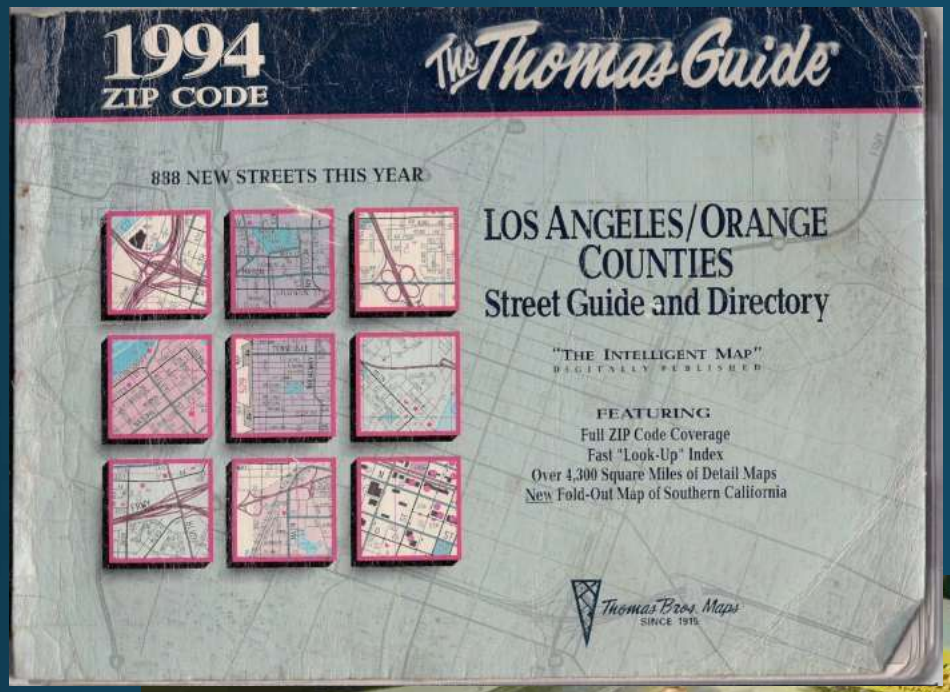
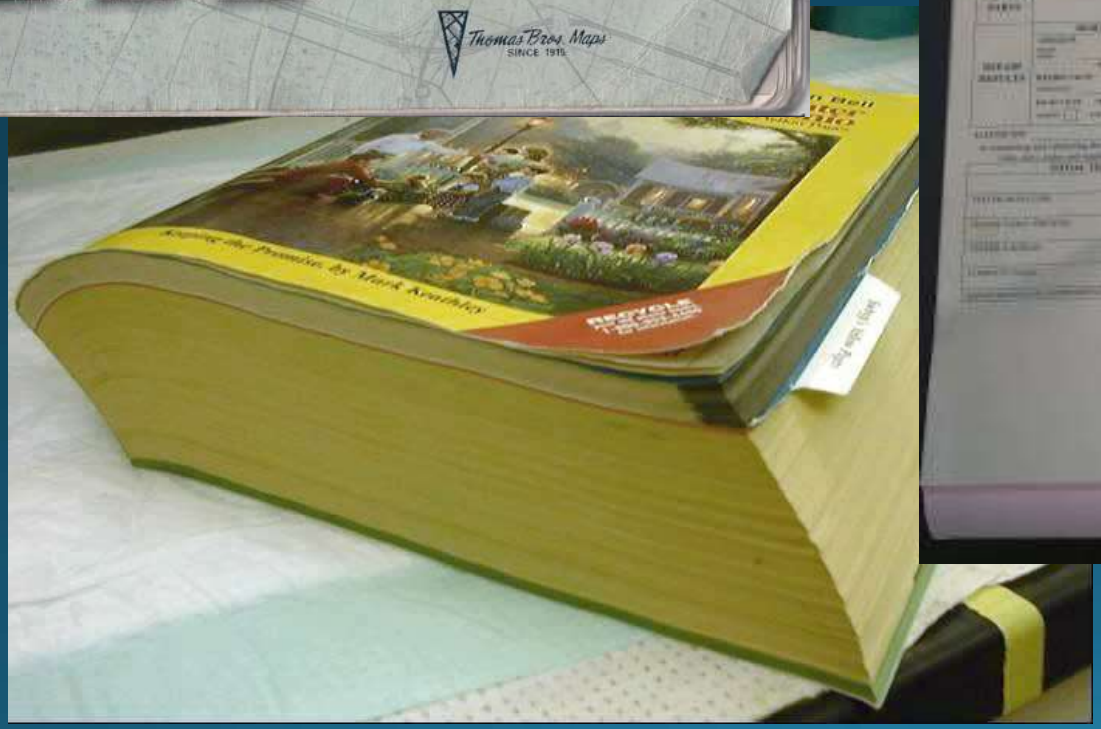
Mobile & Cloud Technology:
Doing More With Less

