navigation arts

Optimizing the online user experience
to drive business value

**The ROI of Mobile Deployment**

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Outline

- **Introduction**

- **Brief history of mobile phone and data device usage**

- **Current state of handset technology and services available**
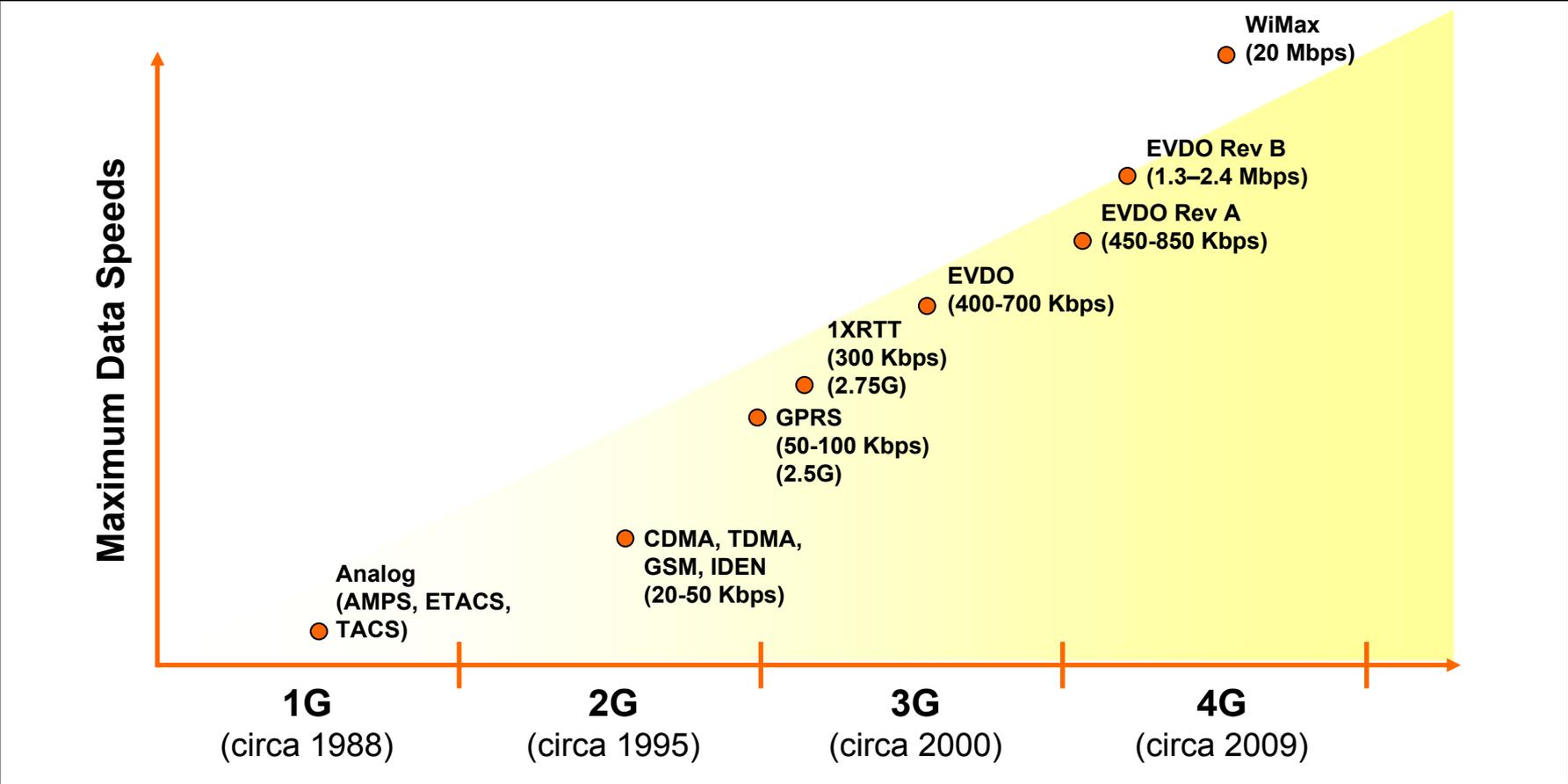
- **Some factors for determining mobile deployment ROI**

