



**Delivering seamless
experiences cross channels**

April 2nd 2015



Agenda

- ▶ **Who we are**
- ▶ **Challenges**
- ▶ **Solution**
- ▶ **Learnings**



The Leader in Digital Health & Wellness

CONSUMERS



53M monthly consumers⁽¹⁾

65M+ registered users since inception

83% visited MD in last six months⁽²⁾

48% plan MD visit within one month⁽²⁾

HEALTHCARE PROFESSIONALS



2/3rd of all U.S. practicing physicians

2.5M monthly visits⁽³⁾

55% of visits during practice hours⁽⁴⁾



Everyday Health

The collage displays the Everyday Health digital ecosystem. The desktop website features a navigation bar with links for HEALTH A-Z, DRUGS, HEALTHY LIVING, and FOOD. The main content area includes a featured article 'When Grief Becomes a Disorder' by Dr. Sanjay Gupta, a 'WOMEN'S HEALTH' section with '7 Supplement Risks Every Woman Should Know About', and a 'YOUNGER THAN 50? Yes, You Can Have Low Testosterone' article. A row of interactive tools is visible: Free Newsletter, Symptom Checker, Drug Finder, Calorie Counter, Meal Planner, and Recipes. Below this are featured columns for 'SAFETY BREAK', 'THIS REVEALS CHOCOLATE', and 'NUTRITION INSIGHT'. The mobile app screenshots show a 'Cold & Flu Center' with various health resources and a 'Journal' app for tracking health metrics like glucose levels, medication intake, and exercise.

- Free Newsletter
- Symptom Checker
- Drug Finder
- Calorie Counter
- Meal Planner
- Recipes

FEATURED COLUMNISTS

- SAFETY BREAK**
By Theresa Scharfman
Hidden
- THIS REVEALS CHOCOLATE**
By Barbara H. Swanson
& Natural
- NUTRITION INSIGHT**
By Jennifer Tardif, PhD, RD, MPH
Bone Broth:

WOMEN'S HEALTH
7 Supplement Risks Every Woman Should Know About

YOUNGER THAN 50? Yes, You Can Have Low Testosterone

Cold & Flu Center
Resources, Symptoms, Diagnosis, Treatment

Journal
Boost Glucose: my out of bed glucose is 111 mg/dL
took all my medication for today
Breakfast: my breakfast has carbs (my relative tolerance is 140g)
Exercise: I exercised for minutes (I burned 11 calories)
this week I weigh pounds

- ▶ **Interactive tools, data-driven graphics, and mobile-friendly platforms deliver best-in-class health information in a fun, engaging way, at a glance and on the go**



Pregnancy & Parenting

WHAT
TO
EXPECT



iOS &
Android app

- More than **10M** unique visitors per month
- **#1 pregnancy app** on iPhone and iPad, and the fastest growing on Android
- Over **40%** of pregnant women in the US register with What to Expect⁽¹⁾
- Over **2M+** app installs per year

(1) Internal data for 2014;



Diet and Fitness



The Mayo Clinic Diet



HOME

FAQ

ABOUT

WEIGHT LOSS

TRACK

ABOUT THE DIET

GET THE DIET

Log In

HB Follow these habits for 14 days and watch the weight come off!



Current phase: Lose W 1

Lose It!

Your Habit Tracker | Day 4

CONTINUE TO DAY 5

DOWNLOAD/PRINT THE TRACKER

Overview

+ Add 5 Habits

- Break 5 Habits

+ Bonus 5 Habits

DAY 4 OF 14

Healthy fats like olive oil, vegetable oils, avocado, nuts and nut butters are the most heart healthy, but don't go overboard. All fats are high in calories.

