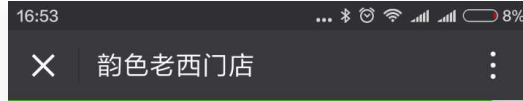
ID : chumenwenwen



沪上潮人钢丝小肉
评分: 4.0 人均: 52.0元 离我7米
黄浦区建国新路肇周路口

韵色(老西门店)
评分: 4.0 人均: 59.0元 离我86米
卢湾区方斜路446号
电话: 021-63463582

克来小夫咖啡店
评分: 3.5 人均: 36.0元 离我44米
黄浦区方斜路432号



口味:8.1 环境:8.6 服务:8.0 消费后买单

方斜路446号(近建国新路) >

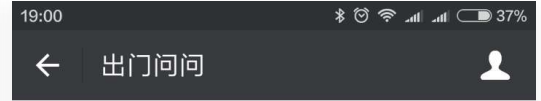
02163463582 >


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2016-05-22 星期日 

19~24 阴

北风

空气质量指数: 88

空气质量等级: 良

温馨提示:

数据来源: 中国天气网

Source: WalktheChat



Example : Crowd Comments Displayed on Screen

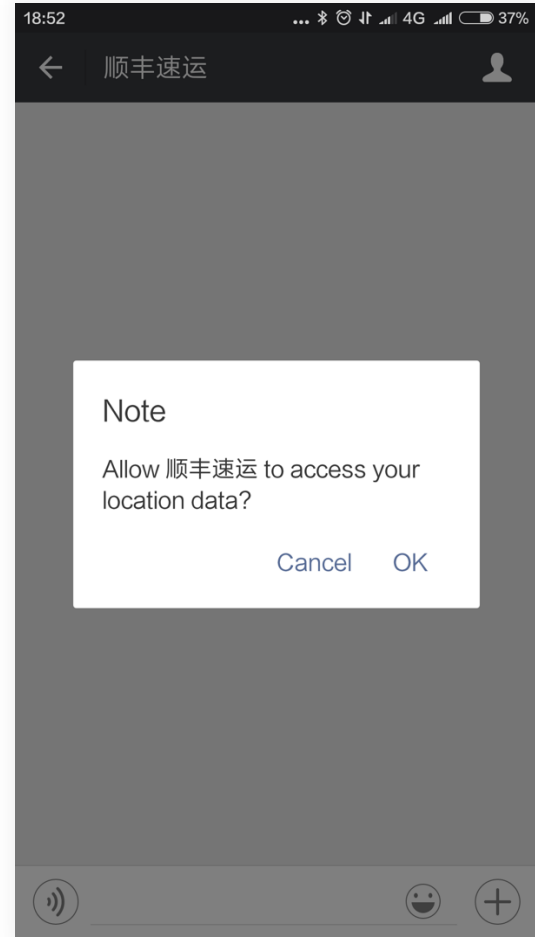


Commenters' avatar picture, nickname and timed comments

Location Retrieval

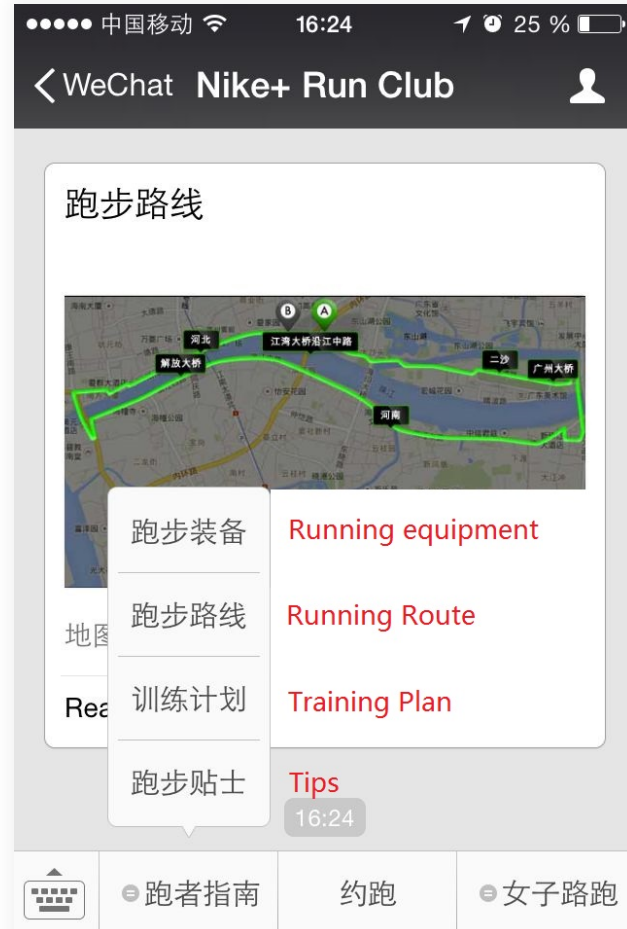
ALLOWING INTERACTIONS TO USE THE USER'S LOCATION

- When the conversation interface is opened, the user is prompted to authorize the official account to acquire their location as set by GPS or network triangulation
- User's location information when they open the interface is reported automatically every five second, for as long as the OA page is kept open
- Use cases :
