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**Communication Technology
Update and Fundamentals:
*Automotive Telematics***

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15TH EDITION

COMMUNICATION TECHNOLOGY UPDATE AND FUNDAMENTALS

AUGUST E. GRANT AND JENNIFER H. MEADOWS
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15TH EDITION

Communication Technology Update and Fundamentals

Edited by
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Topic: Where it all began: 14th Edition

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Automotive Telematics

Denise Belafonte-Young, M.F.A.*

Why Study Automotive Telematics?

- With local building and road changes, locations are often hard to find. GPS is an integral part of wayfinding for drivers.
- Tracking devices and quick response times can alleviate stressful situations, enhance safety, and limit stolen property threats.
- Smart phone apps will provide light and horn alerts to help find a lost car, unlock the car, direct the driver to the nearest coffee shop, and much more.
- Hands-free communication and enhanced Bluetooth technology will increase “infotainment” in the car.

Introduction

Automotive telematics can be defined as “the blending of computers and wireless telecommunications technologies” (Rouse, 2007). Telematics enables drivers to get information about the location, movement, and state of their vehicles. It also enables vehicles to communicate wirelessly, which opens up a wide range of services.

Telematics is essentially a range of different features, options, and devices that are brought together by a single principle—data and communication. (Coe, Prime, & Jest, 2014b). To provide the above services, telematics products may include GPS (Global Position System), inter-vehicle Wi-Fi connections, digital audio and video solutions, wireless telecommu-

nication modules, and car navigation systems (Cho, Bae, Chu, & Suh, 2006).

Background

Ford Motor began a manufacturing revolution with mass production assembly lines in the early 20th century, and today it is one of the world’s largest automakers (Ford Motor Company, 2014). The history of telematics can revert back to Henry Ford’s idea in 1903 to create easy transportation for everyday people. Automobiles evolved from strictly a means of transportation to luxury items as time went on. The development of in-vehicle telecommunications, entertainment, and “infotainment” are the landmarks of today’s automotive environment.

Table 13.1
Evolution of Automotive Telematics

In a GSMA study, the evolution of automotive telematics was outlined:

Telematics 1.0	Hands-free calling and screen-based navigation
Telematics 2.0	Portable navigation and satellite radio
Telematics 3.0	Introduction of comprehensive connectivity to the vehicle
Telematics 4.0	Seamless integration of mobility and the Web

Source: SBD & GSMA (2012)

The Birth of the Car Radio

The first technological breakthrough in electronic devices was the car radio. According to Gray (n.d.), “The first radios appeared in cars in the 1920s, but it wasn’t until the 1930s that most cars contained AM radios.” William Lear, who created the Learjet, also created the first mass market car radio. The first FM

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Huge Trend at the Consumer Electronics Show



CES 2016

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AND THE FUTURE COME TOGETHER

Automotive technology moves faster than any
race car. From smartphone apps right on your
dashboard to self-driving cars. It's all at CES
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automotive technology fast track”

The CES logo is located in the bottom left corner. It features the letters 'CES' in a bold, white, sans-serif font. The letters are set against a background of three overlapping, semi-transparent geometric shapes: a blue triangle on the left, a yellow triangle on the right, and a teal triangle in the center. A small registered trademark symbol (®) is positioned to the upper right of the letter 'S'.

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What is Automotive Telematics?

Automotive telematics can be defined as “the blending of computers and wireless telecommunications technologies”

(Rouse, 2007)

ABOUT TELEMATICS



- Telematics is essentially a range of different features, options and devices that are brought together by a single principle – data and communication. (Coe, Prime, & Jest, 2014b).
- Telematics enables you to get information about the location, movement, and state of your vehicle. It also enables your vehicle to communicate wirelessly, which opens up a wide range of services.



- Telematics makes your car safer, keeps you from getting lost, summons roadside assistance at the press of a button, routes you around accidents, and auto-dials 911 if you're in the accident.
- For most users, telematics means navigation, communications, safety, security, and increasingly infotainment.





