



We provide advanced and revenue-generating mobile technology for mobile operators, portals, ASPs and mobile companies.

**ADDPhone**

enables mobile service developers to create and collect and present products in a unique way, giving our customers a clear path into advanced mobile services and next-generation networks.

Over the last years, our customers have taken giant steps within the space of just 180 minutes. Milestones include the first PDA speech-to-text enabling campaign, the world's first 1811 (toll-free) public transport, the world's first 112 (toll-free) fire and police emergency call service, the world's first 112 (toll-free) fire and police emergency call service, the world's first 112 (toll-free) fire and police emergency call service, the world's first 112 (toll-free) fire and police emergency call service.

**ADDPhone**

enables mobile service developers to create and collect and present products in a unique way, giving our customers a clear path into advanced mobile services and next-generation networks.

Over the last years, our customers have taken giant steps within the space of just 180 minutes. Milestones include the first PDA speech-to-text enabling campaign, the world's first 1811 (toll-free) public transport, the world's first 112 (toll-free) fire and police emergency call service, the world's first 112 (toll-free) fire and police emergency call service, the world's first 112 (toll-free) fire and police emergency call service.

Over the last years, our customers have taken giant steps within the space of just 180 minutes. Milestones include the first PDA speech-to-text enabling campaign, the world's first 1811 (toll-free) public transport, the world's first 112 (toll-free) fire and police emergency call service, the world's first 112 (toll-free) fire and police emergency call service, the world's first 112 (toll-free) fire and police emergency call service.

Over the last years, our customers have taken giant steps within the space of just 180 minutes. Milestones include the first PDA speech-to-text enabling campaign, the world's first 1811 (toll-free) public transport, the world's first 112 (toll-free) fire and police emergency call service, the world's first 112 (toll-free) fire and police emergency call service, the world's first 112 (toll-free) fire and police emergency call service.

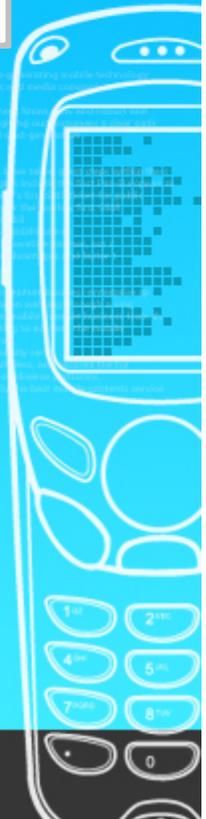
# 해외 서비스 동향과 의미

We provide advanced and revenue-generating mobile technology for mobile operators, portals, ASPs and mobile companies.

Over the last years, our customers have taken giant steps within the space of just 180 minutes. Milestones include the first PDA speech-to-text enabling campaign, the world's first 1811 (toll-free) public transport, the world's first 112 (toll-free) fire and police emergency call service, the world's first 112 (toll-free) fire and police emergency call service, the world's first 112 (toll-free) fire and police emergency call service.

Over the last years, our customers have taken giant steps within the space of just 180 minutes. Milestones include the first PDA speech-to-text enabling campaign, the world's first 1811 (toll-free) public transport, the world's first 112 (toll-free) fire and police emergency call service, the world's first 112 (toll-free) fire and police emergency call service, the world's first 112 (toll-free) fire and police emergency call service.

mobizen(<http://www.mobizen.pe.kr>)  
2008. 6. 26





1. Browser War
2. Mobile Web Browser Market share
3. Rendering Engine
4. User's Trend
5. With Smartphone
6. Simple and slim
7. Telecom want
8. Road Map
9. Widget
10. Transcoder
11. Comparison
12. What we have to do?