Worldwide Mobile Phone Usage

Source: WikiPedia

	0-9%
	10-19%
	20-29%
	30-39%
	40-49%
	50-59%
	60-69%
	70-79%
	80-89%
	90-99%
	100%+
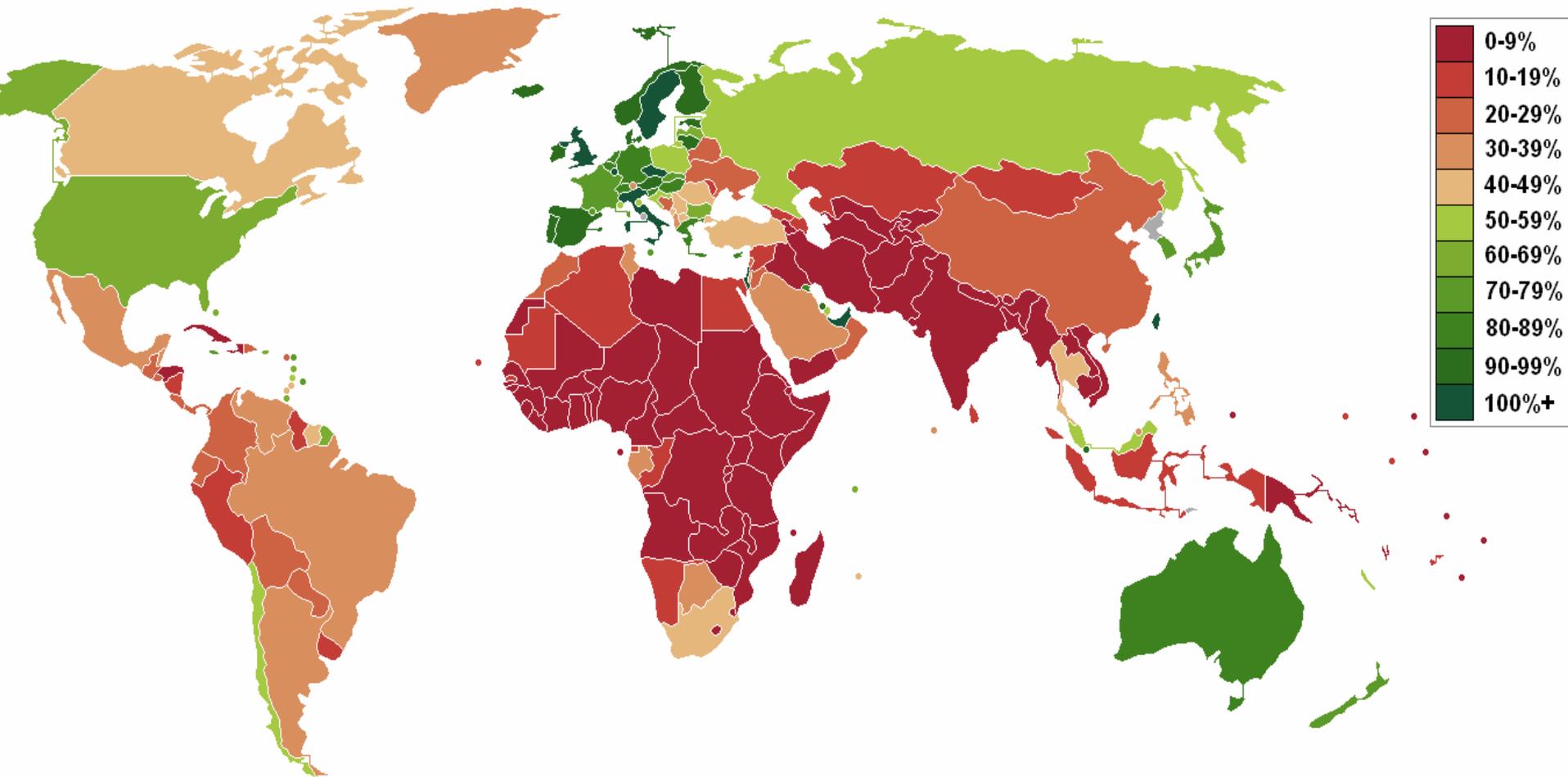
Mobile Data Speed Trends

At-a-glance: a vast amount of detailed information available online

Maximum Data Speeds

WiMax
(20 Mbps)

EVDO Rev B
(1.3–2.4 Mbps)

EVDO Rev A
(450-850 Kbps)

EVDO
(400-700 Kbps)

1XRTT
(300 Kbps)
(2.75G)

GPRS
(50-100 Kbps)
(2.5G)

CDMA, TDMA,
GSM, IDEN
(20-50 Kbps)

Analog
(AMPS, ETACS,
TACS)

1G
(circa 1988)

2G
(circa 1995)

3G
(circa 2000)

4G
(circa 2009)