 - Track user route & speed (running, cycling)
 - Display location based information e.g. nearest store
 - Venue navigation



Example : Running Tracking

After a running session, user receives a shareable map of his/her route



2.

“H5”

Wechat Rendering of HTML/CSS/JS Content

Wechat's Rendering Engine "Headache"

The following slides are a first attempt to state which of the latest HTML capabilities are available for your micro sites and "h5" experiences optimized for the Wechat browser. It is by no means intended to be a reference document, but just an array of compatibility tests.

Wechat browser uses various rendering engines according to multiple conditions : iOS versions use the native webview system as a rendering engine, Wechat Android however will use a custom embedded engine developed by Tencent, "TBS X5".

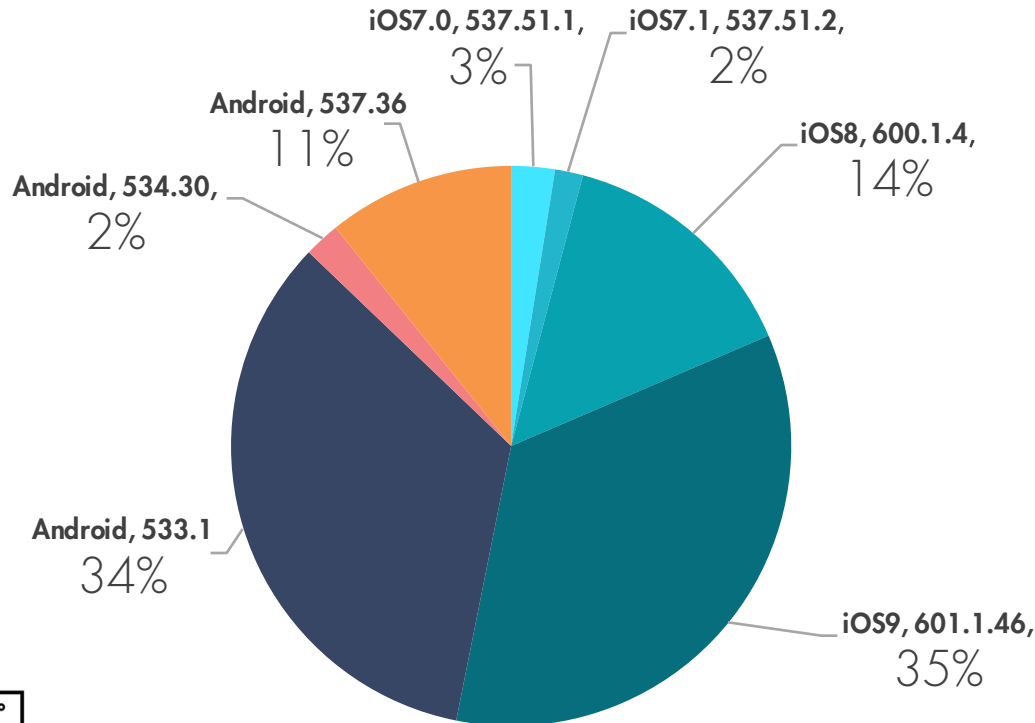
X5 can be very complex for developers as it can run various core engines according to the phone's capabilities (e.g. RAM available) and Android environment. Currently, there are three main rendering engines for X5 :