LEARN MORE ABOUT THE HABITS



Today's Progress

1 Add 5 Habits

1 Break 5 Habits

1 Bonus 5 Habits

FULL PROGRESS REPORT

COMPLETED DAYS 1 2 3 4 5 6 7 8 9 10 11 12 13 14

Weight Tracker

The Mayo Clinic Diet



SOUTH BEACH diet

JILLIAN
MICHAELS

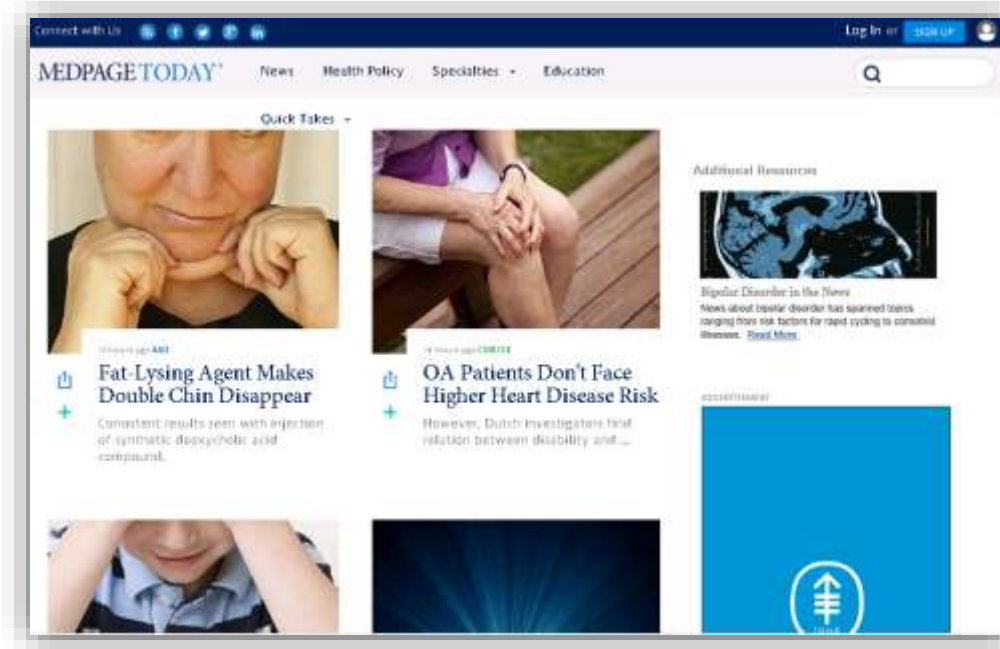
- Multiple diet and fitness products to coach and help live a healthier lifestyle.

- Jillian Michaels - Featured by Apple in App Store as **"Best New Apps"** (July 2014)

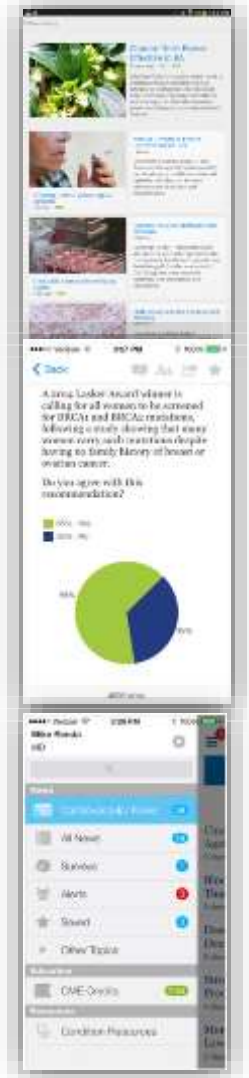




MedPage Today



- ▶ Provider of award-winning medical news, comprehensive tools for CME/CE credit, and live conference coverage all designed specifically for healthcare professionals





What our audience wants from us...