Source: Various online references sources

Speed and Mobile Applications

Data Speed, Network Generation and the Emergence of Mobile Internet Services
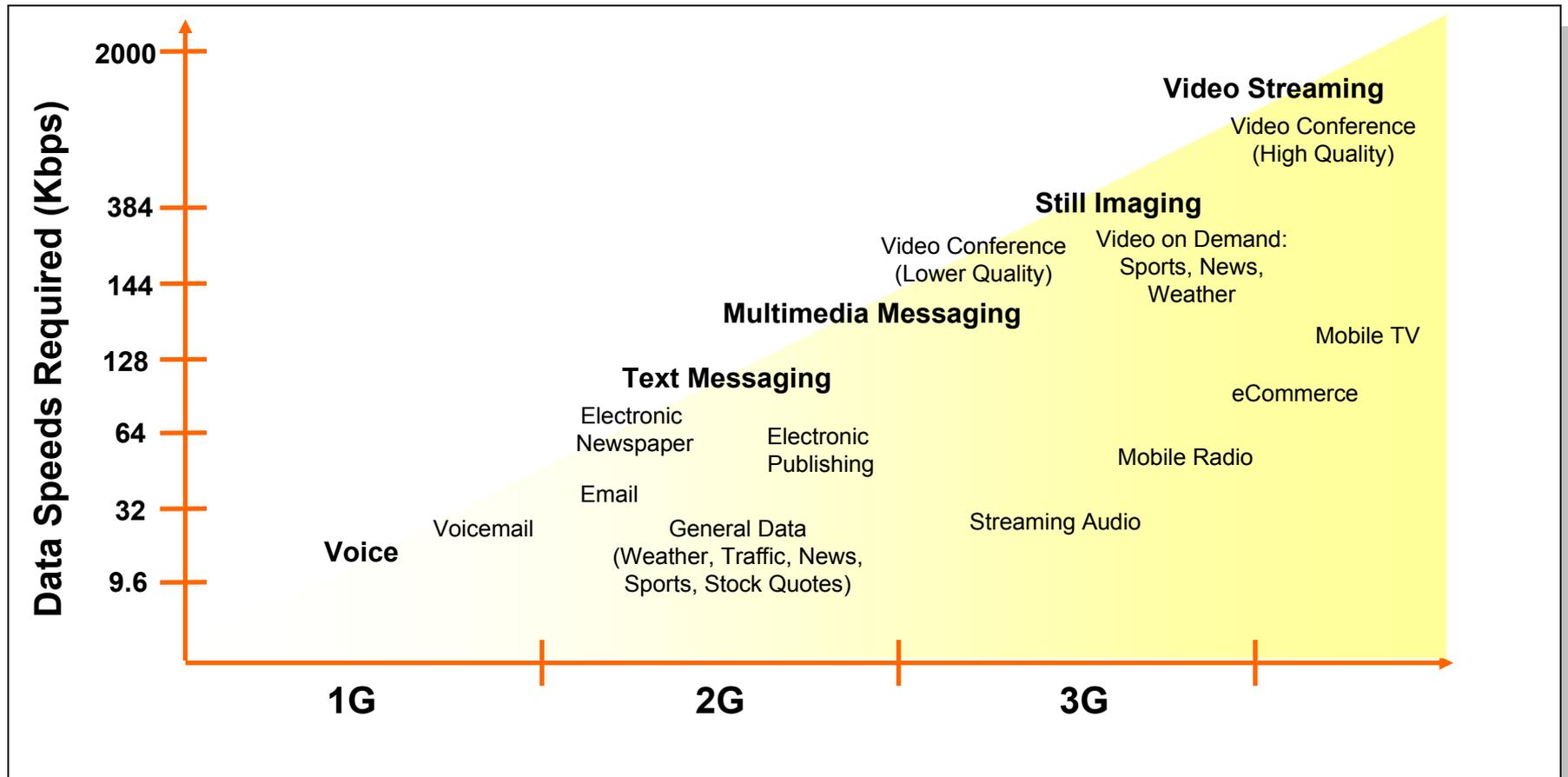
What is ROI?

"Return on Investment"

…or…

The **gain** or **loss** than an individual or organization realizes from an investment of time or resources

Generally ROI is something companies like to know **before** making an investment

…and…

Once known, the information is rarely shared to prevent competitors from **bettering their efforts**

ROI for Deployment of Mobile-Focused Web Content

ROI as it pertains to mobile-optimized Web content is determined (at least in-part) by selecting…

- **the right content to deploy**

- **the right audience to whom it is deployed**

- **the right target device(s)**

- **the appropriate deployment technique**

- **the success criteria**

- **the longevity of the solution**

- **the strategic fit**

Now, some ideas for determining these factors <u>before</u> spending your development budget…

1. The Right Content to Deploy

Your target audience wont tolerate wading through your 5,000 page site on mobile devices just to find the information they need.