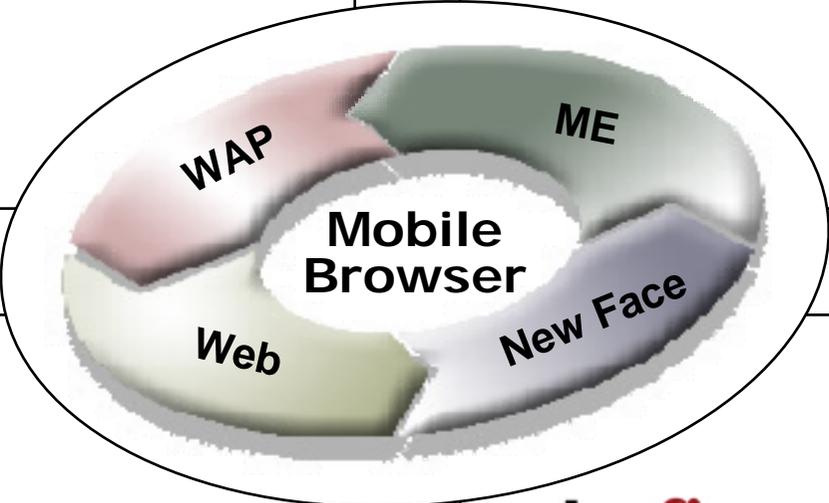


While marketing strategies, the world's first MMS value for an...  
...and...  
...technology...  
...and...  
...and...

# 1. Browser War

**NetFront™ Browser v3.5**




**Opera Mobile**  
Ultimate mobile solution



**Opera Mini**  
Ultimate mobile alternative



**Safari**



**Fennec**



Microsoft Live Labs  
**Deepfish**

**skyfire™ BETA**



**THE IRIS BROWSER**  
MOBILE WEB REDEFINED



**Wake3**



**Squirrel Fish**





While marketing strategies, the world's first 3D web browser for all devices, and the first 3D web browser for the world's first 3D content and browser's first user interface.

Enabling technology, mobile and browser software, the browser's first 3D content and browser's first user interface.

While marketing strategies, the world's first 3D web browser for all devices, and the first 3D web browser for the world's first 3D content and browser's first user interface.

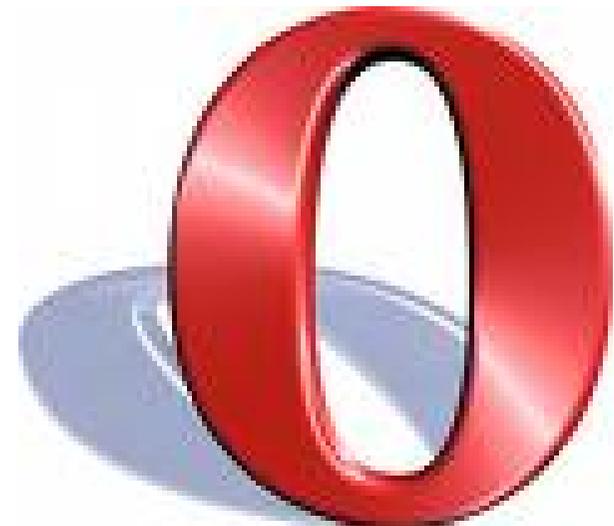
## 3. Rendering Engine – #1 Presto

### ❖ 2008년 5월 13일, Opera Mini 4.1 Release

- Opera 9.5와 동일한 엔진 사용.
- Proxy Server base
- 4.0에 비해서 약 50% 성능향상
- 현재 35million user
- Android 포팅 중(J2SE -> J2ME)

### ❖ Opera Mobile 9.5

- 현재 100+million user(preinstalled)





## 3. Rendering Engine – #2 Gecko

### ❖ Mozilla, Fennec

- Fire Fox 3 Beta 4에 기반
- 2008년 4월 13일, pre alpha Release
- 2008년 8월, Alpha Release 예정