▶ **Connected experience**

- Always available regardless of where and which devices they use

▶ **Make the right personalized content available at the right time**

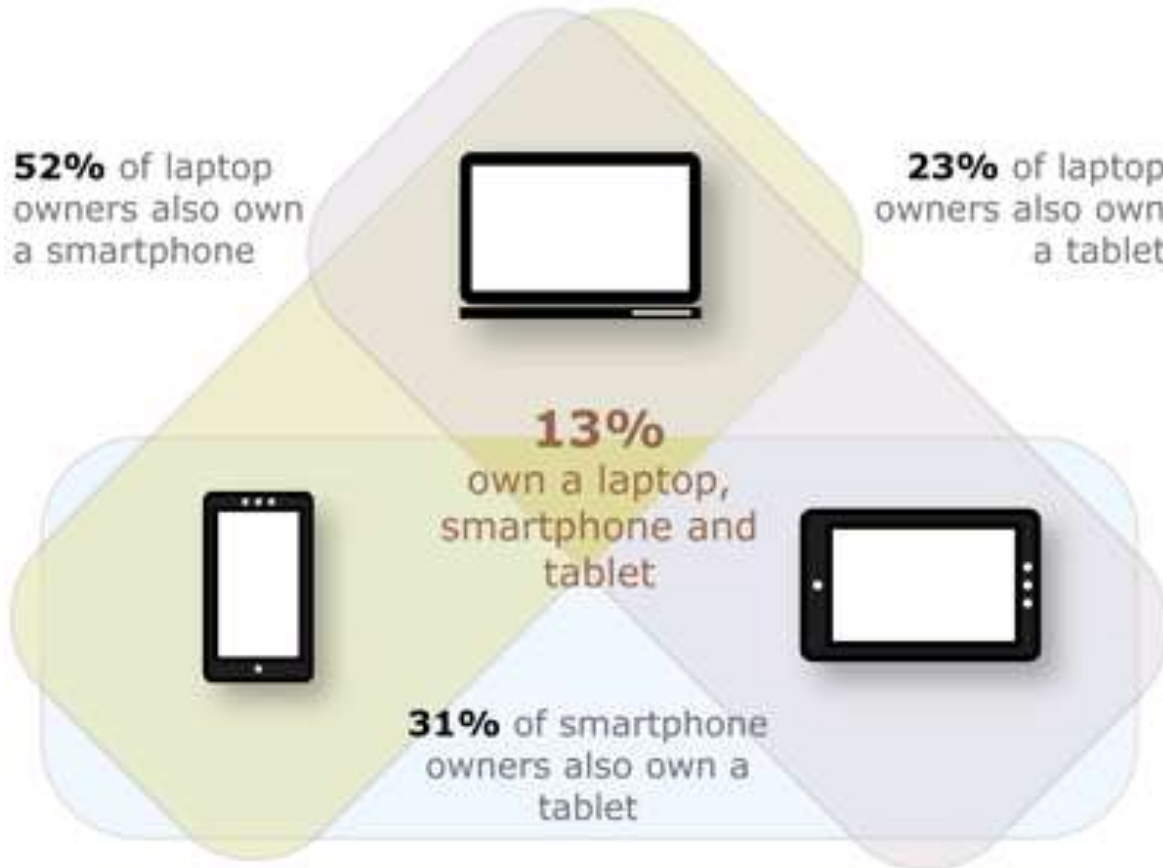
- News / Videos / Pictures / Meals / Recipes / Exercises / Activities

