

Corporate Presentation Genero Mobile

Q4 2020



FOUR Js
The Power of Simplicity



Market disruption

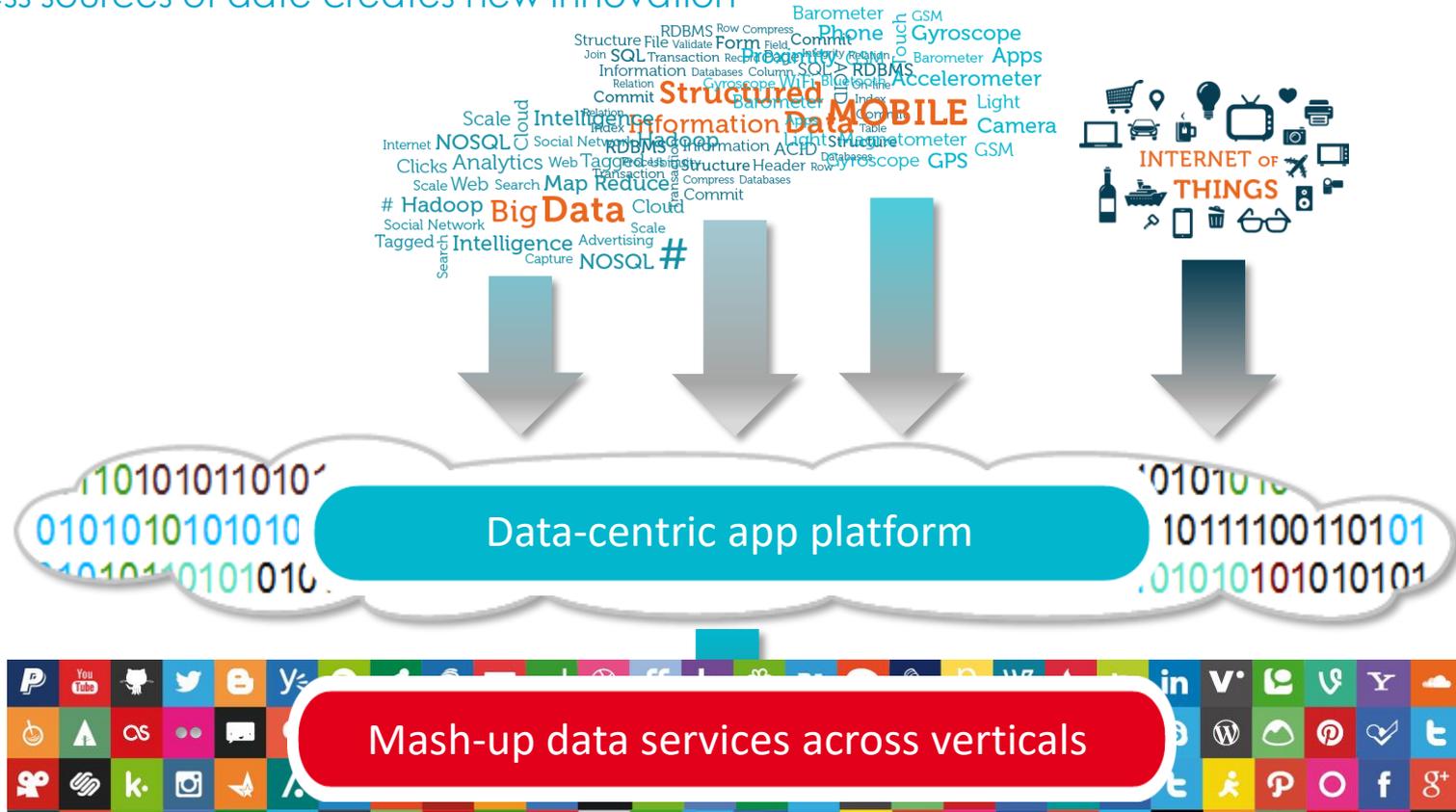


FOUR Js
The Power of Simplicity



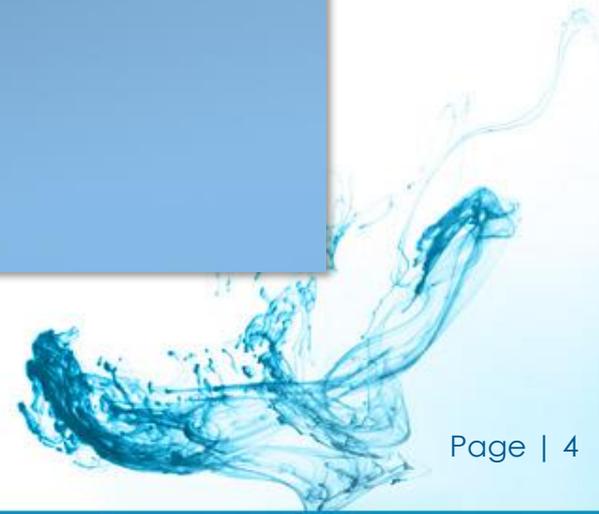
The data explosion

Endless sources of data creates new innovation



Consumer IT

Users prefer to use privately owned devices



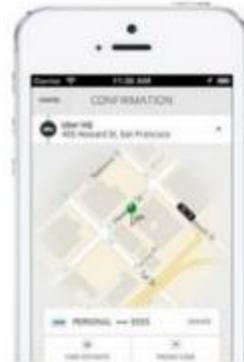
Consumer IT

The 5 big technology shifts



Industry trends

Innovation in weak user experience markets



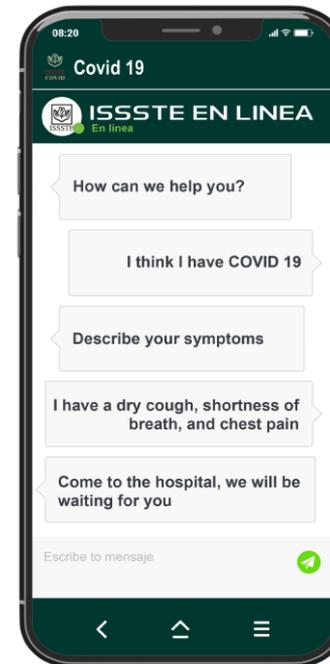
Industry trends

Healthcare

THEN

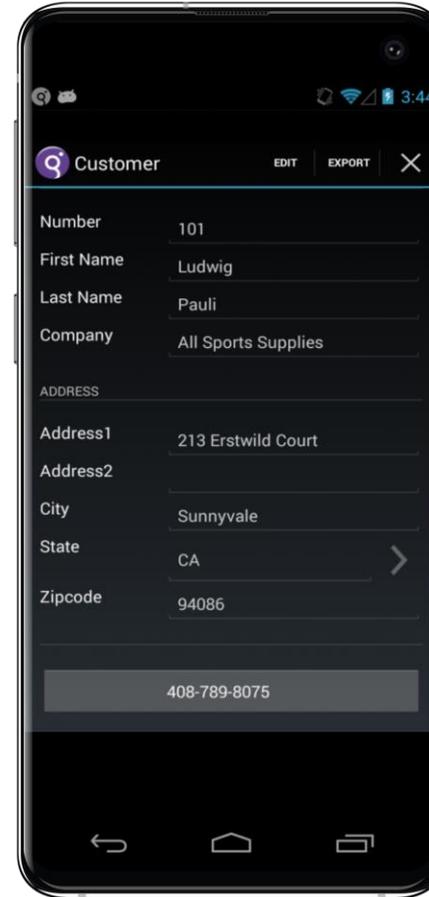
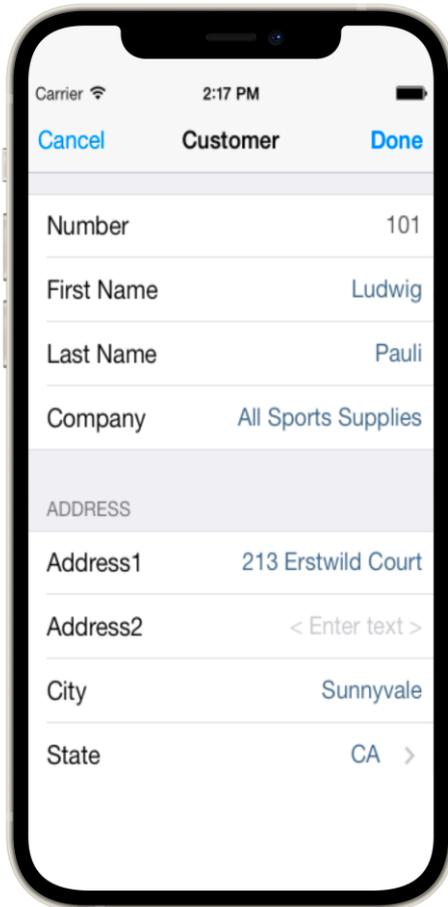


NOW



User experience - ergonomics

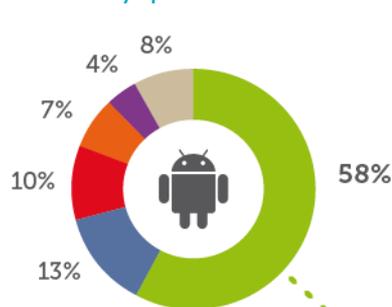
Two dominant platforms



iOS, Android and WP language lock-in

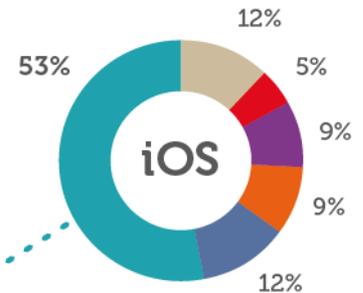
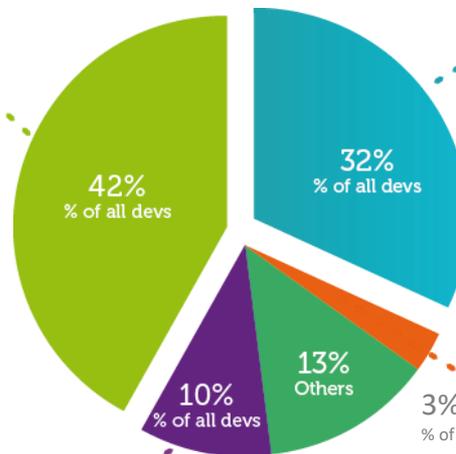
Primary language use by platform indicates platform loyalty

