Getting Creative with Mobile Solutions for Ports and Marine Terminals

American Association of Port Authorities
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Foundational Motivations of Mobile App Ideation

Solve My Problem

Make It Better

Get It Faster
Number of Mobile Apps in Market Today?

2.2 Million Apps

2.1 Million Apps
Continual Growth

- 5G is Coming
- WiFi is Expanding
- Bluetooth is Improving
- Mobile Apps
- Machine Learning
# Cell Platform Impact on Mobile Apps

<table>
<thead>
<tr>
<th></th>
<th>1G</th>
<th>2G</th>
<th>3G</th>
<th>4G</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 Kbps</td>
<td>64 Kbps</td>
<td>2 Mbps</td>
<td>100 Mbps</td>
</tr>
<tr>
<td></td>
<td>Basic voice service using analog protocols</td>
<td>Designed primarily for voice using the digital standards (GSM/CDMA)</td>
<td>First mobile broadband utilizing IP protocols (WCDMA / CDMA2000)</td>
<td>True mobile broadband on a unified standard (LTE)</td>
</tr>
</tbody>
</table>

![1G mobile phone](image1.png)

![2G mobile phone](image2.png)

![3G mobile phone](image3.png)

![4G mobile phone](image4.png)
5G Will Be a Key Enabler for Growth

- Estimated 10 Gbps broadband speeds with peaks of 20 Gpbs
- Automate many network behaviors
- Unite wireless, wireline and satellite services under common structure
- Offer platform-enabling services for vertical markets
- Accelerate service delivery at lower cost
- Use network slicing to deploy multiple virtual 5G networks on common infrastructure
IBM BellSouth “Simon”

Retrospectively the 1st smartphone w/ mobile apps

- faxes
- e-mails
- cellular calls
- address book
- calendar
- appointment scheduler
- calculator
- world time clock
- electronic sketch pad
- handwritten annotations
- input screen keyboard

1994 $1099

2018 $1800
268 Billion Mobile App Downloads in 2017
Critical Success Factor

ADOPTION
Supply Chain Logistics Mobile Apps

E-COMMERCE LOGISTICS
- Delhivery
- JD.com
- Pesado
- Ecom Express
- temando
- VK's
- Lognext
- MPO
- shippo
- HubLogix
- sendle
-mandi
- MetaPack
- LOCUS
- convey
- Rato
- ForEye
- easypost

WAREHOUSING
- FLEXE
- Grabit
- SMI
- Peoplevox
- River Systems
- SEEGRD
- RoboCV
- MAGADINO
- GREYORANGE
- Hinter Technologies
- I am robotics
- Fetch
- Locus
- Kinetic
- GETVU
- Balyo
- MIR

TRUCKING
- SMARTDRIVE
- Rivigo
- GreenRoad
- uShip
- MACROPOINT
- TRANSIX
- oTMS
- intihinc
- Peloton
- Trucker Path
- EZroute
- Convoy
- Fourkites
- CargoWise
- Keychain
- Waythink
- CF
- Nomatics
- LOADSMART
- Decisiv
- BlackBuck
- FleetUp
- Convargo
- Freightera
- Ganyan
- Sontra

INVENTORY MANAGEMENT
- ecomdash
- saleswarp
- Relex
- TradeGecko
- Stitchlabs
- SkuIQ
- Optoro

FREIGHT & SUPPLY CHAIN VISIBILITY
- Flexport
- Freightos
- Olymtech
- 3GTMS
- FR8.guru
- Containers
- InFlow
- ICX
- VENIAM
- GIoT
- Haven
- INTTRA
- Clearmetal
- RiskMethods

LAST-MILE DELIVERY
- GoJek
- Ninja Delivery
- Proteus
- Grofers
- Cloud Logistics
- DHL
- Zipline
- Shyp
- street
- Lalamove
- Ninja Van
- ParcelPoint
- Flirtby
- Doorman
- Loggi
- Matternet
- Fetchr
- Dropoff
- Glovo
- Routific

