

Sports and Fitness Devices in The Connected Era

Ray Maker
dcrainmaker.com
Ray@dcrainmaker.com



Part I:

A wee bit of background

Who exactly am I?

By Day:

- Architect designing enterprise network and datacenter infrastructure for some of the worlds largest organizations based out of Paris, France– travel extensively

By Nights and Weekend:

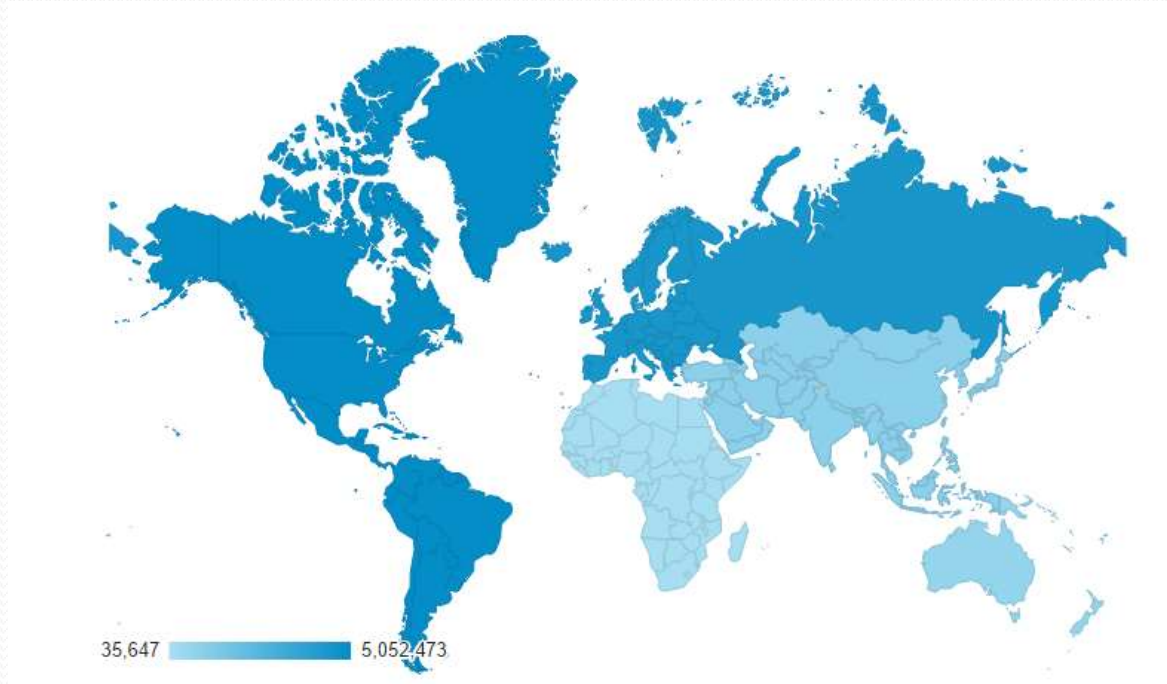
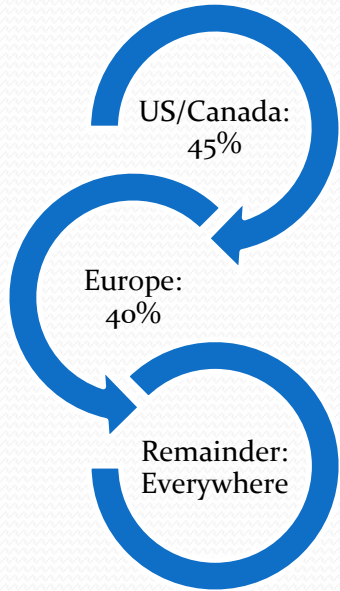
- Competitive triathlete: Proficient runner, functional cyclist and flailing swimmer (I love all flotation devices)
- Completed a few Ironman's, a few marathons, and a huge pile of far less painful races
- Love to travel and tinker with gadgets (though my wife would say I just like stockpiling them)
- Eat lots of cupcakes (Official Tester in Residence at Bertie's CupCakery)



- Started just over 7 years ago in September 2007
- Best known for 'In Depth Reviews' of Sports Technology products
- Reviews are the primary initial driver of traffic to site
- Over 2.8 Million page views/month, 1.2 Million+ uniques/month
- Tens of thousands of daily RSS subscribers including editors for most major sport magazines and gadget sites
- 23K+ Twitter followers, 33K+ Facebook Fans
- Consistent growth month over month
- Revenue based primarily on affiliate links
- No advertising from product segment I review



Readership Geographies



Who is the reader?

- From people who don't know what a HR strap is to those with PhD's on heart rate technology, aerodynamics engineers, etc...
- Readers are across wide range of levels from Olympic Gold Medalists to those trying to lose 300+ pounds
- Followed by most financial analysts/investment companies watching the sector
- Mainstream media publications – Washington Post, The Guardian, etc...
- Technology media publications – Engadget, Gizmodo, TechCrunch, etc...
- Television stations – FOX News, etc...
- Sports media publications – Every editor of major pubs
- And finally...you. The companies I review and talk about.