- Objective-C
- C/C++
- C#
- Java
- Visual Development Tool
- HTML/CSS/Javascript
- Others
- ActionScript



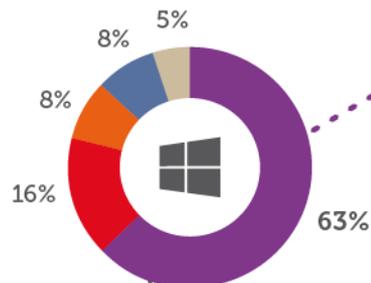
Android
Programming languages used by Android developers

Platform Priority
% of all developers

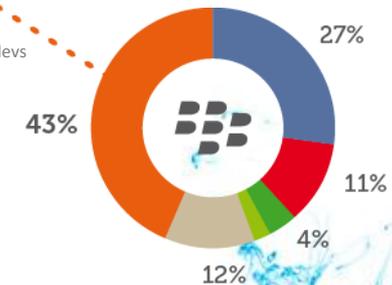


iOS
Programming languages used by iOS developers

Windows Phone
Programming languages used by Windows Phone developers



Blackberry 10
Programming languages used by Blackberry 10 developers



Mobile development tools

Two dominant proprietary frameworks and one outsider



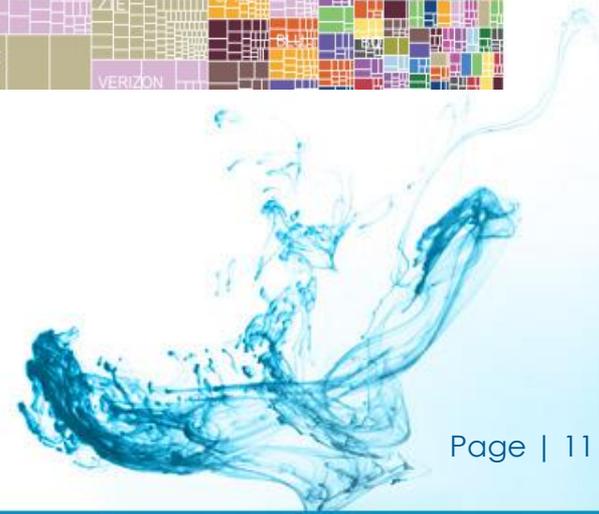
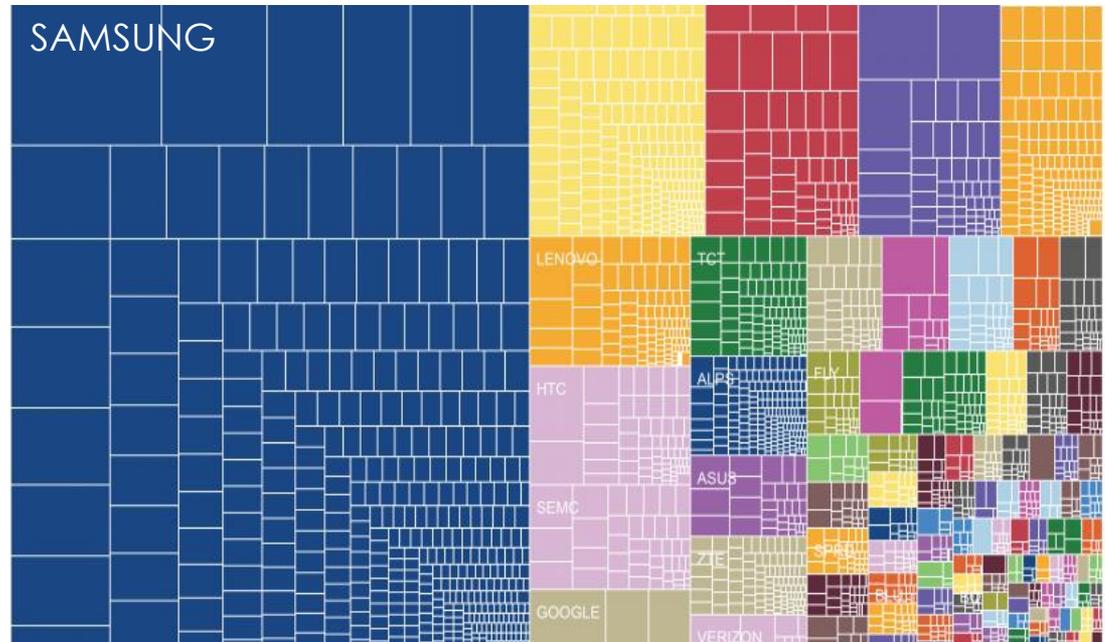
Xcode
Objective-C
C++
UIKit
LLVM

Eclipse
Android Studio
Java

Developer productivity

The developer's nightmare – Android fragmentation, by brand

- 1,294 brands
- 24,000 distinct devices



Developer productivity

The developer's nightmare – Android fragmentation, by handset

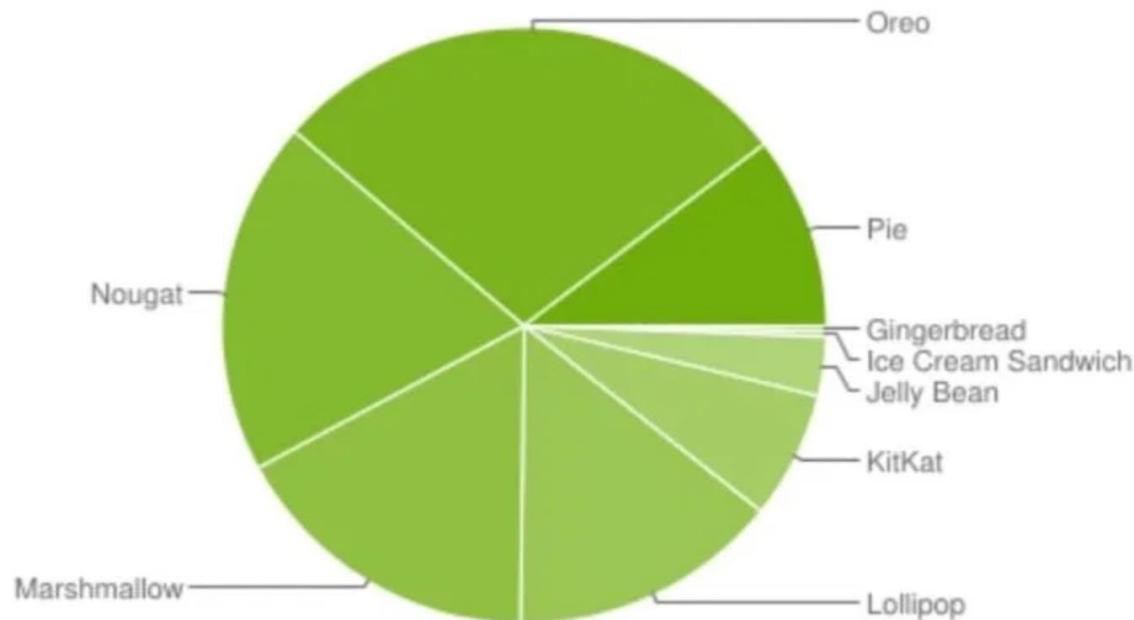
- 1,294 brands
- 24,000 distinct devices



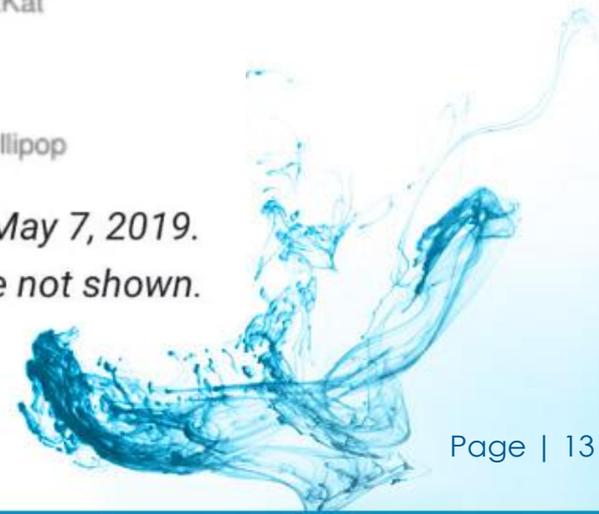
Developer productivity

The developer's nightmare – Android fragmentation, by OS version

?% of all devices use Android 10.



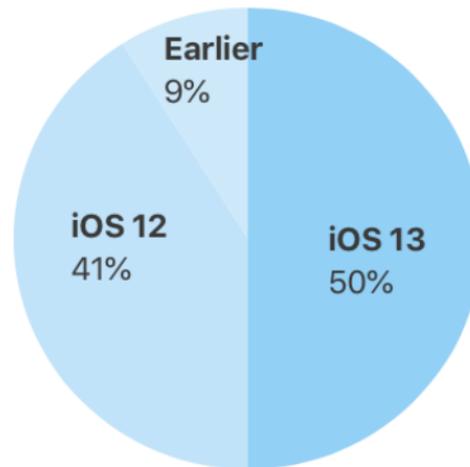
*Data collected during a 7-day period ending on May 7, 2019.
Any versions with less than 0.1% distribution are not shown.*



Developer productivity

The developer's nightmare iOS fragmentation

50% of all devices use iOS 13.

