INTRODUCTION

We have discovered an amazing thing. While so many of us have been scratching our heads trying to figure out why the road to lean has been rockier than it should be, a vital yet simple tool that can help us make real progress toward becoming lean has been right under our noses.

One of us, Mike, had long searched for a means to tie together lean concepts and techniques, which seemed more disparate than they should be, as he worked on many plant floor implementation efforts. Mike noticed the mapping method while studying Toyota's lean implementation practices. He realized mapping had potential far beyond its usual usage, formalized the tool, and built a training method around it that has proved extraordinarily successful.

The other of us, John, has known about the "tool" for over ten years, but never thought of it as important in its own right. As John worked with Toyota, mapping was almost an afterthought—a simple means of communication used by individuals who learn their craft through hands-on experience.

At Toyota, the method—called "Value-Stream Mapping" in this workbook—is known as "Material and Information Flow Mapping." It isn't used as a training method, or as a means to "Learn to See." It is used by Toyota Production System practitioners to depict current and future, or "ideal" states in the process of developing implementation plans to install lean systems. At Toyota, while the phrase "value stream" is rarely heard, infinite attention is given to establishing flow, eliminating waste, and adding value. Toyota people learn about three flows in manufacturing: the flows of material, information, and people/process. The Value-Stream Mapping method presented here covers the first two of these flows, and is based on the Material and Information Flow Maps used by Toyota.

Like many others in recent years, we were struggling to find ways to help manufacturers think of flow instead of discrete production processes and to implement lean systems instead of isolated process improvements. We struggled to help manufacturers make lasting, systematic improvements that would not only remove wastes, but also the sources of the wastes so that they would never come back. For those who simply give the mapping tool a try, we have been pleased to see how exceptionally effective the tool has proved to be in focusing attention on flow and helping them to *see*. Now we present it to you.

Mike Rother and John Shook Ann Arbor, Michigan May 1998