



# Mobile Information Device Programming (3-a)

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Source: C. Edwards, "mobile's game of risk", IET magazine, vol. 3, iss. 14 Aug-Sep 2008



# Operating Systems

1. Vendor-driven
2. Open source



# The reasons behind moving towards open source

- Cross platform complications (application delivery and implementation)
- Volume and accessibility
- Display standards and capabilities
- Expansion of third party software applications
- Mobile commerce applications



# Existing OS [C. Edwards]

1. Proprietary
2. Open Source
3. In Transition



# 1. Proprietary

- iPhone: Apple exerts control over development procedures and type of applications using their own Mac standards and SDK
- Brew: specialised in featurephones
- Blackberry: Based on RIM's\* enterprise server, plug-ins and java app enabled
- Windows: MS Windows mobile environment, needs MS resource kit, both .Net and java apps can be implemented

\* RIM: Research in Motion



## 2. Open Source

- Android: Google instigated built on top of Linux uses java like virtual machines
- LiMo: Linux-based operating system SDK to be made available for free – to make it hardware-independent
- Openmoko: Idea of open hardware and software, offering CAD files to assemble hardware and Gnu/Linux as software platform



### 3. In Transition

- Symbian: most dominant, planning for changes in near future and well established development environment
- MOAP: Mobile Oriented Application Platform, created by NTT DoCoMo for phones that run on its network, very specific, plans to expand
- UIQ: built on Symbian, open source version to be built on Symbian (Motorola and Sony Ericsson)
- Palm: Originally built for Palm PDAs and later the Windows Mobile OS, and own development tools