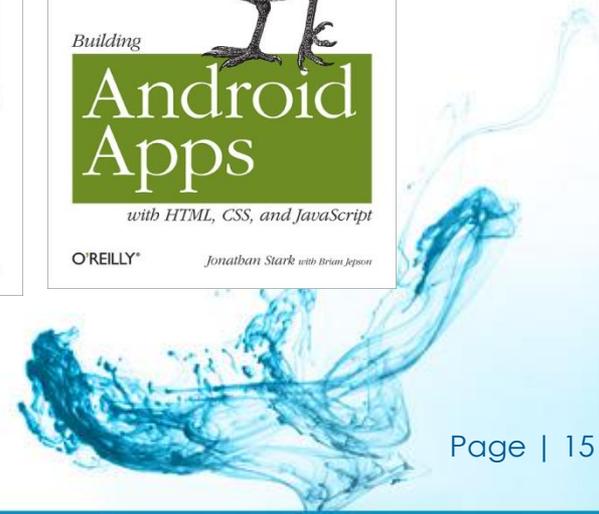
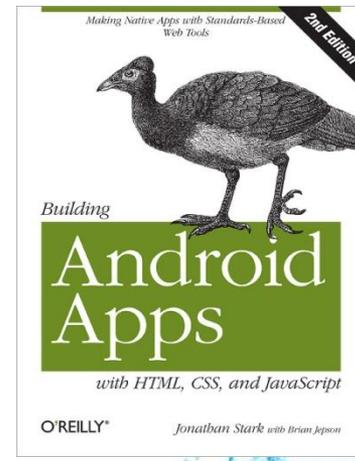
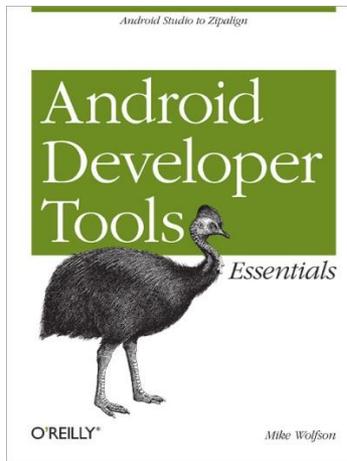
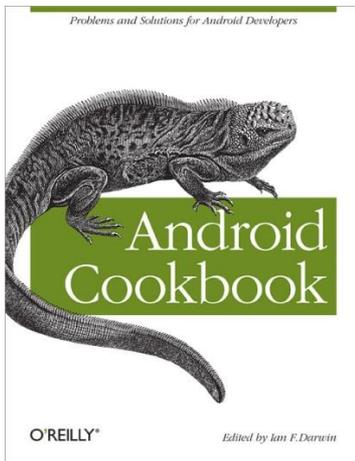
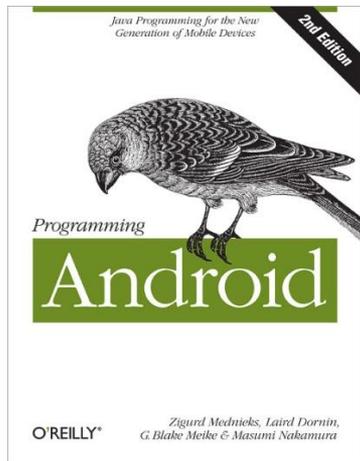
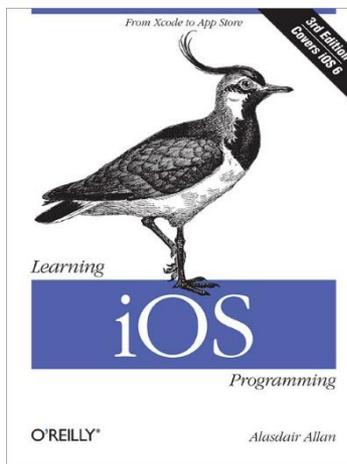
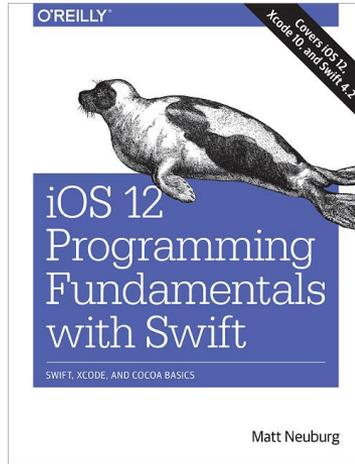
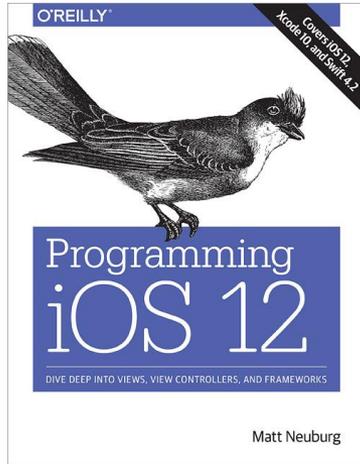


As measured by the App Store on
October 15, 2019.



Developer productivity

APIs perform device specific tasks defined by thousands of calls

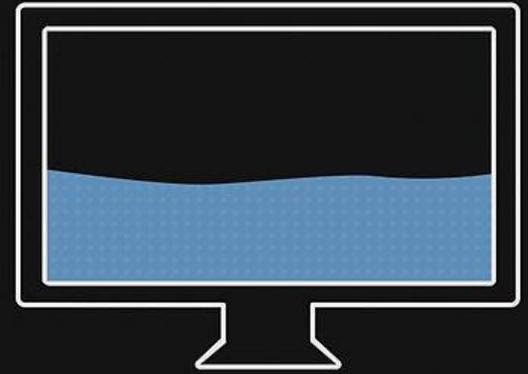
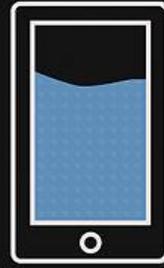
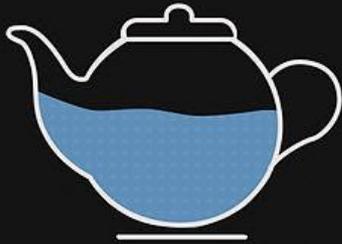
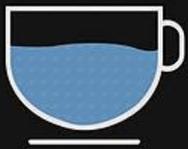


Industry trends

Web-like apps and app-like websites



CONTENT IS LIKE WATER



“ You put water into a cup it becomes the cup.
You put water into a bottle it becomes the bottle.
You put it in a teapot, it becomes the teapot. ”

