

Intervention points in system maps

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Abstract

System maps such as reverse blueprints (RBP) can be labelled for use in planning applications. Among a variety of problem definition methods, a simple but effective way is to identify the system elements where action can take place — and, to make sure, also where it cannot. This binary labelling gives a clear view of the intervention points in a system.

1 Introduction

System maps such as causal loop diagrams (CLD) and reverse blueprints (RBP) can be labelled for use in planning applications (Perdicóúlis, 2012a,c,d). For instance, some system elements in these diagrams may represent options for action, others consequences of that action, and others the objectives (or motives) of that action. Hence, system elements can be classified in different semantic categories, and these may follow one of various schools of planning praxis such as the Kaplan–Norton ‘strategy maps’ (Kaplan and Norton, 2000, 2004; Perdicóúlis, 2012a), Checkland’s Soft Systems Methodology (Checkland, 2000), Friend and Hickling’s Strategic Choice Approach (Friend and Hickling, 2005), or the ‘XYZ’ model of Systems Planning (Perdicóúlis, 2010, pp.58–66).

Since planning is about action, a minimalist approach to all these alternative planning methodologies should identify where the action can take place. Thus, only two kinds of system elements need to be labelled in system maps: (a) *strategic*, where action can take place, and (b) *natural*, which are conditions for, or outcomes of the action. These two general semantic categories are illustrated with an example from the publishing industry (Perdicóúlis, 2012b).

2 Plain RBP

Figure 1 demonstrates a reinforcing feedback loop from the life of a commercial publication — a scholarly journal — as a plain reverse blueprint (RBP). In a narrative form, the RBP conveys the following:

‘Journal popularity drives journal sales, which bring profit to the journal; some of this profit is directed to marketing and public relations, which in return produce visibility

for the journal, and this is important to further increase the journal’s popularity.’

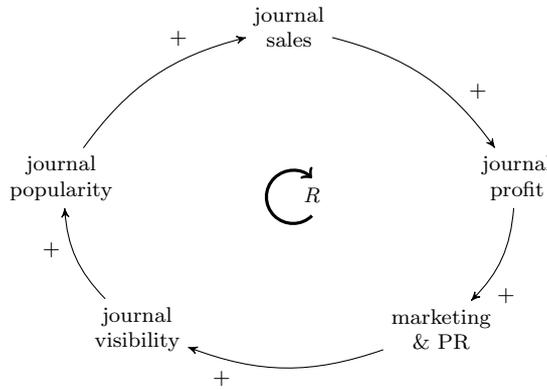


FIGURE 1 A commercial publishing operation is a risky business — i.e. a reinforcing loop

Following all the steps in the RBP of Figure 1, the reinforcing loop suggests that (a) an already popular journal is likely to become more popular, and (b) a weak or new journal stands no chance to gain popularity unless marketing and public relations work miracles for it — and borrowing money for this makes it a risky start-up.

3 RBP with ‘XYZ’ labelling

Besides the action (X) and its outcome (Z'), Figure 2 reveals three conjoined or sequential objectives: journal popularity (‘vital’ objective, or Z_v), journal sales (‘operational’ objective, or Z_o), and journal profit (‘financial’ objective, or Z_f).