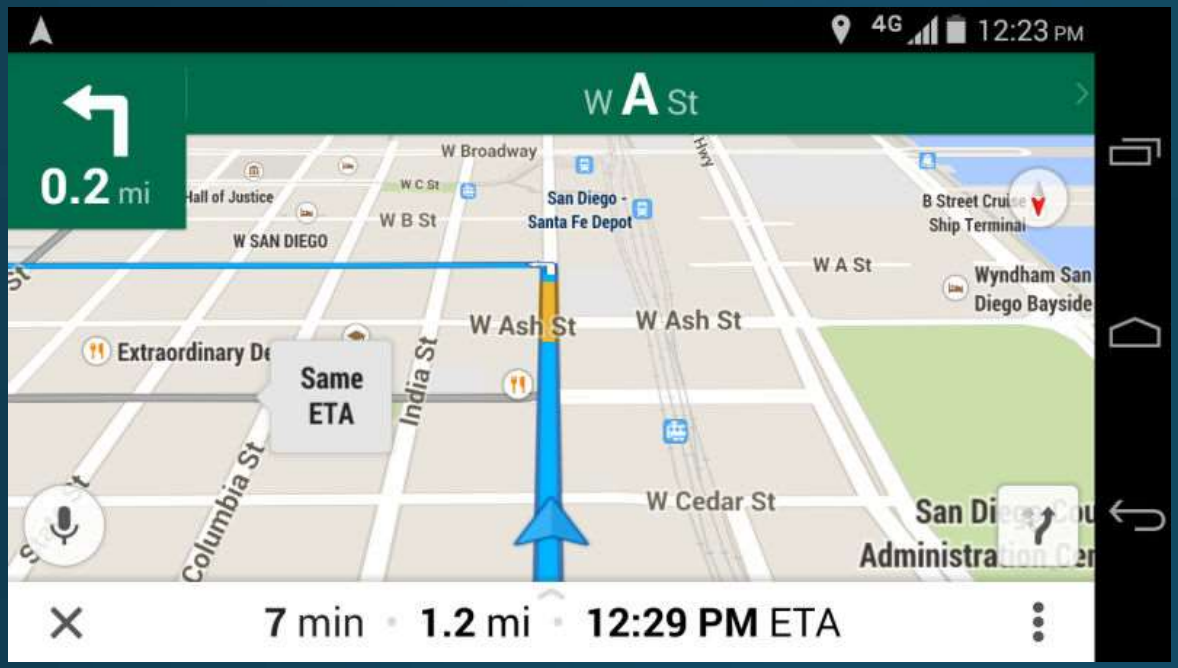
Jeremiah Church
C3Backflow

Background


1994
ZIP CODE
The Thomas Guide
838 NEW STREETS THIS YEAR
LOS ANGELES/ORANGE
COUNTIES
Street Guide and Directory
"THE INTELLIGENT MAP"
DIGITALLY PUBLISHED
FEATURING
Full ZIP Code Coverage
Fast "Look-Up" Index
Over 4,300 Square Miles of Detail Maps
New Fold-Out Map of Southern California
Thomas Bros. Maps
SINCE 1915



PNWS-AWWA
BACKFLOW
PREVENTER REPORT


4G 12:23 PM
W A St
0.2 mi
W Broadway
W C St
W B St
W SAN DIEGO
San Diego - Santa Fe Depot
B Street Cruise Ship Terminal
W A St
Wyndham San Diego Bayside
W Ash St
W Ash St
Same ETA
India St
Columbia St
W Cedar St
7 min
1.2 mi
12:29 PM ETA