Josh Clark (*originally Bruce Lee*) - Seven deadly mobile myths

Illustration by Stéphanie Walter

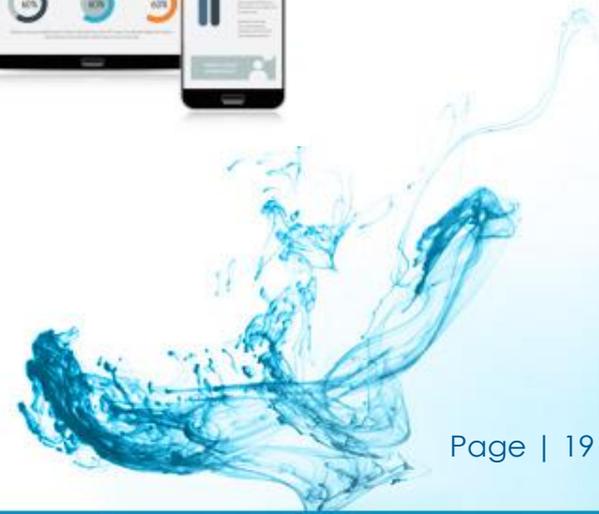
Industry trends

Web-like apps and app-like websites – Responsive Web Design



The modern app – cross-platform

Modern apps must be cross-platform and agile

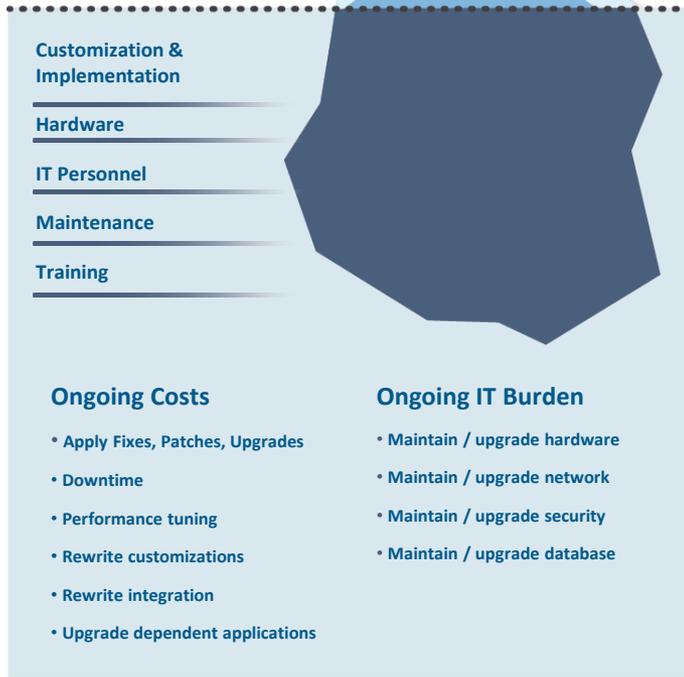


The modern app – the Cloud

Enterprises can focus more on their business than on IT

On-Premises

5-10%
Software Licenses



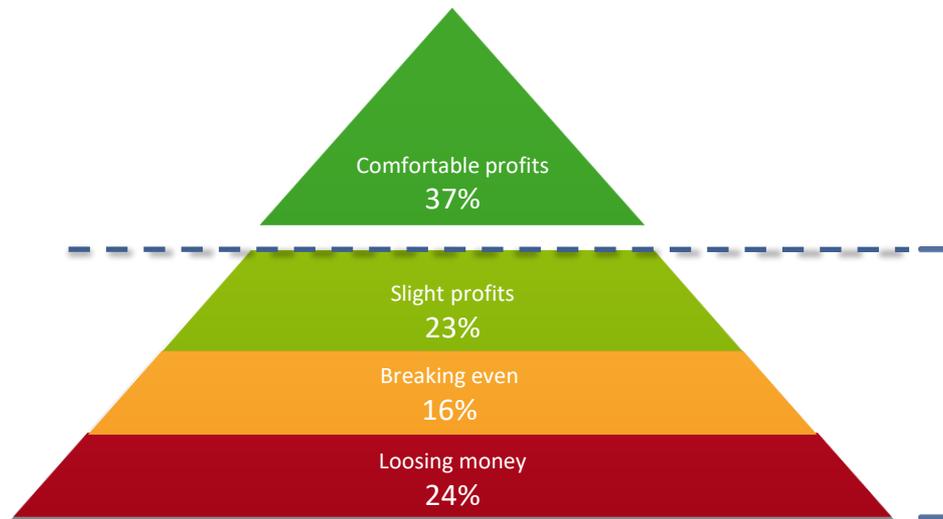
Cloud Computing

67%
Subscription Fees



Making money

63% of mobile app developers are struggling to make a profit



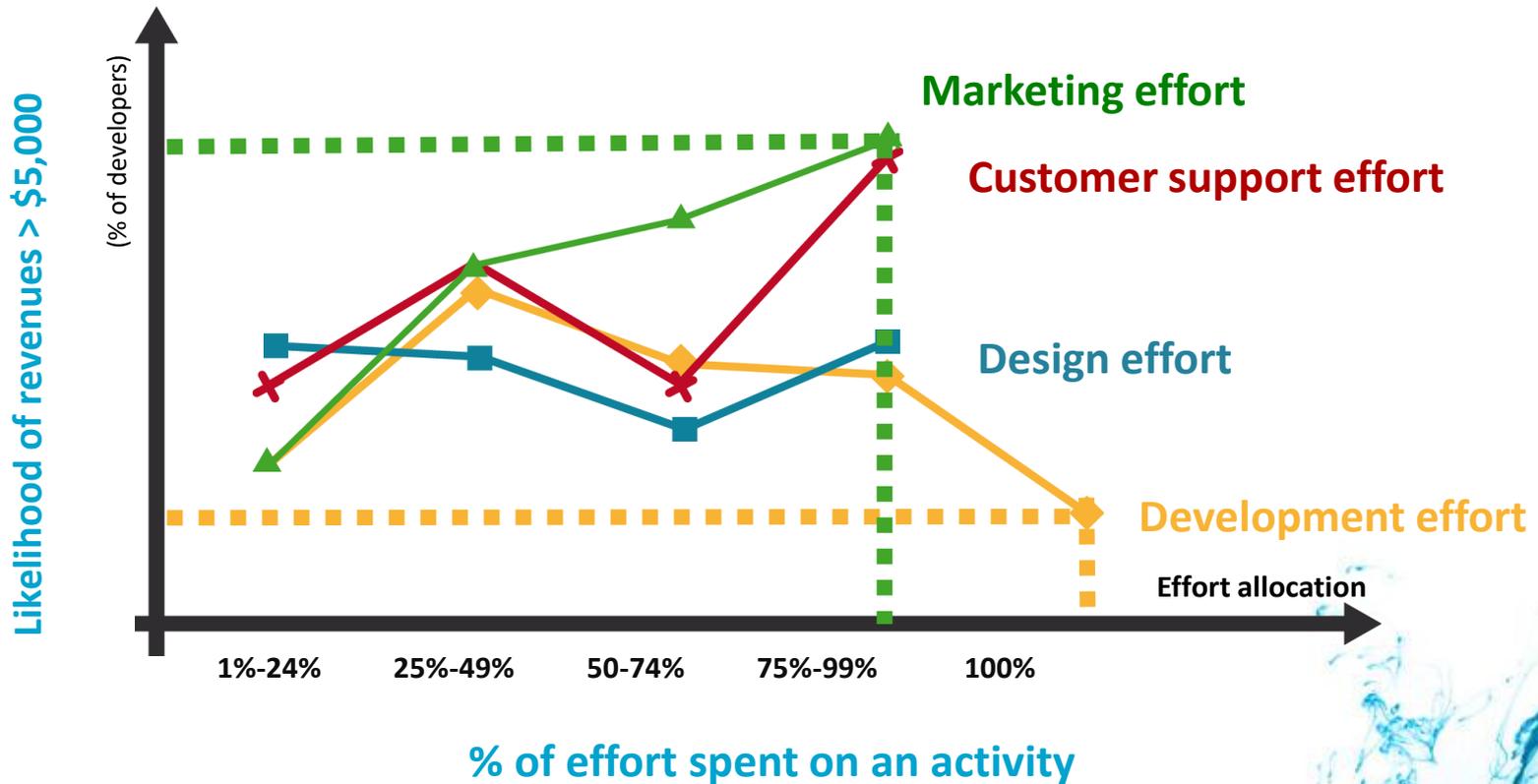
63% of developers struggle or lose money