ENTERPRISE RESOURCE PLANNING
- Infor
- IQMS
- Taulia
- Brightpearl
- SAP
- TIBCO
- TradeShift
- Kenandy
- D2B Center
- Steelwedge
- e2open
- RSI
- Bonsai
- Sight Machine
- arena
- Exostar
- Rootstock
- FusionOps
- Nulogy

SENSORS / ASSET TAGGING
- Alien
- Omnistar
- Scandit

Port Stakeholders
Port Stakeholder Mobile App Categories

- Marine Terminals
- Drayage Dispatch
  - Solution Providers
  - Mobile Apps
- Cargo Moves Booking
- Electronic Logging
- Others
  - Wait Times
  - Street-Turns
  - Truck Parking
  - Traffic Views
Marine Terminals - eModal Mobile

WHAT'S NEW
ERI – Specific instructions, by terminal, to streamline the return of empty containers

Updated
October 23, 2017

Installs
1,000 - 5,000

Current Version
1.3.1

Requires Android
4.0.3 and up

Offered By
Advent Intermodal Solutions

Developer
purchases@adventinc.com
Drayage Dispatch - Service Providers
Drayage Dispatch Apps - Smart Dray

Smart Dray
TransWorks  Productivity
Everyone
This app is compatible with all of your devices.

Add to Wishlist  Install

Smart Dray allows Drivers to communicate with dispatch, manage loads, capture activity data, and automatically convey load status. Automated events utilize GPS to notify respective parties of activity status and additional features, such as electronic signature capture, provide a hassle free way to instantly obtain external documentation at critical times. Please Note that Continued use of GPS running in the background can dramatically decrease battery life.

READ MORE

Updated
September 1, 2016

Installs
1,000 - 5,000

Current Version
1.3.15.8

Requires Android
4.1 and up

Offered By
TransWorks

Developer
helpdesk@trnswrks.com
Drayage Dispatch Apps - eDRAY

Updated
November 6, 2017

Installs
500 - 1,000

Current Version
1.27

Requires Android
4.3 and up

Offered By
Eleos Technologies

Developer
support@eaglegroup.com

The eDray Mobile application was designed with you, our driving associates, in mind. You can do many things with this app: view load and stop detail, send & receive messages, scan & send documents, view news, report safety issues, and much more all anywhere you happen to be.
Drayage Dispatch Apps - Dray Drive

Updated
July 11, 2016

Installs
100 - 500

Current Version
2.0.7

Requires Android
4.0.3 and up

Offered By
Dray

Developer
support@drayapp.com

*** This app is for drivers and owner operators. Dispatchers can sign up for Dray Fleet by calling us at +1 (855) 534-DRAY or emailing support@drayapp.com ***

Drivers must have their account approved by a Dray representative to use this app. Sign up at https://www.drayapp.com to get started.
Drayage Dispatch Apps - Interdom Dray Status

Updated
January 30, 2017

Installs
1 - 5

Current Version
1.4

Requires Android
4.1 and up

Offered By
Interdom, LLC

Developer
bschild@interdompartners.com
Cargo Moves Booking Apps - Macro Point

Updated
June 25, 2015

Installs
100,000 - 500,000

Current Version
1.2.4

Requires Android
2.2 and up

Offered By
MacroPoint

Developer
rderin@macropoint.com

MacroPoint is a free mobile application for Truck Driver's that allows a driver's dispatcher to get important information to them in an efficient and timely manner. Trip information including addresses and pickup times are examples of key pieces of data that can be sent down to the driver using the MacroPoint application. Also drivers can automatically share information back with the dispatcher such as location information, arrival/departure notices, loaded/empty notices, etc.
Cargo Moves Booking Apps - Find Loads

Truckloads & Freight – Free Truck Load Boards

Trucker Path  Maps & Navigation
Everyone
Offers in-app purchases
This app is compatible with some of your devices.

Add to Wishlist  Install

Most Popular Load Board App

Looking for freight to haul?