- Webkit (TBS 1.X)
- Blink (TBS 2.X), a fork of webkit by the chromium project, used by several browsers like Google Chrome
- QQBrowser for mobiles with custom Android OS overlays like Meizu Flyme

As all of those rendering engines are forks of webkit, our tests showed 3 distinct situations, different according to the webkit version.

Wechat's Rendering Engine "Headache"

WECHAT WEBKIT VERSIONS OBSERVED OVER A SAMPLE OF CORPORATE WEBSITE VISITORS



SAFARI WEBKIT VERSIONS

iOS 7.0	iOS 7.1	iOS 8	iOS 9
537.51.1	537.51.2	600.1.4	601.1.46

TENCENT'S X5 ENGINE WEBKIT VERSIONS

Android		
533.1	534.30	537.36

Accelerometer & Device Orientation

MAIN FEATURES

- Capturing device motion and orientation with a fine time granularity (<100ms)

USAGE EXAMPLES WITHIN WECHAT

- Scrolling & navigating content based on device orientation, creating 3 dimensional illusions (virtual visits)
- Triggering events based on accelerometer
- Game controls based on device orientation & motion
- Taking control of other interactive devices (e.g. screen) through the phone's orientation or motion

iOS 7.0	iOS 7.1	iOS 8	iOS 9
537.51.1	537.51.2	600.1.4	601.1.46
?	?	✓	✓

Android		
533.1	534.30	537.36
~	~	✓

LIMITATIONS

- Webkit v533 might not be able to capture motion, only orientation
- Responsiveness depends on hardware



Web Audio API

MAIN FEATURES

- Sound processing : apply unlimited realtime sound effects
- Simultaneous playback of multiple sounds at once
- Sound pre-buffering
- Precise timing controls

USAGE EXAMPLES WITHIN WECHAT

- Live mixing of multiple tracks & sound effects
- Sound-related visualization effects : sound waves, equalizers..
- Virtual instruments
- Collaborative music playing between multiple users
- Live digital audio workstation

iOS 7.0	iOS 7.1	iOS 8	iOS 9
537.51.1	537.51.2	600.1.4	601.1.46
?	?	✓	✓

Android		
533.1	534.30	537.36
×	×	>=5.0

LIMITATIONS

- Complexity limited by the phone's processing capacity



Vibration Trigger

MAIN FEATURES

- Trigger phone vibration : length, number of vibrations

USAGE EXAMPLES WITHIN WECHAT

- Better immersion in html games
- Success notification to the user

iOS 7.0	iOS 7.1	iOS 8	iOS 9
537.51.1	537.51.2	600.1.4	601.1.46
×	×	×	×

Android		
533.1	534.30	537.36
×	×	✓

LIMITATIONS

- Vibration intensity is apparently not controllable



WebGL

MAIN FEATURES

- Rendering and animating interactive 3D graphics and 2D graphics
- Allows much more complex animations than traditional CSS/JS combination

USAGE EXAMPLES WITHIN WECHAT

- 3D rendering of objects
- Wechat 3D based games

iOS 7.0	iOS 7.1	iOS 8	iOS 9
537.51.1	537.51.2	600.1.4	601.1.46
?	?	✓	✓

Android		
533.1	534.30	537.36
~	~	>=5.0

LIMITATIONS

- Complexity limited by the phone's processing capacity



Key Takeaways

- If you can build it for mobile, you can (mostly) build it for Wechat
- For iOS devices, as long as your page runs fine in Safari, you'll be good
- On Android, for most sophisticated features (3D, web audio API), you'll be potentially leaving 30% of users out of the picture. You might want to consider a degraded version of the experience
- By measuring loading microtime and network type, you can serve a lower weight experience to the user (lighter pictures & videos) for remote cities and poor network conditions

3.