Making money

The more time spent on development, the greater the chance of failure

The probability of making \$5,000 per app/month vs. effort



Genero Mobile



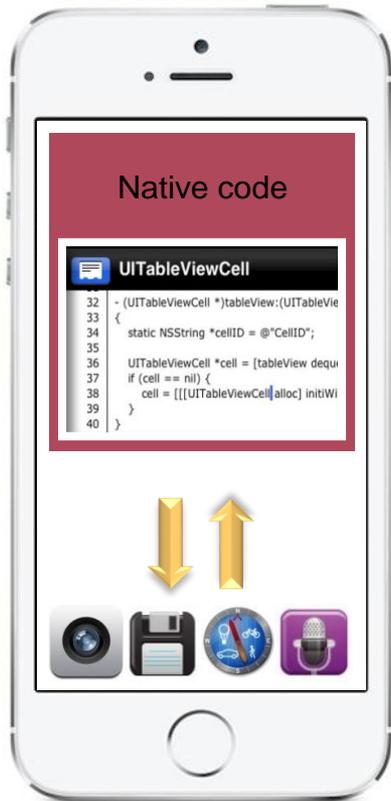
FOUR Js
The Power of Simplicity



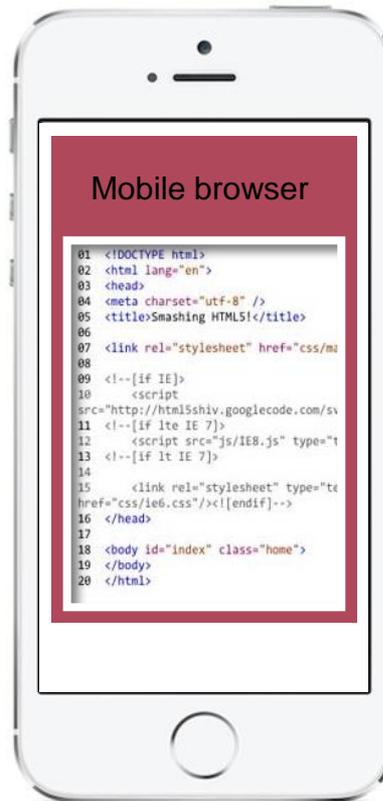
Cross Platform solutions

Mobile Application types

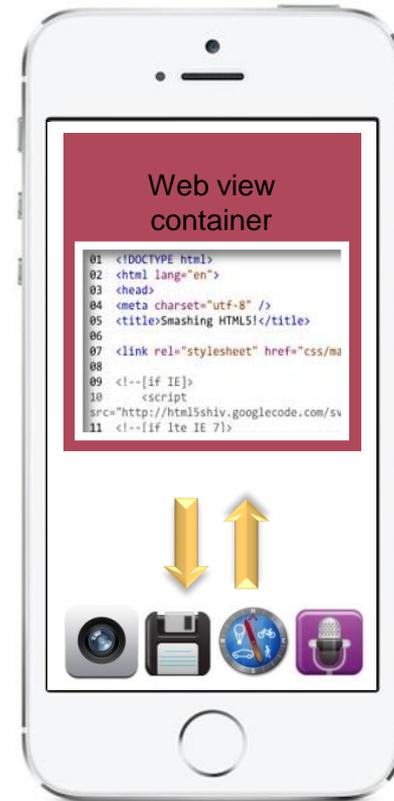
Native



HTML5

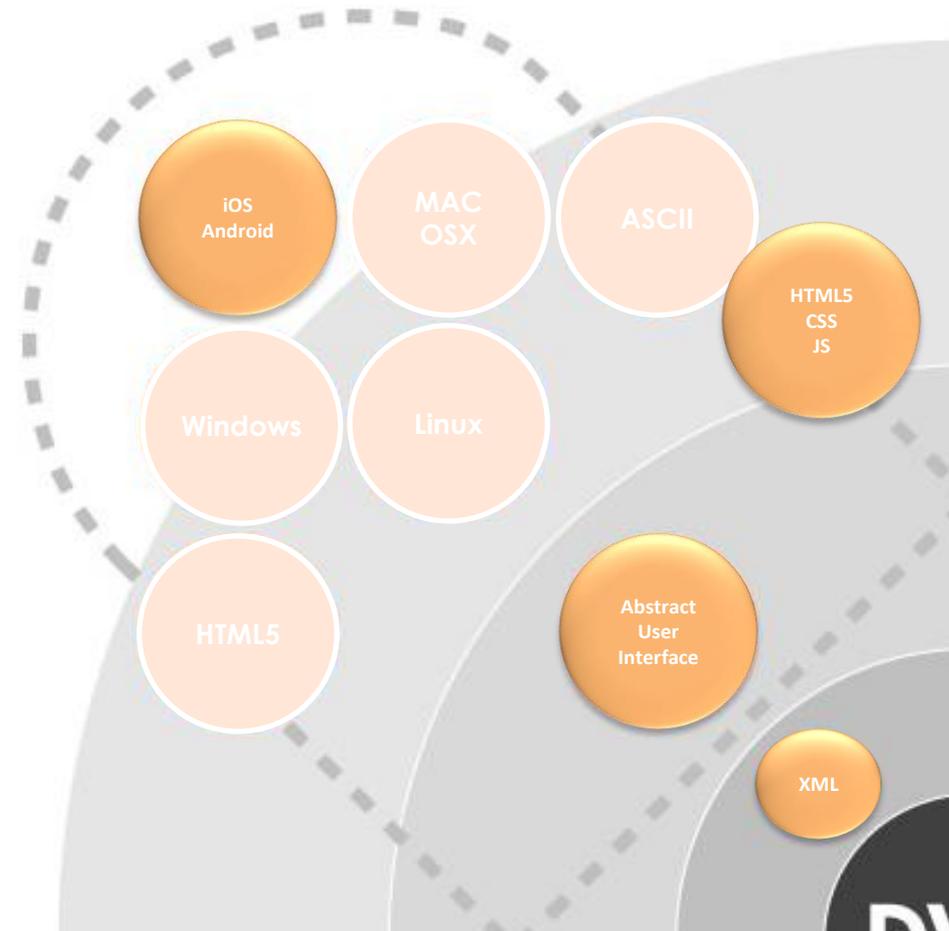


Hybrid



Flexible deployment

Genero Mobile



➤ Cross-platform

iOS, Android = 98%
market opportunity

➤ Native 'look & feel'

➤ Online mode

➤ Offline mode

➤ Embedded SQLite

➤ RESTful Web services

JSON

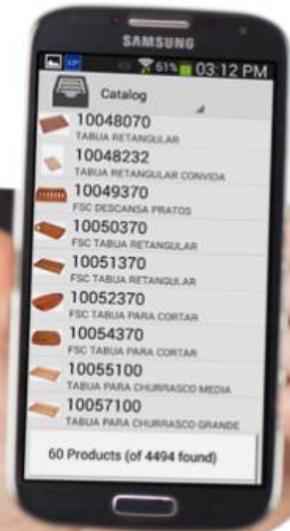
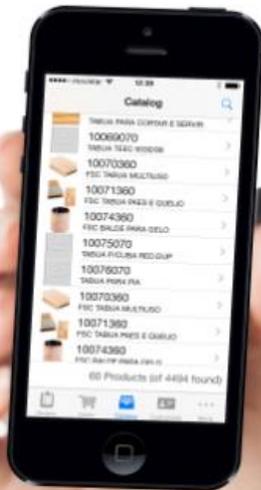
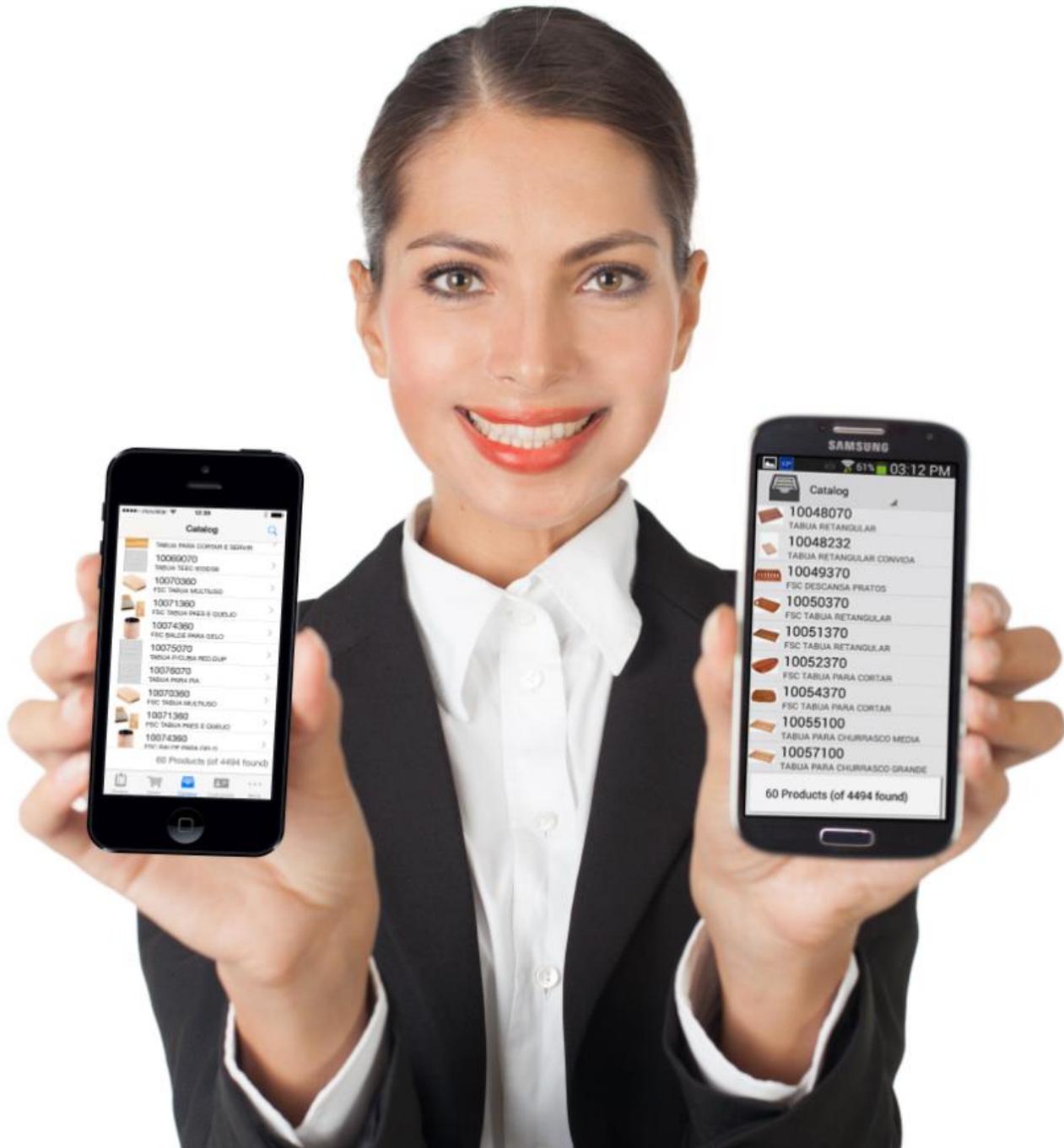
SOAP

➤ UTF-8





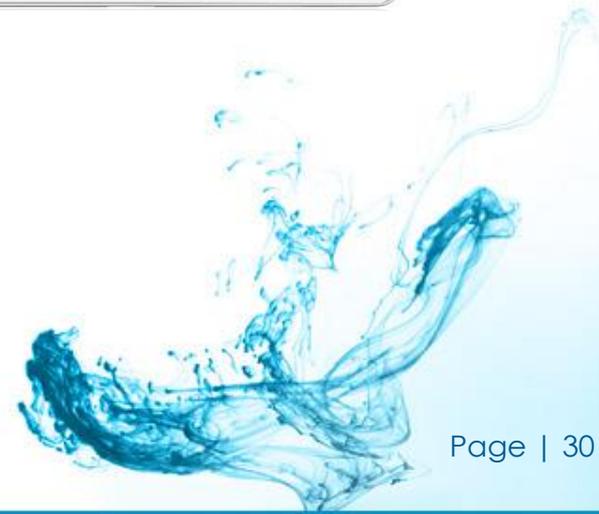
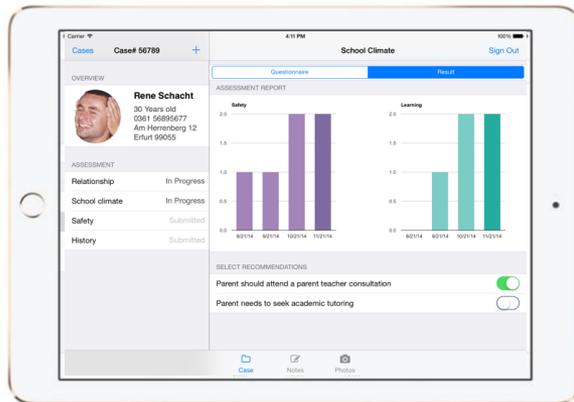




Developer productivity

Cross-platform - iOS, Android

Genero Mobile

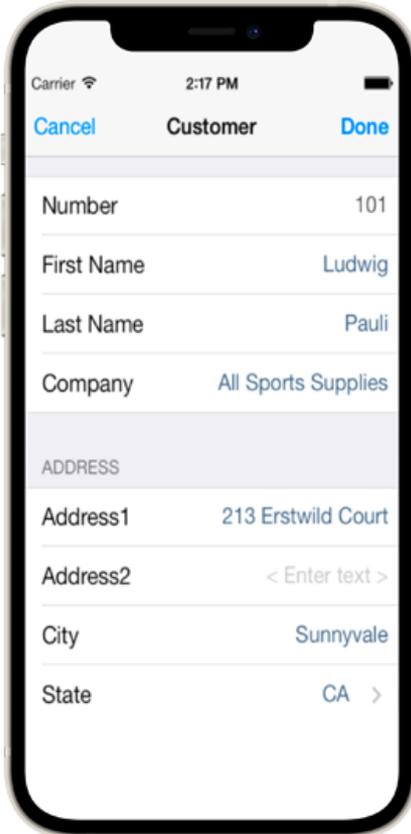


Write once, deploy 'everywhere'

