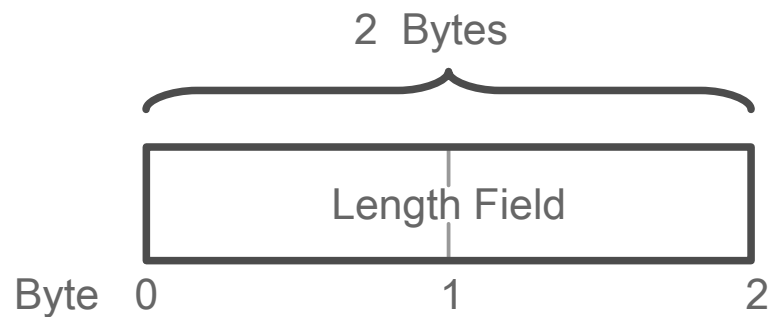




ANGRY BIRDS & HALF-WORDS

MOBILE & THE MAINFRAME

Geoff Pirie – IBM Hursley, UK. CICS Transaction Server

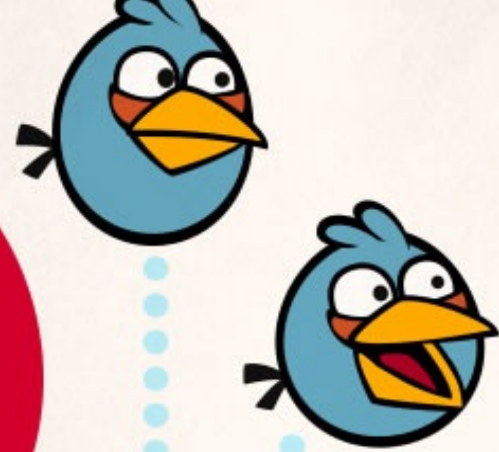


ANGRY NEW YEAR

CHRISTMAS WEEK
DECEMBER 22-29



30
MILLION
ANGRY BIRDS DOWNLOADS



NEW DEVICES
ON CHRISTMAS DAY
17.4
MILLION*

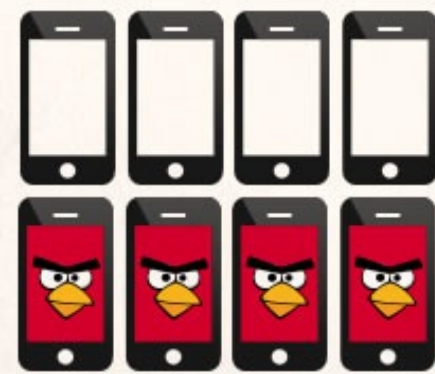
ANDROID + IOS
TABLETS &
SMARTPHONES

CHRISTMAS DAY

8

MILLION
ANGRY BIRDS DOWNLOADS

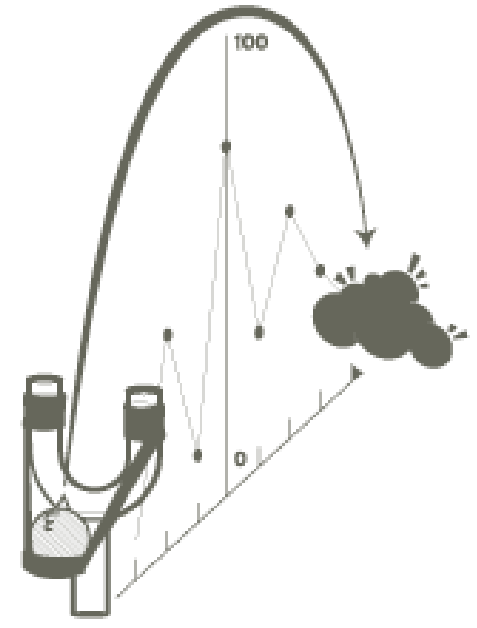
DECEMBER
25



1 ANGRY BIRDS DOWNLOAD
FOR EVERY
OTHER
NEW DEVICE

*STATISTICS COURTESY OF FLURRY

Over **ONE
BILLION**
DOWNLOADS



**#1 in 79
COUNTRIES**



**300
MILLION**
minutes played per day



ONE
Wikipedia
a month!



The reason?

- 1) There are a lot of mobile devices
- 2) We spend a lot of time using those devices
- 3) We really hate green pigs! ;-)

THERE ARE CURRENTLY MORE THAN
1.038 BILLION
SMARTPHONES IN USE



that's 1 out of every 6.7 people on the planet.

MOBILE USERS ARE
FIVE TIMES MORE
LIKELY TO
ABANDON THE TASK
IF THE SITE ISN'T OPTIMIZED
FOR MOBILE.

79%
WILL SEARCH
FOR ANOTHER SITE TO
COMPLETE THE TASK.

MEDIA TABLET SALES

in 2012
118.9
MILLION

by 2016
369.2
MILLION
tablets we will be sold

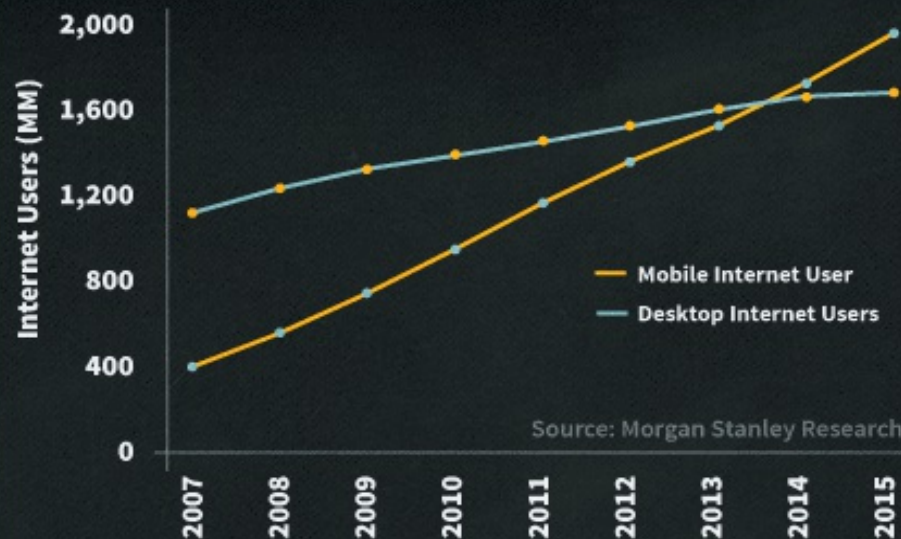
IN THE LAST 16 YEARS

97 98 99 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14

1 BILLION
SMARTPHONES SOLD

THE NEXT
ONE BILLION
WILL BE SOLD
IN JUST THE
NEXT 2 YEARS

GLOBAL MOBILE VS. DESKTOP INTERNET USER PROJECTION, 2007 - 2015



Google estimates by 2013
**MORE PEOPLE WILL USE
MOBILE PHONES THAN
DESKTOP PCS TO GO ONLINE.**



Shopping / Commerce

Global Stats



Gartner predicts that in 2016 there will be
448 MILLION
M-Payment users,

in a market worth
\$617 BILLION



by 2015
Global mobile
transactions
will grow to more than
\$1 TRILLION

Retailers



amazon.com
to reach
\$4 BILLION
IN MOBILE SALES
by end of 2012

In 2011
ebay
people purchased
\$5 BILLION
of goods using their
MOBILE PHONES.

PayPal
estimates
\$7 BILLION
IN MOBILE SALES
in 2012

in 2012, this rose to
\$10 BILLION

Going Places:

MOBILE TICKETS (M-TICKETING) FOR TRAVEL AND ENTERTAINMENT



in 2015 **1 in 8**

MOBILE SUBSCRIBERS WILL USE M-TICKETING

for airline, rail and bus travel, festivals, cinemas and sports events.

By 2015 over

750 MILLION

users will either have a ticket **delivered to their mobile phone** or buy a ticket with their phone



compared to

230 MILLION

today.

Ticket delivery will be by SMS, bar codes, mobile web, smartphone apps or NFC.

Healthcare:

The mobile health technology market including devices, applications, and services

IS EXPECTED TO EXCEED \$8 BILLION

by 2018

70%

of available healthcare apps are **consumer focused.**



30%

are designed for **medical professionals**

Insurance:

Only

22%

of insurers have a **mobile quoting app**



Financial Services:

In 2012

47 MILLION

Americans used

MOBILE BANKING

by next year, more than

61 MILLION

Americans will use mobile banking

MOBILE BANKING

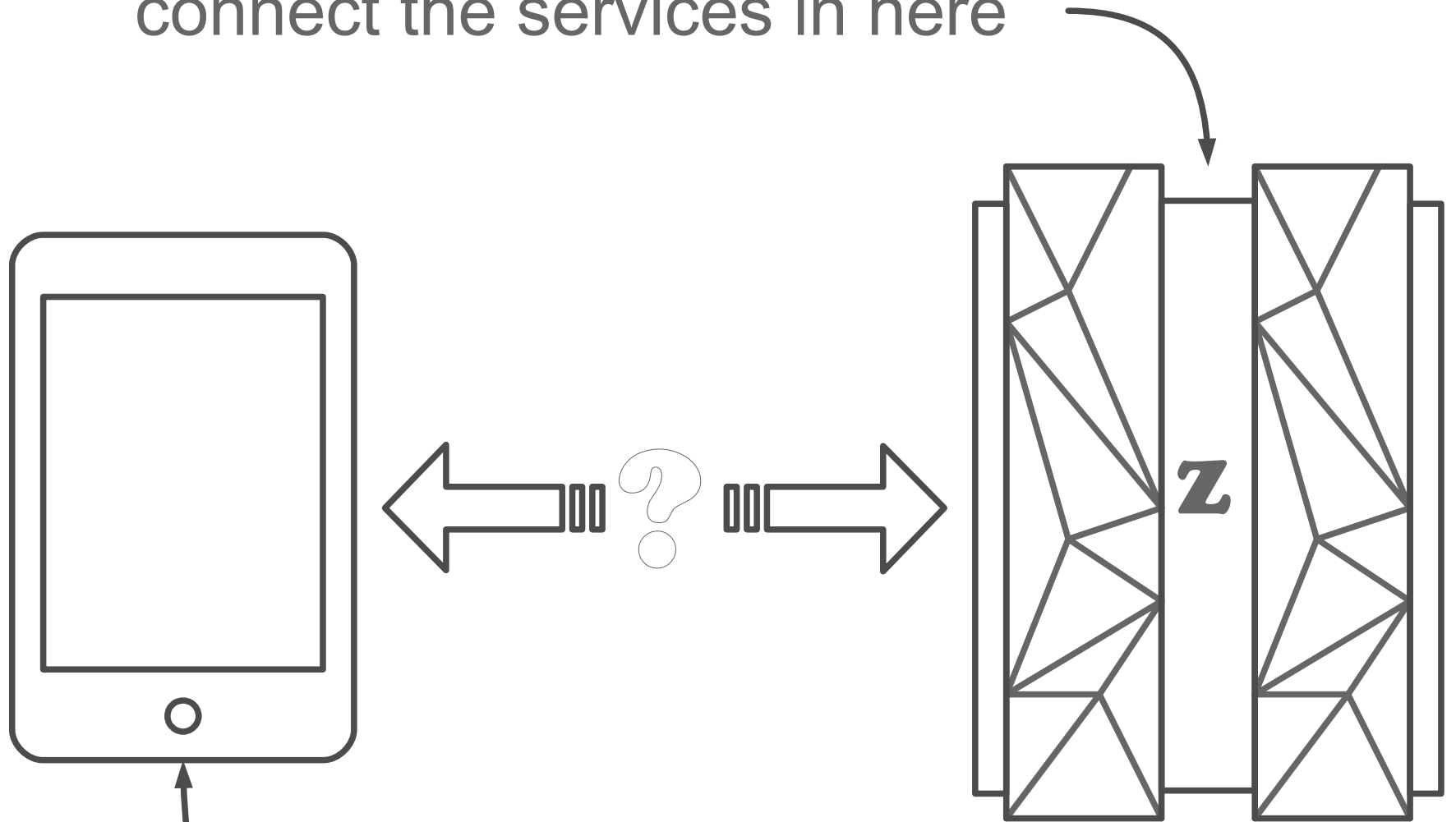
users in the U.S. in the next will

DOUBLE in the next **5 YEARS**

and reach **108 MILLION**

by 2017.

