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Practical **Innovation.**

CASE STUDY

Elsevier



**Elsevier**  
[www.elsevier.com](http://www.elsevier.com)

**Product**  
**Procedures Consult Mobile**  
(Elsevier, Health Sciences)

**Technologies**

- ASP.NET with C#
- MVC Framework
- Microsoft .NET
- Mobile-Optimized UI Code

### Summary

Elsevier, the world's leading publisher of science and health information, serving more than 30 million scientists, students, and health and information professionals worldwide, had a robust, online procedures reference tool product that provided to laptop and desktop users the complete details on how to prepare for, perform, and follow-up on the most commonly required procedures.

### Challenge

In addition to offering medical procedures and video through their standard website, the client wanted to create an application to enable clients to view content on their mobile devices. They requested the development of a mobile interface to complement and extend their current website. The objectives for the solution application were four-fold:

- Scalability for multiple, disparate mobile devices
- Device-independence to run on multiple, mobile-based browsers
- Smoothly streaming video presentation
- Intuitive user interface experience

### Solution

Charged with designing and constructing the device-independent mobile solution, CIBER developed the application by using device detection technology to separate the different mobile devices into groups for both user interface (UI) and for video. The UI device detection identifies how the user interacts with their mobile device and delivers the best formatting, based on whether the user has a touch screen (like an iPhone) or a scroll (like a Blackberry). The video detection device identifies whether the mobile device uses high-quality or 3G-compatible video and it uses the appropriate method to ensure a smoothly streaming video for the user.

It was important that the resultant mobile application complement the existing desktop experience, but not strictly translate it. Focusing on the end-user experience, CIBER addressed the challenges:

- Device-specific rendering of the user interface
- Limitations of a 2"x2" screen size
- Need for intuitive functionality

CIBER ensured success of the project and consistency throughout by incorporating a proactive test plan with robust testing across multiple devices, on multiple mobile device emulators, and on multiple browsers. CIBER applied metrics and measurement to facilitate a consistent approach to testing, implementing Quality Assurance best practices. Additionally, CIBER helped the client to obtain user feedback by introducing a prototype prior to constructing the application.

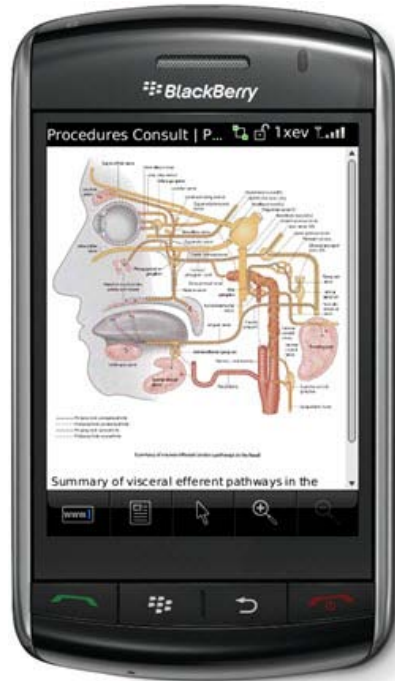
### Results

CIBER's application provided Elsevier with the robust, device-independent application they wanted and accomplished the following:

- Enabled streaming, procedural videos to work smoothly on multiple, disparate mobile devices and browsers.
- Provided an intuitive user experience.
- Was a high-quality, well-tested application that satisfied user functionality needs.
- Delivered on-time.
- Delivered on-budget.

### Learn More

For more information about CIBER's Enterprise Mobility solution, please call **1.800.242.3799** or visit the website at [www.ciber.com](http://www.ciber.com).



### About CIBER, Inc.

CIBER, Inc. is a global information technology consulting, services and outsourcing company applying practical innovation through services and solutions that deliver tangible results for both commercial and government clients. Services include application development and management, ERP implementation, change management, project management, systems integration, infrastructure management and end-user computing, as well as strategic business and technology consulting.

Founded in 1974 and headquartered in Greenwood Village, Colorado, CIBER has more than 8,000 employees. We operate in 18 countries, serving clients from 14 Global Solution Centers and 70 local offices in North America, Europe and Asia/Pacific. Annual revenue in 2009 exceeded \$1.0 billion. CIBER trades on the New York Stock exchange (NYSE: CBR), and is included in the Russell 2000 Index and the S&P Small Cap 600 Index. For more information, visit [www.ciber.com](http://www.ciber.com).

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