Developers don't need to choose - one source code reaches the entire market

14

android

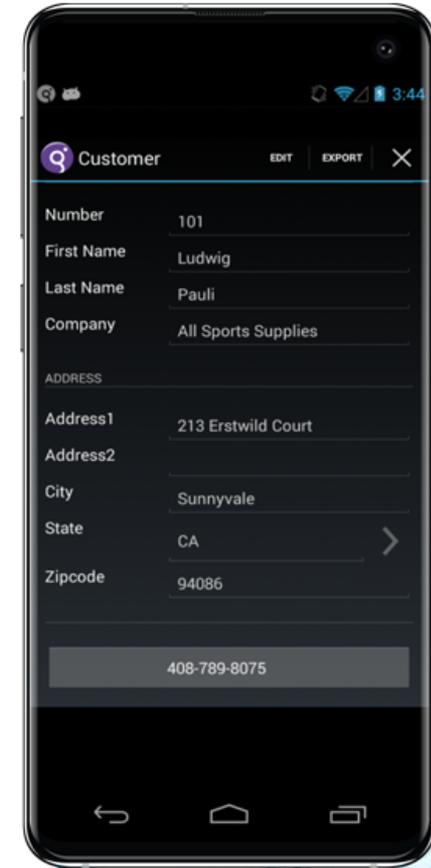


```
private function editCustomer(num)
    define num like customer.customer_num
    let int_flag = false

    -- Fetch customer record from database table
    select *
    into customer.*
    from customer
    where @customer_num == num

    -- Get input from form for customer record
    input by name customer.* without defaults
    on action zoom infield state
        let customer.state = states.getState(customer.state)
        display by name customer.state
    end input

    -- Update customer record to database table or redisplay
    if not int_flag then
        update customer
        set customer.* = customer.*
        where @customer_num = num
    else
        select *
        into customer.*
        from customer
        where @customer_num == num
        display by name customer.*
    end if
end function
```



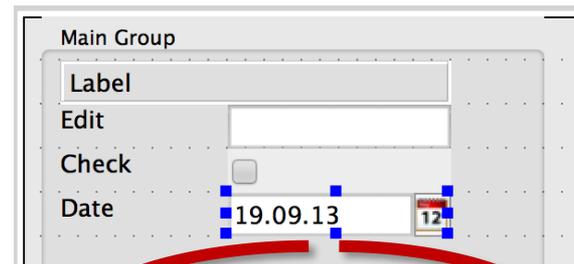
Write once, deploy 'everywhere'

Reduces need to learn native APIs

➤ Native widgets

```
public function showForm()  
  
  open window wForm with form "simple2"  
  
  let pEdit = 3  
  let pDate = today  
  
  input by name pEdit, pCheck, pDate without defaults  
    on action foo  
      display "foo"  
    on change pCheck  
      display "ON CHANGE pCheck:", pCheck  
    on action bar  
      display "bar"  
  end input  
  
  close window wForm  
  
end function
```

Abstract form description

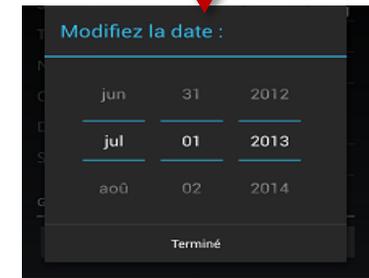


A diagram showing an abstract form description. It consists of a rectangular box labeled "Main Group" containing four rows of controls: "Label", "Edit" (with a text input field), "Check" (with a checkbox), and "Date" (with a date picker showing "19.09.13"). Red arrows point from the "Date" control to two native rendering examples below.



A native rendering of a calendar. It shows a table with months and years. The date "19.09.13" is highlighted in blue.

June	16	2010
July	17	2011
August	18	2012
September	19	2013
October	20	2014
November	21	2015
December	22	2016



A native rendering of a date picker. It shows a dark-themed dialog box with the title "Modifiez la date :". The date "19.09.13" is displayed. Below the date, there are three columns for month, day, and year, with "jun", "01", and "2012" selected. A "Terminé" button is at the bottom.

Native rendering

Write once, deploy 'everywhere'

Reduces need to learn native APIs

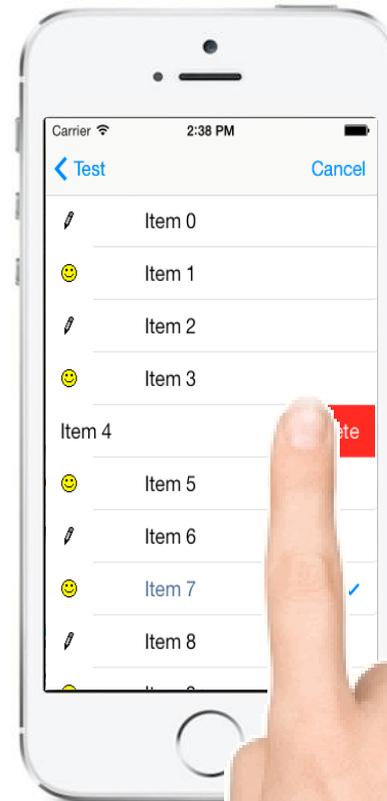
```
private function showlist()
  define arr dynamic array of record
    a string,
    b string
  end record
  define i int

  open window f with form "simple"

  --populate array
  for i = 1 to 100
    let arr[i].a = sfmt("Item %1", i-1)
    let arr[i].b = iif(i mod 2 == 0, "smiley", "pen")
  end for

  display array arr to arr.* attributes(unbuffered)
  on delete
    display "deleted element at index:", arr_curr()
  end display

  close window f
end function
```



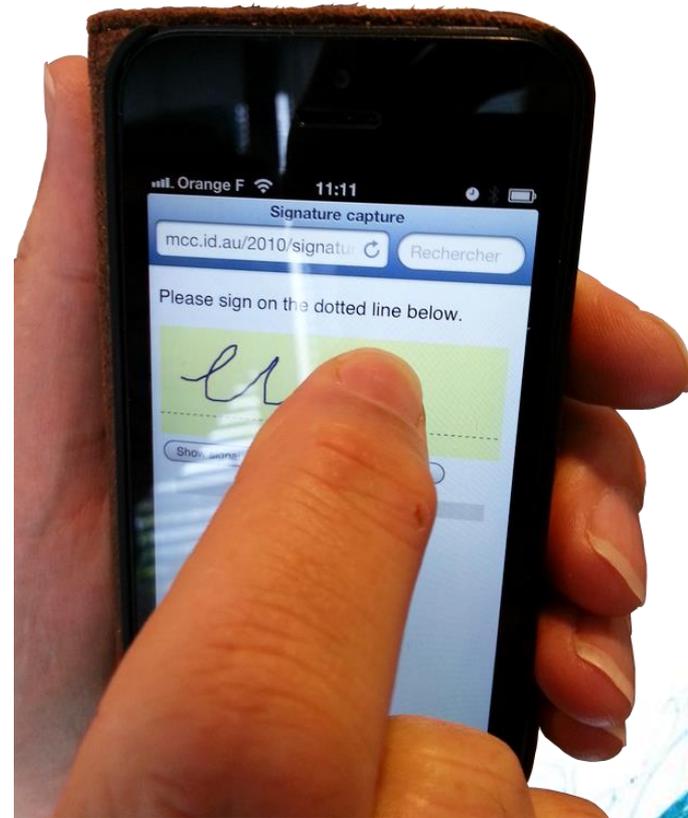
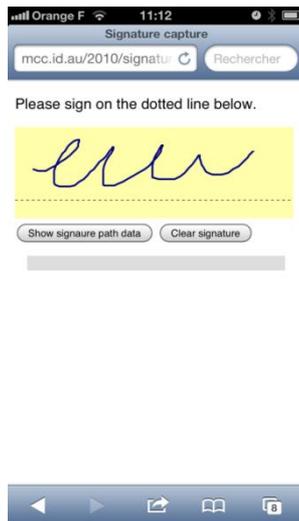
Web components

Tectonic shift for web development - vast library of 3rd party components

➤ Embed Web components into native mobile apps

Eg. Signature capture

<http://mcc.id.au/2010/signature.html>



Web components

Tectonic shift for web development - vast library of 3rd party components

➤ Embed Web components into native mobile apps

Eg. Barcode scanners & sleds



Cordova API

Accelerometer

Tap into the device's motion sensor.

Camera

Capture a photo using the device's camera.

Capture

Capture media files using device's media capture applications.

Compass

Obtain the direction that the device is pointing.

Connection

Quickly check the network state, and cellular network information.

Contacts

Work with the devices contact database.

Device

Gather device specific information.

Events

Hook into native events through JavaScript.

File

Hook into native file system through JavaScript.

Geolocation

Make your application location aware.

Globalization

Enable representation of objects specific to a locale.

InAppBrowser

Launch URLs in another in-app browser instance.

Media

Record and play back audio files.

Notification

Visual, audible, and tactile device notifications.

Splashscreen

Show and **hide** the applications splash screen.