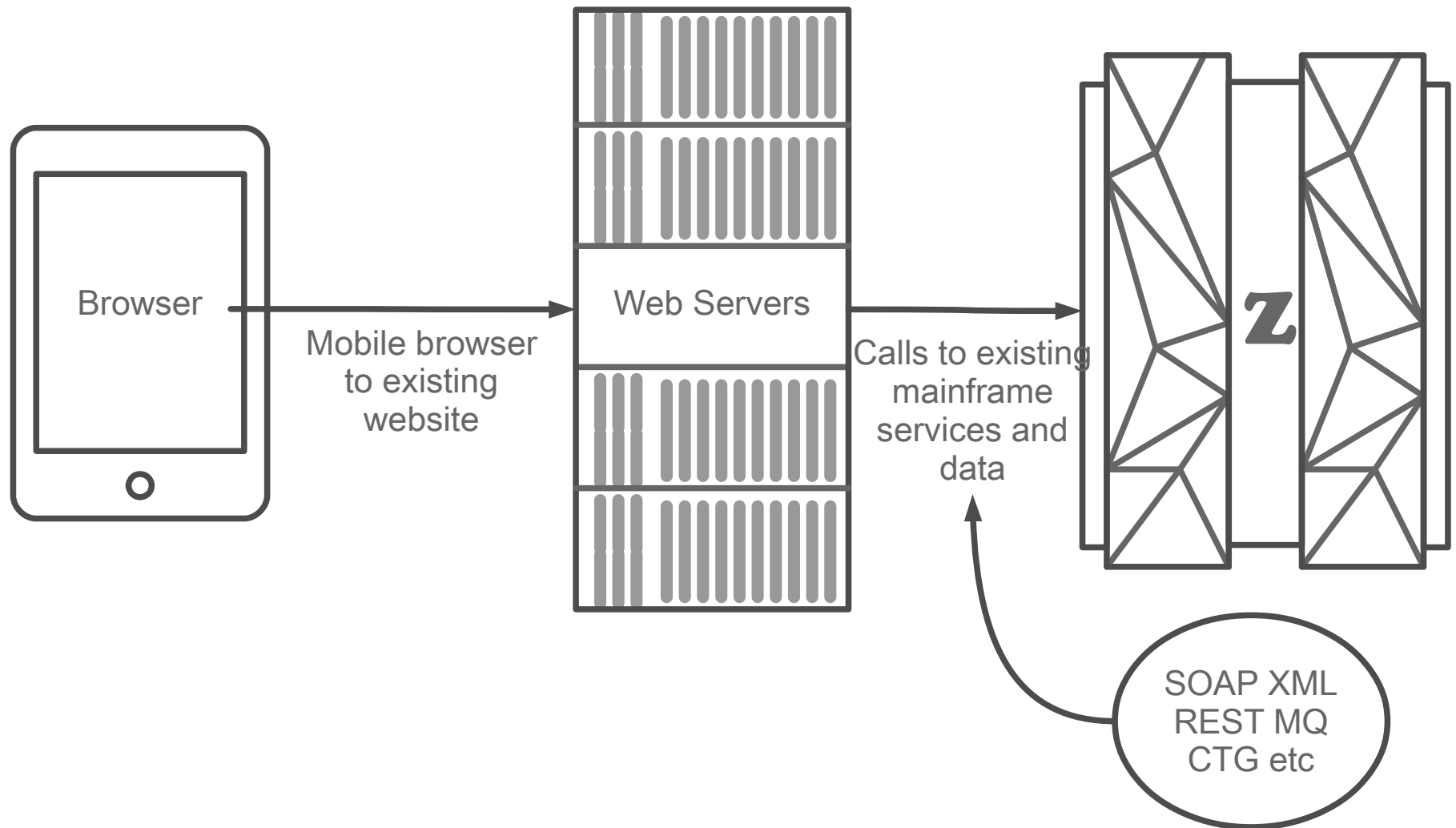
So we need to
connect the services in here



To the users on here

Easy!

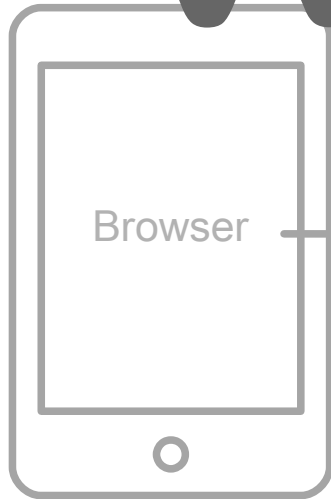
Mobile is just like the web right?



Easy!

Mobile is just like the web right?

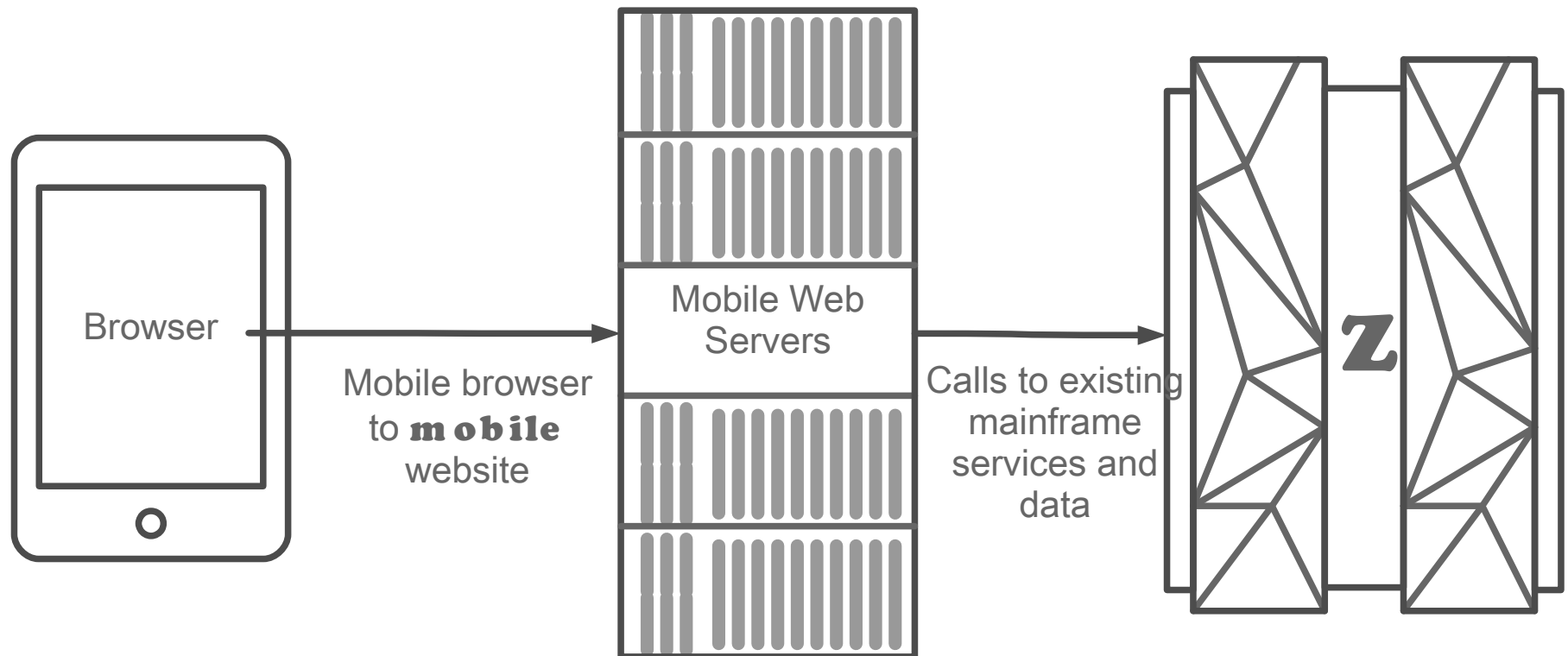
WRONG!

A dark grey tablet icon with a white border. The screen displays two statistics in white text. The first statistic is in all caps and states that mobile users are five times more likely to abandon a task if the site is not optimized for mobile. The second statistic features a large percentage followed by the text that 79% of users will search for another site to complete the task. The tablet is positioned in front of a background of vertical bars and a wireframe structure.

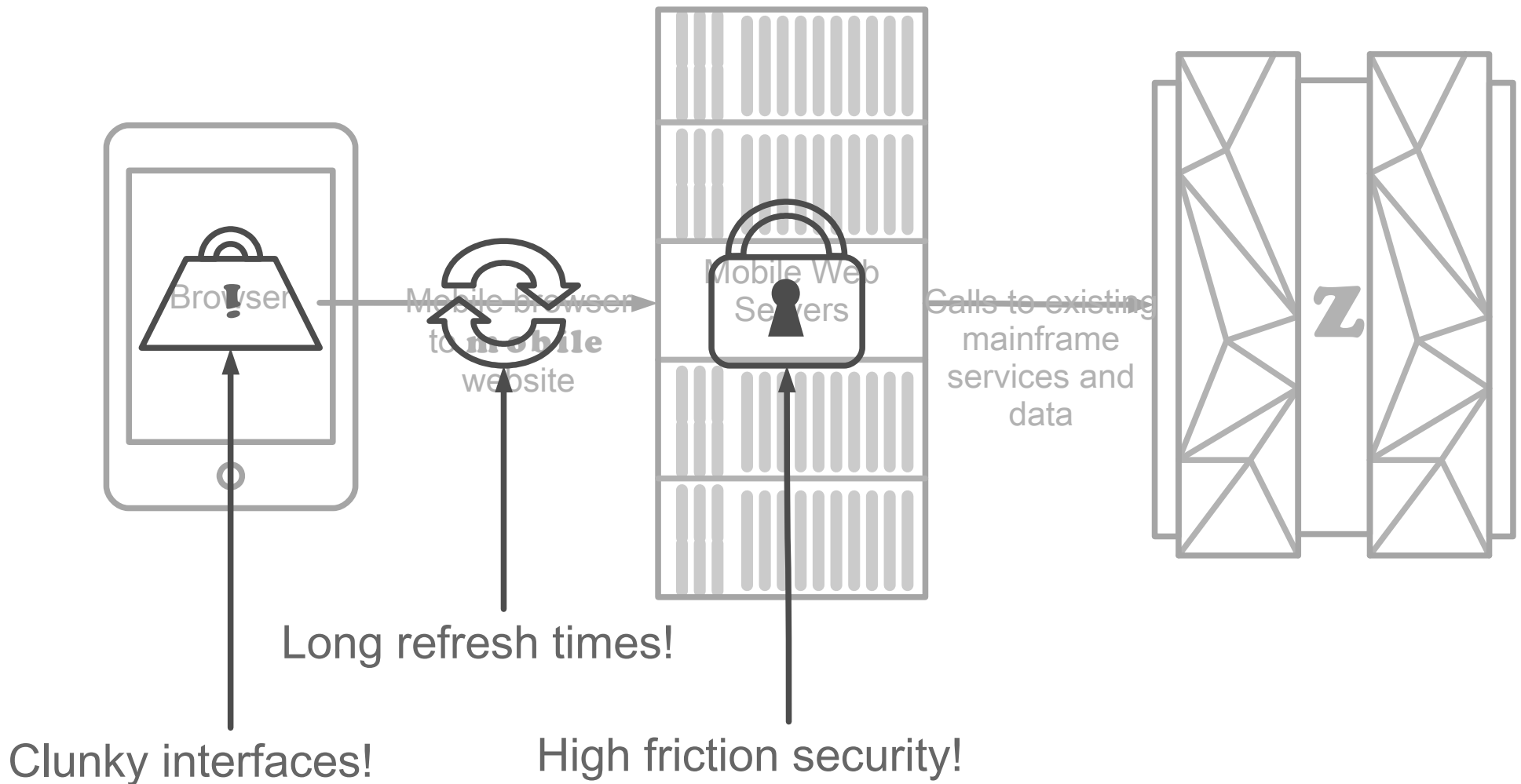
MOBILE USERS ARE
FIVE TIMES MORE
LIKELY TO
ABANDON THE TASK
IF THE SITE ISN'T OPTIMIZED
FOR MOBILE.

79%
WILL SEARCH
FOR ANOTHER SITE TO
COMPLETE THE TASK.

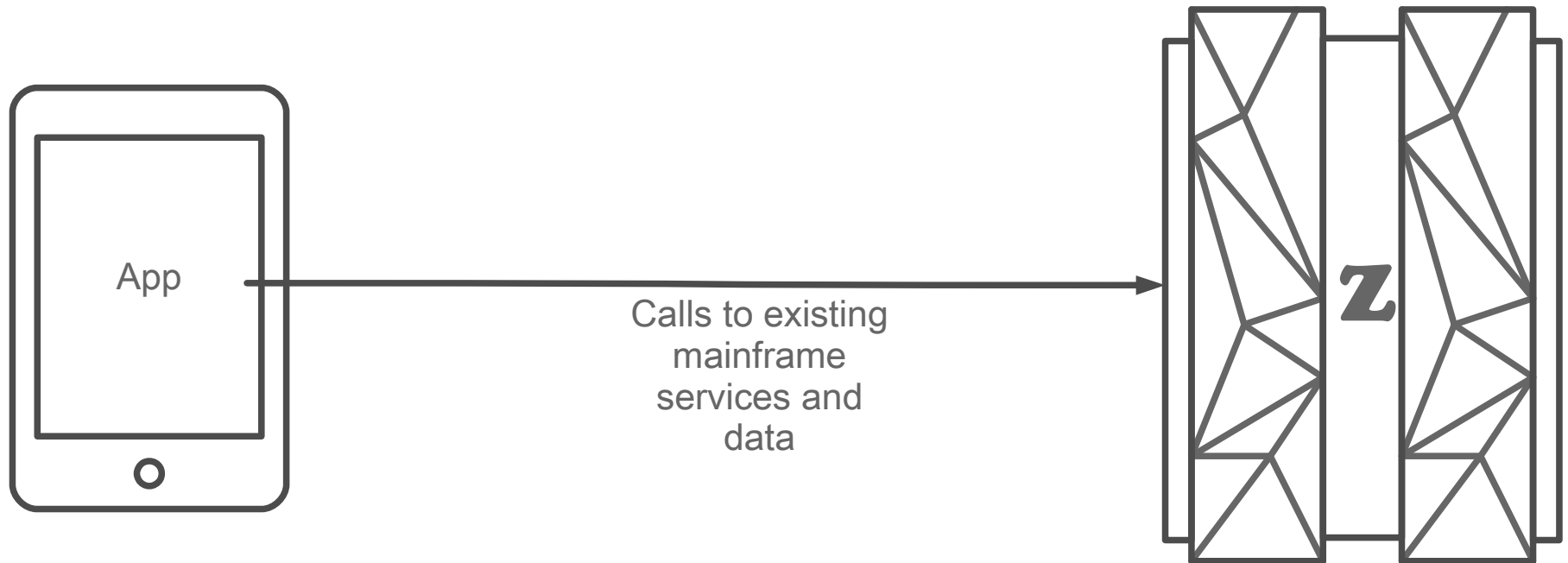
Ok... Re-style for a mobile website



Ok... Re-style for a mobile website **Better...** **But not quite as good as an App!**

