

# System to process

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## Abstract

System maps such as reverse blueprints expose the mental model of the ‘target system’. When such models explain the function of the system, they can help document process protocols.

## 1 Introduction

In planning we are often interested in the action (or, simply, ‘what to do’) in order to achieve the stated objectives. Other times — or, perhaps, in addition to that — we are interested in the implementation of this action: in other words, what to do first, what to do next, etc. This latter sequence is a process protocol, and can be either normative (when issuing instructions) or descriptive (when describing something we thought of or discovered).

Cause-and-effect system maps such as reverse blueprints (RBP) can be easily transformed into another kind of causal diagrams such as strategy maps, as we saw in an earlier issue (Perdicóúlis, 2012b). System maps may also contain information about the function of the system, which can be transcribed in process maps such as concise process diagrams, or CPD (Perdicóúlis, 2010).

In either case, the facility of moving from one type of information to the other depends on how well the system is known or conceived and represented. Therefore, both knowledge and diagramming (or, generally, communication) skills are crucial. Let us the ‘system to process’ transformation with the same RBP used in the ‘system to strategy’ case — that is, the system model of the ‘article-publishing’ industry (Perdicóúlis, 2012a).

## 2 Selecting the pathway

System models documented as reverse blueprints contain system elements and interactions. While all of these elements must be quantifiable (Perdicóúlis, 2010, 2011), some of them may be physical or abstract entities such as ‘books’ or ‘liberty’, or actions such as ‘printing’ or ‘resting’. When seeking the identification of process protocols in RBPs, we need to identify the relevant pathway(s). In this example, Figure 1 is an extract of the original RBP, presenting the ‘publishing’ pathway.

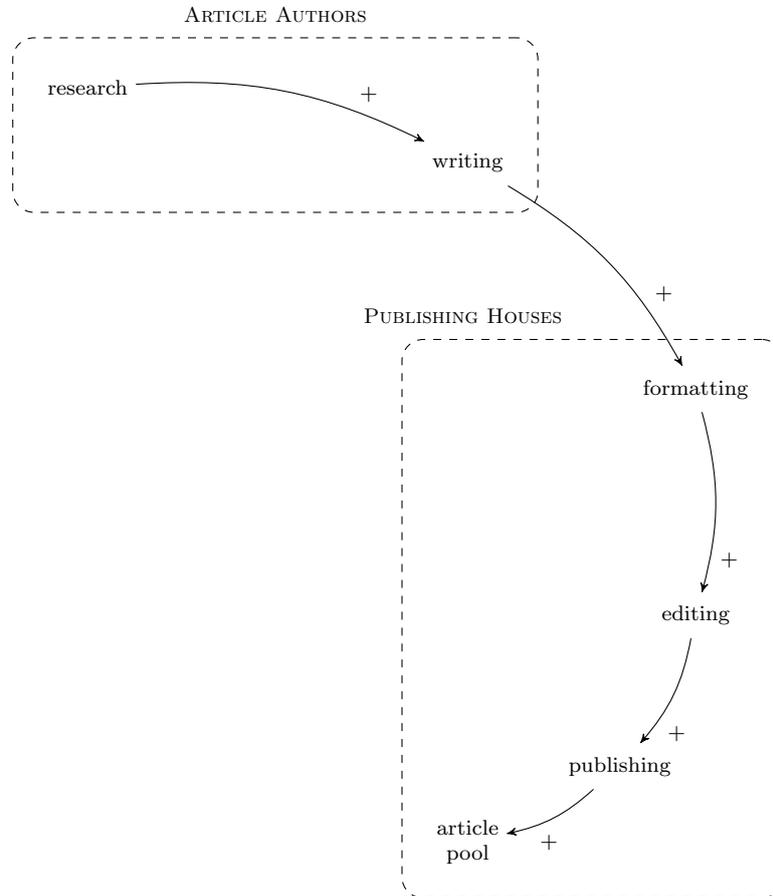


FIGURE 1 The ‘publishing’ pathway, originally captured in the ‘article-publishing industry’ model (Perdicóúlis, 2012a), identifies actions, actors, and some products

The selected pathway(s) must contain most of the important actions and products associated with the process of interest — in this case, the ‘publishing’ process. This information is likely to be incomplete, as the RBP is not designed to be a process diagram, but should be completed during the construction of the process diagram — or CPD, in this case.

### 3 Shaping the process

The nodes of the CPD can be either actions or products of the process (Perdicóúlis, 2011). Since the products are the more ‘concrete’ ones, let us opt to make them the nodes as in Figure 2. This leaves the actions to be marked on the arrows, indicating what produces the transformations.

By completing the research publishing process, it becomes evident that the produced articles join the general pool of articles, to be used in subsequent research efforts. Thus, the process is presented in a closed loop format, which makes it necessary to indicate the starting point.

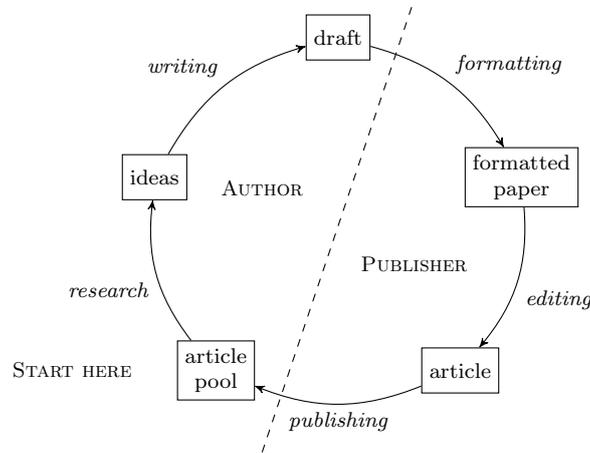


FIGURE 2 The article publishing process presented in a concise process diagram (CPD); a closed loop is formed when the published article joins the general pool

## 4 Discussion

The domains of the author and the publisher are separated by a dashed line, and appropriately labelled. In more complex diagrams, ‘concise’ process diagrams may not be enough, so the entities responsible for the actions may have to be labelled next to the action itself, thus proceeding a kind of ‘extended’ process diagrams.

## 5 Conclusion

When interested in documenting processes, we can seek information in mental models such as existing RBPs. The resulting CPD documentation helps to clarify and understand what are the final and intermediate products of the process, and which are the associated actions — and, optionally but very usefully, the corresponding entities.

## References

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