EMAIL

Google
Say "Ok Google"
Google Search
I'm Feeling Lucky

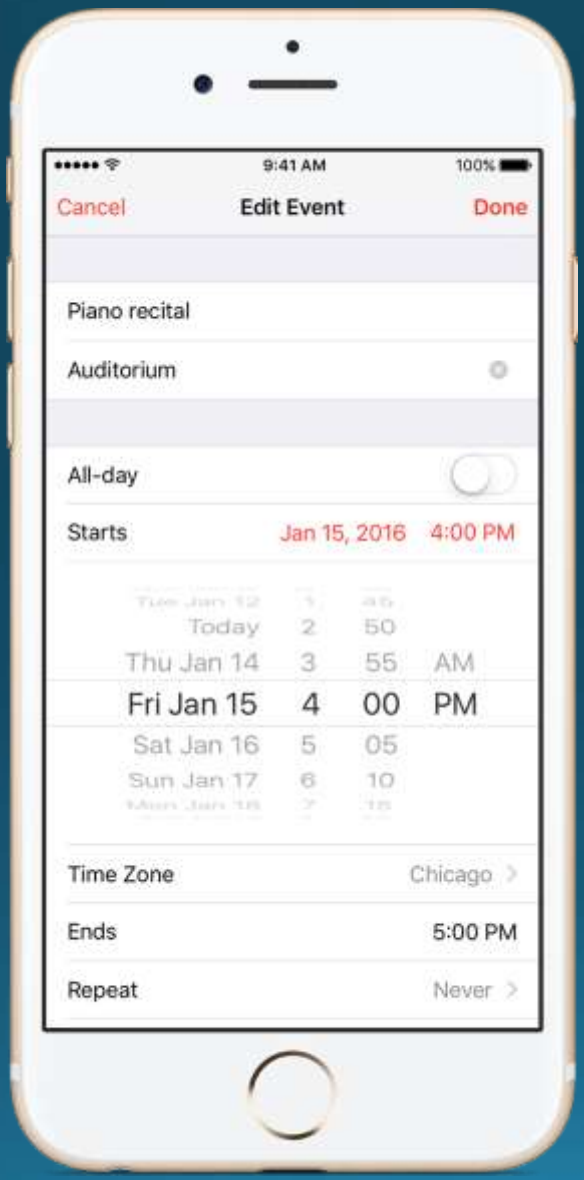
Mobile & Cloud

Benefits & Drawbacks

Making the Switch

Mobile

Common Uses


9:41 AM
100%
Cancel
Edit Event
Done
Piano recital
Auditorium
All-day
Starts
Jan 15, 2016
4:00 PM
Today
Thu Jan 14
Fri Jan 15
Sat Jan 16
Sun Jan 17
2
3
4
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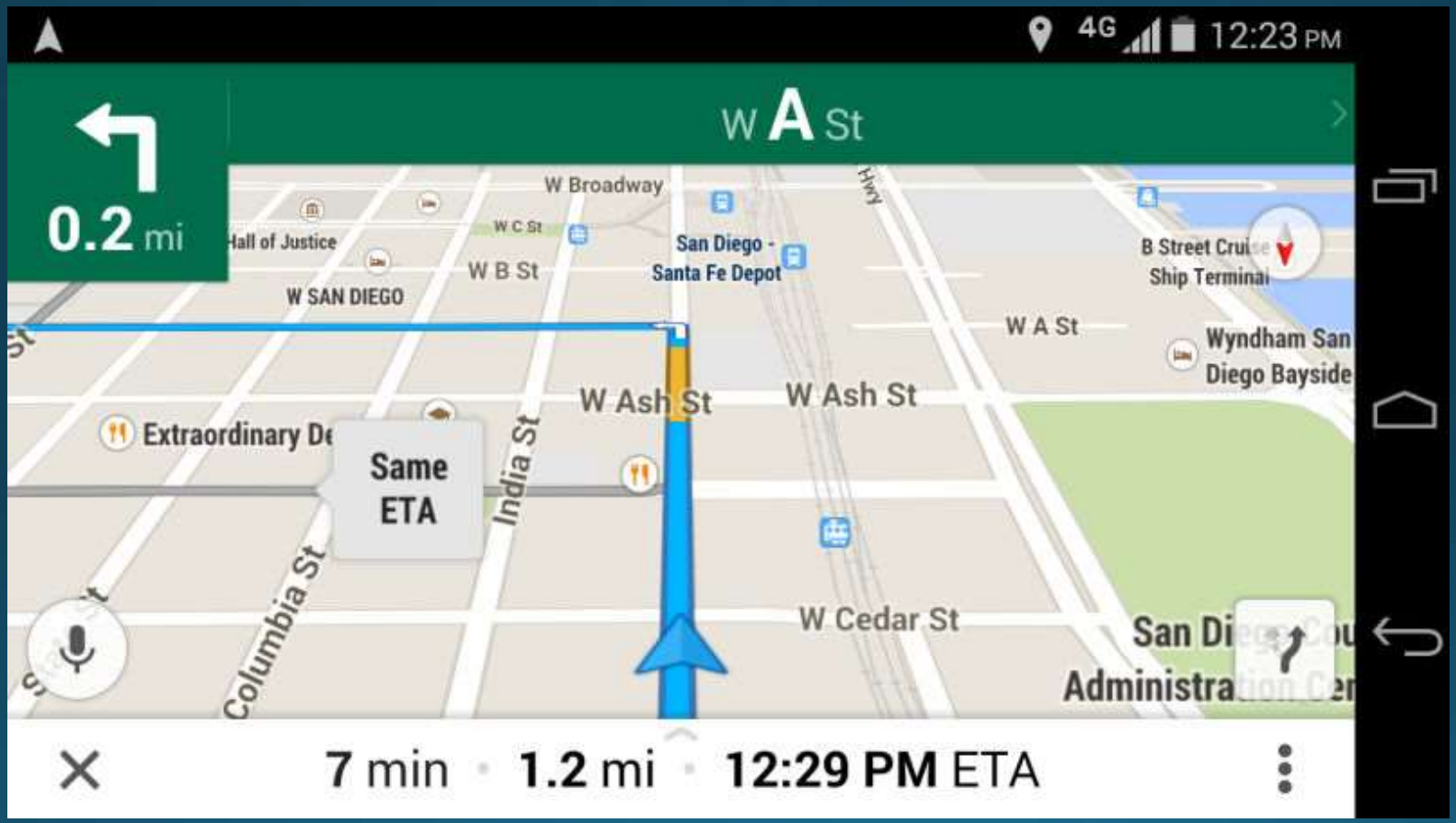
6
50
55
00
05
10
AM
PM
Time Zone
Chicago
Ends
5:00 PM
Repeat
Never