“JS SDK”

Direct Access to Wechat Native Capabilities Within a Webpage

Introduction

WHAT IS WECHAT JS SDK

- A set of tools to add Wechat native functionalities inside a webpage rendered within the Wechat browser
- Allows developers to drastically enhance the user experience by using Wechat functionalities the user is familiar with (QR scanner, microphone, picture upload)

FEATURES OVERVIEW

- Wechat Login : login and get user information in one click
- QR codes : Use the QR code scanner without leaving the web page
- Multimedia : Microphone, Speech recognition, Camera
- Wechat Payment : Let users pay using Wechat payment without leaving the website
- Other : Intelligent geolocation, get current network used, customize the sharing snippet aspect

FEATURES DEMO



Wechat Login

FUNCTIONALITY

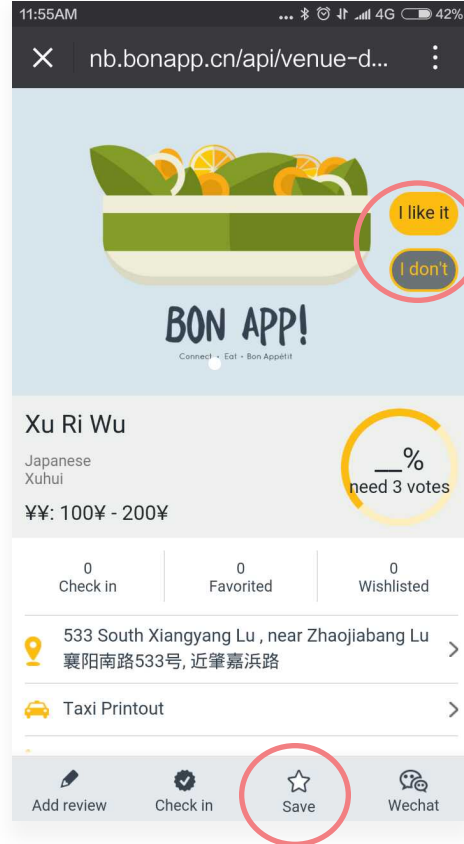
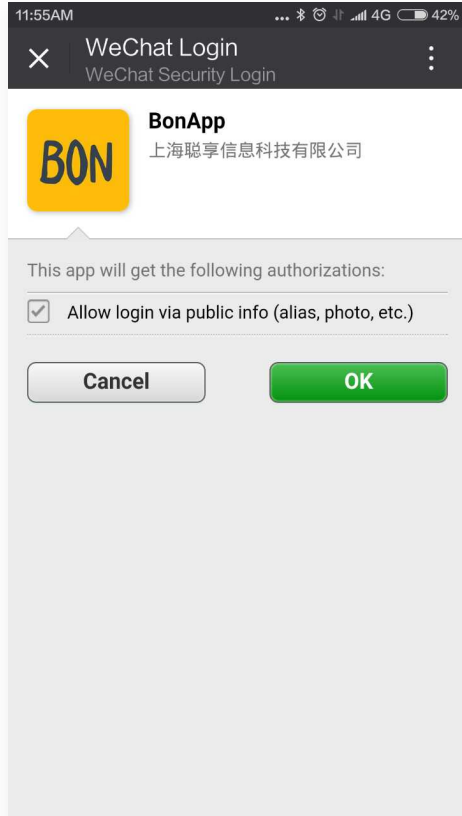
- Allows the user to instantly signup/login with a click to a web app using his Wechat account
- Same workflow as Google login or Facebook login, needs the user's explicit consent

USER INFORMATION RETRIEVED

- **OpenID** : Unique user ID that is specific to the brand's official account (NOT the actual Wechat ID)
- **Nickname** : User's Nickname
- **Profile Picture**
- **Gender**: 1 (Male) 2(Female) 0(not defined)
- **Wechat language**
- **Province** : From user Wechat signup, not updated according to actual location
- **City** : From user Wechat signup, not updated according to the location
- **Country** : From user Wechat signup, not updated according to the location
- Is the user following your Wechat account ? (yes/no)

No phone number, actual Wechat ID, first and last name, email etc. To do consumer data binding, you need to give sufficient reason to the follower to share additional information such as email or phone number.

