

Introduction

Process-Resource Model

What is it?

Pancake production

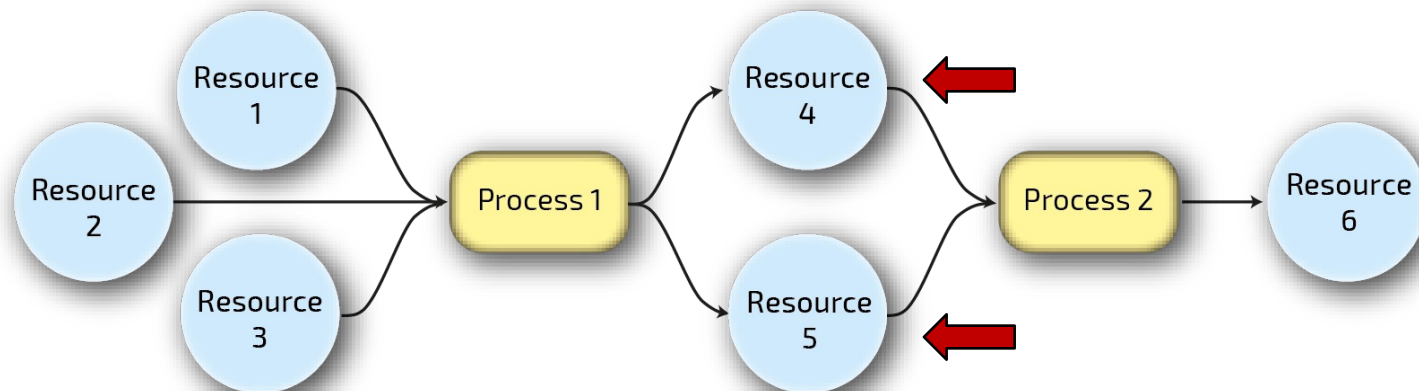
Print production

Workflow puzzle

Thomas Hoffmann-Walbeck

Process-Resource Models

- ▶ Processes are described by verbs, resources are physical things, files or parameter sets.
 - » Processes normally have several input resources, i.e., prerequisites that are needed for running a process.
 - » Processes have one or more output resource(s), i.e., the result(s) that the process produces.
 - » A output resource of one process might be the input resource of the next process (a “transitional” resource).