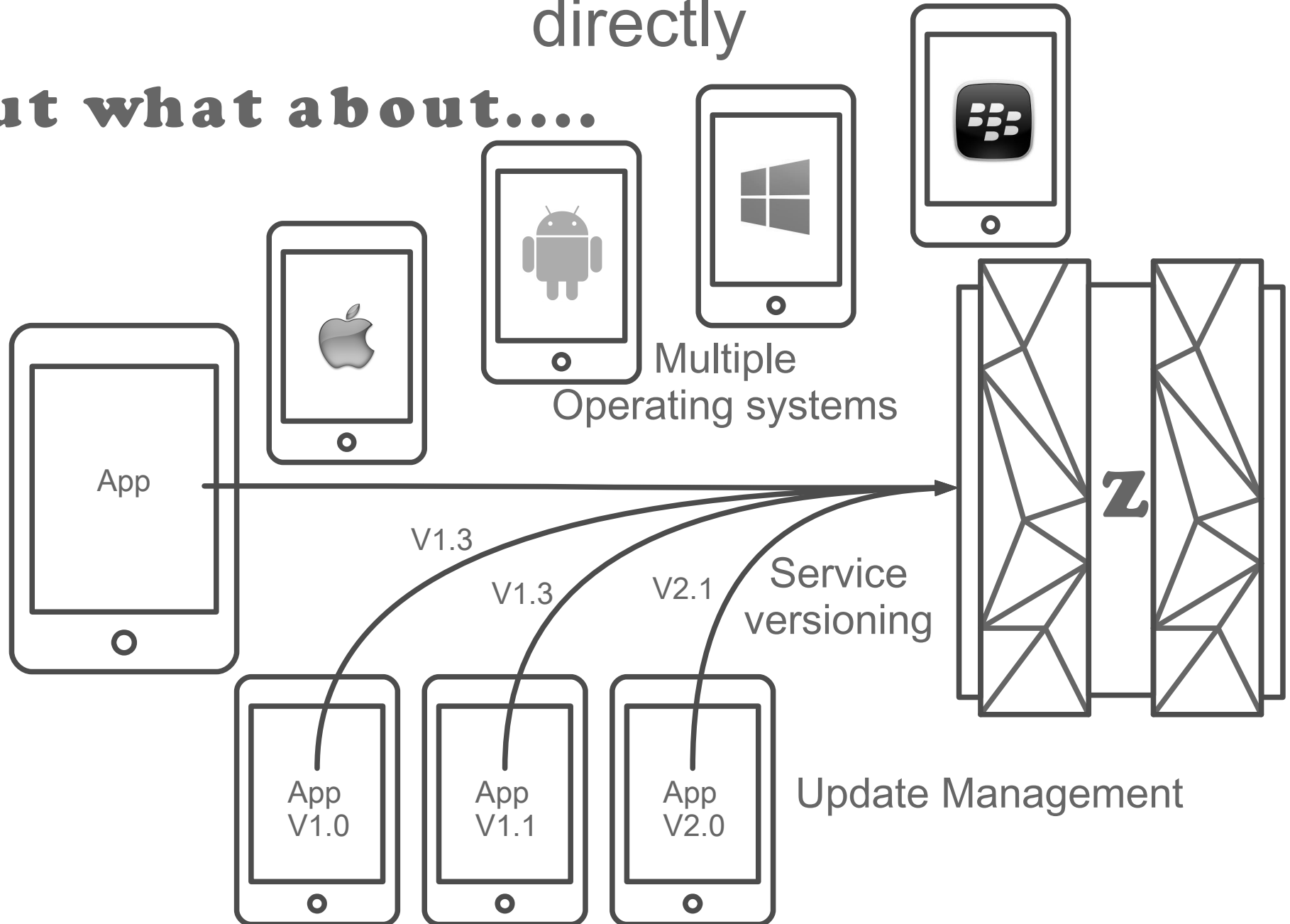


So... Lets write an app that calls the services directly



So... Lets write an app that calls the services directly

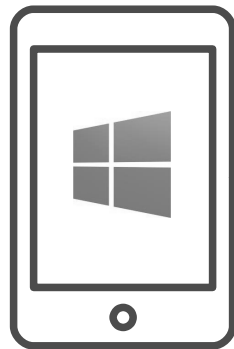
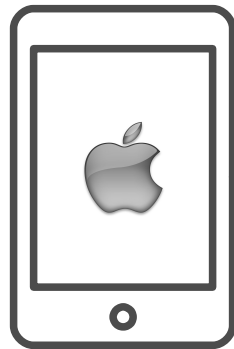
But what about....



We need a mobile app platform...

Hybrid Apps

Write once,
run anywhere!



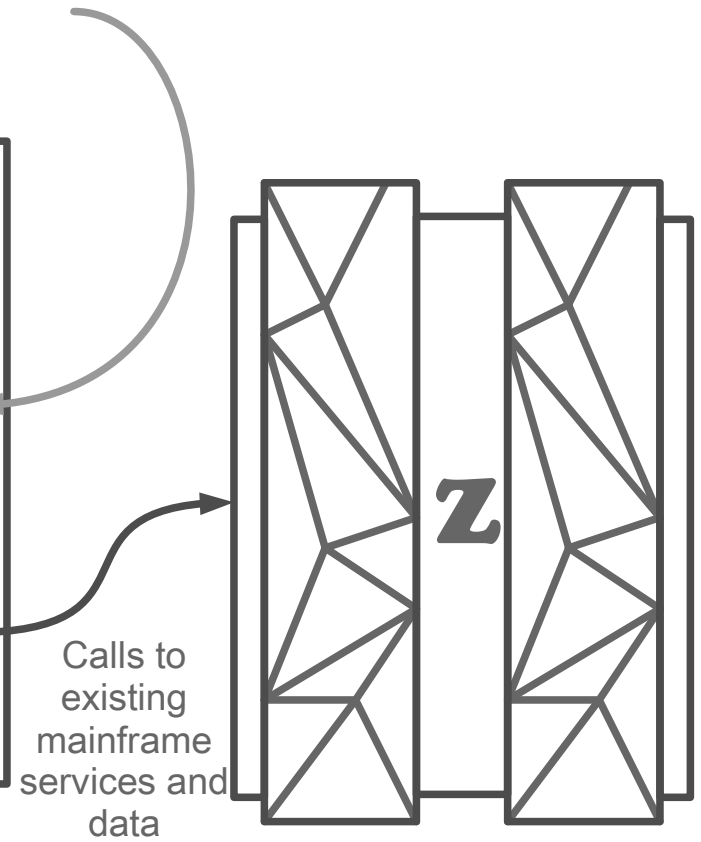
Version management,

Disable old versions
Upgrade certain platforms
Mandatory Updates

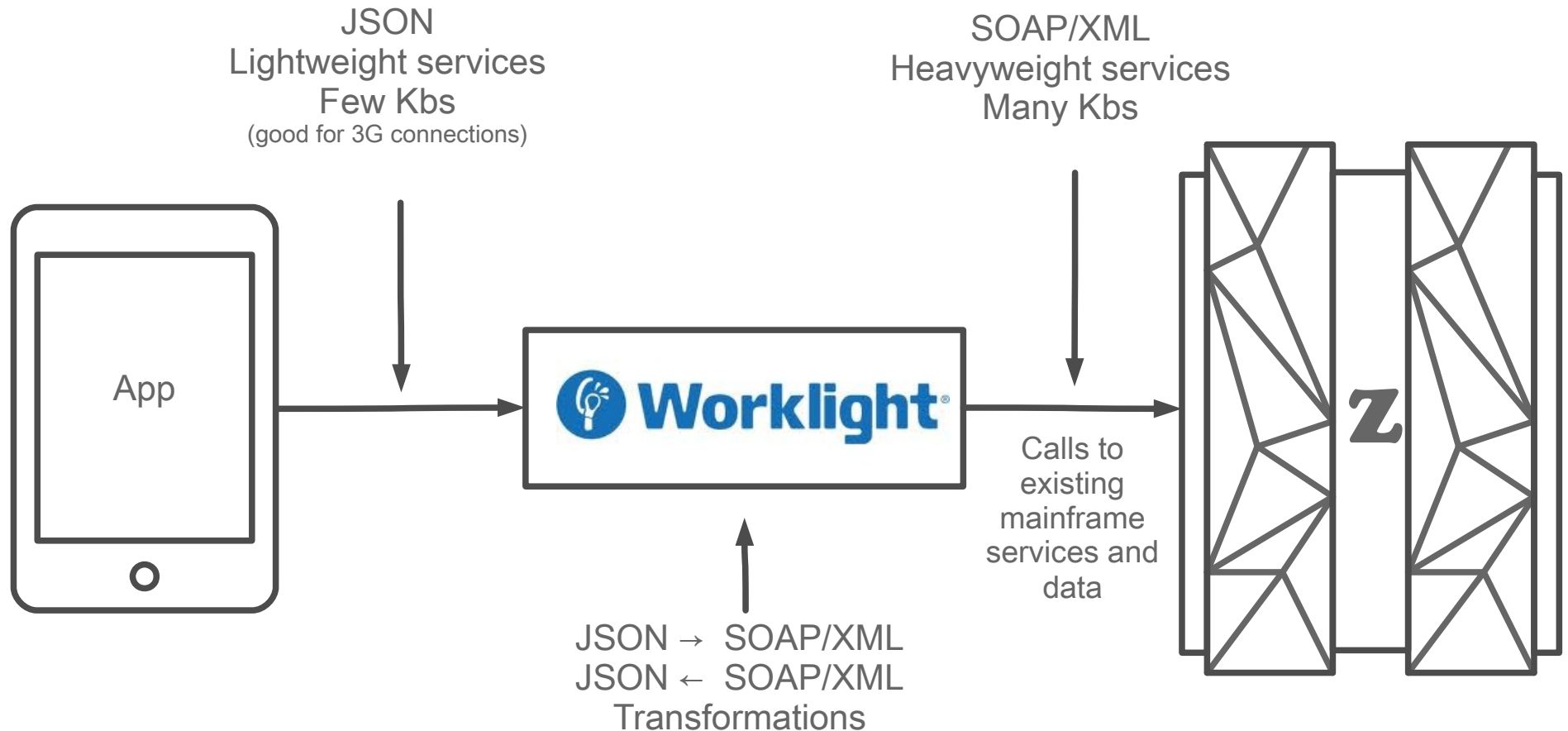


Service management

Shield app from enterprise changes
Manage service versions
Simplify complex interfaces

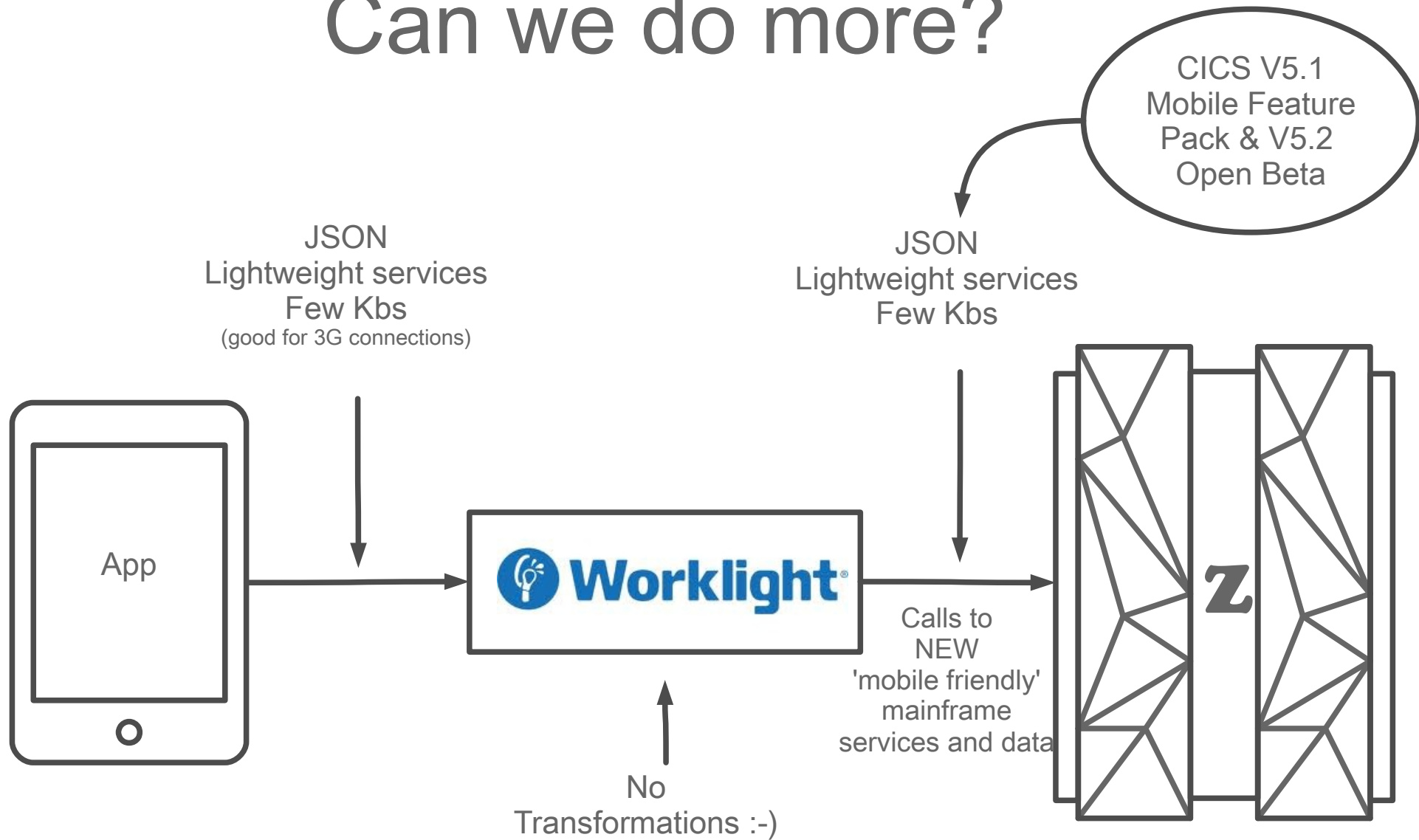


Can we do more?