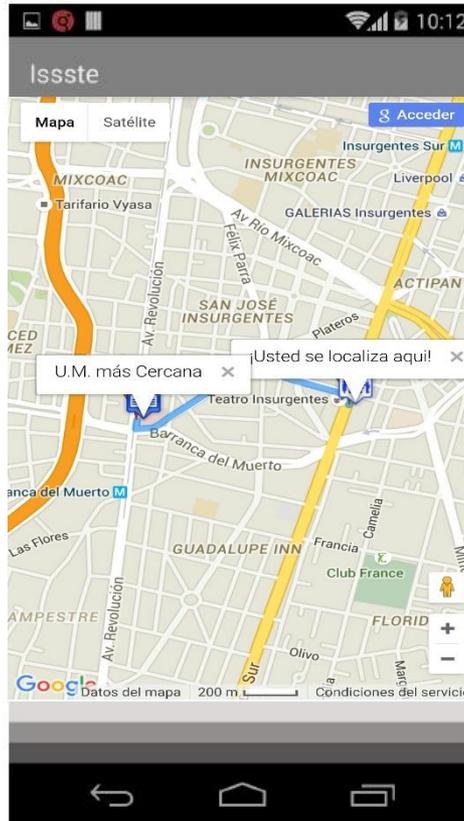
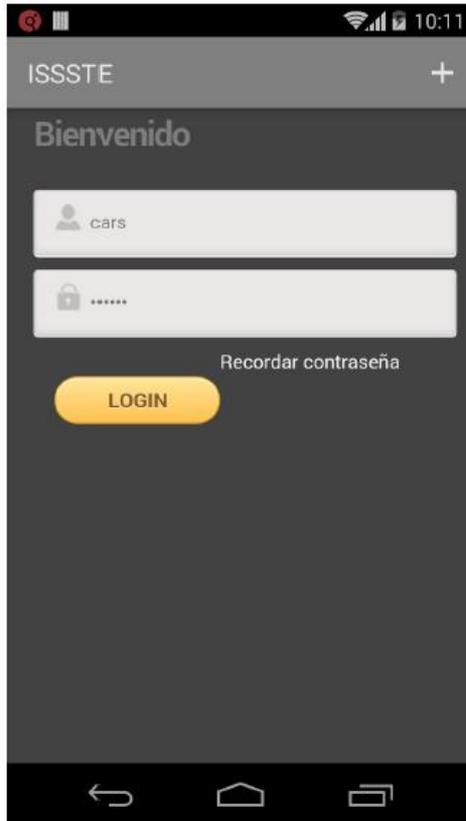
Storage

Hook into the devices native storage options.



User experience – streamlining processes

Exploiting device innovation



Digital transformation

- On-demand payslip
- Linked to tax department
- Real-time account status
- 900,000 payslips downloaded in 2 days
- 800 reports/second
- Sub-second response times
- 1 Linux server
- **Taxpayer savings of \$ millions**



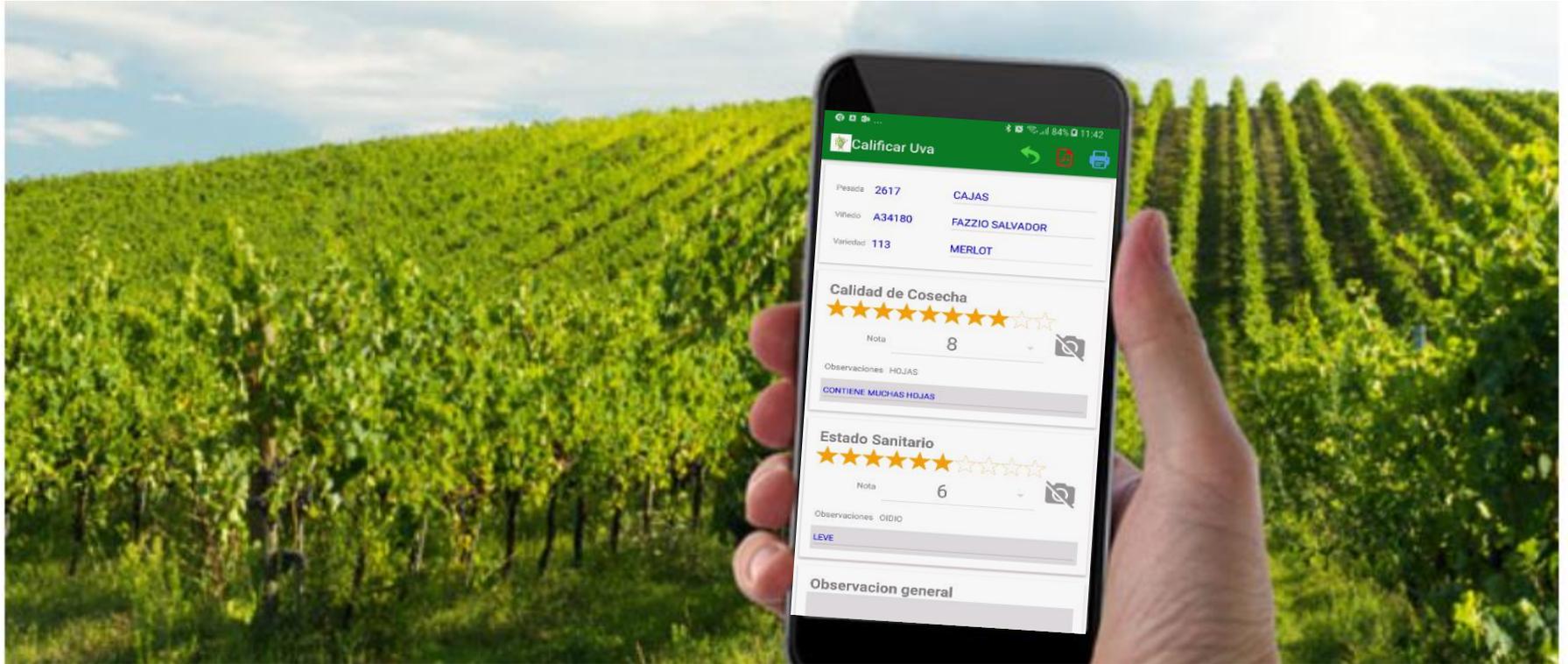
The screenshot shows a mobile browser interface for the Mexican government's ISSSTE system. The address bar displays 'issstet2.issste.gob.mx:8080'. The page header includes the 'MÉXICO GOBIERNO DE LA REPÚBLICA' logo and the national seal. The main content area features a form with two sections: 'SELECCONE EL TIPO' with radio buttons for 'RIESGOS DE TRABAJO' and 'EDAD Y TIEMPO', and 'DATOS DE PENSIÓN' with input fields for 'Número de Pensión', 'Código de Deudo', 'Año', and 'Meses'. To the right of the form are 'CANCELAR' and 'BUSCAR' buttons. At the bottom, a message states: 'Este sistema se ve mejor en Chrome, Firefox Requiere que se permitan ventanas emergentes'.

Digital transformation

- On-demand payslip
- Linked to tax department
- Real-time account status
- 900,000 payslips downloaded in 2 days
- 800 reports/second
- Sub-second response times
- 1 Linux server
- Taxpayer savings of \$ millions

COMPROBANTE DE PAGO		RC61090			GONZALEZ CARMEN VERA SALAZAR					
ISSSTE		R.F.C. DEL (EX) TRABAJADOR			NOMBRE DEL PENSIONADO					
MES DE PAGO	NUMERO PENSION	LOCALIDAD PAGO	LUGAR PAGO	CODIGO POSTAL	CODIGO DEUDO	PENSION ACTUAL	CLAVE RAMO			
NOV-2014	03011	3103	008	5070	0	101	637			
PERCEPCIONES			DEDUCCIONES							
CPTO.	DESCRIPCION	IMPORTE	CPTO.	DESCRIPCION	IMPORTE					
001	PENSION	\$19,572.30	057	PRESTAMO PERSONAL	\$3,913.22					
002	BONO DESPENSA	\$100.00	059	CREDITO HIPOTECARIO FOVISSSTE	\$5,871.69					
003	PREVISION SOCIAL MULTIPLE	\$120.00	074	SEG. DE VIDA INST. 18 MESES ME	\$137.01					
			093	SEG. DAQOS FOVISSSTE	\$17.00					
ISSSTE ELIMINA VIGENCIA DE DERECHOS PRESENCIAL NO NECESITA PASAR VIGENCIA, NI ACCION ALGUNA										
GENERADO DESDE LA OFICINA VIRTUAL				FECHA DE INICIO DE PENSION	CPTO	DESCTO	PLAZO	CPTO	DESCTO	PLAZO
Sello electrónico de validez oficial				16/08/2009	57	1	24	59	15	2
2105YK - 1H816019				\$19,792.30		\$9,938.92		\$9,853.38		
HTTPS://OFICINAVIRTUAL.ISSSTE.GOB.MX				PERCEPCIONES		DEDUCCIONES		NETO A PAGAR		





Budbreak	Development of leaves and infl...	Flowering	Fruit development	Ripening
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SAMSUNG

Independiente

ANÁLISIS FISIOLÓGICO

Fecha 19/9/18

Finca CAICAYEN

Viñedo FINCA CAICAYEN II (A)

Cuartel 1 CHARDONNAY

Hilera 1 Claro 1 Planta 1

Observaciones

Día nublado

Continuar

SAMSUNG

Independiente

ANÁLISIS FISIOLÓGICO 19/09/2018
CAICAYEN / FINCA CAICAYEN II (A)

Determin	18/09/2018	Actual
Yemas	11	12
Brot	8	10
Br /Ra	6	7
Rac		
Peso		
PeMRa		

SAMSUNG

ANÁLISIS FISIOLÓGICO 19/09/2018
CAICAYEN / FINCA CAICAYEN II (A)

Numero Yemas francas

Valores anteriores

17/09/18	18/09/18
10	11

Valor actual

12

Observaciones

nada



SAMSUNG

ANÁLISIS FISIOLÓGICO 19/09/2018
CAICAYEN / FINCA CAICAYEN II (A)