Consider some of the following examples of successful mobile content deployments:

- **Location-based services –** Business and services near my current location
- **Goal-oriented information –** GoogleMaps Mobile or MapQuest for directions
- **Time-critical information –** Stock quotes, movie listings
- **Fast-purchase scenarios –** Purchasing mobile software
- **Services that utilize mobile device capabilities –** PayPal Mobile, PocketCaster

And often, the best "desktop web" services flounder when deployed to mobile devices:

- **Music downloads -** Report cites 11% of surveyed sample, down from 22%
- **Mobile web search –** Used by only around 5% of 190 million US mobile subscribers (now 210 million)

2. The Right Audience to whom it is Deployed

A mobile "killer app" is nothing without an audience to use it.

Consider the following target audience characteristics when forming a mobile deployment business case:

- **Lifestyle –** The psychological drivers that make your site content within their realm of interest

- **Cost Tolerance –** The willingness of users to pay a price (money, attention to ads, etc.) for your content

- **Demand –** The extent to which the user needs or desires the information, product or functionality being offered

- **Brand Loyalty –** The likelihood that the user's experience with past products/services will influence their decision to purchase new ones

- **Age** – Mobile internet use remaining steady in younger users (18-34) at 36%, and growing in users 25-54 (currently 27%) and 55 and up (currently 12%)

3. The Right Target Devices

There are more mobile device choices than ever before, from the most basic voice-only phone to connected "palmtops". Understand which your target audience prefers or risk failure.

Some recent figures to consider regarding mobile device usage:

- Though a smaller percentage of total phones, users of **Smartphones** are much more likely to download/consume music, games, video and news
- **Mobile web browsing is the #1 data packet generating service –** at 63%, versus for example 10% for mobile messaging

Most importantly, know the devices your audience uses and plan content/services compatible with them:

- Size of screen
- Operating system & browser capabilities
- Device and communications security
- Ease of text entry

- Amount of memory
- Processor speed
- Size of device
- Additional capabilities (WiFi, GPS, camera

4. The Appropriate Deployment Technique

Tightly related to the audience and device types you target is the manner in which users will consume your content.

Consider the following usage paradigms for deploying content/services for mobile devices

- **Users access a generally public website -** That may also provide additional accommodations for mobile users, like mobile-specific CSS

- **Users access a separate, mobile-specific website -** Yahoo, eBay, etc.

- **Users download an application to their device to utilize Internet-based services -** MapQuest, Weather Channel for standard Web phones, or Virtual Earth Mobile, PocketCaster for Smartphones

And some less obvious paradigms:

- **Using SMS (text messaging) –** PayPal Mobile

- **Using IM "ChatBots"** – AOL Yellow Pages, MovieFone

Not surprisingly, each paradigm carries with it a set of development technology options

5. The Success Criteria

Success isn't just about money. Therefore, it's especially important to determine how you'll judge the success or failure of the effort <u>before</u> you begin.

Consider the following success criteria:

- **Increased revenue –** Should always be evaluated separately to provide a means for comparison with other channels or future efforts

- **Increased business opportunity –** Such as increased brand awareness or brand loyalty (these two, and the benefits that come from them, are perhaps the most difficult to measure)

- **Increased expertise –** Not evident until you attempt to develop your <u>next</u> mobile project

- **Reduced/avoided costs –** Such as reduced call center volume, due to the increased ability to deploy self-service features

Source: Computing Unplugged Magazine, "Mobile ROI Boot camp", by Dale Troppito and Dawna Paton

6. The Longevity of the Solution

Ideally all software development efforts could be seen as long-term investments. This is not likely with your mobile deployment efforts.

You should likely consider any deployment of mobile content a short-term investment for the following reasons:

- **Standard deployment paradigm not yet established –** But W3C MWI in full-swing

- **Sheer variety of mobile devices and browser capabilities**

- **Trend of increasing device capabilities –** Now some device screens even capable of VGA display (640x480)

The current best options for long-term mobile deployment are:

- **Using mobile-specific CSS and other standards** to render mobile optimized (and content limited) versions of full websites, or…

- **Creating separate mobile-specific websites** following the W3C MWI 1.0 Guidelines

7. The Strategic Fit

Deploying mobile content is only worthwhile if it meets your organization's strategic goals.

Like any means of deploying information or services, mobile deployment must fit the organization in the following (and more) ways:

- **Compatibility with other sales/communication channels**
- **Appropriateness given organization mission and purpose**
- **Fit with user base/target audiences**
- **Future expandability**

Conclusion

Perhaps you'd never considered some of these factors.

These questions and others must be addressed, but the success stories are out there. Here are some final recommendations:

- **Follow the same requirements analysis, design and development steps that you would for a full website –** Don't try to shortcut efforts for small screens
- **Allow for a 3-year evaluation period after deploying the solution to determine ROI**

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