▶ **Get real-time updates/reminders to stay informed and live healthier lives**

▶ **Secure data sharing**



Multiple devices for the same product

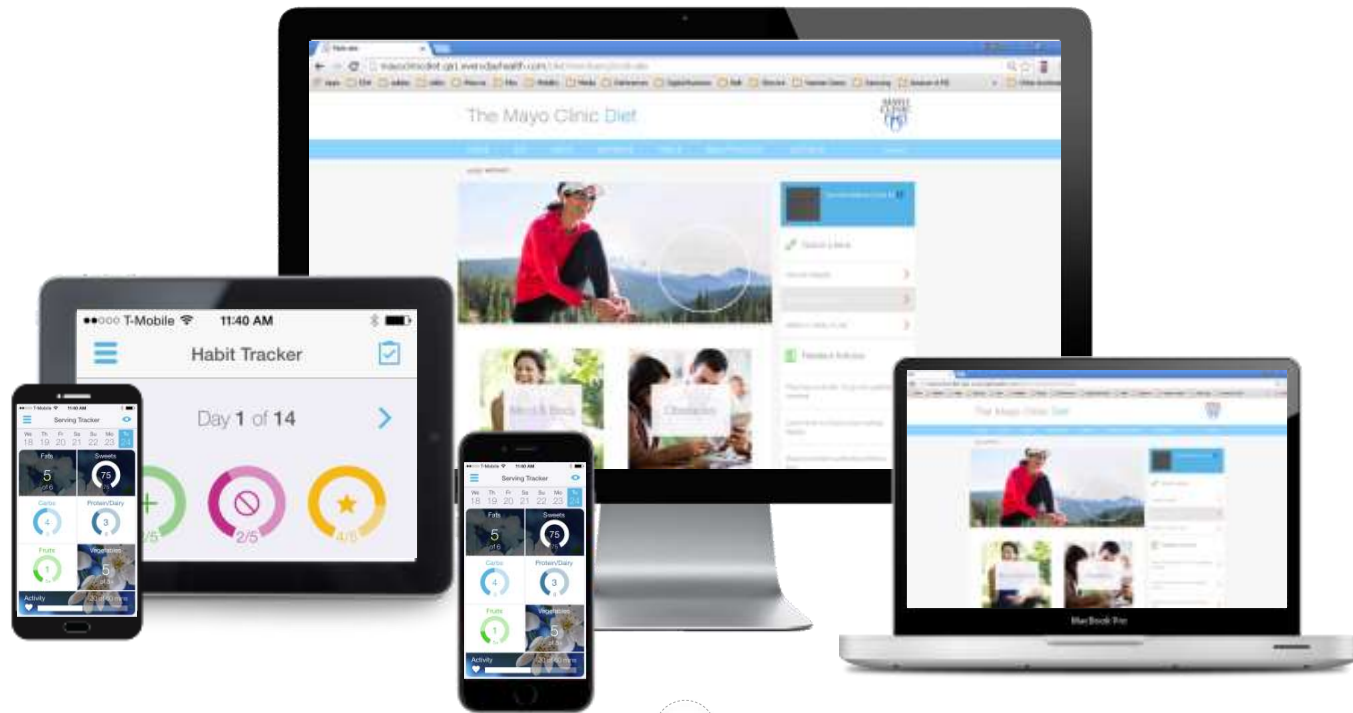


40% of users run the same app in multiple devices

90% of Multiple device owners switch between devices to complete tasks

Source: <http://www.stateofthedia.org/> & www.thinkwithgoogle.com

Multi Device - Technical Challenges



Development

App & Services
across platforms

Maintain state

Across devices

Synchronization

Content created &
consumed
across devices

Offline/Slow networks

Maintain UX &
Seamless transitions



Considerations

Needs a system capable of storing and syncing data across devices, cross platform

- **Fit into existing web and mobile infrastructure**
- **Support desktop, iOS and android**
- **Security**
- **Reduced development & maintenance cost**
- **Scale for multiple product lines**





Potential solutions explored



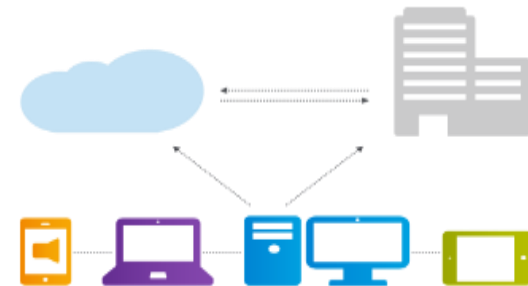
iCloud

- iOS only
- No “server side”



Parse

- Cross platform
- Subscription based
- "Cloud code" within Parse environment (JavaScript SDK)
- No hook into existing website infrastructure.



Custom backend services

- REST APIs - cross channels
- SQLite mobile DB in the device.
- Custom plumbing on mobile and server sides
- Integrate with existing infrastructure
- Higher development & maintenance cost
- Handling Sync errors