The background features a dark blue, textured surface with a fine halftone dot pattern. Overlaid on this are several wavy, horizontal lines in a lighter blue color, creating a sense of motion or data flow.

Part II:

2014: The Connected Watch

In the beginning...

- There were:
 - Fitness watches
 - Regular cheap watches
 - Fancy high-end watches
- But many fitness watches still used as regular watches
- Middle of last decade: Addition of GPS started to carve out new category, different sized/purpose units
- You then had a desktop application that uploaded data
- And last 24 months added phone/WiFi connectivity

The 1st generation of smart watches

- Smart watches aren't actually new either, first connected option around 2000, by IBM (with Linux)
- Then mostly silence, every 3-4 years something showed up
- Around 2012ish, new resurgence, driven by Kickstarter and projects like Pebble & Metawatch
- But still highly geek-focused, not yet sport/mass-adoption focused
- Were/are slow, have poor battery, poor displays, not durable
- Android Wear starts to potentially create standardization

List of “Smart Watches” per Wikipedia

Sony SmartWatch	HOT WatchWearing
SmartWatch 2	Kreyos Meteor
Samsung Gear Live	GEAK Watch
Pebble Watch	i'm Watch
Samsung Gear 2, Gear Neo, and Gear Fit	Digital WEDA (Slap Band)
Samsung Gear S	Omate TrueSmart
Samsung Galaxy Gear	Z1 Android Watch-Phone
Garmin Forerunner	Fashion S9110
NikeFuel	LG GD910 (limited edition)
WIMM One	Hyundai MB 910
Motorola Motoactv	ANDROID SmartWatch
Motorola Moto 360	LG G Watch
MetaWatch Strata	Qualcomm Toq
Timex Datalink	Seiko Ruputer

Fitness folks start doing smart watches

- First true fitness focused smart watch was the Motorola Motoactv
- Then we started seeing Garmin get involved (i.e. Fenix lineup)
- Now Suunto, Timex, Soleus and others
- These watches though were more about notifications than about app development like Pebble
- They could effectively do what most 1st gen smart watches could do...but better.

And then there was a fruit company

- The Apple Watch: Most feared yet least understood watch out there
- What we know: What it looks like, the screen, app platform, base price point, requires Apple device
- What we don't know: Waterproofing, battery life, full price points, connectivity requirements, exact release date, how much access apps have to hardware
- You might be in a better position than you think

More than a watch, it's a platform

- Why Apple is different - it's actually two platforms:
 - Apps on the watch device
 - Health Kit as a health/fitness platform
- By doing so they complete the ecosystem (and has 'Just Works' factor)
- Whether or not health/fitness apps will see it as a threat remains to be seen
- Companies will have to compete on: Hardware / Price / Platforms

Everyone wants a platform

- Every health/fitness app wants to be that repository
- A massive mess of companies with API's
- Slightly different goals, odd alignment for consumers



Platforms don't equal standardization

- “A product/system is a standard when it has 80% of the market” - Richard McAinsh (Verve/Infocrank)
- What is a platform anyway?
- Rather, platforms just act as landing pads for data, user connectivity and social interaction
- Each company now has to normalize data
- There is no data standard for steps, distance, calories or sleep

Standardization: The Just Works Factor

- This is actually why consumers buy most of your products – it works with other things they're using:
 - Bluetooth Headset, Music
 - The USB plug
 - A SD or CF card for a camera
- Differences in quality, yes, but core interoperability, no
- Making examples: No pain, no gain.

Standardization

- Two core areas of focus for this crowd:
 - File Format Standards
 - Connectivity Standards (using standard profiles correctly)
- Rule #1: I don't care about your excuses*
- Rule #2: Consumers don't care about your excuses
- Rule #3: Refer to Rules #1 & #2
- *Your excuses will cost you business

Suunto Ambit3 Bluetooth Smart Compatibility

Sensor Name	Sensor Type	Compatible?	Ambit3-specific Compatibility Notes
4iiii Viiiiva	Heart Rate only	No	Pairs, but can't find upon activity start
4iiii Viiiiva	Heart Rate + Running Footpod	No	Pairs, but can't find upon activity start
4iiii Viiiiva	Heart Rate + Power Meter	No	Pairs, but can't find upon activity start
4iiii Viiiiva	Heart Rate + Speed/Cadence Sensor	Partial	Displays cadence/speed, but not HR
Adidas Blueooth Smart Stride Sensor	Running Footpod	Yes	All good!
Kinetic Inride	Cycling Power Meter/Trainer	Partial	Power displays, no speed/cadence
Mio Link	Optical HR wrist sensor	Yes	All good!
Polar H7	Heart Rate	Yes	All good!
Pyle Sports Footpod	Running Footpod	No	Pairs, but can't find upon activity start
PowerTap BLE Cap	Cycling Power Meter	Yes	All good!
PowerTap BLE Speed/Cadence Sensor	Speed/Cadence combo sensor	Yes	All good!
Scosche Rhythm+	Optical HR armband sensor	Partial	Depends on firmware version
Stages Power	Cycling Power Meter	Partial	Base functionality works
Wahoo RPM (V1/V2)	Cadence Sensor	Partial	Cadence yes, but overrides GPS speed with 0-value
Wahoo Blue SC (v1)	Speed/Cadence combo sensor	Yes	All good!
Wahoo Blue HR	Heart Rate	No	Pairs, but can't find upon activity start
Wahoo TICKR	Heart Rate	Partial	Pairs, but finicky on finding sensor during activity
Wahoo TICKR RUN	Heart Rate, Running Cadence	Partial	Pairs, but finicky on finding sensor during activity
Wahoo TICKR X	Heart Rate, Running Cadence	Partial	Pairs, but finicky on finding sensor during activity