Wechat Login Example : BONAPP



DEMO



Wechat Silent Login

FUNCTIONALITY

- Allow a web page to obtain the user's OpenID without authorization prompt

USER INFORMATION RETRIEVED

- **OpenID** : Unique user ID that is specific to the brand's official account (NOT the actual Wechat ID)

USE CASES

- Uniquely identifying a web page visitor for web analytics purposes
- For a discount campaign where each user can only apply for one coupon, instead of checking the identifying the user once with a phone number validation, we can use Wechat silent login to make sure a visitor can only have one coupon generated

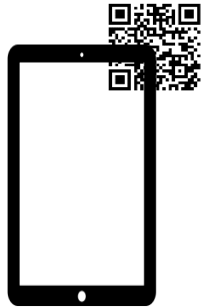
QR Code Scanner

FUNCTIONALITY

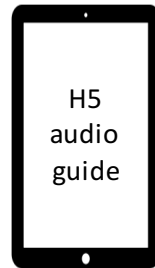
- Use the QR code scanner without leaving the webpage : 1 click instead of back arrow => top menu "+" => QR code scanner

WORKFLOW EXAMPLE : MUSEUM AUDIOGUIDE EXPERIENCE

Scan QRcode from Wechat in Entrance of Museum



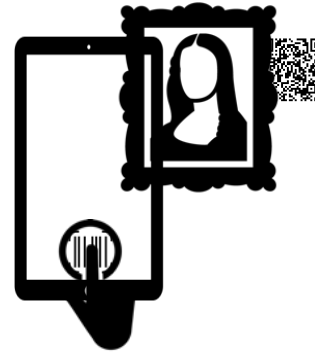
Redirects to Wechat Micro Website



Audioguide track starts playing



Click on the Scan button



Audioguide is updated to the specific painting track without leaving the page



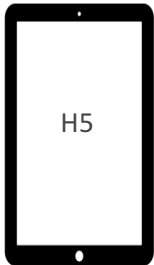
Multimedia : Microphone and Speech to Text

FUNCTIONALITY

- Microphone : records the user voice and sends it to a web app
- Speech to text : translates the user recorded message to text (Chinese recognition only)