Common Uses


4G 12:23 PM
W A St
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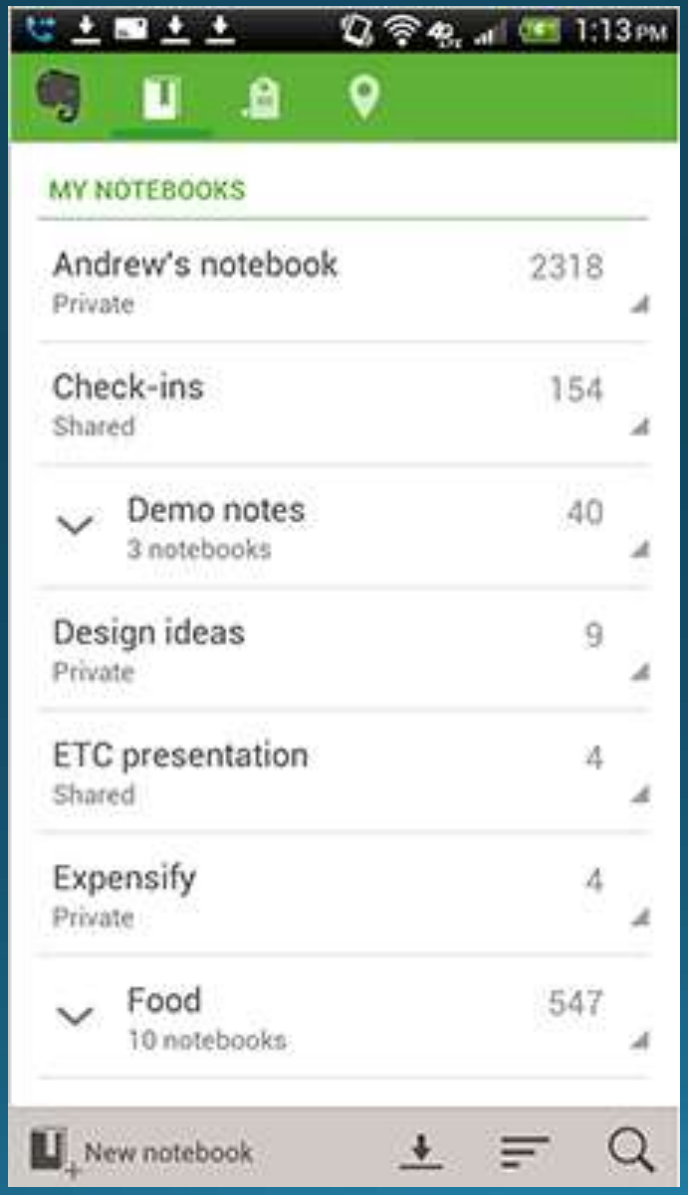
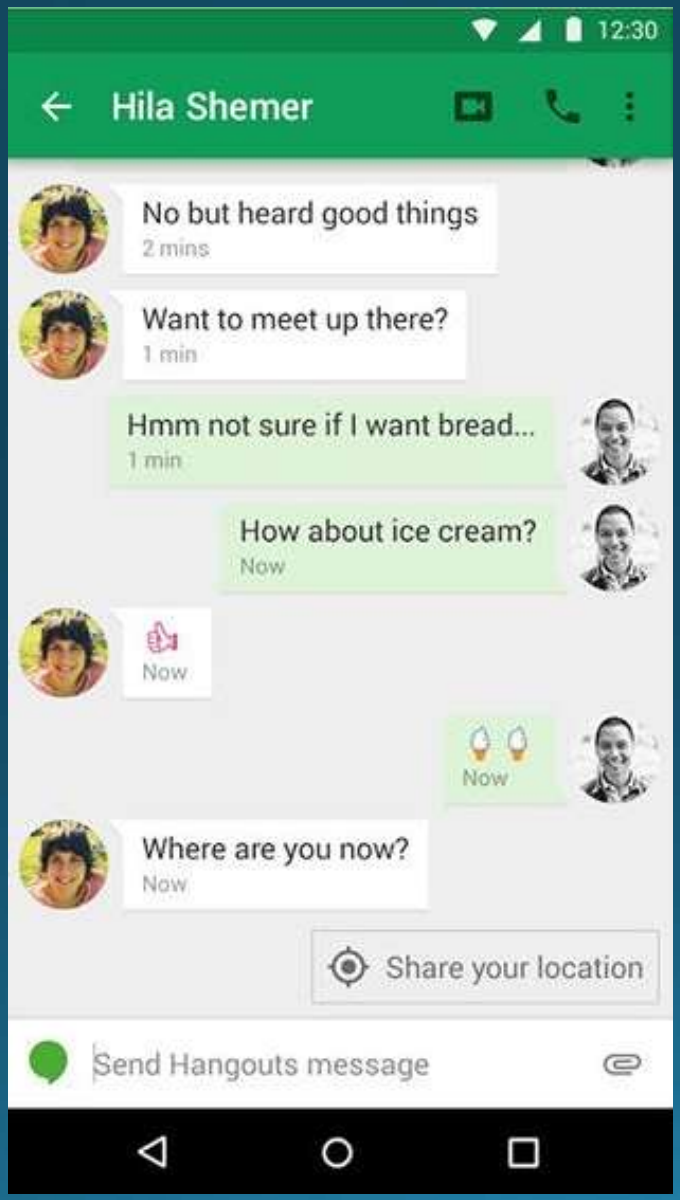
Administra
7 min • 1.2 mi • 12:29 PM ETA