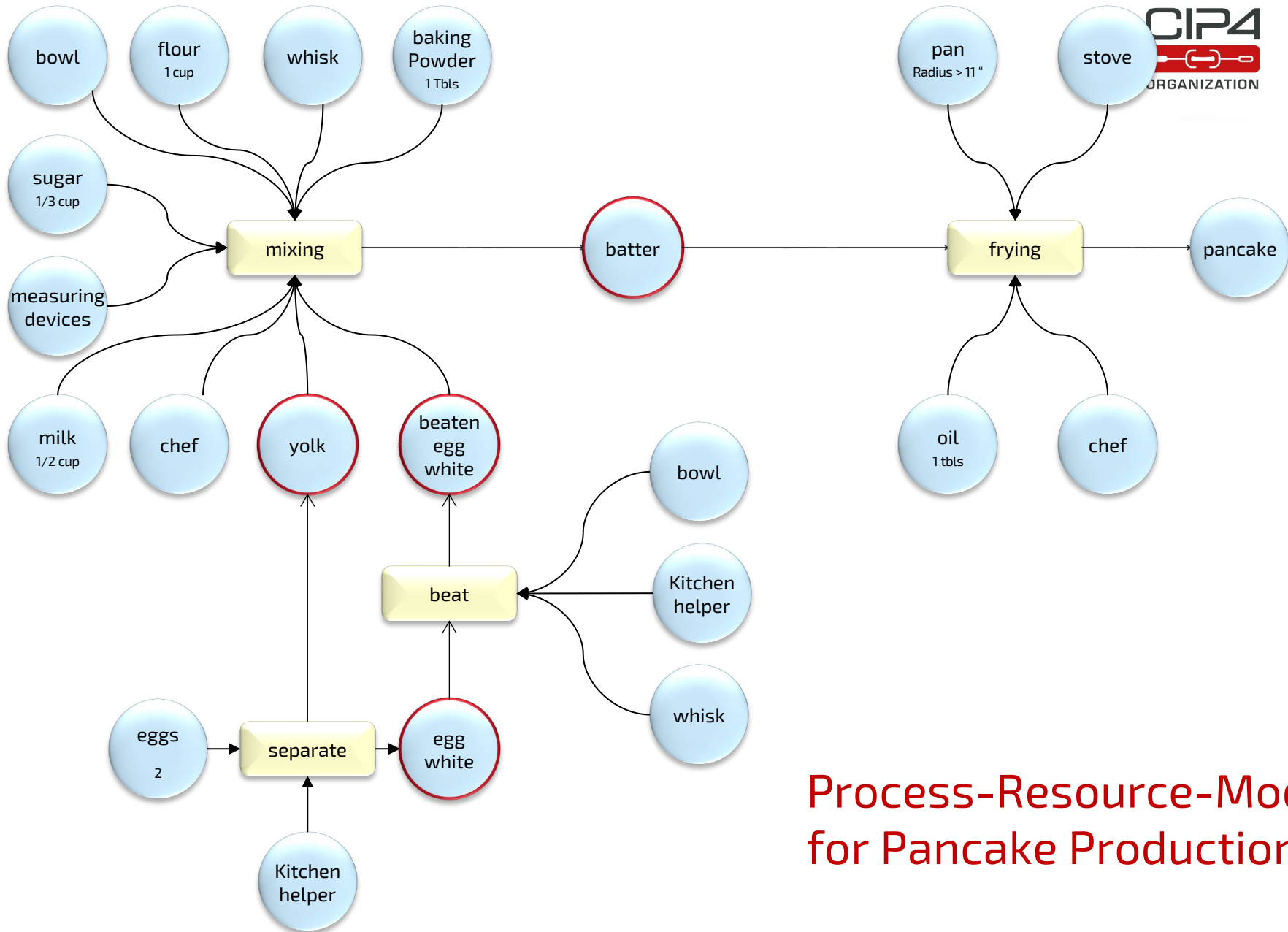


Process-Resource Model (PRM)



Let's make
pancakes!

Sorry,
let's make a PRM recipe



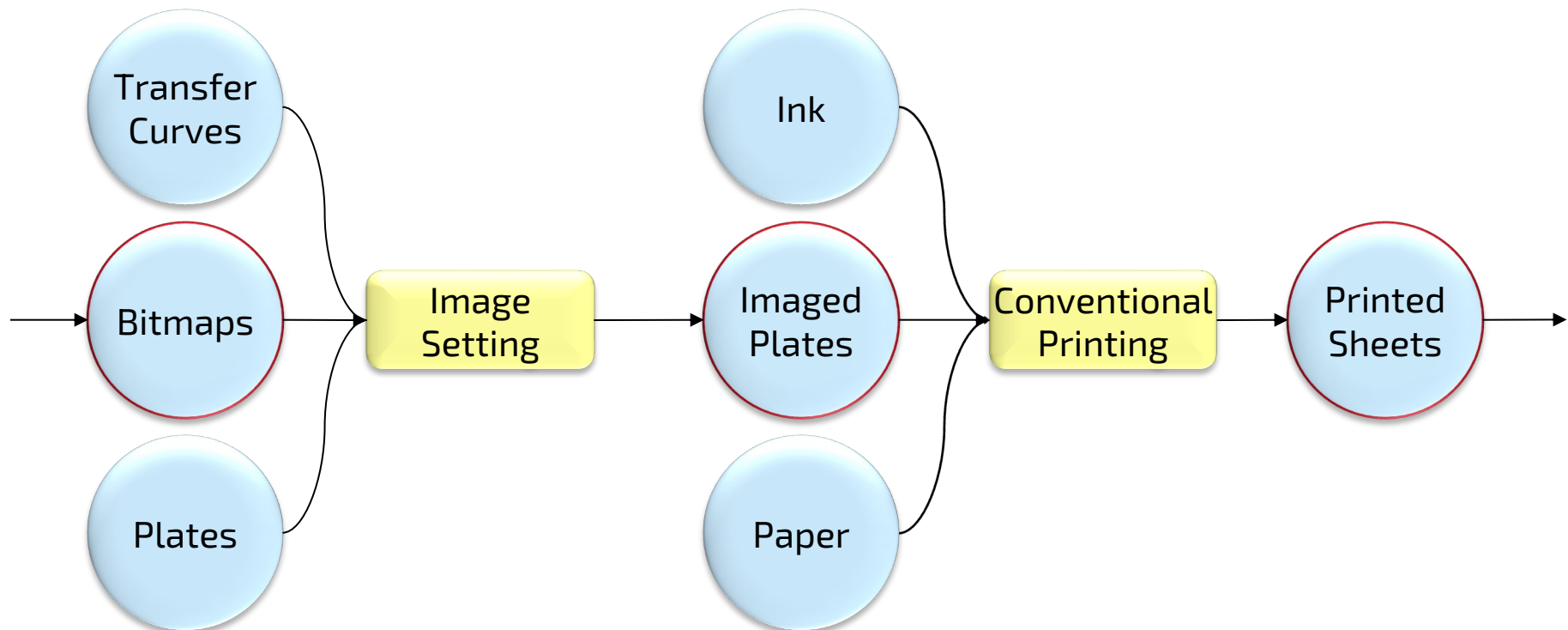
Process-Resource-Model for Pancake Production