### ❖ Nokia, MicroB

- maemo 플랫폼의 Browser

### ❖ SkyFire

- 2008년 5월, Beta 0.6 release
- Proxy Server base







# 3. Rendering Engine – #3 Webkit(2/2)

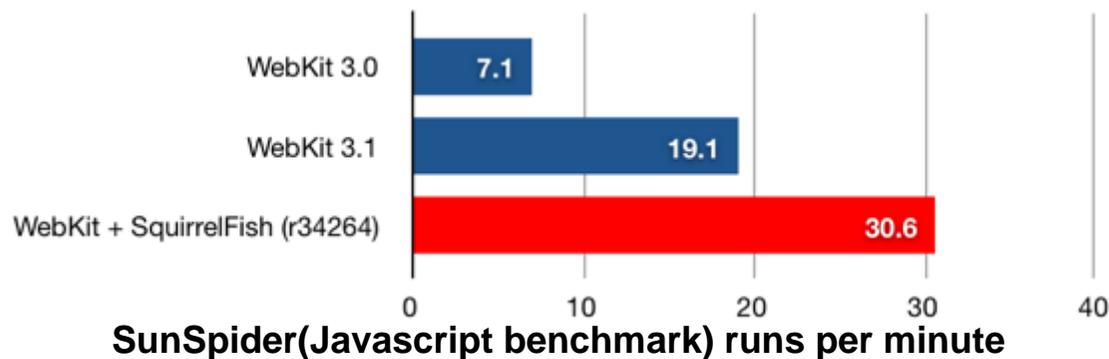
## ❖ Squirrelfish

### ○ Low Performance의 주범은 Java script

- 실행에 필요없는 것들도 수행된다.
- 필요있는 일이라도 비용이 많이 든다. : Access indirect memory
- 노드들간의 많은 데이터를 전달해야 한다.

### ○ 개선을 위해 syntax tree architecture에서 bytecode로 교환

- bytecode stream은 필요한 동작을 정확하게 나타낸다.
- Read direct memory
- 노드들간의 데이터를 전달할 필요가 없다.