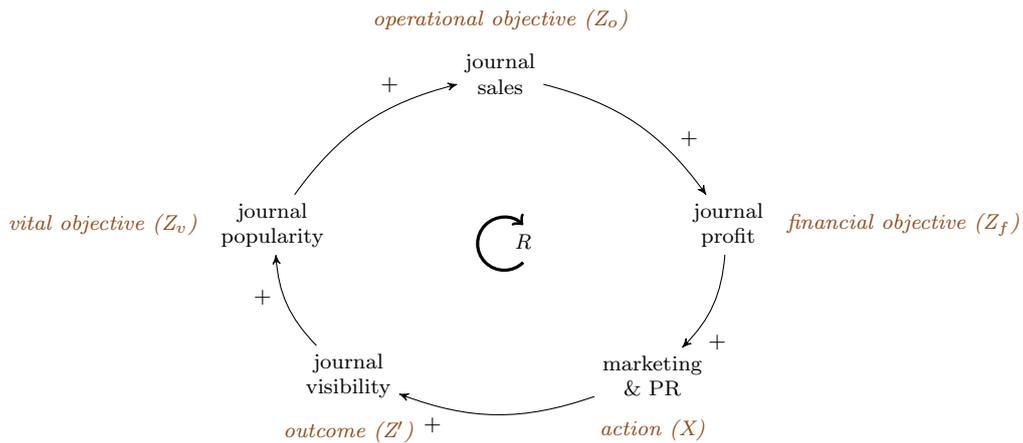


FIGURE 2 ‘XYZ’ labelling reveals conjoined objectives

4 RBP with binary labelling

Figure 3 labels the system elements either as ‘strategic’ (those carrying the action) or ‘natural’ (conditions for, or consequences of the action). The ‘natural’ semantic category is used only to double-check on the labelling operation, and does not have any particular value for planning — e.g. it does not identify common categories such as objectives or goals. On the other hand, the ‘strategic’ semantic category makes a significant contribution: it identifies exactly where action can take place and keeps that in focus.

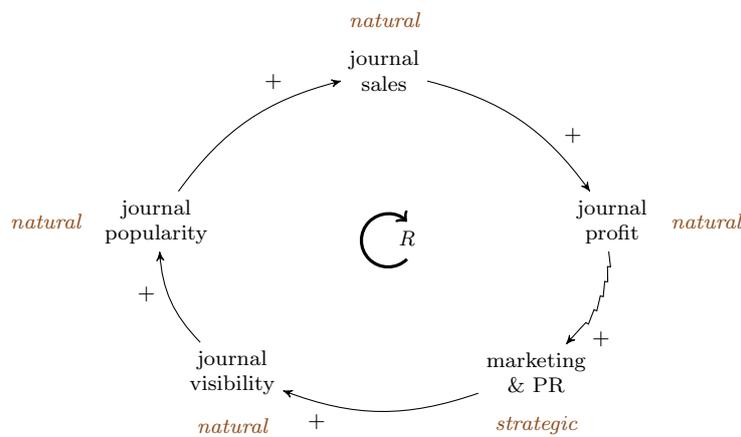


FIGURE 3 General labelling on an RBP can identify the ‘strategic’ elements that represent action

The link from journal profit (a ‘natural’ element) to marketing and public relations (a ‘strategic’ element) is marked on the RBP as a jagged line, indicating a proposed option of the strategist — i.e. a proposed pathway.

5 Discussion

After the study of the RBP system map in different ways, it is possible to ‘extract’ the journal strategy and represent it in a strategy map — namely, a descriptive causal diagram (DCD) — (Figure 4). The strategy map — as opposed to the RBP, which is a system map — focusses on the action, and in this case it suggests that everything starts with the journal’s promotion.

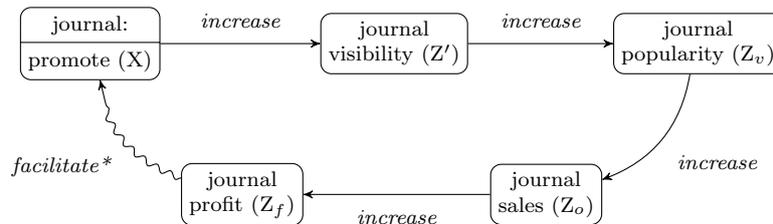


FIGURE 4 The strategy as a descriptive causal diagram (DCD)

For the relatively low complexity of the example in this case, both RBP labelling options (Figures 2 and 3) point to the strategy map of Figure 4. In this sense, if the identification of action is the only concern, perhaps the extra investment of the full ‘XYZ’ labelling is an overkill.

If time or other resource constraints are immaterial, transformations of information from one type of diagram to another — i.e. from an RBP with ‘XYZ’ problem labelling to a DCD strategy map — always facilitate the study of the system and also of the planning problem, and reveal important perspectives about the organisation of action. This has been seen also in other similar cases (Perdicoulis, 2012c,d, 2013).

6 Conclusion

Labelling the system elements in a general way, as *strategic* and *natural*, easily identifies where action can or should take place in a system for the purposes of planning. The relationships between the ‘natural’ and the ‘strategic’ elements represent *proposed options* of the strategy maker, and are therefore marked distinctly (i.e. jagged arrows). This special-interest mark-up stands between the alternatives of no labelling and thorough problem labelling (e.g. ‘XYZ’), each one reserving their use for cases where different kinds of understanding are required.

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