Image source: Carline Jean/Sun Sentinel

Back-up Camera Technology

Driverless Cars



Image source: Martindale, 2015

The Book is used as a
supplemental text in our
Communication and Emerging
Media Major course:

COM 244- *Development of
Technology in Communication*

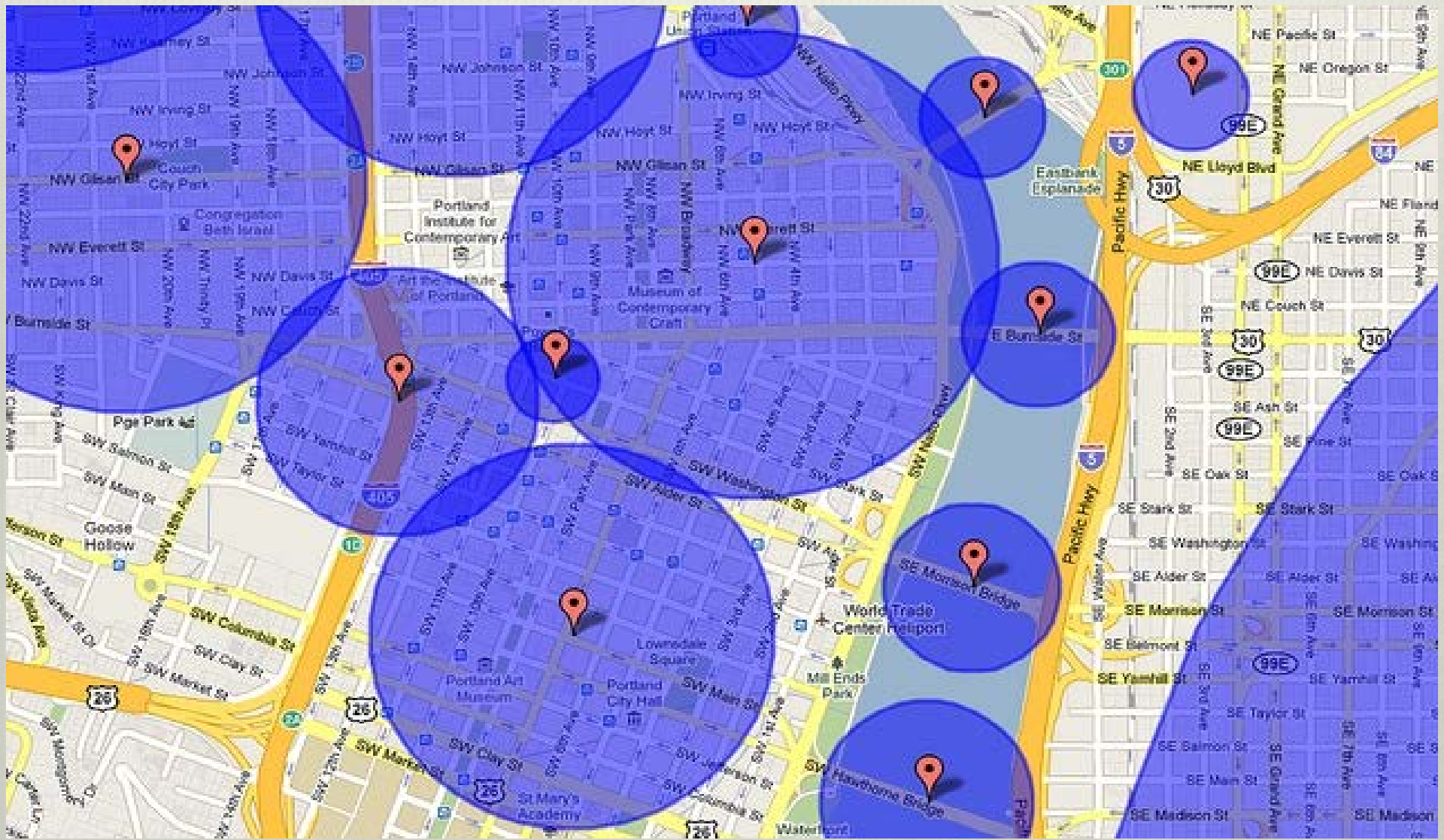
Where Do We Go From Here?