Couchbase Mobile



Couchbase Lite

On-device, light weight,
native embedded
database



Sync Gateway

Synchronize on-device
Couchbase lite with
Couchbase server



Couchbase Server

High performance,
scalable, always-on cache
& JSON document store

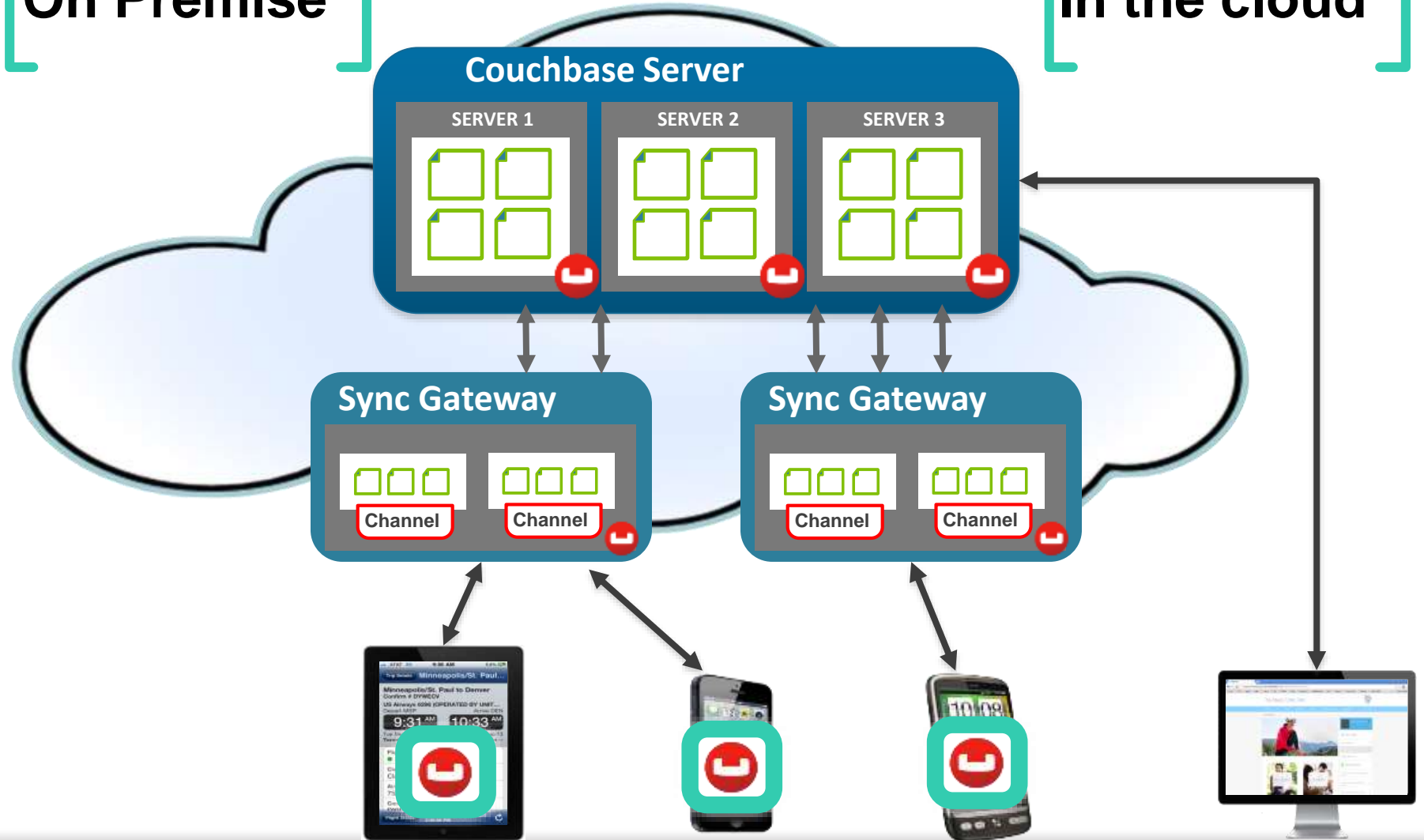
- ▶ Cross platform support
- ▶ Supports auto-replication with bidirectional, multi-master sync
- ▶ Fit into existing Couchbase website infrastructure
- ▶ Security (Supports Certificates, User-level permissions)
- ▶ Open source (+ Support Subscription for Enterprise)



Architecture

[On Premise]

[In the cloud]





Key features

▶ JSON Documents

- Versioning available out of the box
- Document ownership - security
- Queryable against key/value through REST APIs



▶ Buckets

- Documents written to and read from buckets
- Different buckets for different purposes