Takes time and CPU :-)

Can we do more?



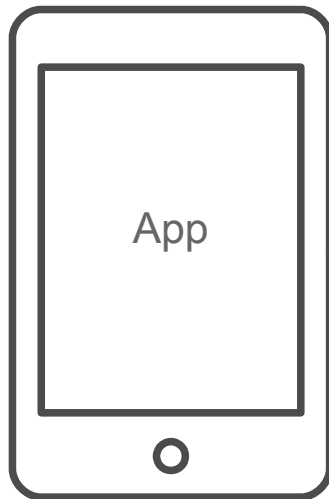
A better way...

Can we do more?

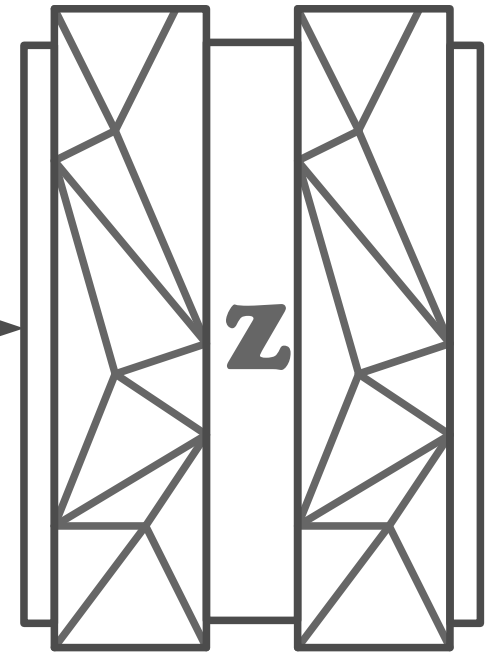
Designed for Mobile,
Used by Facebook!



MQTT
Lightweight services
Few Kbs
(good for 3G connections)



Calls to
NEW
'mobile friendly'
mainframe
services and data



Or something different...

So, you can make
'mobile friendly' services, but...



...the app team want them
yesterday!

Improve your processes!

- Incremental delivery with **agile principles**



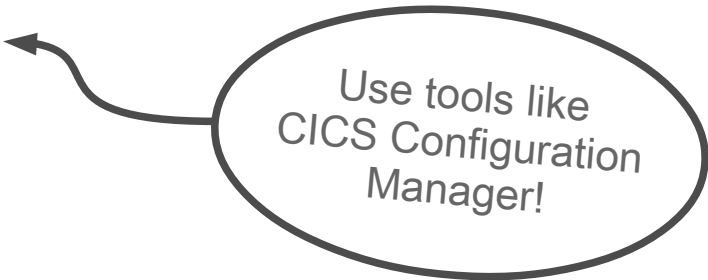
Use project management tools like RTC to track work!

- Faster delivery with **cloud style deployment**



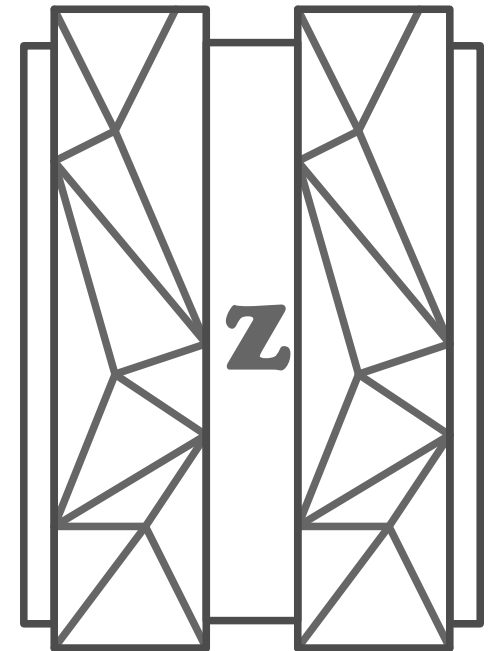
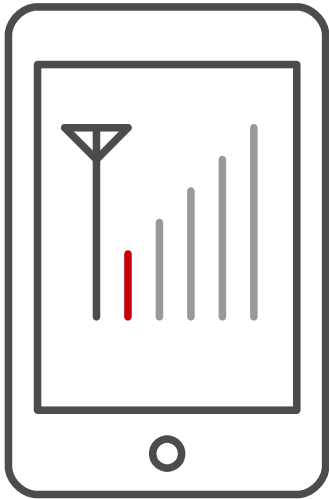
Use the App and Platform feature NEW in CICS V5.1

- Reduce risk with **change management**

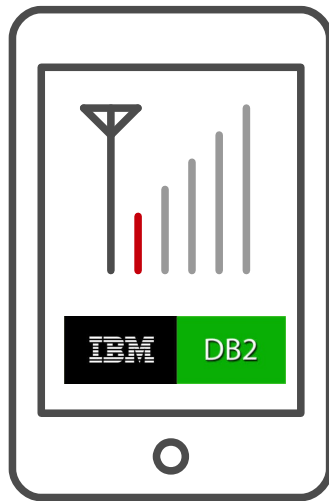


Use tools like CICS Configuration Manager!

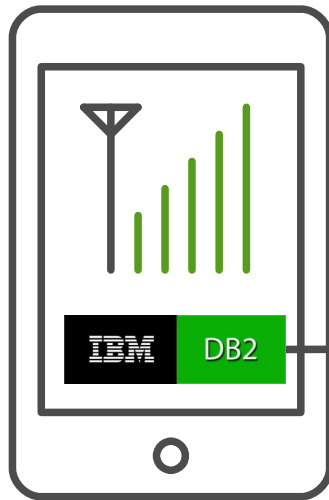
What if the user has no signal?



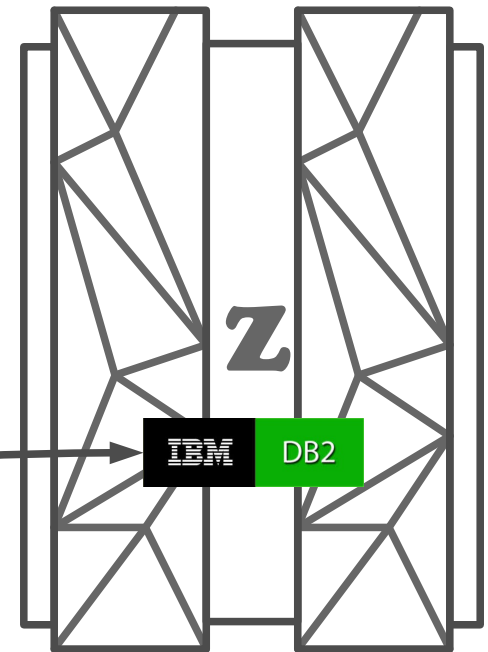
Use IBM Mobile Database to sync offline changes to DB2!



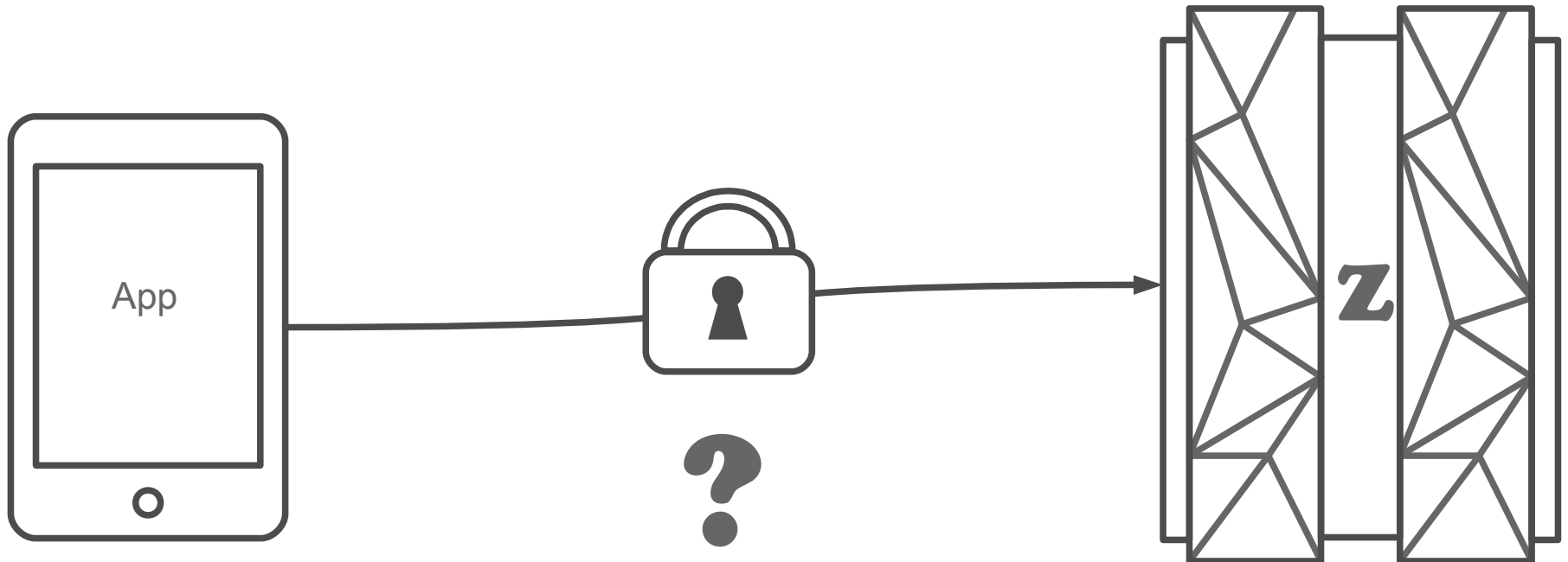
User make changes offline...



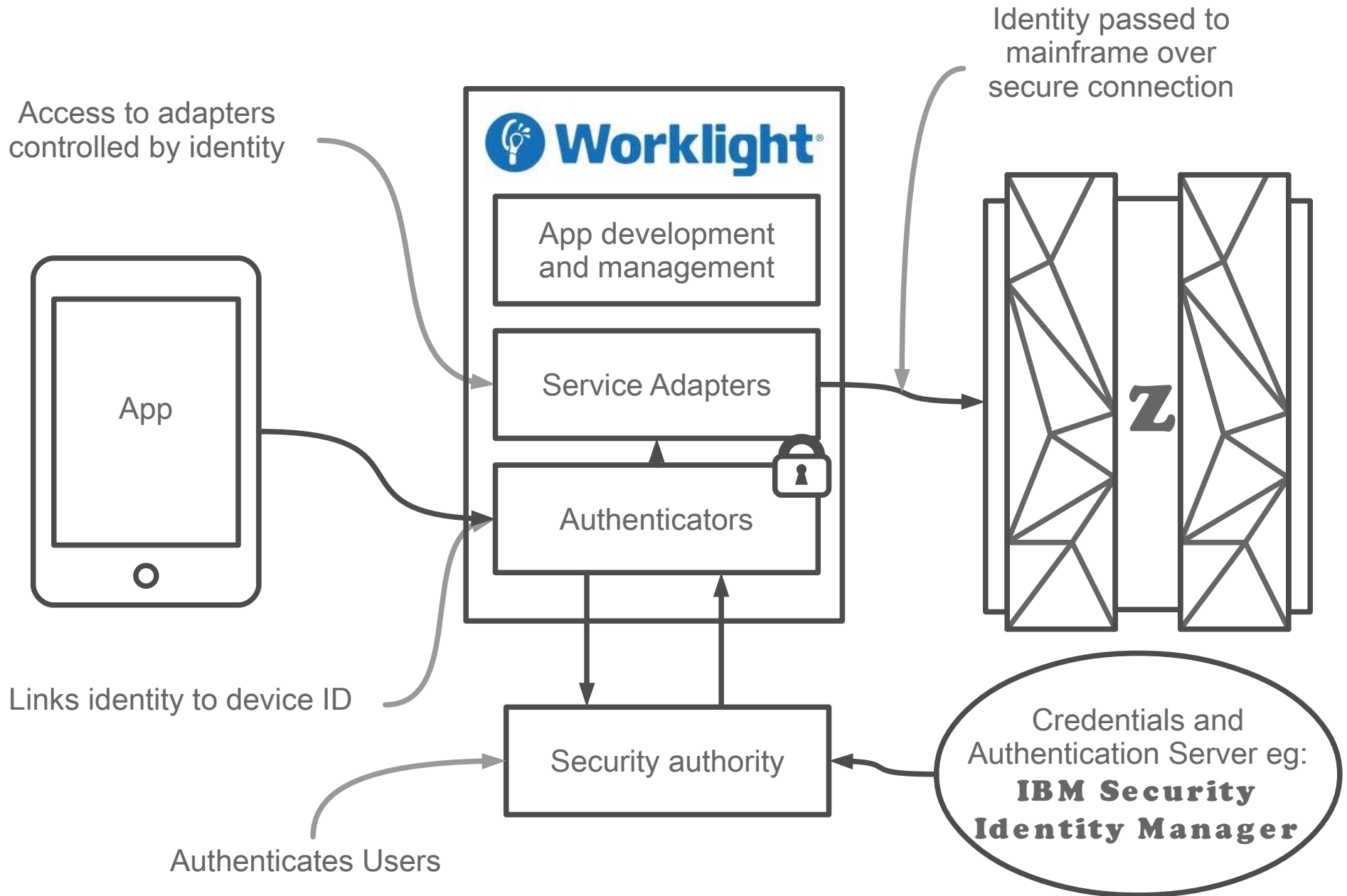
IBM Mobile Database automatically syncs changes when they next get signal!