Next Edition Coming at you...

Look For...

➤ Fleet Management trends

➤ <http://www.automotive-fleet.com/article/photos/253838/2017-fleet-management-trends-telematics/13074.aspx>



- Self-Driving Cars
- Driverless UBER, car rental, food delivery...etc.
- Smart technology & Connectivity gone mad
- Safety features eg. Brake sensor technology



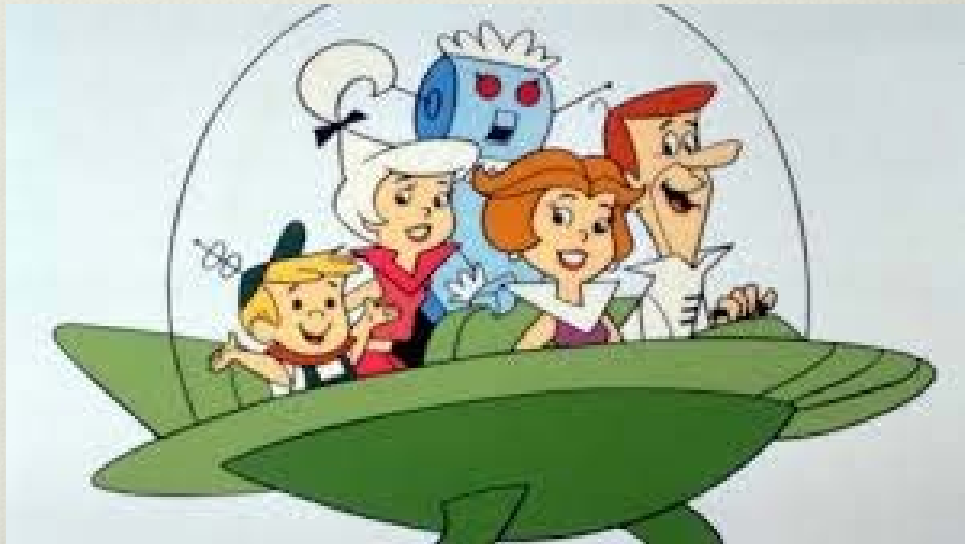
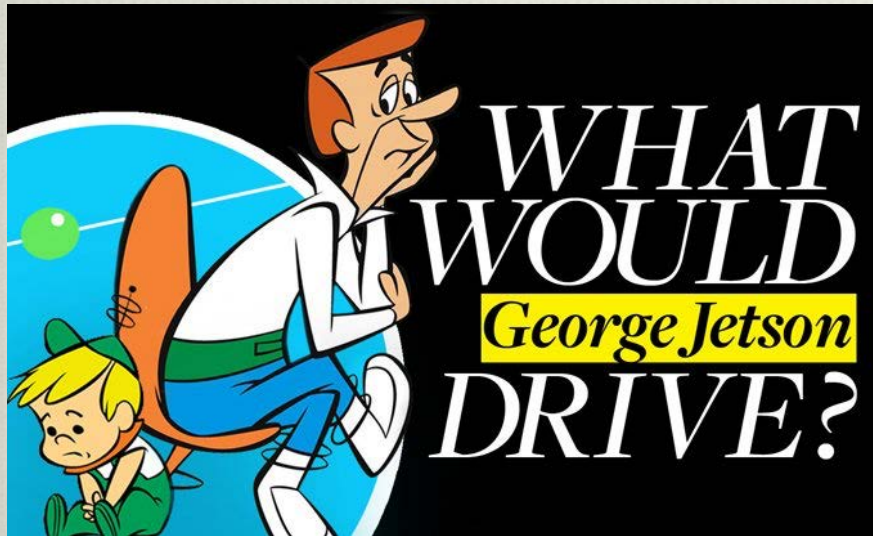
In Conclusion...

*“Communication Technology
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Is a great text and/or tool for any
emerging media or technology
course

Keep updated with us...

What's next?



Thank you!