Big Data – Big Business in mHealth?

Ralf Jahns, MD Research 2 Guidance
R2G IS THE ANALYST AND STRATEGY CONSULTANT OF THE DIGITAL HEALTH MARKET

- **8** years in business
- **10** consultants specialized on digital health
- **6** running world’s biggest annual mHealth research program since 6 years
- **50** served 50 Fortune 500 clients to define the mobile app strategy
- **50K** contact base of 50K mHealth developers and publishers
The mHealth market is becoming crowded

<table>
<thead>
<tr>
<th>MHealth App Publishers</th>
<th>MHealth Apps</th>
<th>MHealth App Downloads</th>
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<tbody>
<tr>
<td>&gt; 80,000</td>
<td>&gt; 325,000</td>
<td>&gt; 3.7 bn</td>
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Source: research2guidance - mHealth App Developer Economics study 2017
But only 32% of digital health innovations are coming from the industry

MHEALTH APP MARKET COMPANY SEGMENTATION

Traditional health care company share 32%

Source: research2guidance - mHealth App Developer Economics study 2017
TODAY: AN APP IS NOT JUST AN APP

1. Engaging and beautiful
2. Track and help to self-manage
3. Automate input
4. Coach and consult
5. Save data
6. Integrate

Apps & SDKs
D-Devices
Coach and consult
Save data
Track and help to self-manage
Automate input
Community
Integrate

Source: research2guidance - mHealth App Developer Economics study 2017
Most of the app categories track user generated data

- Medical Reference, 23.70%
- Fitness (Health Improvement), 21.00%
- Nutrition & Wellness, 11.60%
- Women's Health, 8.60%
- Medical Condition Management, 7.60%
- Medical Education, 7.70%
- Children's Health, 5.00%
- Tools, 1.80%
- Compliance, 1.60%
- Other, 11.50%
- Compliance, 1.60%

Sample size n=1,030, iOS and Android apps
Source: Research2Guidance; App Annie; Prioridata; Apple App Store; Google Play.
Currently 110M people are actively using mHealth apps

MHEALTH MONTHLY ACTIVE USERS #8 OCTOBER 2017, GLOBAL IOS/ANDROID

110 Million mHealth users

Medical, 14%

Health&Fitness, 86%
ACTIVE USERS MAINLY GENERATE HEALTH AND FITNESS TRACKING DATA

MHEALTH METRICS BY MONTHLY ACTIVE USERS

Source: research2guidance mHealth App Developer Economics
The market was able to capture 18bn USD in 2016. Big Data has not had a significant share yet.

MHEALTH APP MARKET SIZE 2016

- Device Sales, 51%
- External Financing, 30%
- Service Sales, 10%
- Transactions, 5%
- Paid downloads, 3%
- Advertisement, 1%

18 Bn USD

Source: research2guidance - mHealth App Developer Economics study 2017, R2G mHealth App Market Sizing 2015-2020
THERE ARE ONLY A FEW MAKING BIG MONEY WITH mHEALTH

REVENUE GENERATE WITH mHEALTH APPS LAST YEAR (2016)

- Low earners
  - Europe (55%)
    - 2.7
    - $146,000
    - 89k
    - 76%
    - Premium content (33%)
    - 52%
    - 27%
  - Region
    - # of apps published
    - External budget
    - Downloads in 2017
    - Developing for iOS
    - Monetization
    - Health APIs integrated
    - EHR integrated

- High earners
  - North America (64%)
    - 6.6
    - $389,000
    - 2m
    - 91%
    - Licensing (58%)

Source: Research2Guidance - mHealth App Developer Economics study 2017 - n = 2,400
WHAT ARE THE BUSINESS MODELS FOR BIG DATA IN MEDICAL

**DRIVING COMPANY EVALUATION**
- Drive MAU numbers up and develop potential Big Data use cases to drive company evaluation
  - EG. Myfitness Pal Clue

**OPEN PLATFORM / SELLING DEVICES SUPPORTING RESEARCH**
- Let research institution/ universities buy devices to fill an open platform
  - EG. Body sounds

**SUPERIOR APP USER SERVICE**
- Enrich self empowerment services via pattern recognition and AI
  - EG. Medtronic SugrIQ

**HCP SUPPORT QUALITY AND EFFICIENCY**
- Supporting HCP diagnoses, treatment plan writing
  - EG. IBM Watson on Oncology

**RESEARCH**
- Efficiency and quality gains in medical trails
  - EG. Medical trails

**MOST BIG DATA BUSINESS MODELS TODAY DON’T HAVE AN IMPACT ON COMPANY’S P&L**
MYFitnessPal still is the largest deal in the mHealth industry

EXAMPLE MYFITNESSPAL

- Data: Steps, food consumption
- Purchased by Under Armour in 2015
- Deal: $475 M
- $5-7 US per cumulated download
- $50 – 70 US per active user
LARK PROVIDE DIGITAL HEALTH COACHING THROUGH AI

EXAMPLE LARK

How much does it cost? € 22 per month

YTD Downloads? 40,000
IT IS STILL A LONG WAY TO MAKE MEANINGFUL USE OF THE DATA TO SUPPORT SERVICE SALES

EXAMPLE SUGAR.IQ

- The app only provides insights into retrospective events
- It links user to educational resources
  - Supporting behaviour change

Source: research2guidance - mHealth App Developer Economics study 2017
OTHER CONCEPTS TRY TO MONETIZE ON SUPPORTING RESEARCH

EXAMPLE THINKLABS

- Open platform project to save sound data
- Captured by the company’s connected stethoscope
- Drive device sales

A free and open platform for improving human health.
THANK YOU.

FREE DOWNLOAD MHEALTH APP
DEVELOPER ECONOMICS 2017
REPORT

- Current status and trends
- 2,400 participants
- 26 pages
- Free download

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