



BREW® DEVELOPER CASE STUDY

COMPANY:
MEDIASEEK, Inc.

HEADQUARTERS:
Tokyo, Japan

FOUNDED:
March 1, 2000

OVERVIEW:
MEDIASEEK is dedicated to aggressive and sustainable business expansion with three different strategic business units: System Consulting, Contents and Service Development. Each strategic business unit is expected to expand its role and capacity as quickly and dynamically as possible. Service Development takes its role as cultivator of cutting-edge service and technology, providing original application software designed for cellular handsets and other mobile devices.

WEB SITE:
www.mediaseek.co.jp/english/top.html

BREW DEVELOPER:
Since August 2003





BREW® DEVELOPER CASE STUDY

Founded in 2000, MEDIASEEK's primary focus is the distribution of content for mobile devices and the development of related software, with an emphasis on image processing technology. The core technology for MEDIASEEK's mobile device software is an advanced image processing technology that uses the built-in digital camera on a mobile device for advanced image decoding applications. Called CamReader, this technology has allowed MEDIASEEK to take advantage of the rapidly growing global market for camera phones to become a major software applications provider for the mobile communications industry. With CamReader technology as its foundation, MEDIASEEK has expanded its business to become a top global provider of mobile software applications. Requests have come from all over the world for its innovative technology and MEDIASEEK credits the BREW® solution playing a part in its success.

MEDIASEEK selected the BREW solution as the platform for CamReader, and the BREW Extension Program was an important driver. This program provides an "open market" opportunity whereby any authenticated BREW developer has unrestricted access to download extensions and can incorporate them into any number of its applications, without having to separately notify and license the technology from the extension developer. This has allowed MEDIASEEK not only to generate revenue for its own applications, but to also create additional revenue from other publishers and developers who wish to develop BREW applications by using MEDIASEEK's extension.

One of the most successful MEDIASEEK CamReader applications is Barcode-Reader, which uses an innovative decoding engine to read both single (1D) and multi-dimensional (2D) barcodes captured by the electronic camera module implanted into mobile handsets. By designing Barcode-Reader using QUALCOMM's BREW solution, the application can be used with multiple operating system (OS) platforms, application platforms and IC-chipset architectures. Furthermore, Barcode-Reader is much more than its name implies, as it uses information decoded from a scanned barcode to enable users to access the Internet, register the information in a phonebook, create and send emails, make phone calls and access LBS services. Barcode-Reader not only operates on cellular handsets, but also on PDAs, PCs and other electronic "camera-ready" devices.

"The BREW solution gives us a greater degree of freedom as application developers due to faster processing speeds and larger capacity, said Mr. Noritada Shimiza, Director for

MEDIASEEK. "In addition, prior to developing on the BREW solution, we had no choice but to develop pre-installed software for each marker's platform".

With the innovative Barcode-Reader at its core, the success of CamReader has been impressive. CamReader has been installed as a default application into more than 50 percent of cellular handsets shipped in the Japanese market with software-driven implanted optic modules as digital camera or video functions. In 2004, MEDIASEEK's Barcode-Reader 2D Code Reader was also a finalist in the Best Productivity/M-Commerce Application category of the BREW Developer Awards.

In 2005, MEDIASEEK's unique image processing technology made another splash, as it branched out from the enterprise space to tackle the gaming arena. The company's "Buggy Boom with Motion Detection" is a video game specially tuned for camera-ready mobile handsets. An advanced sensor engine called MotionDetection – which is also based on the BREW solution – is embedded into Buggy Boom, allowing it to use a device's camera to detect the direction and moving-path of a mobile phone by analyzing the motion of a preview image. "Buggy Boom with Motion Detection" was so groundbreaking that it took home top honors in the Most Innovative Use of Technology Award at the BREW 2005.

Another exciting application from MEDIASEEK built on the BREW solution is the company's Optical Code Reader (OCR) engine, which can extract and analyze written characters from photo images taken by a mobile phone or PDA camera and quickly translate them. The OCR engine contains special links to a dictionary database on the handset. When the OCR engine recognizes words contained in a picture image captured by the camera, those words are immediately searched and checked by the smart OCR application. Even when words are misspelled or out of focus, this smart engine corrects them automatically by searching and finding appropriate words from the dictionary. The OCR engine can translate any language by linking to different reference dictionaries in different languages.

"The BREW solution has been the foundation in effectively leveraging our CamReader image processing technology to develop innovative and unique applications," said Mr. Noritada Shimizu, director for MEDIASEEK. "We will continue to develop new and exciting applications for our Barcode-Reader, MotionDetection and OCR technologies, using BREW extensions."