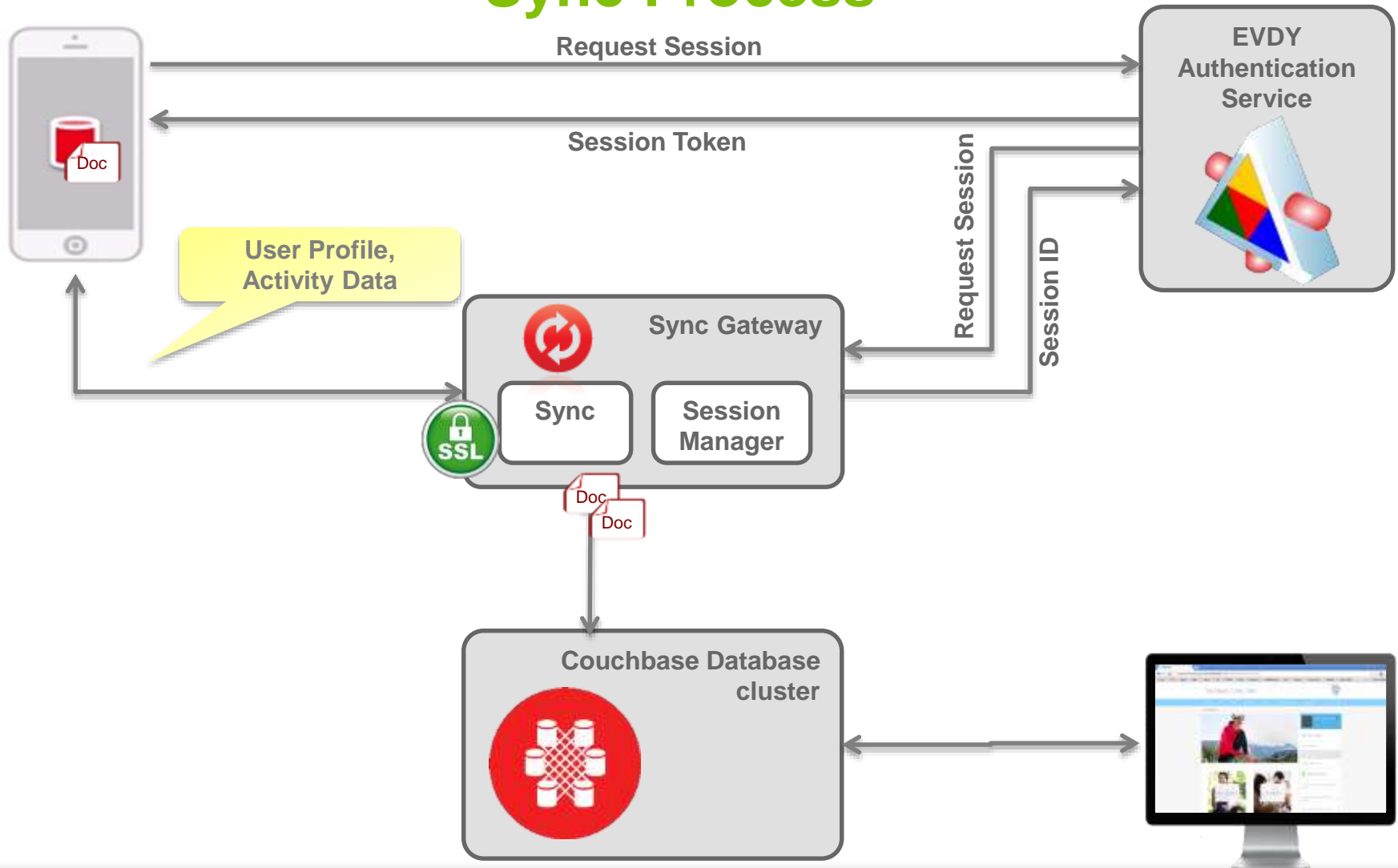
▶ Sync / Replication

- Bucket level replication
- Automatic or Triggered
- Push only / Pull only / Bi-directional
- Reduced work on plumbing





Sync Process





Personalization

- ▶ Channels
- ▶ Tagged documents
- ▶ Users subscribe to channels
- ▶ Possibilities for Personalization



User A
channels: food



User B
channels: sports



User C
channels: food, travel



doc.channels : "food"



doc.channels : ["food", "sports"]