The door swings both ways: ANT+

- Adoption/Creation of profiles is simply taking too long
- Trainer Profile: Years in the making, no tangible adoption
- Power Meter High Speed Data: Going to BLE islands instead – Stages (or private ANT – Pioneer)
- Running Dynamics: Scribe Labs, Wahoo TICKR
- Cycling Dynamics: Could potentially bring clarity to the confusion of duplicate/non-clear metrics

Standards can change

- Trying to boil the ocean never really works
- It doesn't need to be perfect on the first go, but it does have to be interoperable
- It doesn't have to encompass everything envisioned, but it should work for those things implemented
- Companies should be certifying/validating with their respective toolsets on ANT+ and BLE
- Don't be the drunk uncle



Part III:

2014: Carrier Connected Watches

Starting to see 1st generation devices

- Two products this year:
 - Bia women's focused tri watch
 - Timex GPS One+ running watch



These devices sidestep phone platform issues

- Not limited to Apple or Android for pairing and data connectivity
- Ideal for runners, triathletes (less important for cyclists) – no additional carried item
- Usually do a better job of keeping all devices on same firmware level
- Will ultimately become the standard
- Have international roaming agreements (ideal for travelers)

These devices aren't perfect though

- Somewhat limited functionality today
- Usually a bit bulkier/bigger
- Have to balance potential layered fees for service
- Can have battery constraints (though, haven't seen that thus far)
- Susceptible to data usage run-up issues



Part IV:

2014: A few other trends & thoughts

Power meters and the next few years

- Last year I said this was “the year of power”. Apparently, I lied.
- Tremendous price drops over the past 12-18 months
- Even more over the last 45 days, just the beginning
- The conversation *still* needs to shift from watts to ‘what’:
Education
 - Consumers hear about power, but 95% don’t understand it
 - Look at how other areas of sport are solving the problem
 - Would ‘Power University’ been more beneficial than ‘Cycling Dynamics’?

Activity Trackers

- Seeing the definition of activity trackers evolve
 - Is a smartwatch that does activity tracking an activity tracker?
 - What about a GPS watch that does it?
- Used to be just steps/calorie/distance...
- ...now it's everything including the kitchen sink
- I still question the long term viability of standalone activity trackers

Action Cameras

- This market has exploded in the past year
 - Including entrants from the non-usual suspect (HTC?)
 - I'm not 100% convinced that it's a GoPro only world
- Sensor data is quickly becoming norm for non-GoPro
- Seeing potential price divergence however (high and low)
- Last like year, re-use of this data in a smart manner still too complex
 - Record > Transfer via USB > Translate/Process on Computer > Upload to Cloud Service > Download to play from cloud service > Ride on Trainer

'13-'14: Five products that excited me...

Here's five products I'm looking forward to over next year.

- SRM PC8
- The ANT+ Trainer profile
- Recon Jet
- Moxy
- The Garmin FR620 with Running Dynamics

'14-'15: Five products that excite me...and why

Here's five products I'm looking forward to over next year.

- Smaller action cameras with sensors
- Increased usage/accuracy of optical sensors
- Better convergence of sport watches + smart watches
- Apple Watch
- 4iiii Precision

Biggest Challenges for This Segment

- Integration across platforms
- Device pricing versus phone solutions
- Mobile OS adoption differences for connected devices
- Sensor compatibility
- The Apple Watch



Part V: Ways to work with me

Types of reviews

- ‘First Look’ posts & Initial Hands-On posts
 - Typically trade-show driven posts (not reviews)
 - Last-minute posts, 1-3 days pre-launch (not reviews)
 - Designed to explain product, usually based on pre-release hardware/software
- In-Depth Reviews
 - Full in-depth review with final product/software

A Typical Test Review Cycle

- 1) Discussions about product, ensuring it's a proper fit
- 2) Product Arrives
 - A. Unboxing and initial use
 - B. 4-12 weeks of usage/beating crap out of it
 - C. Information gathering
- 3) Writing the post
 - A. Photos/Content
- 4) Publication
 - A. Responding to comments (I don't delete comments)

Ways you can engage with me



Method 1: NDA discussions/product access, far in advance of product release, private beta feedback.



Method 2: Product launch timed review. Pre-availability product usually under NDA until public announcement.



Method 3: Post-release review (already in market product). Usually less time sensitive.



Q&A

(I'm here till Friday morning)

Contact info:

Ray@dcrainmaker.com

www.dcrainmaker.com

The Twitter: @dcrainmakerblog