Common Uses

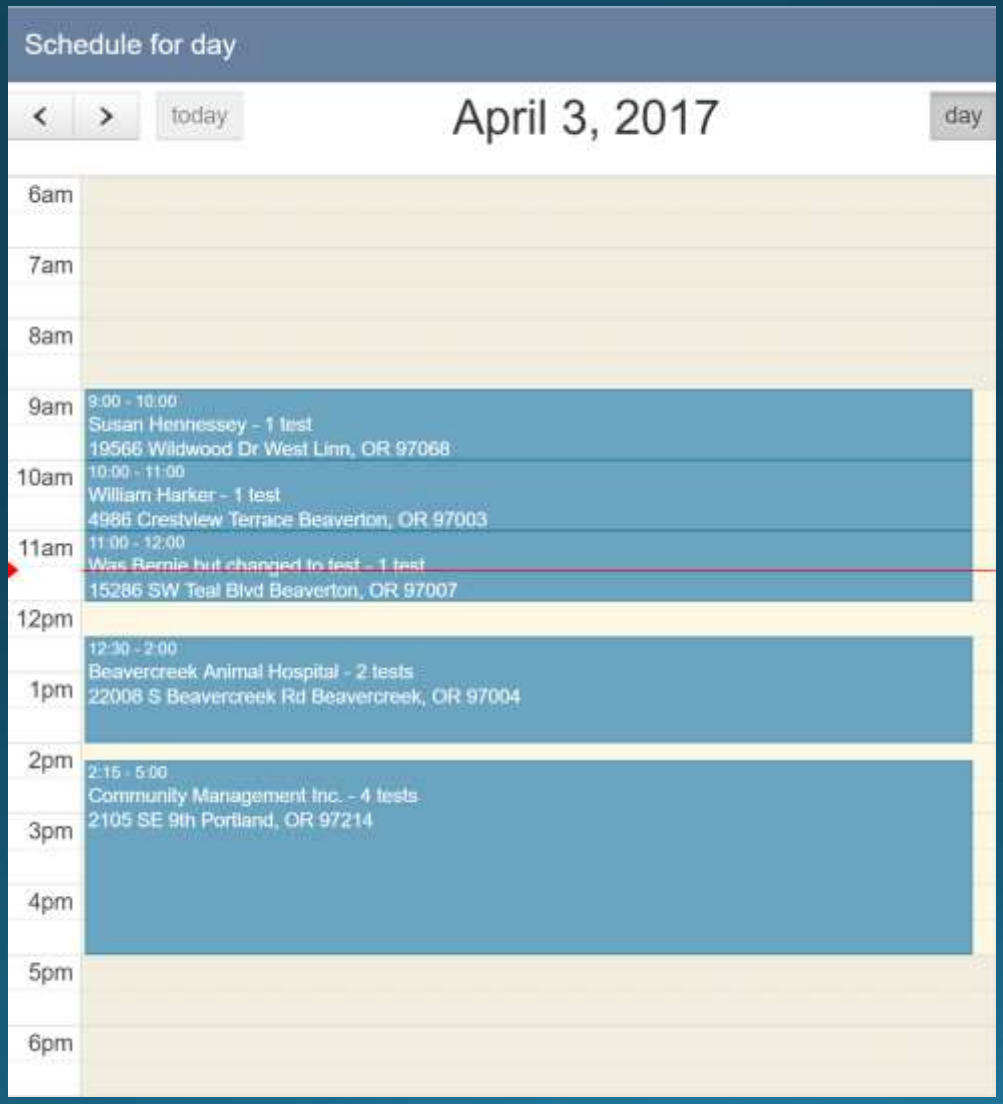

1:13 PM
MY NOTEBOOKS
Andrew's notebook
Private
2318
Check-ins
Shared
154
Demo notes
3 notebooks
40
Design ideas
Private
9
ETC presentation
Shared
4
Expensify
Private
4
Food
10 notebooks
547
New notebook

