



## Next in Mobile Search: Recommended Web Standards Close By

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Exploring the Future of Mobile Search  
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# Outline



Photo by [Elaine Vallet](#)

1. The World Wide Web Consortium
2. Desktop/Mobile — Content/**Context**
3. Mobile context is...
4. Device APIs
5. Next standards?
6. Privacy issues

## “Leading the Web to its full potential...”

- **Web Standards**  
(X)HTML, CSS, XML, SVG, PNG, XSLT, WCAG, RDF, ...
- **Consortium**  
420 members, from industry and research
- **World-wide**  
Offices in many countries, including Brazil, China, India, Morocco, South Africa, ...
- **One Web!**  
Founded and directed by inventor of the Web, Tim Berners-Lee
- **The Mobile Web Initiative**  
Created in 2005 to make Web access from a mobile device a reality



# Desktop search vs. Mobile search

The image displays two side-by-side screenshots of a mobile browser interface, illustrating the difference between desktop and mobile search results for the same query.

**Left Screenshot (16:17):** Shows the Google homepage on a mobile device. The search bar contains the text "Arcueil", which is circled in black. Below the search bar, there are links for "Connexion", "iGoogle", "Paramètres", and "Aide". At the bottom, it says "Afficher la version Google : Google Mobile | Classique".

**Right Screenshot (17:00):** Shows the search results for "pizza" in Arcueil. The top result is "Livraison de pizza à domicile, pizzas, pizza à emporter, commander ...". Below this, there are three results for nearby pizzerias:

Restaurant	Rating	Address	Phone Number	Action
<a href="#">Pizza Positano</a>	★★★★☆ 11 résultats	15, Rue des Canettes, 75006 Paris	01 43 26 01 62	Afficher la carte
<a href="#">Enzo</a>	★★★★☆ 10 résultats	72 Rue Daguerre, 75014 Paris	01 43 21 66 66	Afficher la carte
<a href="#">Pink Flamingo</a>	★★★★☆ 9 résultats	67 Rue Bichat, 75010 Paris	01 42 02 31 70	Afficher la carte

At the bottom of the results, there is a link for "Plus de résultats à proximité" and a snippet for "pizza en livraison à domicile à emporter".

**Context** is essential in mobile search to filter out possible responses.

# Mobile context is...

- **Geolocation**, where the user is  
(through GPS, triangulation, set by user)
- What the user **sees or hears**
- What the user **is**  
(age, gender, height, weight, job, income, ...)
- What the user **has**  
(car, computer, music, purchases, ...)
- What the user **knows**  
(studies, known movies, music)
- **expressed interests**  
(sports, hobbies, blog posts, comments)
- **Friends**  
(for recommendations)
- ...

Plus **history** for each of the above.

# This is mobile search



**Augmented reality** is mobile search

# Privacy issues

blippy

7 Eleven

www.7-eleven.com



Kitosoma spent \$6.60 at 7 Eleven shared 1 day ago

Comment



Vikram spent \$3.59 at 7 Eleven shared 2 days ago

Comment



Erica spent \$25.72 at 7 Eleven shared 2 days ago

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Written by Marshall Kirkpatrick January 11, 2010 8:24 PM 165 Comments

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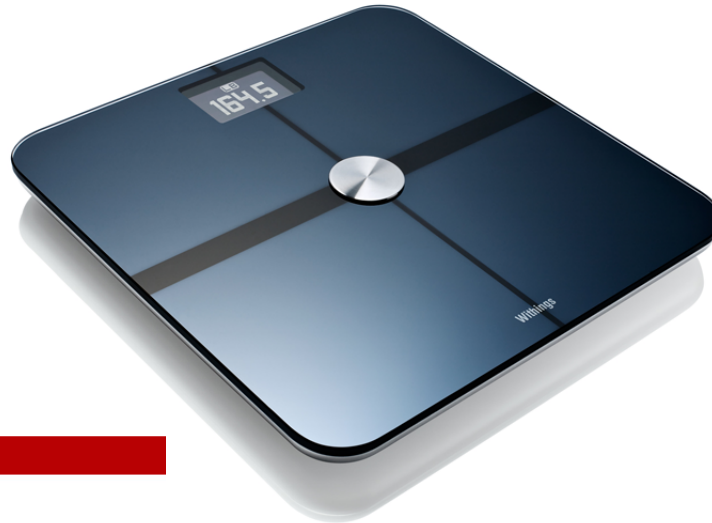
everyone a



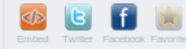
PLEASE ROB ME

Raising awareness about over-sharing

Check out our [guest blog post](#) on the CDT website.