Processes & Resources Must be Specified

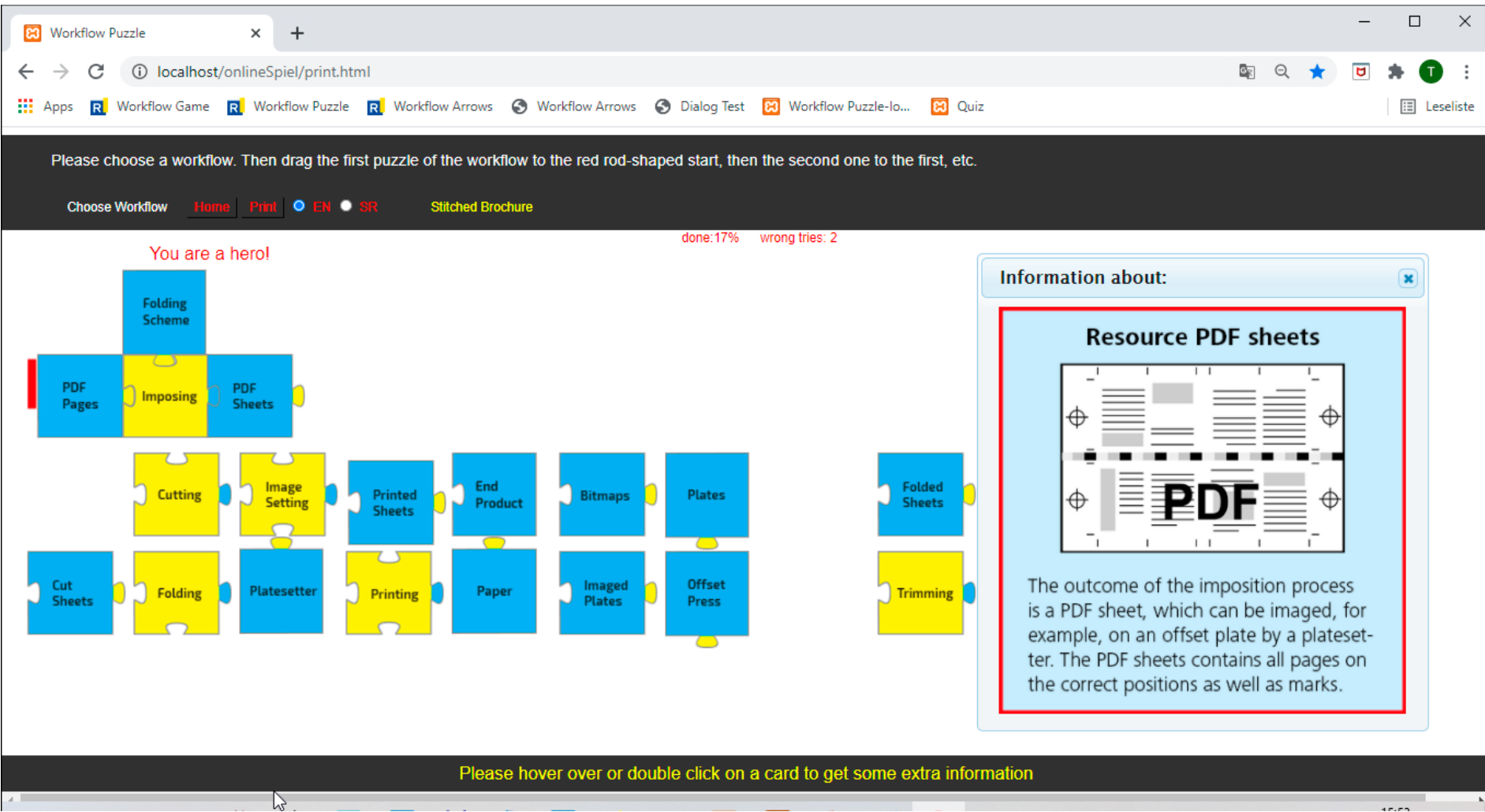
- ▶ If you want to replace the “chef” by a “mixing robot”, a “frying robot”, a “separating robot” and a “beating robot” a precise specification for all processes and resources is needed, which...
 - » ...must be clear, unambiguous, universal (not for pancakes only!) and represents a complete “language”
 - » ...should be an open standard – otherwise the pancake manufacturers cannot buy robots from different vendors
- ▶ The specification is the tricky part - and, of course, robots must understand the language and can execute the processes accordingly.
- ▶ Please note: The PRM is just a model, just a description what to do (“recipe”). It's not the production!

Example of PRM in Print (JDF)

- ▶ Production is described by a network of processes and resources.
 - » Each process is executable when all mandatory input resources are available and the production time window is reached



Model a print production workflow



Please choose a workflow. Then drag the first puzzle of the workflow to the red rod-shaped start, then the second one to the first, etc.


