



"A Woman-owned Business Organization"

## HOB International, Inc.

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### **Abstract**

The incorporation of Design for Recyclability (DFR) into the design process is an extremely critical step towards the creation of more recyclable electronics products. A product's design can have the single greatest impact on both the logistics and the costs of the recycling process. Constraints set forth by the design can dictate not only the methodology used to recycle the product but also the revenues (or costs) generated from the recycling process.

This presentation provides an overview of the application of DFR concepts to the design of technology products. A number of specific concepts are explored. The net revenue curve as applied to the demanufacturing of products is demonstrated as a tool for the quantification of DFR improvements.

### **Biographical Information:**

Craig Boswell, Vice President  
HOB International, Inc.

Craig Boswell is vice president of HOB International, Inc. and manager of their Dallas operations. In this capacity, Craig has been extensively involved in the design, development, and deployment of electronics demanufacturing and recycling techniques. Craig's background includes 9 years experience as an electrical engineer for Texas Instruments, Inc.. As a member of Texas Instrument's engineering staff, Craig managed electronics design projects and was extensively involved in development and deployment of electronics manufacturing techniques. Craig holds a B.S. in electrical engineering from the University of Illinois, a M.B.A. from the University of Texas at Dallas and is a registered Professional Engineer in the state of Texas. In addition to his managerial duties, Craig is HOB's chief industry consultant on demanufacturing, design for disassembly, and reverse logistics programs. Craig has published and presented numerous papers on the recycling of electronic products and the keys to designing more recyclable products.