(718): UPS Guy has Love for Ferrets. [Funny]



Hey yo this Harold and I need to know when you gonna come get these boxes... because the longer these boxes sit here... I think... I'm not sure because I'm just working for the U.S. But ummm, I think there's a ferret in there. And I, I only say a dog or a cat, because I had a ferret once and the kinda noise this rom these boxes...I'm pretty god damn sure its a ferret. And I, I uss unless I'm serious about somethin'. So I think it's a fuckin' ferret. n deal with it the way y'all want. But if you don't come get these le gonna starve...Out!

OMG! [317] WTF? [35] Like 4

by greenpointer

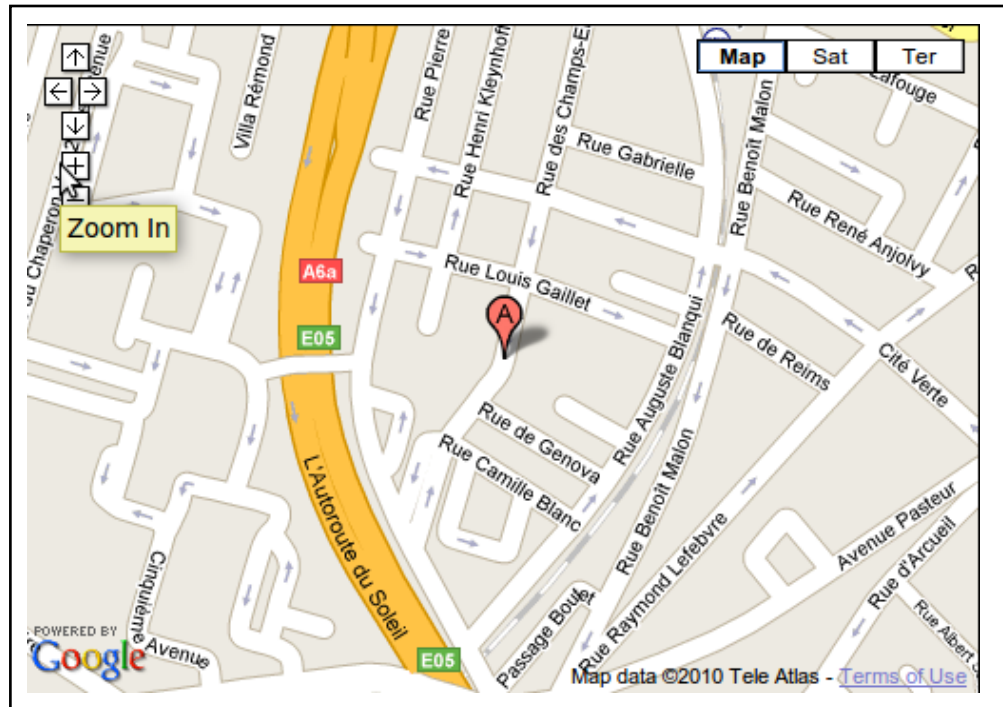
# Device APIs



Device APIs and Policy Working Group



# Geolocation API example



Locate me!

Longitude: N/A

Latitude: N/A

# Next possible standards?

- [Media ontology](#)
- [Delivery Context Ontology](#)
- [Memento](#) to add time to the Web
- Metadata format for Web applications to ease discovery
- [Attention Profile Markup Language \(APML\)](#)
- [Augmented Reality Markup Language \(ARML\)](#)
- More device APIs (e.g. speech input tag)
- Interactions with social networks
- Best practices to write context-aware mobile Web content
- Speech synthesis
- Gestures

# Conclusion

- Mobile search needs to link context with content
- Many possible dimensions to define a user context and to flag content
- Info for both context and content spread all over the Web
- Web standards to enable applications at a global level
- Privacy issues cannot be dismissed, even though mentalities change

## Contact

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