

Broker's Direct Cost and Time Variables and Expressions

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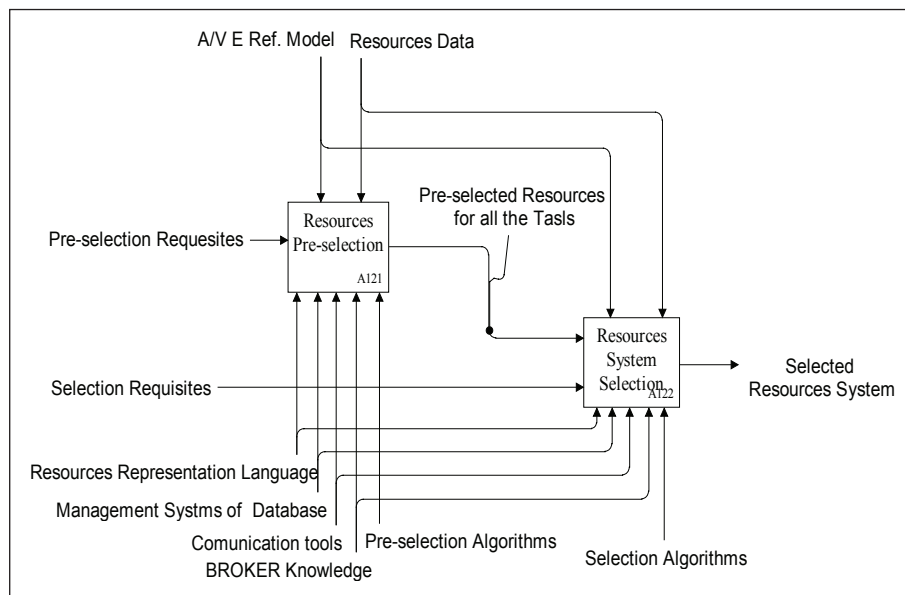
INTRODUCTION

In this work, we will present the direct costs and times of the broker for the resources selection process in our agile/virtual enterprise (A/VE) project designated by BM_Virtual Enterprise project (more details can be seen in Putnik, 2000). Related with this work and after revised literature about the selection process for A/VE, we have verified there are some works about selection models and about selection algorithms (Dhaenens-

Filipo, 2000; Gupta & Nagi, 1995; Huang & Mak, 2000; Ko, Kim, & Hwang, 2001; Minis, Herrmann, & Lam, 1996; Sluga & Butala, 2001; Subbub, Sanderson, Hocaoglu, & Graves, 1999; Wu, Mao, & Quian, 1999), but on the one hand without evaluating the times and the costs associated to the selection process, much less considering the broker.

For each of the activities defined in the selection model, we will first identify an expression that translates with variables the time and cost spent in process-

Figure 1. IDEF0 representation of process A12: resources selection (Ávila, Putnik, & Cunha, 2003)



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ing them, regardless of the tools used and the agent responsible for selection (in our case, the broker). To conclude the times and costs model, the expression of their totals should be defined. However, these depend on the selection method that has been defined in the selection requisites to unchain the selection process. We will

consider the following three selection methods, placed in increasing order of complexity, for the identification of the costs and time selection model: independent selection method (ISM); dependent selection method *without* preselection of transport resources (DSMWO);



Figure 2. IDEF0 representation of the process A121: resources preselection (Ávila, Putnik, & Cunha, 2003)

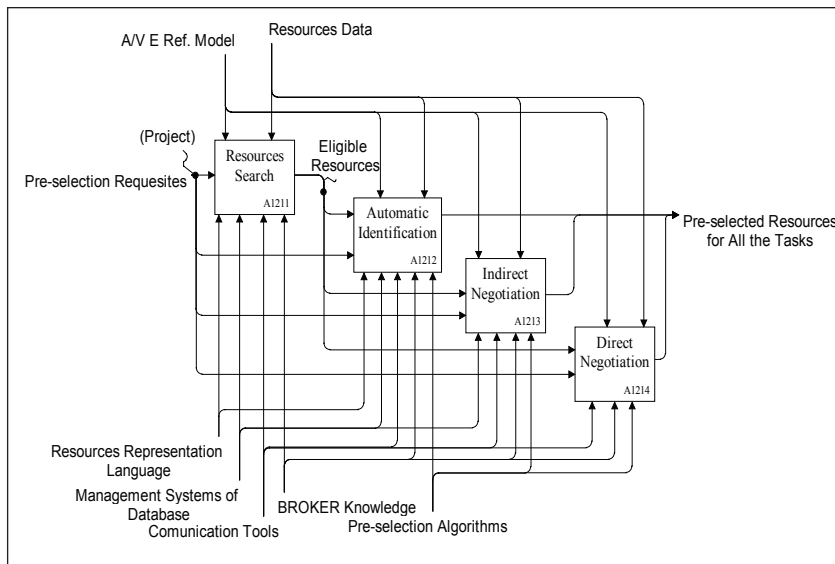
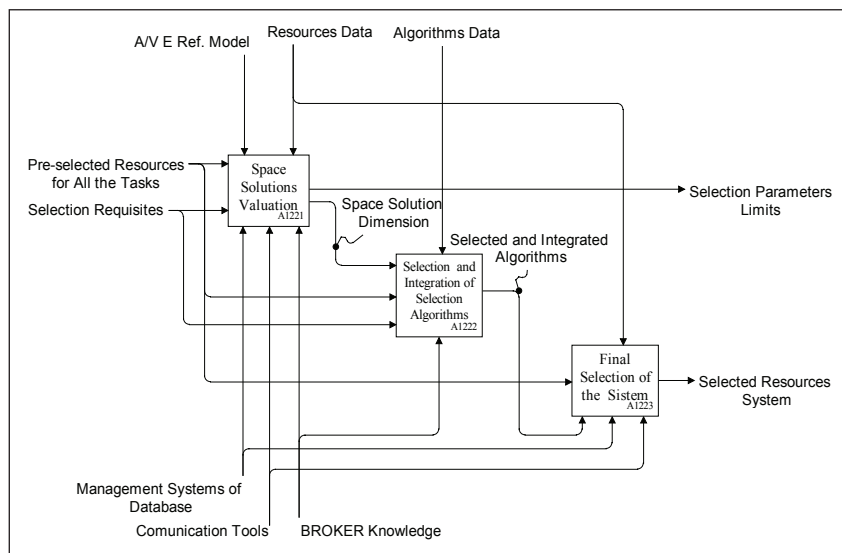


Figure 3. IDEF0 representation of the process A122: resources system selection (Ávila, Putnik, & Cunha, 2003)



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