Source : Webkit blog

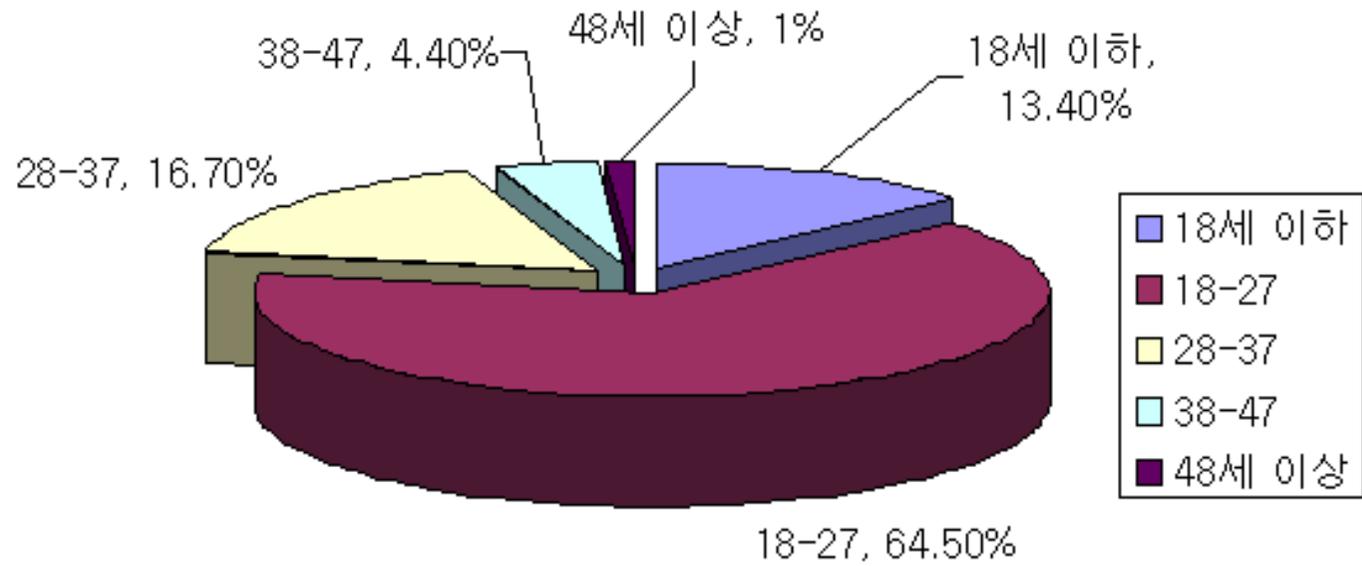




While marketing strategies, the world's top 1000 sales for all...  
 The world's top 1000 sales for all...  
 The world's top 1000 sales for all...

# 4. User's trend - #1 성별, 연령별

- ❖ 여성에 비해 남성의 이용 빈도수가 절대적으로 많음
  - 인도, **97.2%**가 남성(**Max**)
  - 미국, **80.6%**가 남성
  - 남아프리카, **75%**가 남성(**Min**)
- ❖ 연령대별 비율





While marketing strategies, the world's first...  
 The world's first...  
 The world's first...  
 The world's first...

# 4. User's trend – #2 Page Transcoded

## ❖ Page Transcoded in Opera mini

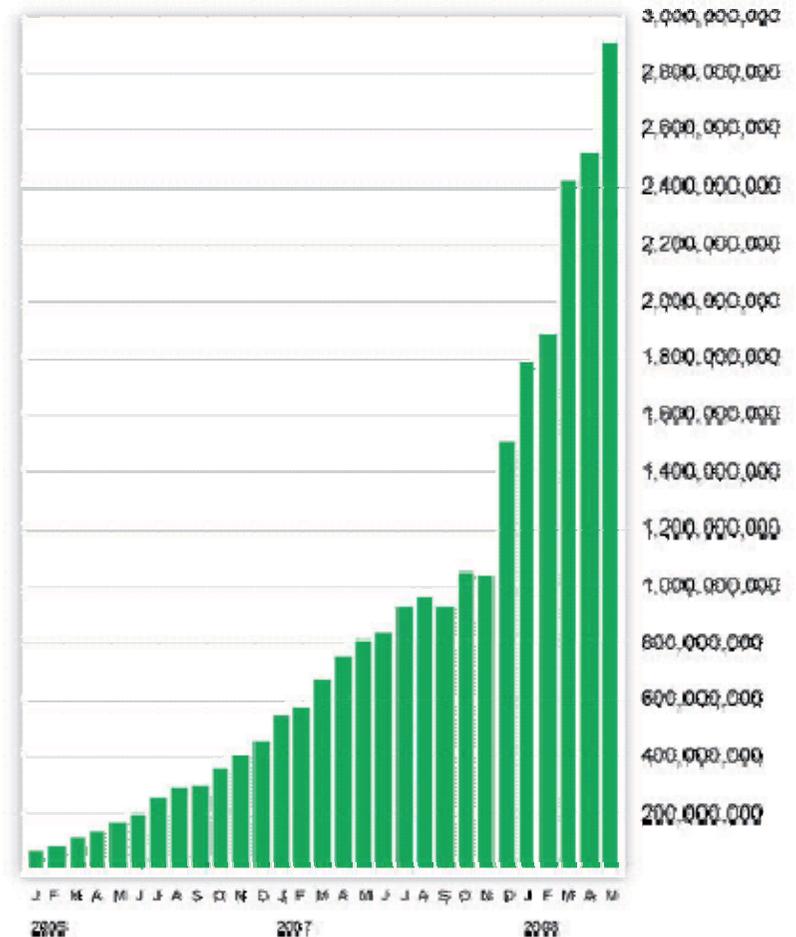
### ○ 2008년 4월

- Total : 2.5 billion Pages
- Each Person(ave.) : 191 Pages

### ○ 2008년 5월

- Total : 2.9 billion Pages
- Each Person(ave.) : 200 Pages

### ○ 2008년 3월부터 5월까지 21.4% 증가



Pages transcoded by Opera Mini per month



data marketing strategies, the world's first SMS robot for an...  
 operators and Korea's first mobile...  
 including technology transfer and technical support, the...  
 operators have gained competitive advantage and better...  
 performance.