Common Uses

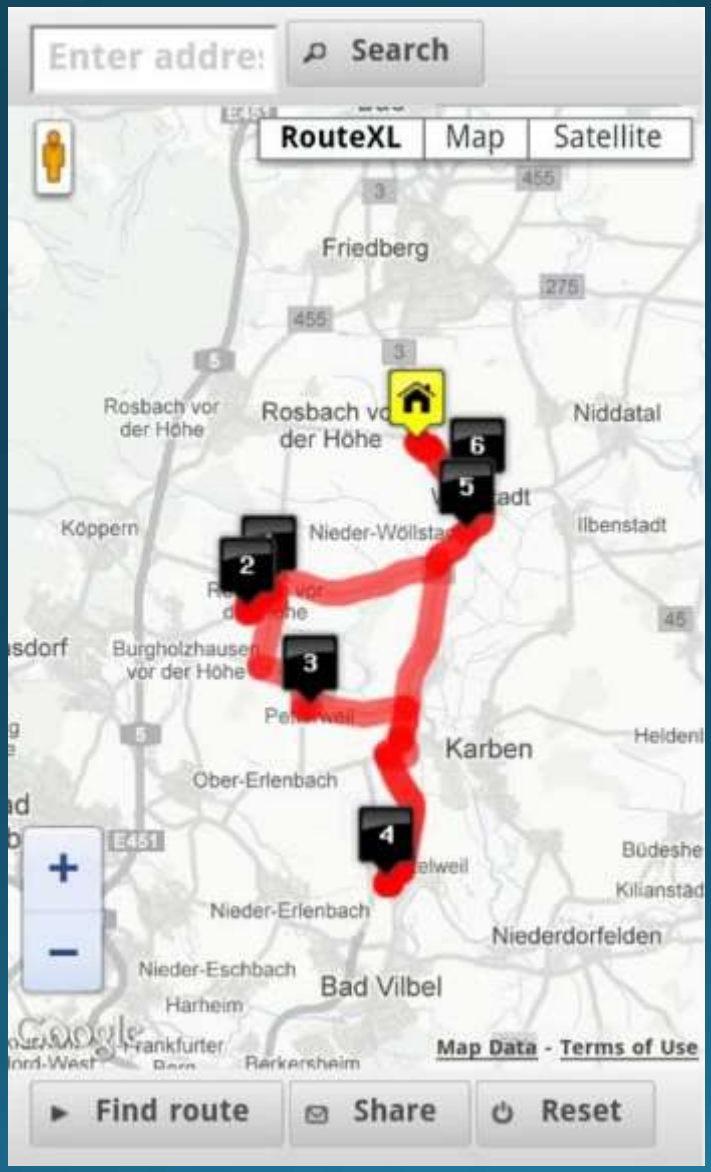

12:30
Hila Shemer
No but heard good things
2 mins
Want to meet up there?
1 min
Hmm not sure if I want bread...
1 min
How about ice cream?
Now
Now
Now
Where are you now?
Now
Share your location
Send Hangouts message

Backflow Specific

Backflow Specific



Backflow Specific



Backflow Specific

Benefits

- Already in your pocket
- Your employees are already comfortable with it
- Information where you are
- No limitations on how much you can carry