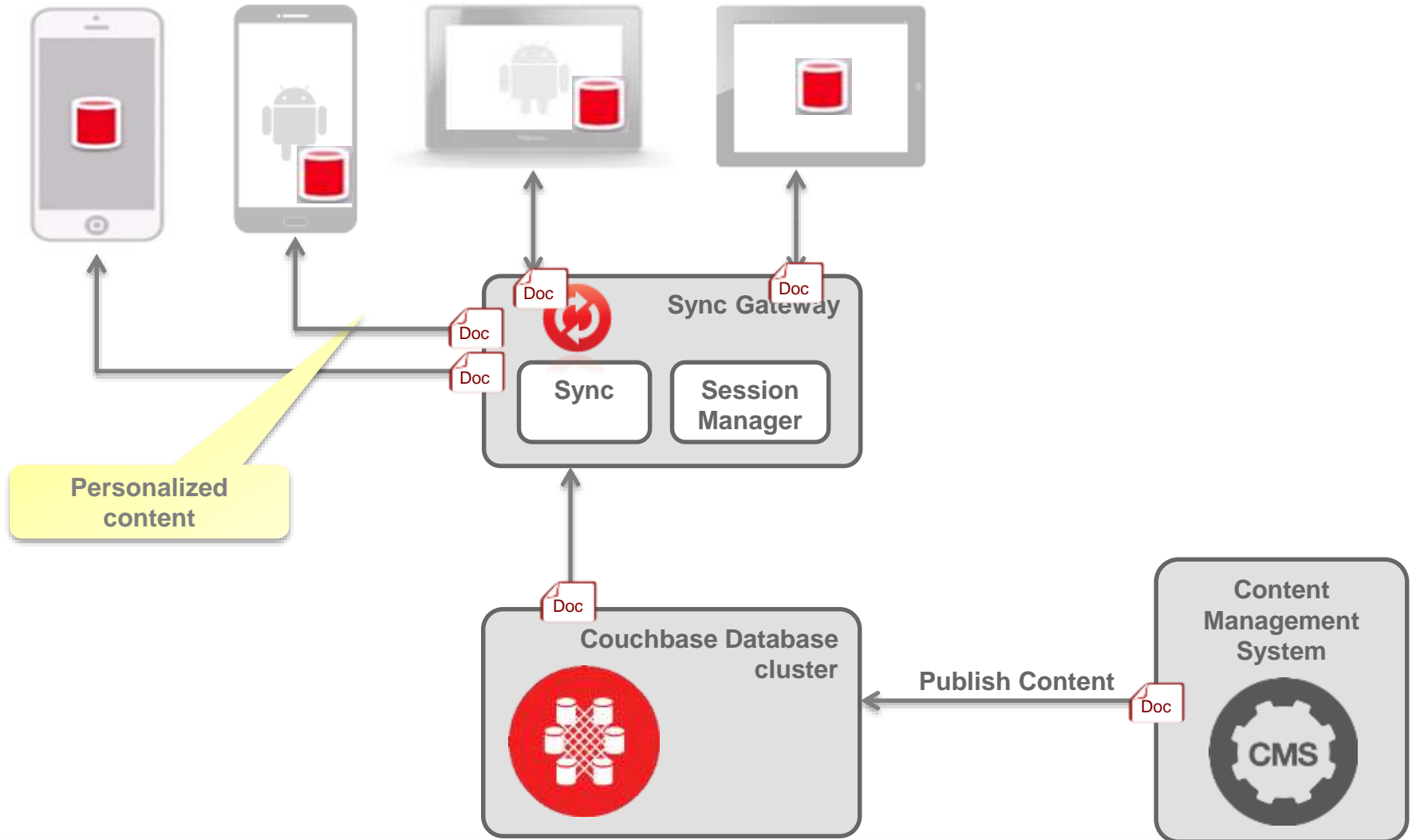
doc.channels : ["sports", "travel"]

**Users subscribed to the
specific interests**

**Content created with
channel association**



Content Publish





Learnings

- ▶ **Successful sync between Website, iPhone, iPad and Android apps**
 - Implemented only on some screens
 - Sync completed in a few milliseconds on 4G
- ▶ **Simplified, Scalable & Standard architecture across platforms**
- ▶ **Reduction in effort**
- ▶ **Scalable for new products through new buckets**
- ▶ **Exploring personalization**



Learnings

- ▶ Early version (ver. 1.3)
- ▶ Tied to one vendor
- ▶ Socket usage & limits
- ▶ Manual failovers for redundancy
- ▶ No management dashboard

 everyday HEALTH®