With a focus on the first generation mobile devices, operators are...  
 involved in various projects, the same includes mobile...  
 to work on various technologies.

# 4. User's trend – #3 Data consumed

## ❖ Data consumed in Opera mini

○ 2008년 4월

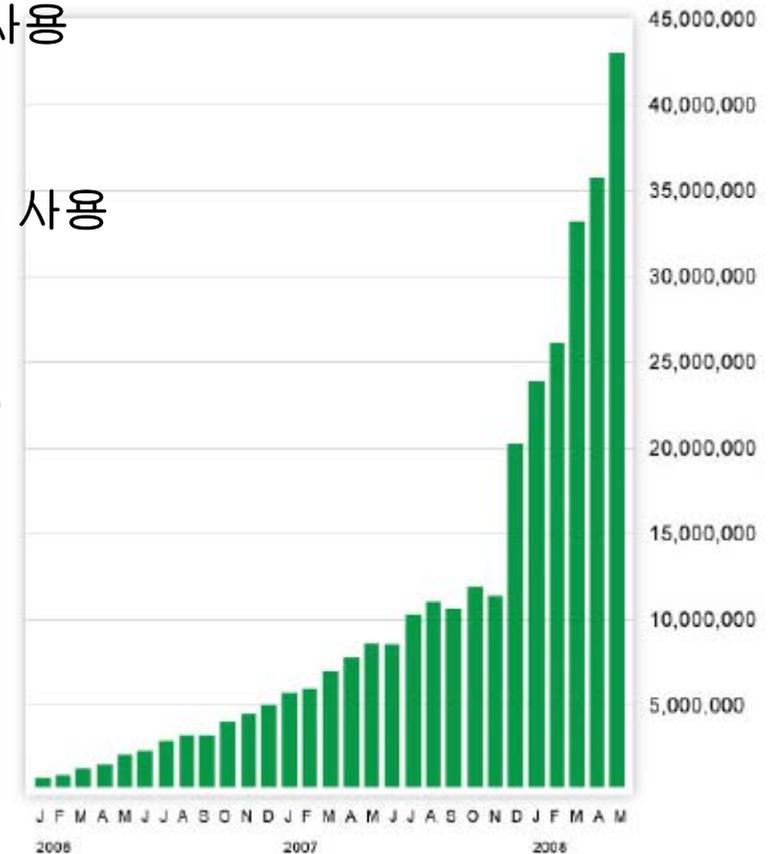
- 13 million User가 35.7 million MB 사용

○ 2008년 5월

- 14.7 million User가 43.2 million MB 사용
- 실제로는 288 million MB로 예측

- Opera Mini의 압축률은 평균 85%

○ 2008년 3월부터 5월까지 30.4% 증가



Total data consumed per month (in MB)