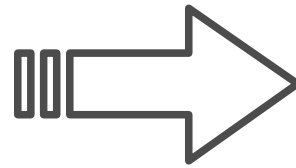
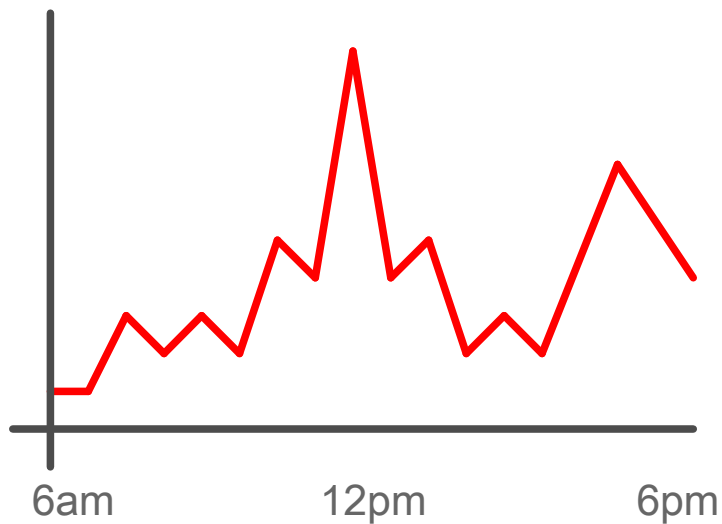
What about security?



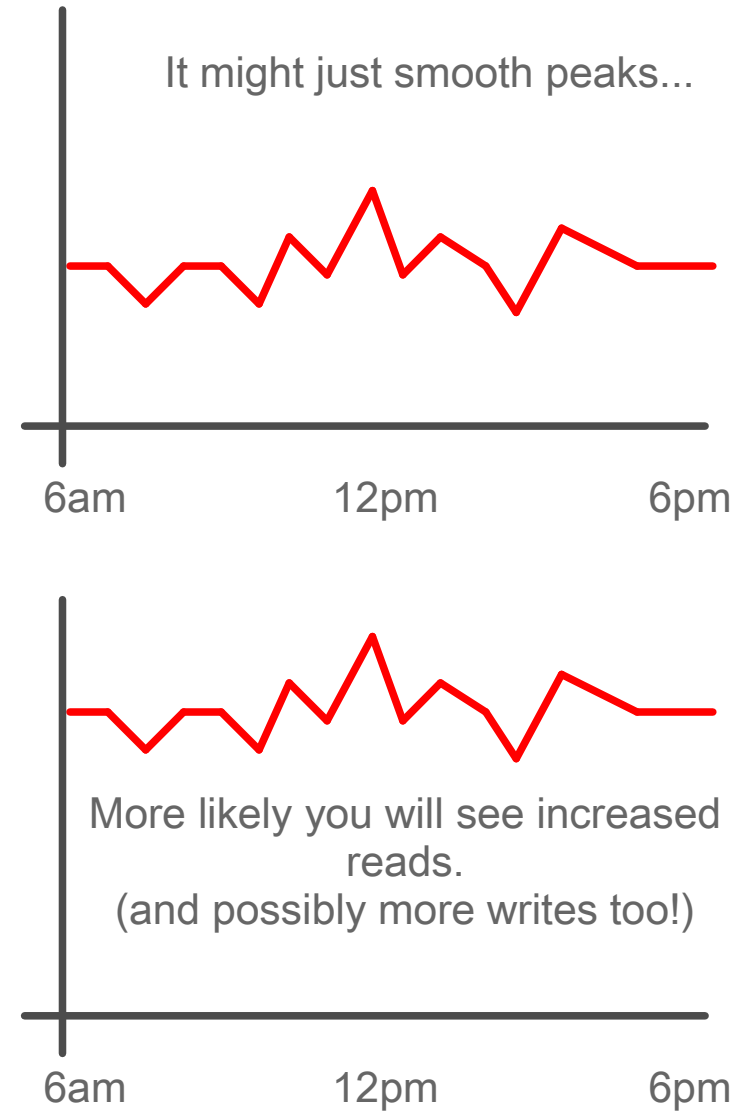
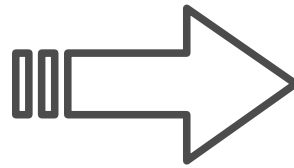
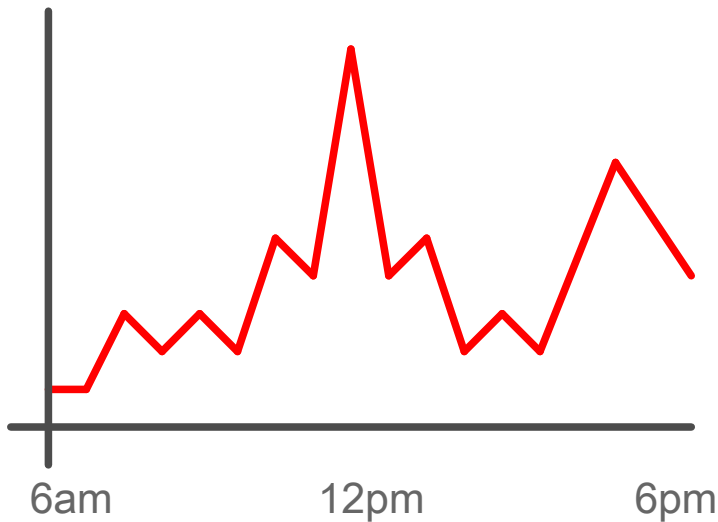
Your app platform should manage it!



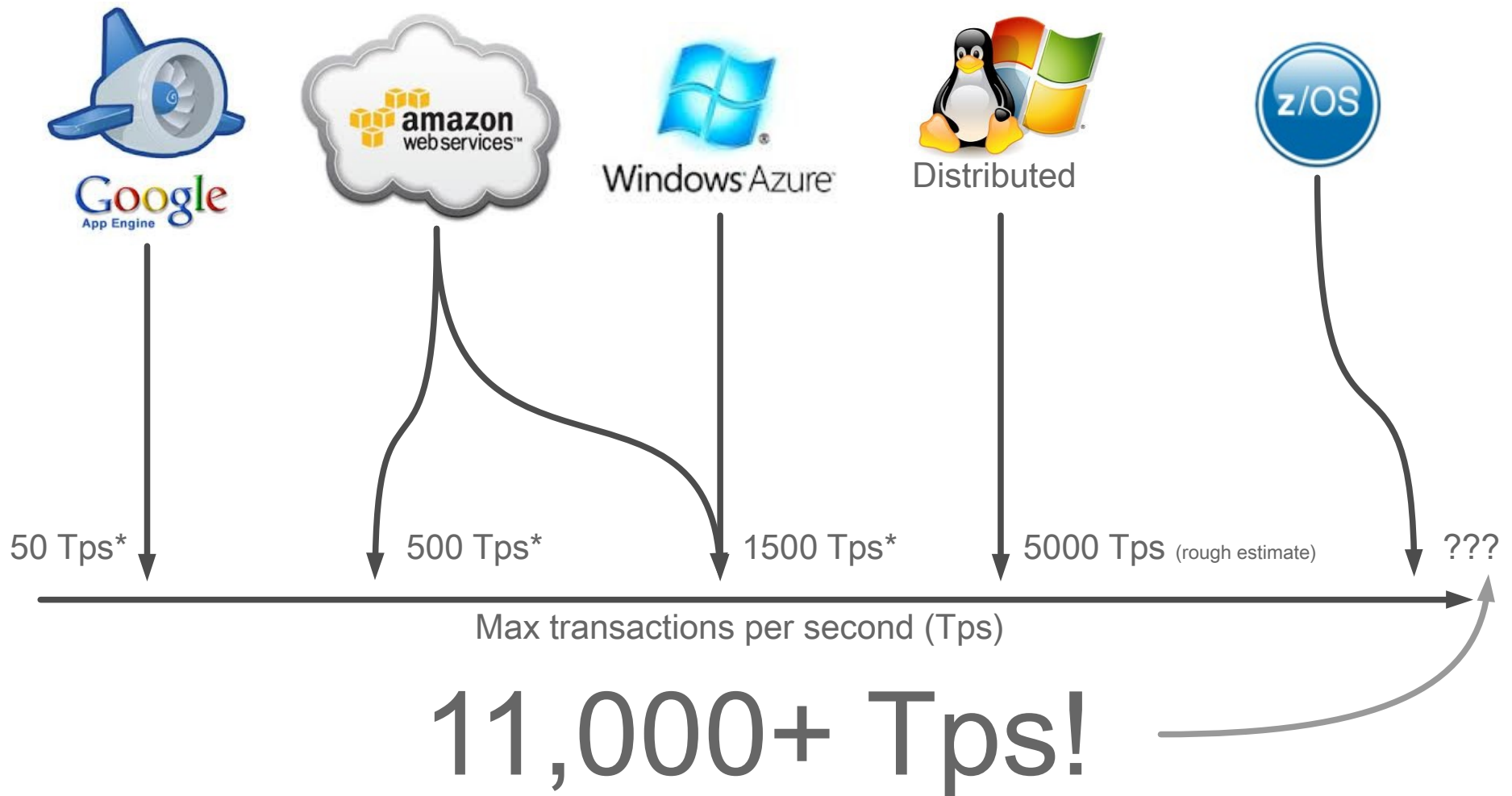
But how will this affect my workload?



It depends on your business...

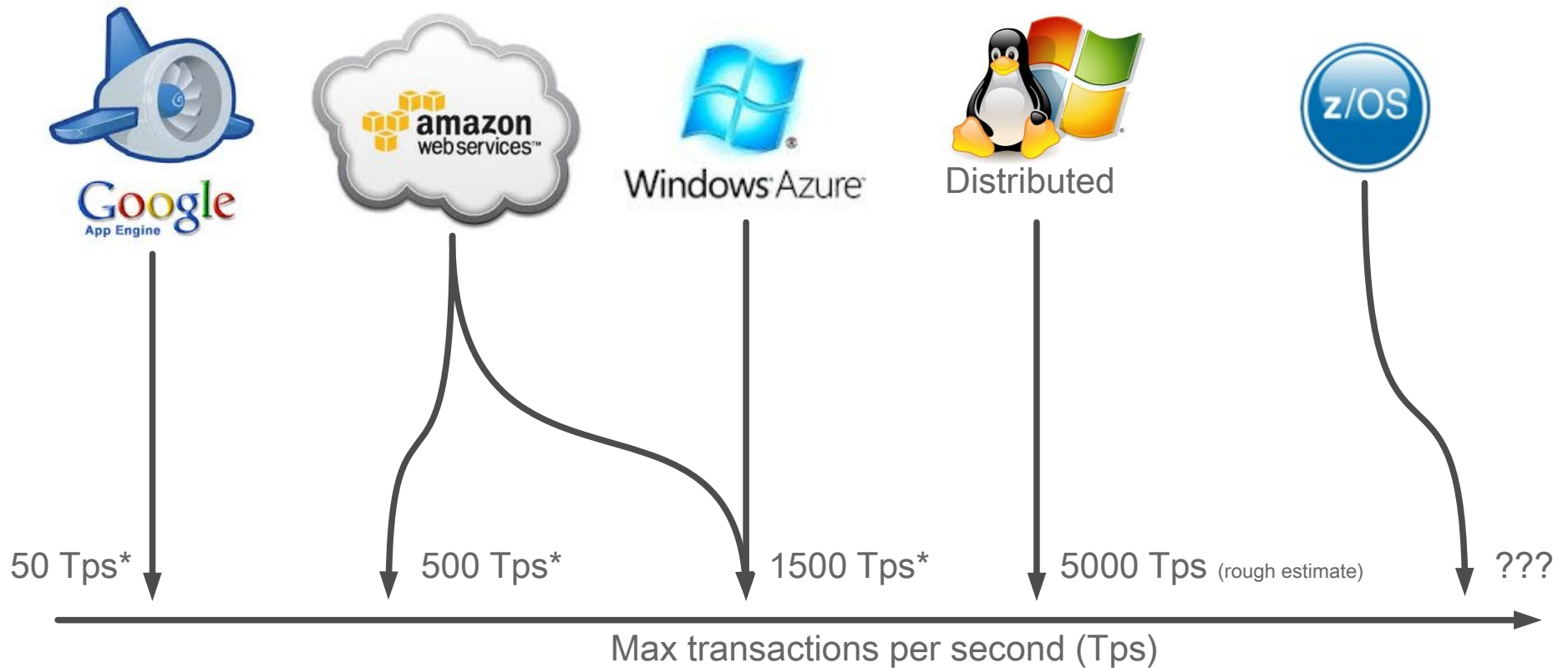


Don't worry, the mainframe can scale!



* Data from "An Evaluation of Alternative Architectures for Transaction Processing in the Cloud", 2010, D Kossmann, T Kraska, S Loesing

Don't worry, the mainframe can scale!