Número de brotes

Valores anteriores

17/09/18	18/09/18
8	8

Valor actual

10

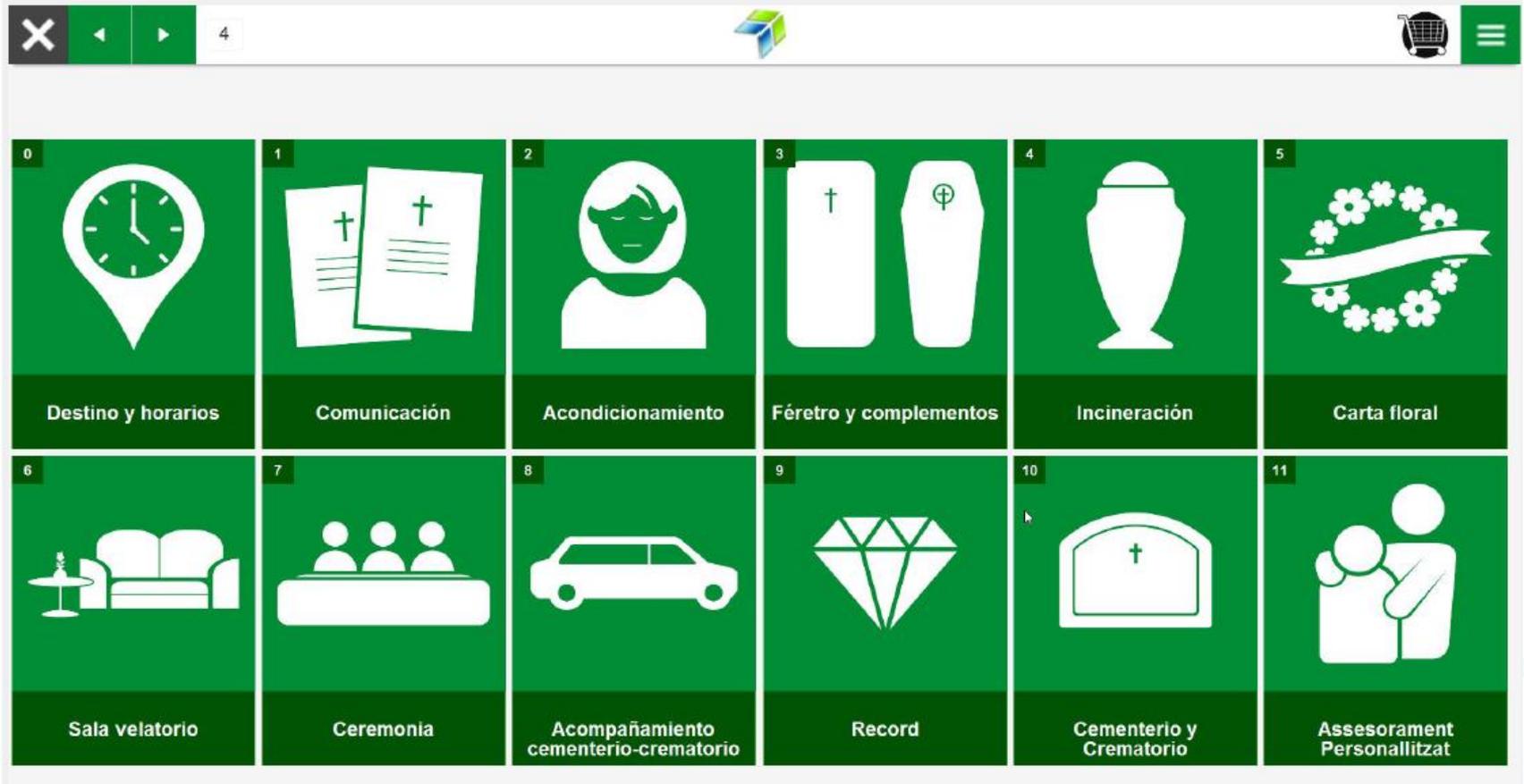
Observaciones

Ingrese su observación



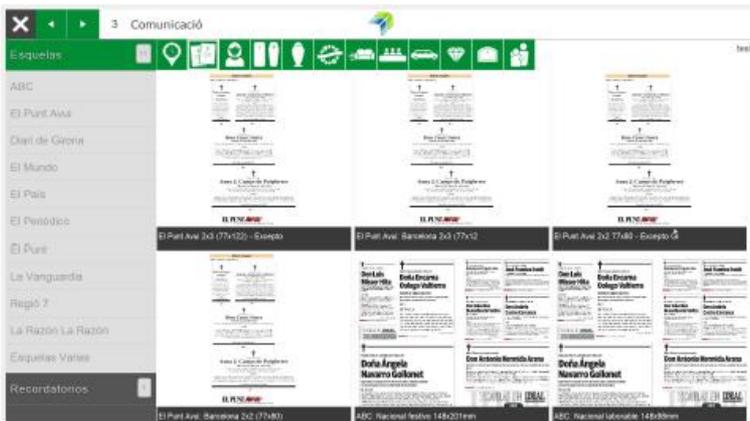
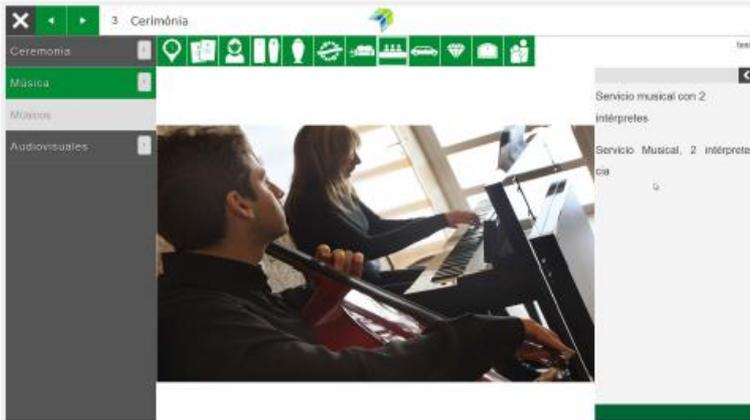

User experience – streamlining processes

Exploiting device innovation



User experience – streamlining processes

Exploiting device innovation



User experience – streamlining processes

Exploiting device innovation

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Liliana Gonzalez #152288

Assignments

By Class **Upcoming/Missing**

Chem1 Cp-06 Term: Year
Homework #11
Due: Fri 06/19/15 Category: Daily Work
Assigned: 06/19/15 Possible Points: 100

Chem1 Cp-06 Term: Year
Homework #10
Due: Thu 06/18/15 Category: Daily Work
Assigned: 06/18/15 Possible Points: 100

Chem1 Cp-06 Term: Year
Homework *9 **Due Tomorrow**
Due: Wed 06/17/15 Category: Daily Work
Assigned: 06/17/15 Possible Points: 100

Chem1 Cp-06 Term: Year
Homework #8 **Due Today**
Due: Tue 06/16/15 Category: Daily Work
Assigned: 06/16/15 Possible Points: 100

Chem1 Cp-06 Term: Year

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Attendance

By Date (Entire Year)

Date	Type	Duration
▶ Tue 06/16/15	Tardy/Absent	3 Per / 2 Per
▶ Fri 05/22/15	Tardy/Absent	3 Per / 3 Per
▶ Thu 05/21/15	Tardy/Absent	3 Per / 3 Per
▶ Wed 05/20/15	Tardy/Absent	3 Per / 3 Per
▶ Tue 05/19/15	Tardy/Absent	3 Per / 3 Per
▶ Fri 05/15/15	Tardy/Absent	3 Per / 3 Per
▶ Thu 05/14/15	Tardy/Absent	3 Per / 3 Per
▶ Tue 05/12/15	Tardy/Absent	3 Per / 3 Per
▶ Mon 05/11/15	Tardy/Absent	3 Per / 3 Per
▶ Fri 05/08/15	Tardy/Absent	2 Per / 3 Per
▶ Thu 05/07/15	Tardy/Absent	2 Per / 3 Per

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Attendance

By Date (Entire Year)

Date	Type	Duration
▶ Tue 06/16/15	Tardy/Absent	3 Per / 2 Per
▼ Fri 05/22/15	Tardy/Absent	3 Per / 3 Per

Meets	Term	Subj-Sect	Course	Code
01	S2	22531-01	GEOMa EOC	U
02	S2	22532-01	GEOMb EOC	U
03	Year	27130-06	Chem1 Cp	U
04A	Year	96100-01	Lunch	T
05A	Year	31330-07	Whist Cp	T
06AB	Year	65550-02	Intro To Cosmetology	T

▶ Thu 05/21/15	Tardy/Absent	3 Per / 3 Per
▶ Wed 05/20/15	Tardy/Absent	3 Per / 3 Per
▶ Tue 05/19/15	Tardy/Absent	3 Per / 3 Per
▶ Fri 05/15/15	Tardy/Absent	3 Per / 3 Per



Genero Mobile

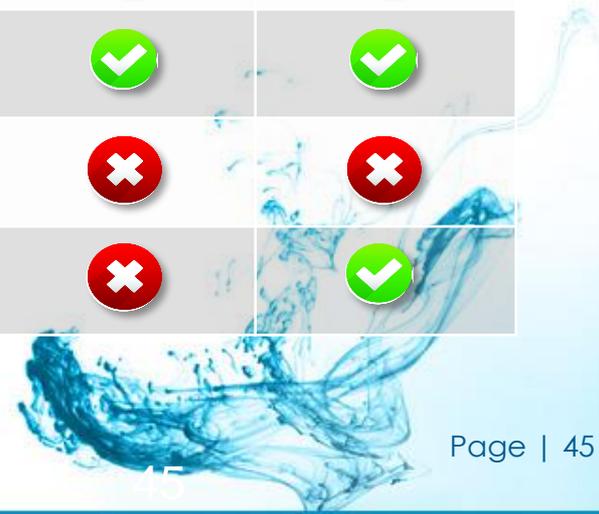
Competitive analysis



	Genero mobile	Xamarin	PhoneGap	Appcelerator	Kony
Native UI	✓	✓	✗	✓	✓
Abstract OS API	✓	✗	✓	✓	✓
Abstract form designer	✓	✗	✗	✗	✓
Single code base	✓	✗	✗	✗	✓
Debug on device	✓	✓	✗	✓	✓
Developer mode	✓	✗	✓	✗	✗
IDE	✓	✓	✗	✓	✓
Server-centric apps	✓	✓	✗	✗	✗
Ease-of-use	✓	✗	✗	✗	✓



Genero Mobile Overview



Thank You



FOUR Js
The Power of Simplicity