## 4. User's trend – #4 Top 10 Sites

### ❖ Top 10 Sites in Opera mini

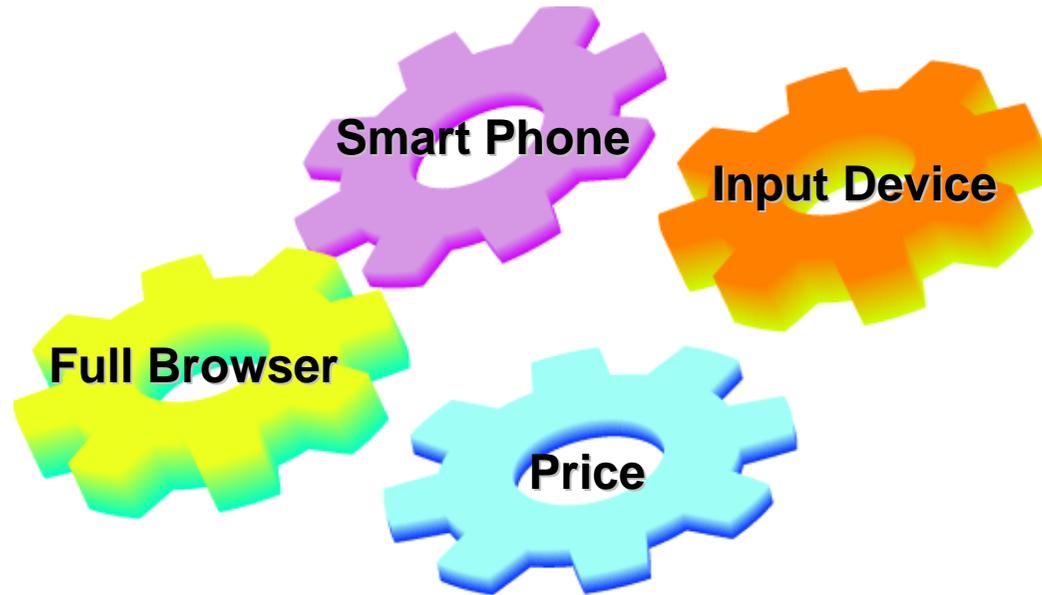
나라	미국	영국	독일	폴란드
1	google.com	yahoo.com	google.com	google.pl
2	myspace.com	google.com	yahoo.com	lajt.onet.pl
3	yahoo.com	news.bbc.co.uk	wikipedia.org	allegro.pl
4	wikipedia.org	facebook.com	sport1.de	nasza-klasa.pl
5	facebook.com	live.com	ebay.de	wikipedia.org
6	nytimes.com	youtube.com	studivz.net	wp.pl
7	youtube.com	wikipedia.org	spiegel.de	fotka.pl
8	espn.com	bebo.com	my.opera.com	onet.pl
9	cnn.com	myspace.com	web.de	youtube.com
10	accuweather.com	ebay.co.uk	heise.de	rozklad-pkp.pl

- 사용자들은 기본적으로 **Portal**을 통해 검색을 하는 것은 유선과 동일
- 정보성 사이트는 **Mobile User**들의 **Needs**
- **Mobile Web Browser**는 특정 사이트에 최적화가 필요
- **WiFi**를 이용해서 접속하는 빈도수가 높으므로 국내와 절대 비교는 위험



state marketing strategies, the world's first SMS robot for an...  
 wireless, and mobile...  
 wireless, and mobile...  
 wireless, and mobile...

# 5. With Smartphone



- ❖ **Smart Phone**의 활성화와 밀접
- ❖ 무선 정액제에 가입자가 많을 수록 풀브라우저 활성화

항목	미국	영국
총사용시간	월평균 4시간 38분	월평균 2시간 30분
방문 1위	craigslist.org	Facebook
정액요금제	10.9%	2.3%
QWERTY	약 90%	약 10%

Source :  
M:Metrics



# 6. Simple and slim

While marketing strategies, the world's first SMS system for...  
...the world's first SMS system for...  
...the world's first SMS system for...