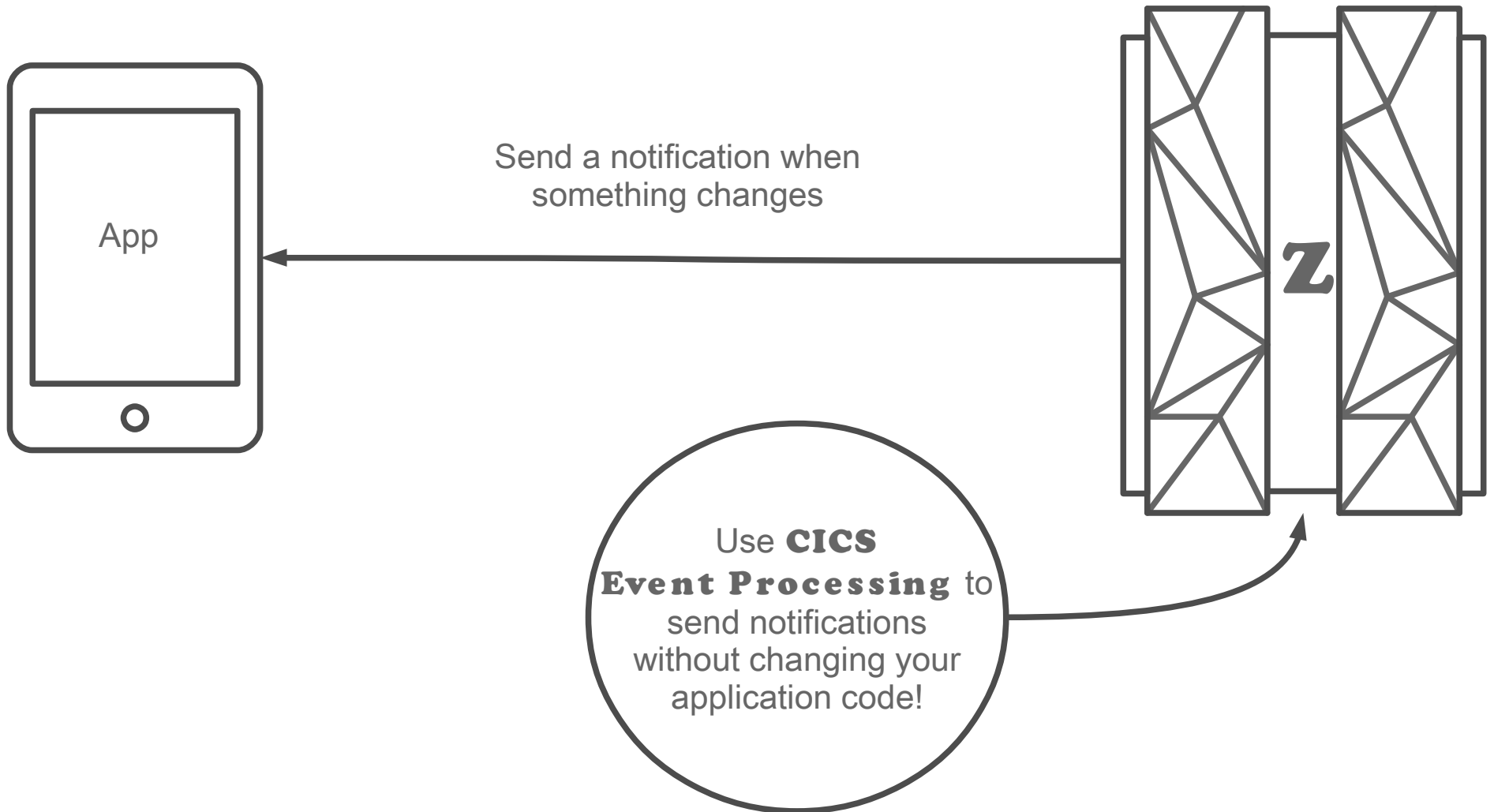


* Data from "An Evaluation of Alternative Architectures for Transaction Processing in the Cloud", 2010, D Kossmann, T Kraska, S Loesing

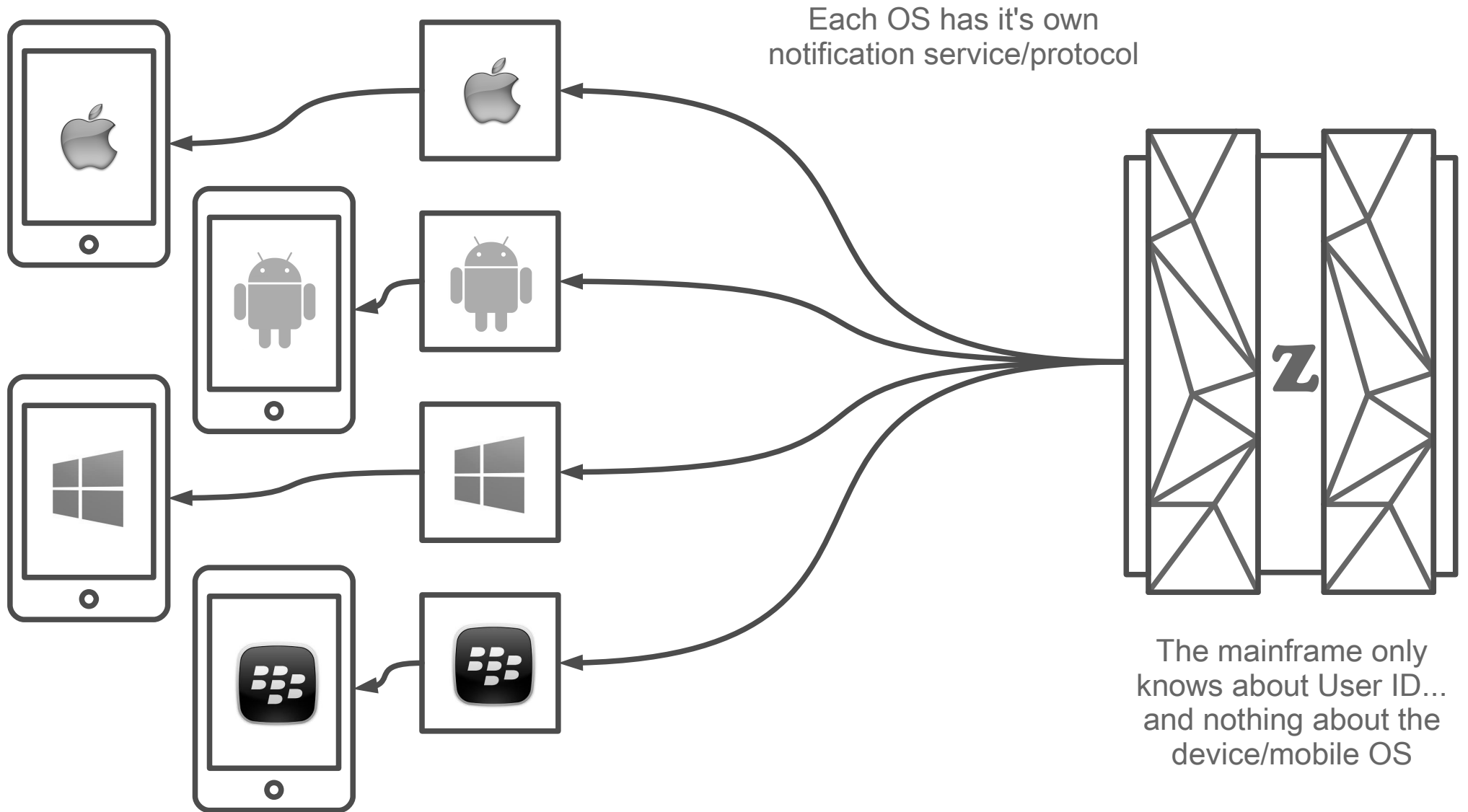
How can we reduce mobile workload?

- Most requests from mobiles are 'reads'
- Mainly from people checking if things have changed
- We would get less 'reads' if we told people when things change...

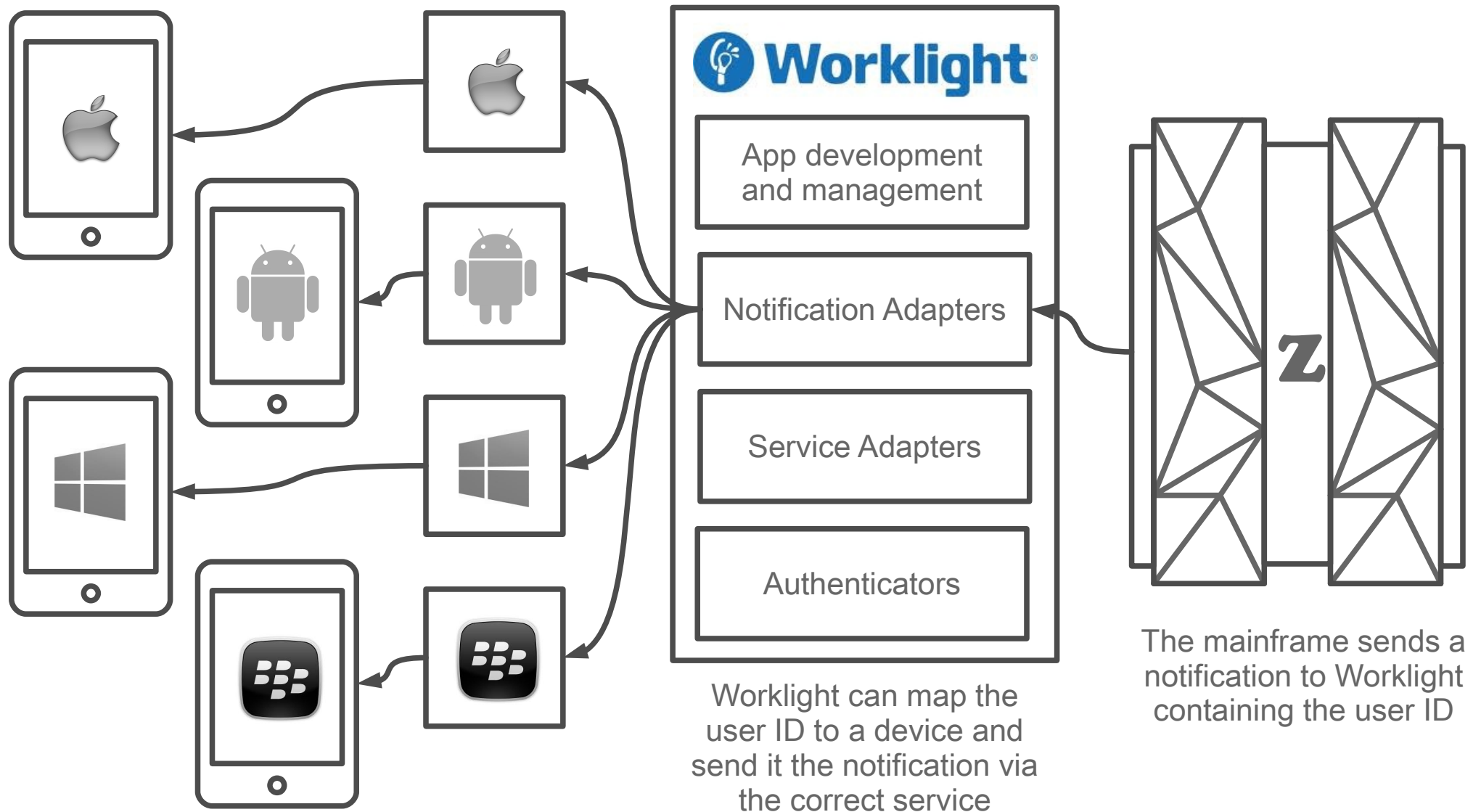
We need notifications!



It's not quite so simple...



Once again it's a job for the app platform!

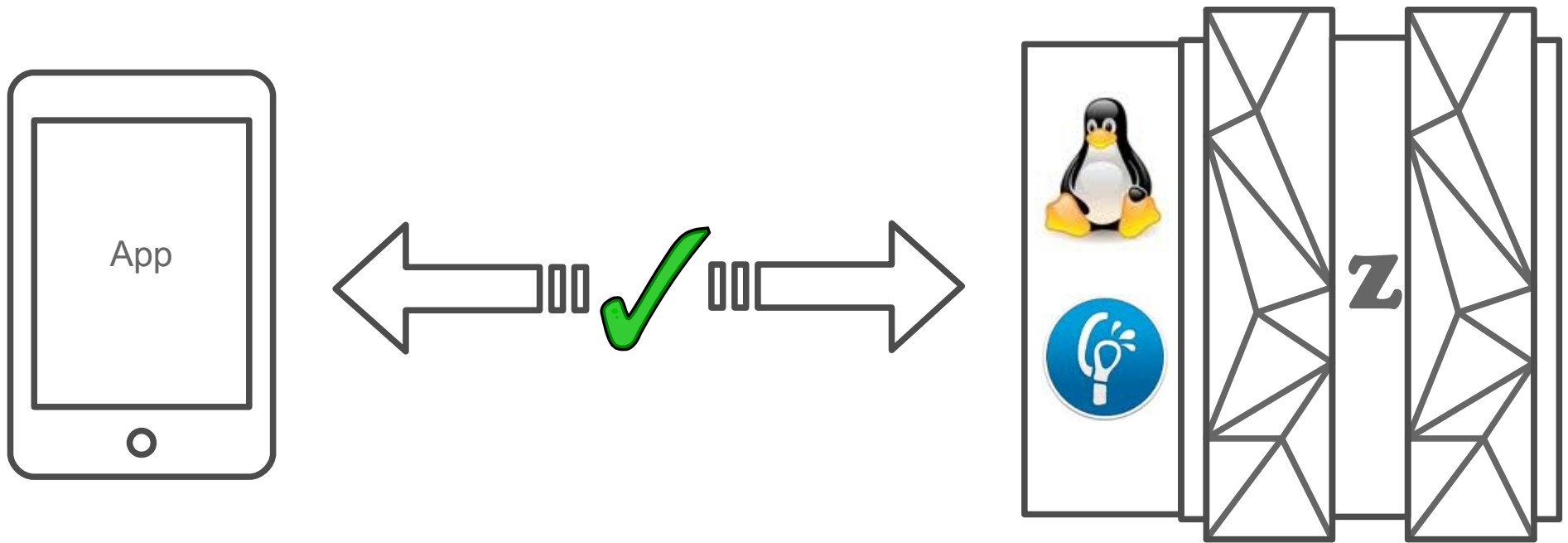


Do I have to buy new servers to run Worklight?