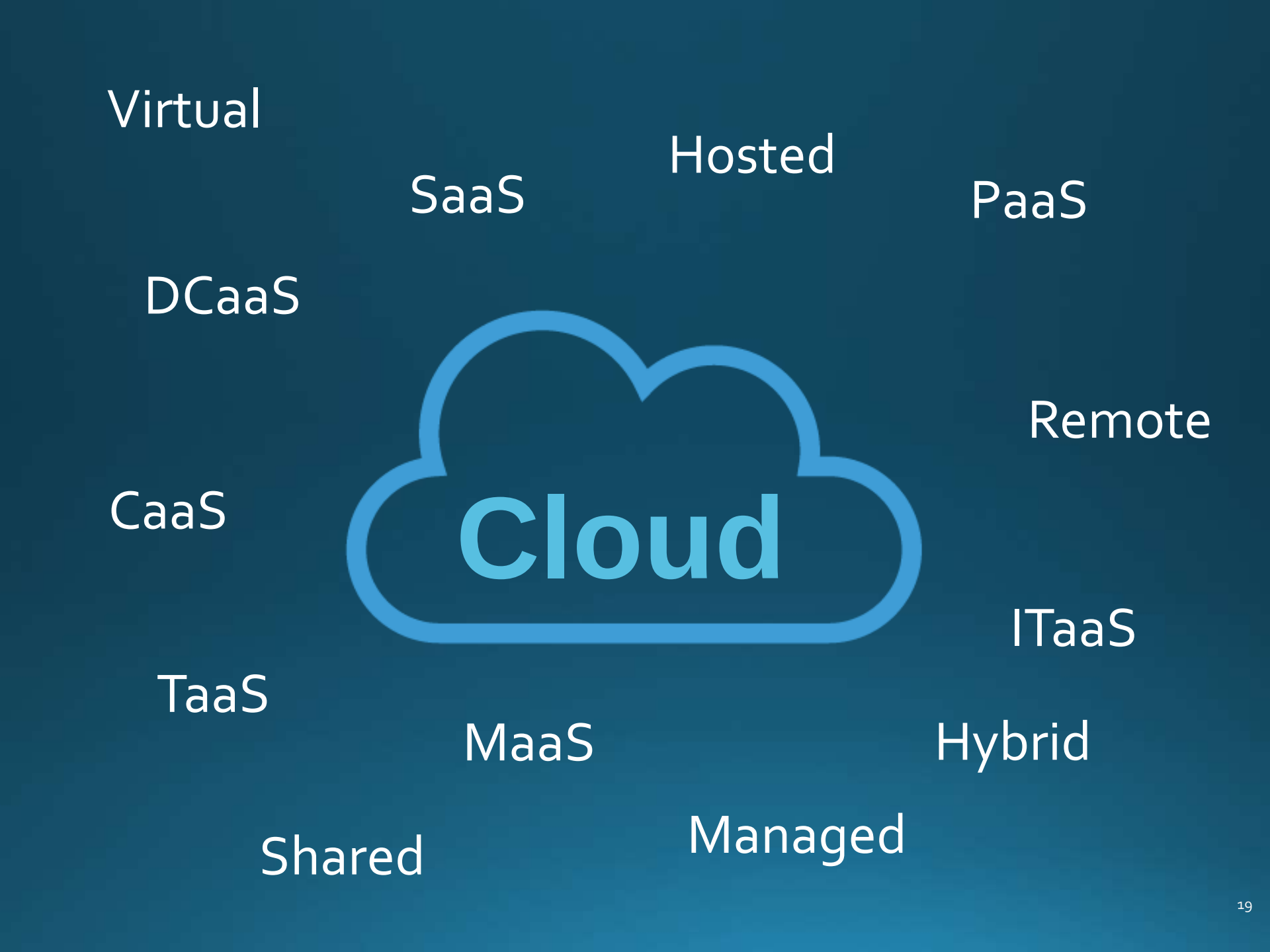
Drawbacks

- Cell coverage can be spotty
- Devices & data can be expensive
- Increased security exposure

Questions To Ask

- Will this benefit my business?
- Do I need to buy new devices to use this solution?
- Will my people use it?
- Who will support us when we have problems?
- Battery life in the field?
- How well do the devices standup to the environment?

Cloud


Virtual
Hosted
SaaS
PaaS
DCaaS
Cloud
Remote
CaaS
ITaaS
TaaS
MaaS
Hybrid
Managed
Shared

Service

Used to be service provider or managed service provider (MSP)

Now the term is X as a Service

Done correctly you get the expertise & economies of scale for much less than you would spend internally

Common Tools - Files

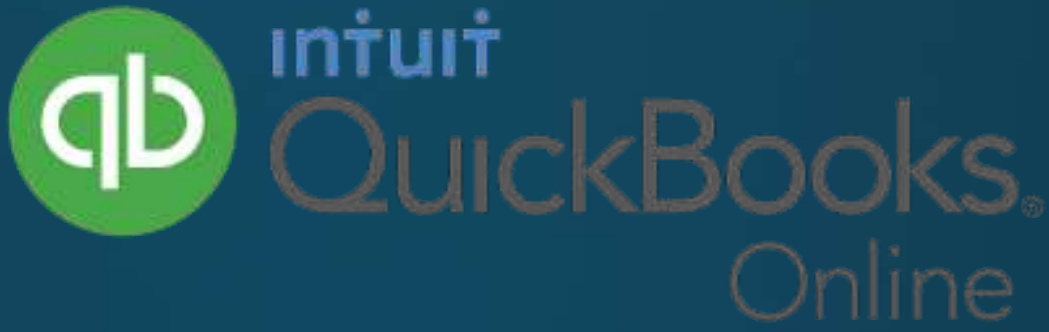
Dropbox

Google Drive

CARBONITE™
ONLINE BACKUP

Common Tools - Productivity

Common Tools - Finance



stripe

Common Tools - Notes

asana

Common Tools - Phone

Backflow Specific

Workflow management

- Backflow testing
- Surveys
- Customer notifications
- Annual compliance reporting

Form management

- Storage

Integration with existing systems

Compliance with existing requirements

- Data management
- Hosting requirements
- Security / access control

Benefits

- Known costs upfront
- Dramatically lower costs overall
- Increased security
- Better availability
- Constantly improving

Drawbacks

- Out of sight out of mind
- Lack of control
- Lack of customization

Questions To Ask

Do I own the exclusive rights to any data I provide to your system?
    If it isn't exclusive what rights do I have to my data?