WORKFLOW EXAMPLE : DISCUSSION BOT

Access to
Wechat Micro Website



Bot asks vocally the user how is
today's weather



User presses a record button
and says "its raining" in
Chinese



Bot recognizes the "raining"
word and asks the user if it is a
light rain



Multimedia : Camera

FUNCTIONALITY

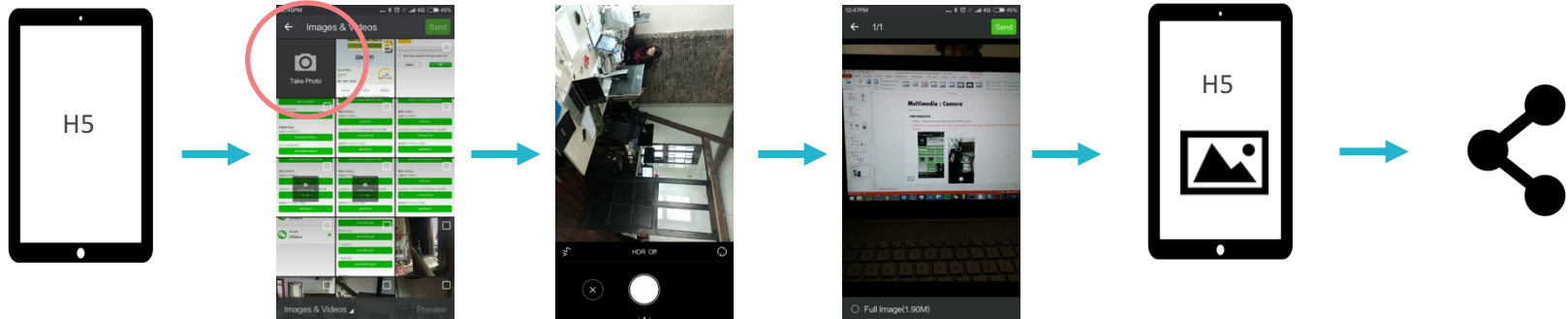
- Camera : allow user to upload picture files and/or take a picture
- Pictures stored on Wechat's server
- Full picture resolution not activated by default (pictures will be compressed)
- Cannot access directly the camera capture interface in one click, current flow is : click button > File system > Choose camera + Video
- Sights not supported yet

WORKFLOW EXAMPLE : PHOTOMATON WEB APP

Access to
Wechat Micro Website, ask
the user to choose a picture

add some effects on
the picture (texts,
filters, etc...)

Share a resulting
page with the
customized picture



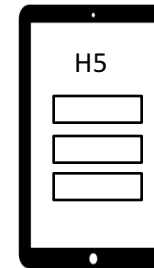
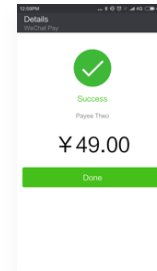
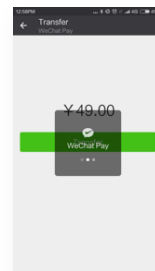
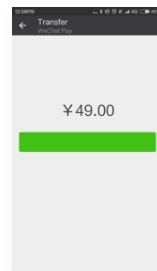
Wechat Payment

FUNCTIONALITY

- Allow the user to purchase using Wechat Wallet and Wechat Cart system

WORKFLOW EXAMPLE : WECHAT ONE PRODUCT PAGE ECOMMERCE

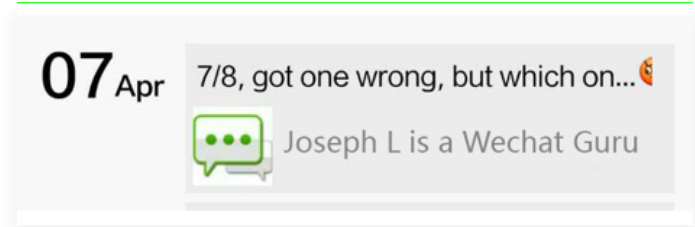
Access to
Wechat Micro Website



Back on the website, Ask for
the address delivery and
other information

Other Functionalities

- Intelligent Geolocation
 - Get the user location coordinates (Latitude and Longitude)
 - Fallback on Mobile Network Triangulation if the GPS is not enabled
 - Precision accuracy (in meters)
- Current network used
 - Wifi / 4G / 3G / 2G
 - Contextual information that can be useful to adapt the HTML5 Website experience to the user connection (simpler, lighter experience if on 2G for example)
- Customize the sharing page overview on moments
 - Can customize and personalize the Wechat text and picture sharing for each user to increase sharing virality
 - Only available for 3 domains per official account



**Custom description
instead of the page URL,
custom picture**

Credits

This document heavily relies on content previously published by :

- WalktheChat
- ChinaChannel
- Jing Digital
- Grata
- 36kr
- CruiSo
- Lux.co
- Alan Siu
- Kawo

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- Vincent @Adama Development
- DC @Rikai Labs
- Julien @Blue Reef
- Alex @Kawo
- Guiling @Daikē

QUALITY ENGLISH SOURCES OF WECHAT INFORMATION



WalktheChat
walkthechat.com



ChinaChannel
chinachannel.co



Grata
blog.grata.co



Kawo
blog.kawo.com

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