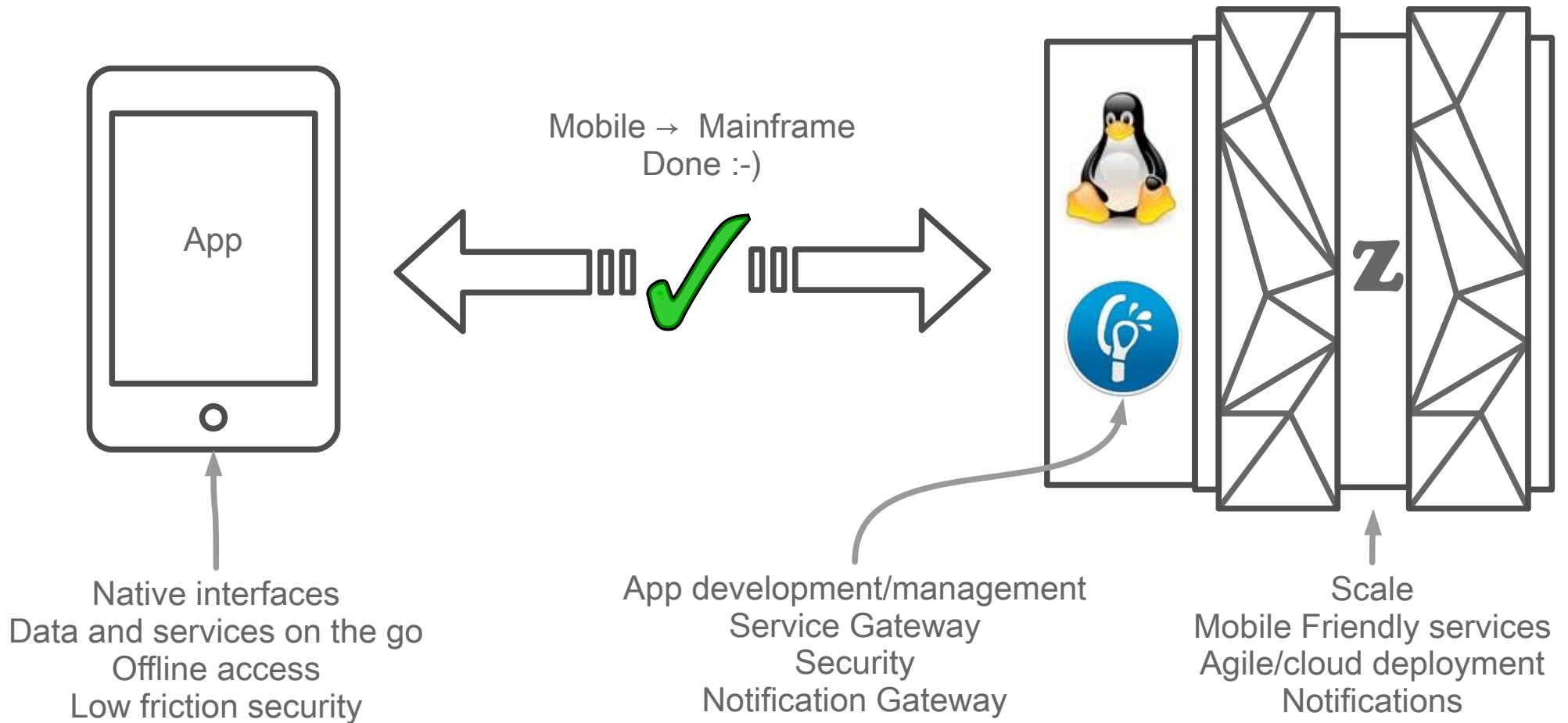


No!

Worklight will run on zLinux!

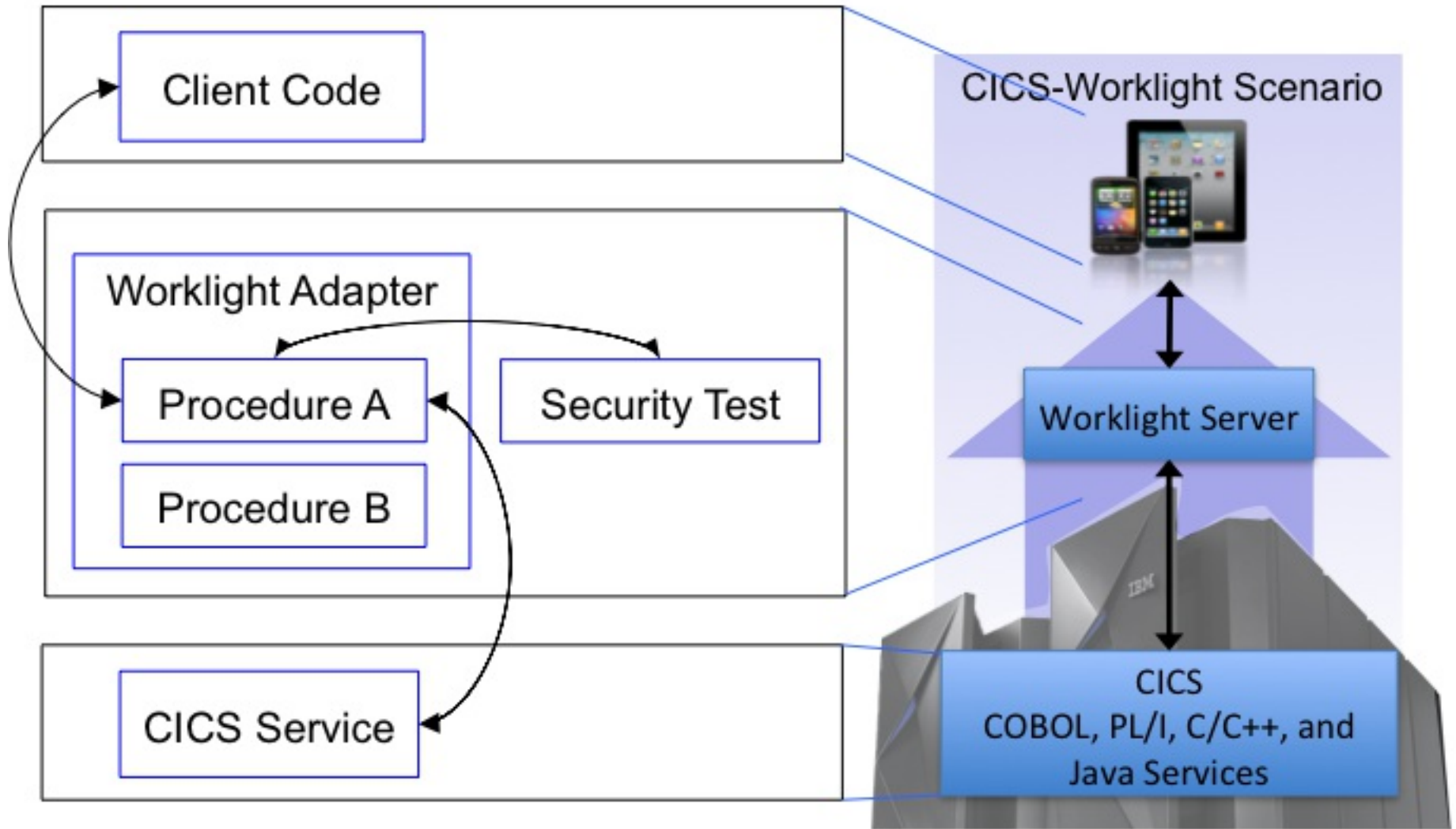


And we're done!