What is your uptime guarantee? What's your average uptime?
    Do you have any maintenance windows?

How do I get my data back if I want to leave?

Contract Terms – lock-in period, etc

Support – how fast will you respond to my issue? How fast will you fix it? Biz hours only? What timezone?

Data safety/backups – how often?

Making The Switch

Backflow Specific

Staying in compliance – know your regs!

Security & fraud protection

- Use the mobile you have to ensure the tester is in the field at that device!
- Historical analysis of results & tester data submission

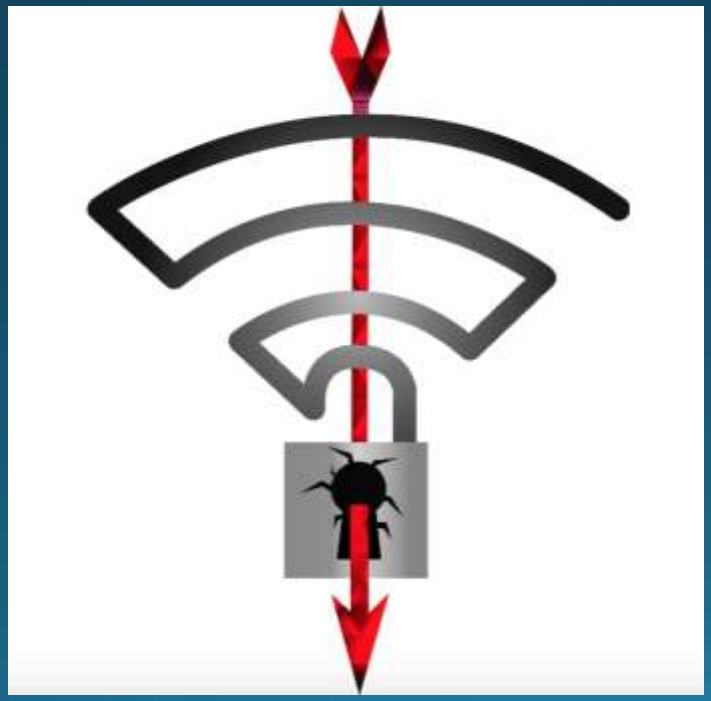
Use the right forms – minimal or no changes from established

Training & Documentation

Data backup & retention

- 5 years for testers & purveyors in WA

Security



Backflow Specific

In Texas this is nicely laid out by the TCEQ in RG-478

1. What are the **deviations from the official TCEQ forms**?
2. What precautions have you taken to **prevent data loss**?
3. What precautions have you taken to **ensure data integrity** (fraud prevention, consistency with USC test procedures)?
4. How will the software comply with **record-retention requirements** (BPAT retention: three years; CSI retention: 10 years or indefinitely)?
5. Will the PWS be able to produce a hard copy of the records when requested during a comprehensive compliance inspection by the TCEQ regional investigators?
6. Will training be available to the PWS to ensure that its staff knows enough to be able to supply required information during a comprehensive compliance inspection?
7. Will the software identify when values that are out of acceptable parameters are entered?
8. Will the software alert the tester that a backflow preventer has failed a test?
9. Will the software record that a backflow preventer failed a test, was repaired, and passed the test after repair?
10. What precautions are taken when the tester has successfully tested a backflow preventer and, for some reason, the software is not available (malfunction, user error, etc.)?
11. **Where an unscrupulous person is misusing the software, can it confirm that the tester actually went on-site to conduct the test?**

Hidden Costs

- Training
- System Setup
- Lost Efficiency
- Research, Negotiation, & Decision Time

Questions To Ask

What's included in the migration/onboarding for your product?

What data will be lost/not migrated?

What interfaces will be substantially different than my current?

How much training/onboarding time is needed for a group my size?

How much training do you include?

Is there any customizations we will need not included in your standard pricing?

Will this synchronize with my existing systems? How often will it sync? What is the delay?

What datacenter compliance requirements do you meet? SAS 70, ISO 27001, FedRAMP

Review

Mobile: giving you & your staff the information they need wherever you are

Cloud: specialized expertise & systems without the need for headcount

Making the switch can be tough but its worth it

Tester's - If you aren't doing this your competition is
- Less efficient means you're losing your customers
- Harder to sell without system & paper trail

Utilities - there's probably pressure from your finance folks to show you're as efficient as possible

Questions?

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