100% FREE UNLIMITED ACCESS to 120,000+ LOADS DAILY on your smartphone.
Find freight with Truckloads! From the creators of Trucker Path comes Truckloads – Free Loadboard.
We believe carriers should not pay to find loads - it's just counterintuitive!
Enter your equipment type, find truck loads and call a broker - Truckloads is the only freight finder you need!

READ MORE

Updated
February 12, 2018

Installs
100,000 - 500,000

Current Version
1.45.6

Requires Android
4.1 and up

Offered By
Trucker Path

Developer
support@truckerpath.com
Cargo Moves Booking Apps - Uber Freight

Updated
January 23, 2018

Installs
50,000 - 100,000

Current Version
0.94.10000

Requires Android
4.1 and up

Offered By
Uber Technologies, Inc.

Developer
freight@uber.com

Uber Freight is an app that matches carriers with shippers. Carriers can just tap a button and instantly book a load, and the price you see is the price you get—no more back-and-forth negotiations. Loads on our app are exclusive to us through our contracts with shippers.

Before you can start using the app you'll need to sign up at https://freight.uber.com. When your account is approved and authorized you'll be able to access our exclusive loads and book them.
Cargo Moves Booking Apps - NEXT Trucking

Updated
February 6, 2018

Installs
10,000 - 50,000

Current Version
1.6.9

Requires Android
4.0.3 and up

Offered By
NEXT Trucking

Developer
dev@nexttrucking.com
Moving stuff sucks! DUDE I Need A Truck!

Yet all of us has had to move something too big to fit into our car at some point throughout our busy lives.

We call this a 'micro-move': Solution? We borrow a friend's truck, but that's a nuisance. Go rent one?

Update
December 6, 2017

Installs
5,000 - 10,000

Current Version
2.3.0

Requires Android
4.3 and up

Offered By
Dude I Need A Truck

Developer
help@dudeineedatruck.com
Cargo Moves Booking Apps - Dray Now

Updated
December 11, 2017

Installs
500 - 1,000

Current Version
2.1.0

Requires Android
4.4 and up

Offered By
DrayNow

Developer
truck@draynow.com
Cargo Moves Booking Apps - Cargomatics

Updated
February 14, 2018

Installs
5,000 - 10,000

Current Version
3.0.13

Requires Android
4.1 and up

Offered By
Cargomatic, Inc.

Developer
support@cargomatic.com

Cargomatic is an on-demand technology that connects shippers with nearby carriers who have extra space on their trucks.

NOTE: Before downloading the Cargomatic Driver App, please complete your profile at cargomatic.com.
Electronic Log Apps - Keep Trucking

Updated
February 14, 2018

Installs
500,000 - 1,000,000

Current Version
13.1

Requires Android
4.1 and up

Offered By
KeepTruckin, Inc.

Developer
support@keeptruckin.com
PeopleNet ConnectedDriver™ brings daily work to a driver’s mobile device. If you are using the PeopleNet system, this companion application provides access to critical information about a driver’s day, including dispatches, hours of service availability and messages. Drivers can now receive important updates while away from the vehicle.

You must be a PeopleNet customer to use this app. If you are interested in signing up, please visit www.peoplenetonline.com to learn more.

REVIEWs

2.5

★ 5 72
★ 4 46
★ 3 51
★ 2 41
★ 1 175

385 total
Wait Time Apps - Pier Trucker

Updated
October 21, 2017

Installs
5,000 - 10,000

Current Version
1.1.124

Requires Android
4.1 and up

Offered By
Vlad Services

Developer
info@piertrucker.com

Port gate cameras, turn time information and more

REVIEWs

4.7

5 stars: 51
4 stars: 6
3 stars: 4
2 stars: 0
1 star: 2

63 total
Wait Time Apps – Port Vancouver PortVan eHUB

PortVan eHub
Port of Vancouver  Business
Everyone
This app is compatible with all of your devices.