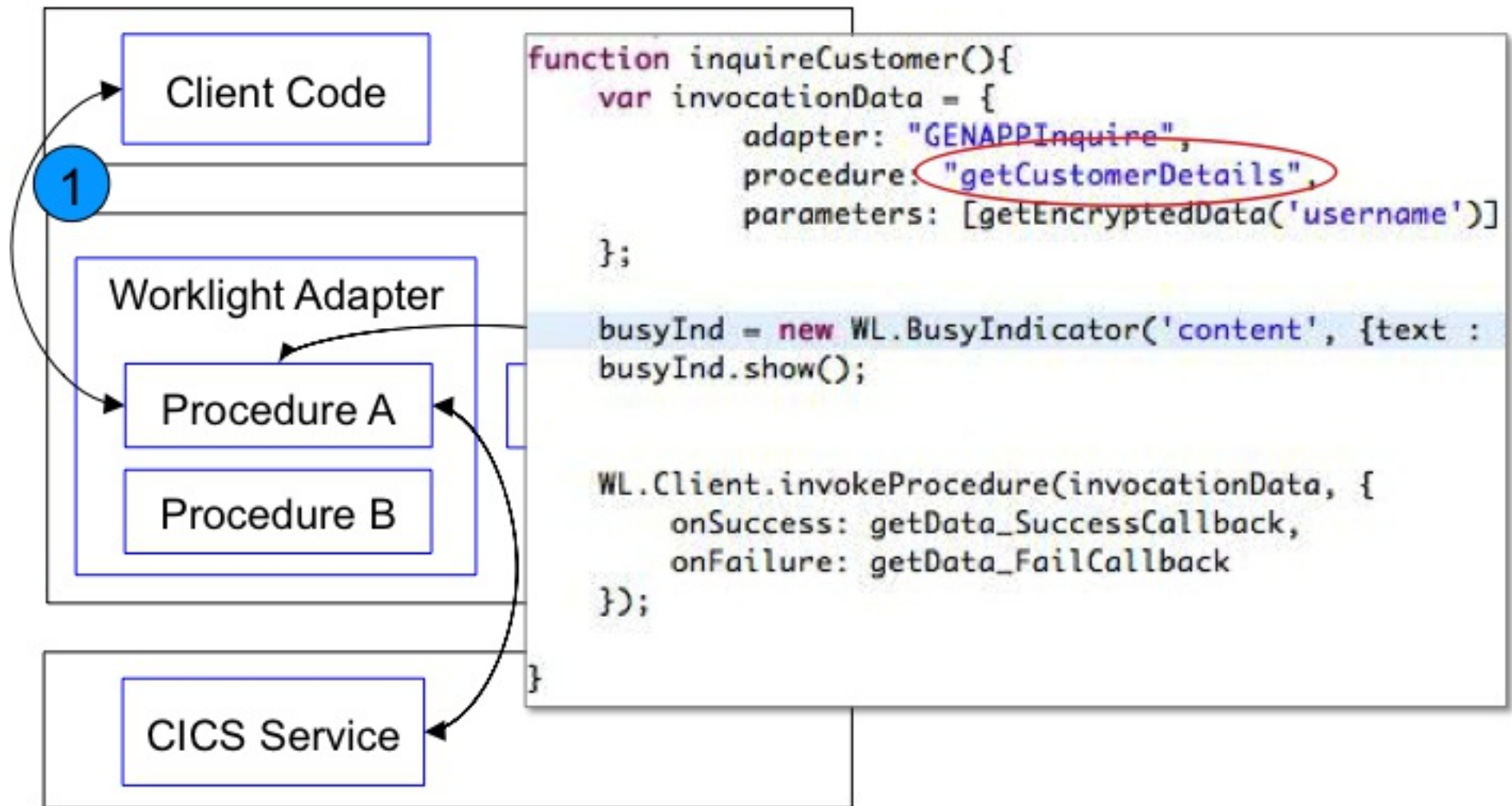


Example of connecting a mobile to CICS services

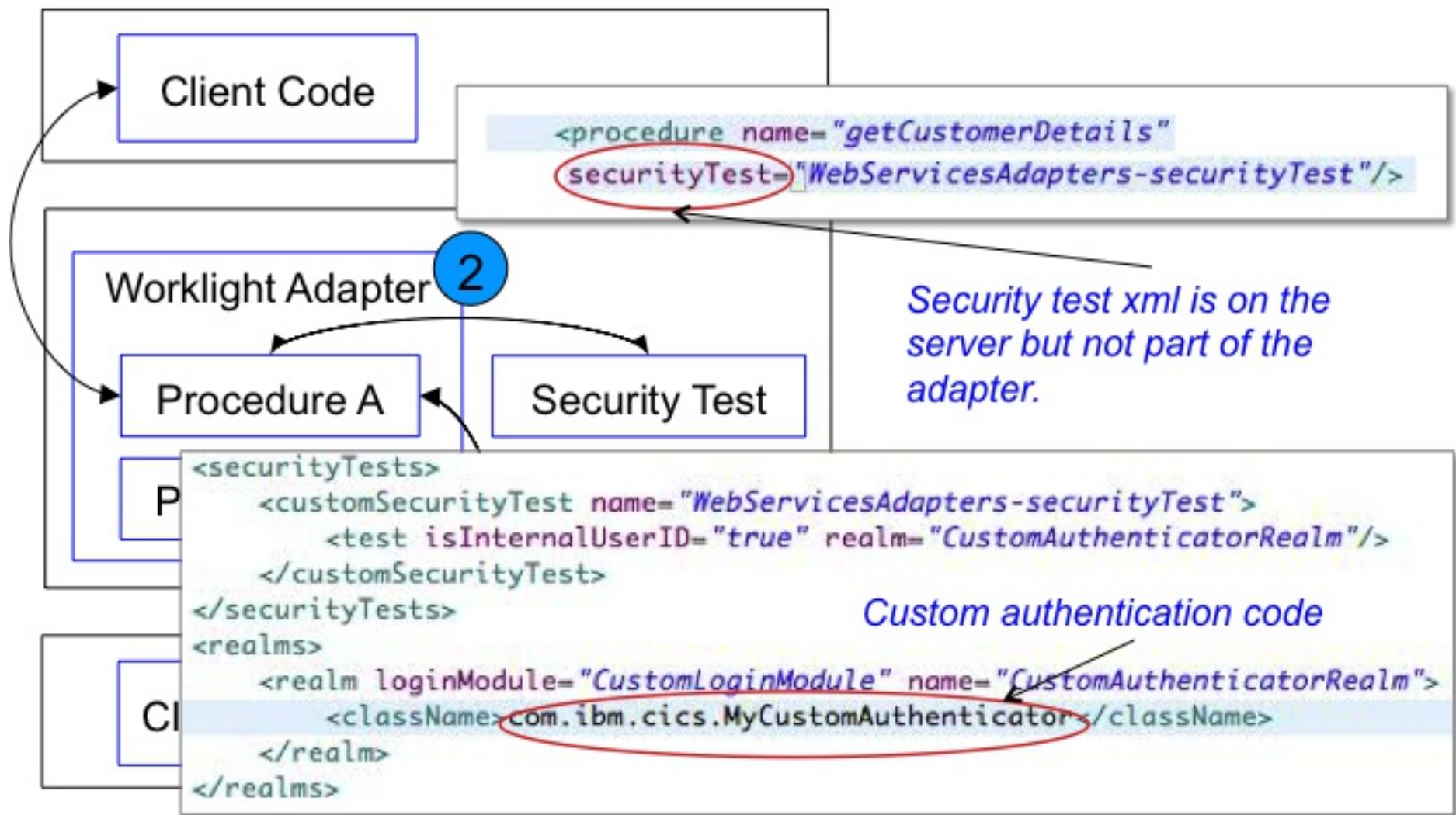
Worklight Components – basic flow



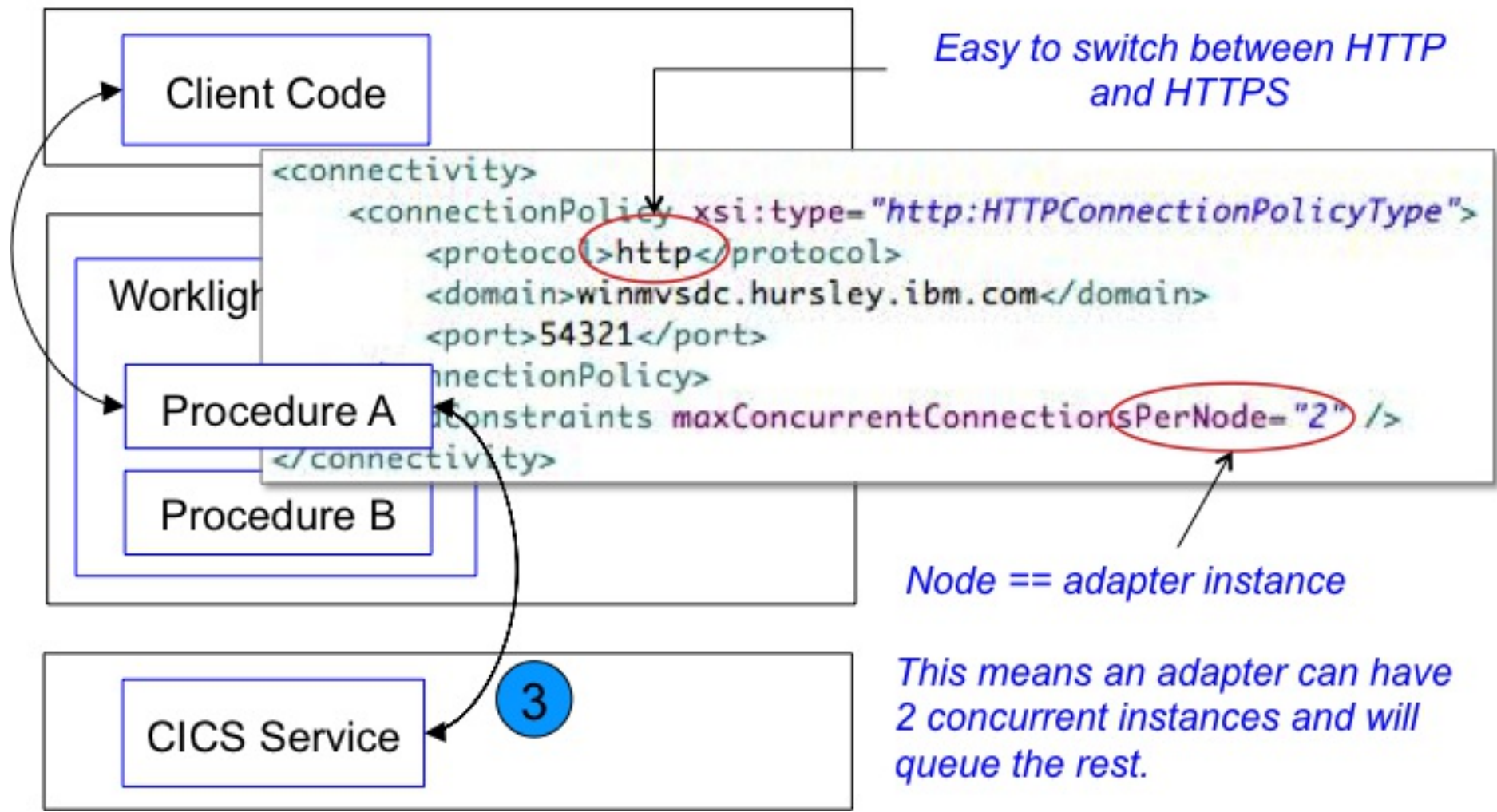
Worklight Components – Client call



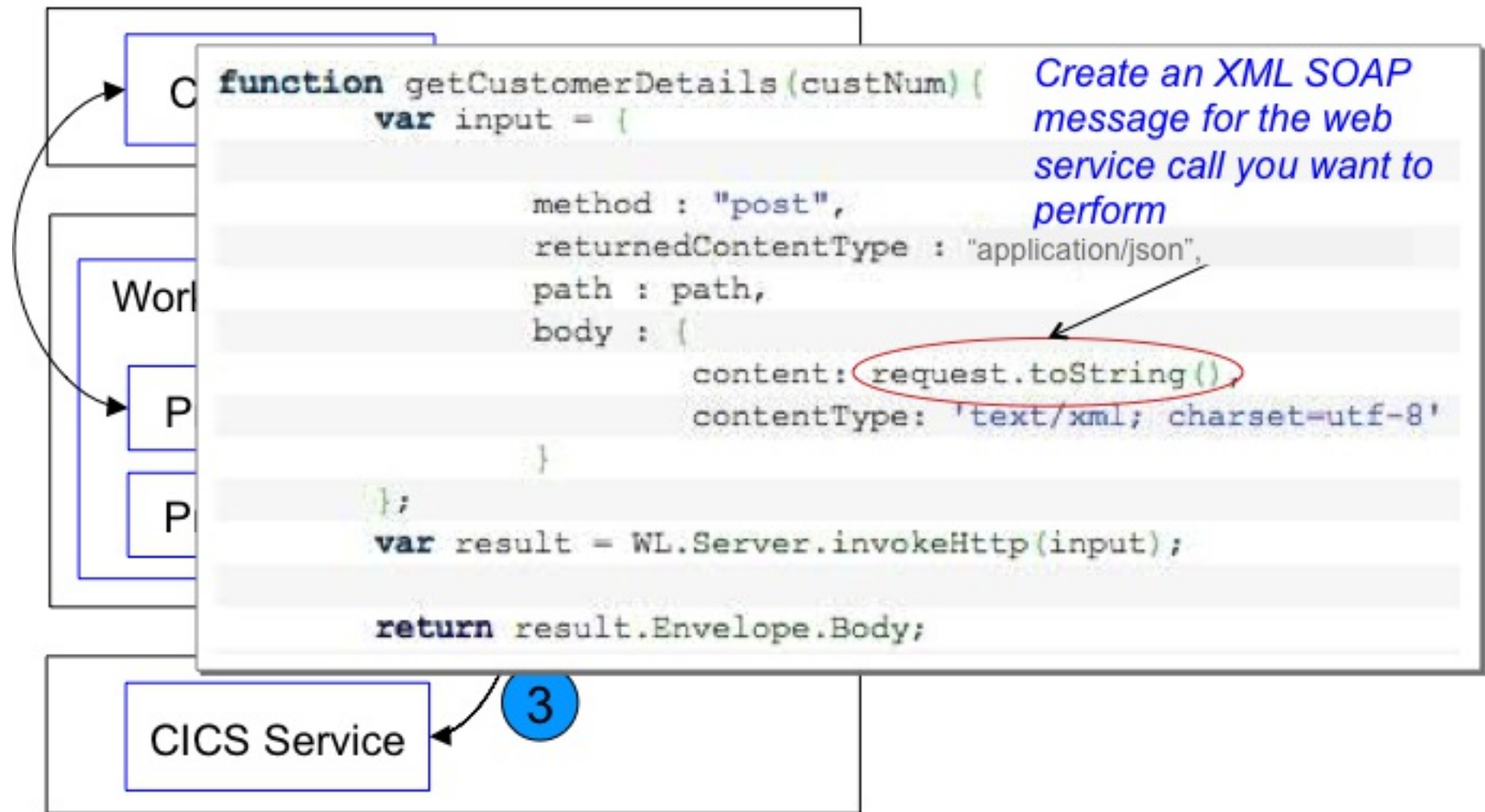
Worklight Components – security check



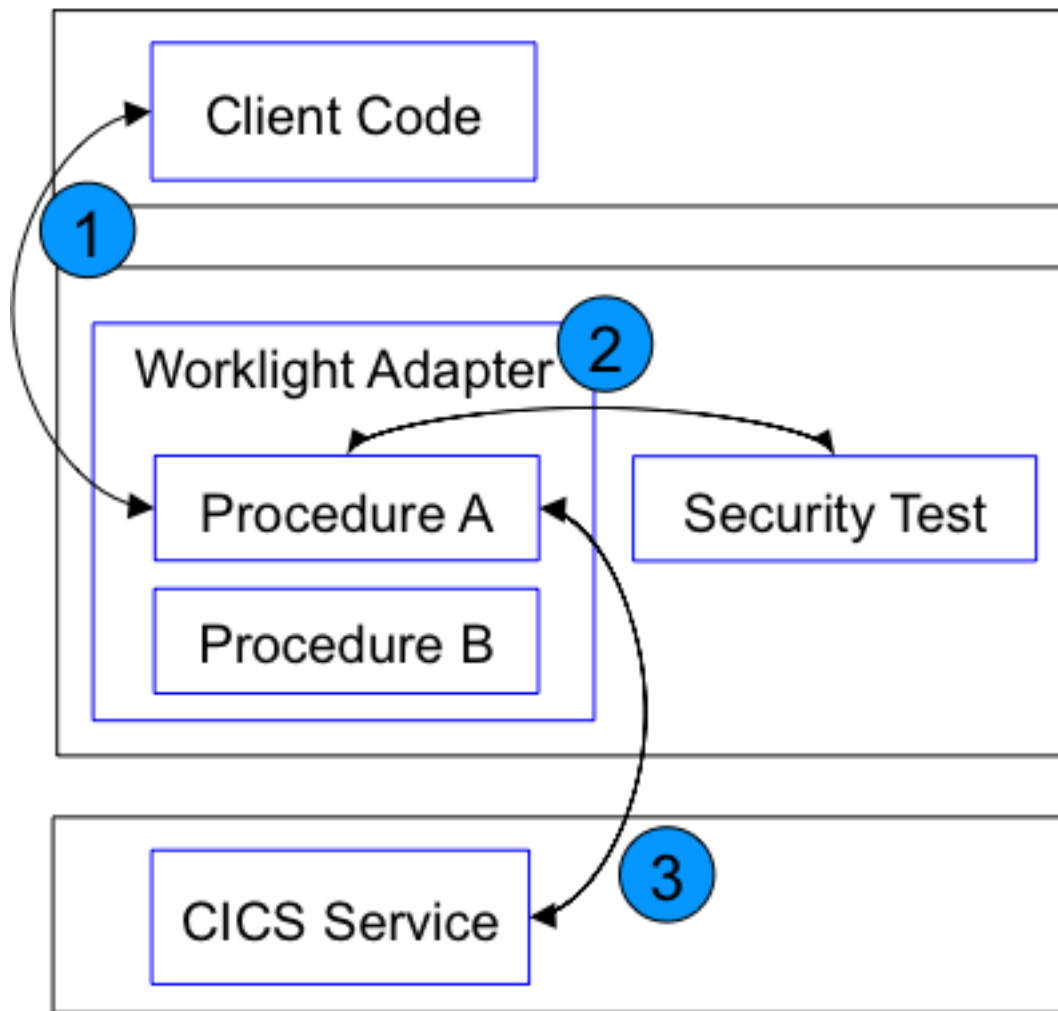
Worklight Components – basic flow



Worklight Components – basic flow



Worklight Components – basic flow



Worklight server provides separation, security, and a variety of mobile services, helping control the impact mobile has on CICS Transaction Server

Thank you for listening
Any questions