Choose Workflow **Home** **Print** EN SR **Stitched Brochure**

You are a hero!

done:17% wrong tries: 2

Information about:

Resource PDF sheets



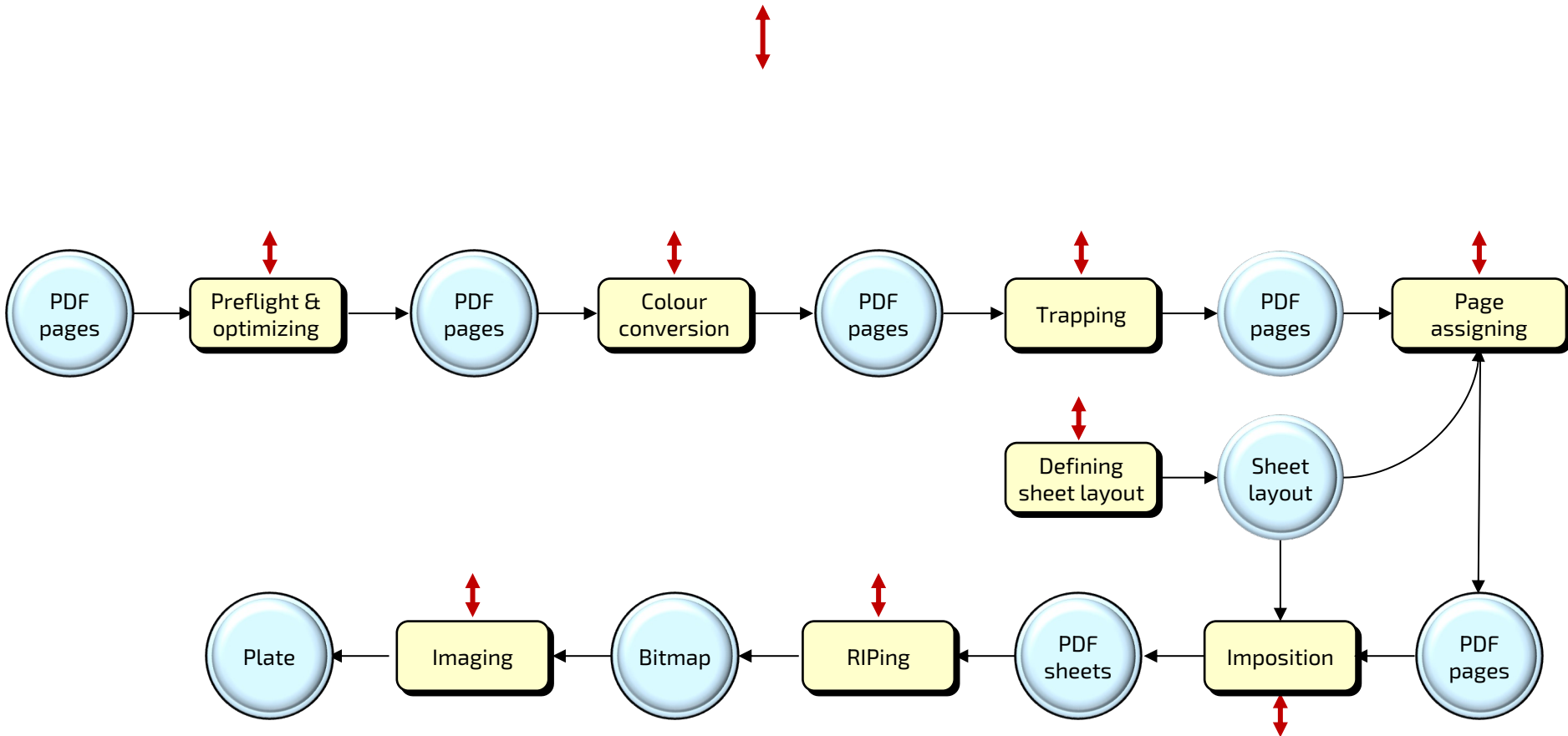
The outcome of the imposition process is a PDF sheet, which can be imaged, for example, on an offset plate by a platesetter. The PDF sheets contains all pages on the correct positions as well as marks.

Please hover over or double click on a card to get some extra information

<https://www.torontomu.ca/~wdp/workflow-puzzle/print/print.html>

PRM for Prepress in Commercial Printing

MIS – Production Controller – Planning Board



What is still wrong with the chart?

- ▶ Resources such as PDF or plates are not sent back and forth to the Controller.
 - » Rather references, where the PDF is stored in the file system.
- ▶ Most input resources are missing such as trapping details.
- ▶ Some output resources are missing, such as preflight report.
- ▶ Process and resource naming are not (X)JDF compatible,
 - » E.g., instead of “PDF” it should be “Runlist”
- ▶ Everything is simplified, e.g., “RIPing” is not a process, but a process group.