Add to Wishlist  Install

The Vancouver Fraser Port Authority's hub for real time operational updates and terminal status at the Port of Vancouver. Use this app to view by the minute updates on the status of Port of Vancouver container terminals including truck transaction wait times. Stay up to date with status updates on active south shore rail crossings, cruise ship scheduled departure times and terminal congestion forecasts, as well as the types of vessels in port. Set up your own personal email notifications by subject to ensure you have the latest information all the time.

Updated
April 11, 2017

Installs
1,000 - 5,000

Current Version
1.1.132

Requires Android
4.0.3 and up

Offered By
Port of Vancouver

Developer
evgeny.vdovin@altyn.ca
Wait Time Apps – Port Montreal Truck PORTal

Trucking PORTal
Port de Montreal Tools
Everyone
This app is compatible with all of your devices.

Updated
September 9, 2016

Installs
500 - 1,000

Current Version
1.0.0

Requires Android
4.0 and up

Offered By
Port de Montreal

Developer
tianaliste@port-montreal.com

About the Trucking PORTal
At the service of road transport and truck drivers
The Port of Montreal Trucking PORTal is a free user-friendly application at the service of the road transport industry and truck drivers who frequent the Port of Montreal.
The “Trucking PORTal” application can be downloaded on smart phones. The Web version can be used on tablets and computers.

READ MORE

REVIEWS

Write a Review

4.7
5
4
0
3
1
2
0
1
0

6 total
Wait Time Apps - GeoStamp

Updated
November 15, 2017

Installs
100 - 500

Current Version
1.1.10

Requires Android
4.4 and up

Offered By
InfoMagnus

Developer
troy.sabin@infomagnus.com

This is a companion app that broadcasts GPS location to the GeoStamp logistics turn-time analytics service. Use of this app requires a GeoStamp driver account, which must be created separately by an administrator with an active subscription.
WHAT'S NEW

**Messaging**: send-receive image, video, text, and voice msgs.
**Real-time location**: share your whereabouts.
**Voice call**: initiate voice call with your Buddies or Teammates.
**Group chat options**: add new members, view current members, edit group name, and leave group chat.
**Offline message viewing**: view all your chat messages and media content offline

Updated
November 20, 2017

Installs
50 - 100

Current Version
6.2.4

Requires Android
4.4 and up

Offered By
Jupigo

Developer
admin@jupigo.co
Other: Truck Parking App - Park My Truck

Updated
July 13, 2017

Installs
1,000 - 5,000

Current Version
1.0.27

Requires Android
4.1 and up

Offered By
NATSO Foundation

Developer
hello@parkmytruck.com

Park My Truck is a free mobile app developed to help truck drivers locate an available truck parking space.

Park My Truck helps professional drivers identify available parking no matter where they are in the United States and allows any parking provider to share their parking availability for free through the app.

REVIEWs

[Write a Review]
Other: Traffic Congestion Views App - DrayView

DrayView provides real-time camera views of traffic conditions at container terminals to help shippers, trucking companies and drivers make better dispatch decisions. The application enables a user to get a quick picture of areas leading to, in, and out of container terminal yards.

Your Window to Cargo Moves!™

**REVIEW**

- **Updated**
  - February 28, 2018

- **Installs**
  - 1 - 5

- **Current Version**
  - 1.0.3

- **Requires Android**
  - 4.1 and up

- **Offered By**
  - DrayView

- **Developer**
  - drayviewports@gmail.com
**Smats iNode™ Technology**

iNode™ Data Analytics Server

Client Office or End-user computer

Cloud Network (Internet)

Cellular Network

Real-time and Predicted Data

Historical Delay Reports

Decision support system (optimization)

TrafficXHub™

TrafficXHub™

TrafficXHub™

deltaT = Turn Time

deltaT = Gate Wait Time

Port Entry/Exit Gate
Room to Grow

Intermodal, Port, Marine Terminal, Drayage Industry

Currently, less than 100

By 2020, projection is over 6 Million mobile apps
Key Consideration Factors

• Building Separate Platforms
  – Cloud-Web Portal
  – Apple Platform
  – Android Platform

• Maintenance

• Operations and Help Desk Support

ADOPTION
Somewhere in a garage . . .