craigslist	us cities	united states	canada	asia	europa	intl cities
help pages	alabama	alaska	arizona	california	colorado	connecticut
login	delaware	florida	georgia	hawaii	illinois	indiana
factsheet	kentucky	maine	maryland	massachusetts	mississippi	missouri
avoid scams	montana	nebraska	nevada	new hampshire	new jersey	new mexico
your safety	new york	north carolina	north dakota	ohio	oklahoma	oregon
best-ofs	rhode island	south carolina	south dakota	texas	utah	vermont
job boards	virginia	washington	wisconsin	wyoming	alberta	british columbia
movie	quebec	ontario	manitoba	saskatchewan	alberta	ontario
1-shots	quebec	ontario	manitoba	saskatchewan	alberta	ontario
foundation	quebec	ontario	manitoba	saskatchewan	alberta	ontario
net neutrality	quebec	ontario	manitoba	saskatchewan	alberta	ontario
system status	quebec	ontario	manitoba	saskatchewan	alberta	ontario
terms of use	quebec	ontario	manitoba	saskatchewan	alberta	ontario

<http://www.craigslist.org>



<http://www.google.com>



<http://www.naver.com>



<http://se.naver.com>





While marketing strategies, the world's first MMS client for an...  
...and...  
...technology...  
...and...  
...and...

# 8. Road Map

## WAP Browser

- ❖ WAP 1.X
- ❖ WAP 2.X



## Full Browser

- ❖ Web Standard Spec.
- ❖ AJAX
- ❖ Web 2.0 Support
- ❖ Background job
- ❖ Full Touch UI



## Mobile Web Platform

- ❖ Widget as RIA
- ❖ RSS
- ❖ Offline Web Application
- ❖ Component





Mobile Frontier is the world's first mobile browser for...  
 We provide advanced web browser...  
 We provide advanced web browser...  
 We provide advanced web browser...

# 9. Widget

- ❖ **Browser 기술을 기반**
  - ECMA Java Script
  - CSS and HTML
  - AJAX
  - Flash Lite
- ❖ **Access, Opera, Nokia 등 대부분의 개발사가 자사 Browser를 Widget화**
- ❖ **다양한 Display Mode**

○ Dock Mode



○ Idle Screen Mode



○ Full Screen Mode





# 10. Transcoder



- ❖ 대부분의 **Browser** 개발사와 **Google** 등이 솔루션을 보유
- ❖ **Full Browser** 기술을 기반으로 개발
- ❖ **WAP Browser**를 기반으로 한 기업의 경우에는 **WAP Tag로 Converting**이 가능하기 때문에 상대적으로 유리
- ❖ **Local Company**가 단기에 집중해야 할 제품



Mobile marketing strategies: the world's first SMS robot for an...  
 We provide advanced and innovative marketing mobile technology...  
 We provide advanced and innovative marketing mobile technology...

# 11. Comparison

## What They have

- ❖ WiFi 개방
- ❖ 웹사이트 표준화
  - ex. You 
- ❖ 다양한 서비스의 공개 API
  - ex. 구글맵 API,  
페이스북의 
- ❖ 풍부한 Web 2.0 서비스
- ❖ 스마트폰의 활성화

## What We have

- ❖ WiFi 폐쇄
- ❖ 지나친  사용
  - ex.  PANDORA.TV
- ❖ 강력한 포털과 이동사의 지배력
- ❖ 풍부한 Web 2.0 컨퍼런스
- ❖ 프리미엄 노말폰



While marketing strategies, the world's first 4G LTE rollout for an...  
...the world's first 4G LTE rollout for an...  
...the world's first 4G LTE rollout for an...

# 12. What we have to do?

이동통신사

Web Service 업체

SW 개발사

- ❖ 스마트폰 활성화
- ❖ WiFi 개방(When?)
- ❖ 신규 Web 서비스에 투자(or Bit Pipe)

- 
- ❖ Web 표준화
  - ❖ Site 경량화
  - ❖ 공개 API
  - ❖ 유무선 연동
  - ❖ Killer Service 개발(Clear Target)

- 
- ❖ Local 사업자에 유리한 상품 개발
  - ❖ Platform으로서의 발전 모색
  - ❖ 외부 Rendering 엔진을 이용한 New Face 등장 기대
  - ❖ 다양한 Plug-In 개발에 투자