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Research on ERP Project Post Evaluation of Economic Benefit Based on System Dynamics

ABSTRACT

With the deepening of industrialization and information technology, big data and cloud computing applications is just unfolding, information work more and more attention in today's enterprises, and it is regarded as the effective means to enhance the core competitiveness of enterprises. At present, the major enterprises not only to improve the level of information technology as a means of enterprise management level, but also as a measure to promote enterprise strategic innovation. Along with the enterprise to the information project of high investment, the information project in the end to the enterprise benefit growth has played the role of the various enterprises to promote the issue of concern. In the enterprise of the operation process, the lack of a set of effective post evaluation method, made the Implementation effect is difficult to quantify. Enterprises lack of effective tools for the project after the implementation of the economic benefits of dynamic management, can not be achieved through the project evaluation to promote the construction of the purpose.

This paper using ERP project of Aluminum corporation of china limited as the background, With the economic benefits post evaluation content as the main line. By using the balanced scorecard and combining the method of system dynamics simulation model of the ERP information project economic benefits post evaluation to establish a simulation model for analysis.

The innovation of this paper is through the combination of system dynamics and the balanced scorecard, designed a set of large enterprise ERP information on economic benefit of the post project evaluation of the simulation model, the models are verified by the company over the years of business data.

Using the dynamic simulation model proposed in this paper, Can effectively evaluate ERP

project's influence on the economic benefit. Provides a way of thinking and method for the economic benefit post evaluation of the ERP project which is difficult to be quantified. It also provides an important reference value for the later period of the company's other enterprises to implement the ERP project as well as the post project evaluation.

This paper is divided into five parts. The first part from the background of the evaluation of the project economic benefits, this paper focuses on the purpose of this paper, the results and significance, and outlines the research content, ideas, etc. The second part is the theory of system dynamics and the evaluation method of the balanced scorecard. The third part is the establishment of the evaluation model of the economic benefit of the ERP project of the Limited by Share Ltd in China. The fourth part is the application of the model in the evaluation of the economic benefits of ERP informatization in China Aluminum industry. The fifth part is the conclusion and Prospect of this paper, which is a summary of the full text. This article through to the enterprise informatization of ERP economic evaluation of knowledge and learning, try to use the dynamic system thinking and system theory, combined with the Balanced Scorecard performance evaluation tool, carries on the appraisal to the economic benefits of the enterprise information project after ERP. The method can effectively solve the problem that the economic benefit of ERP information project is difficult to quantify.

KEY WORDS ERP project, post evaluation of economic benefit, balanced score card, system dynamics

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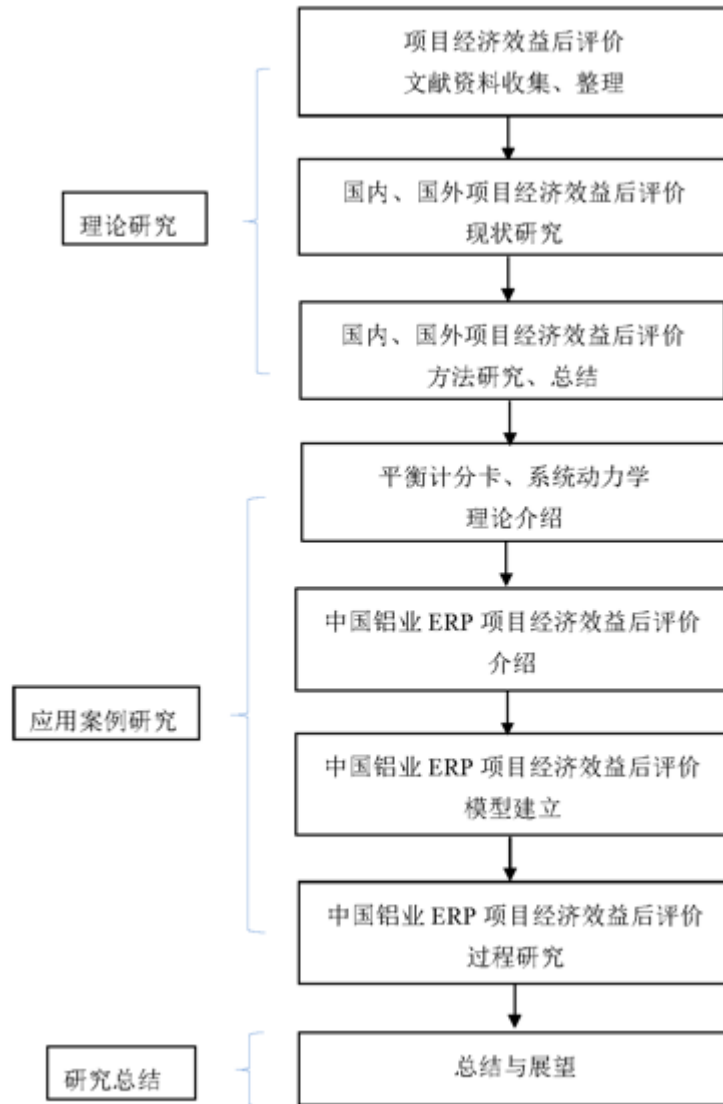
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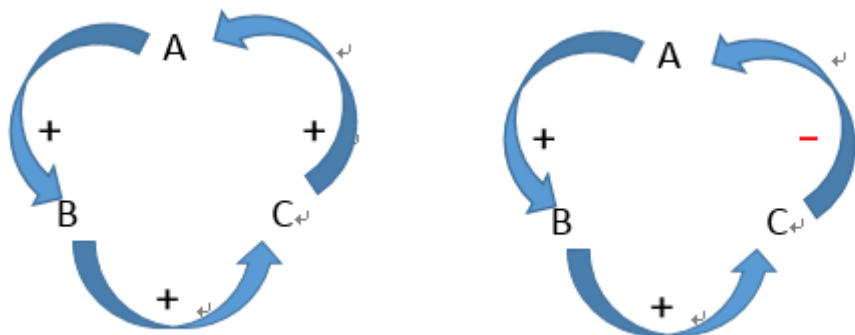
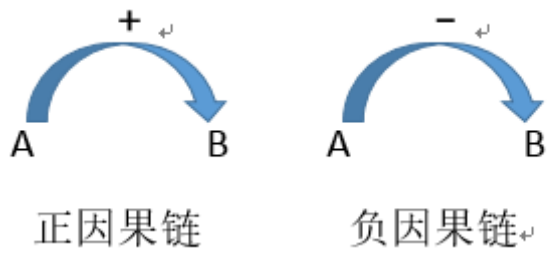
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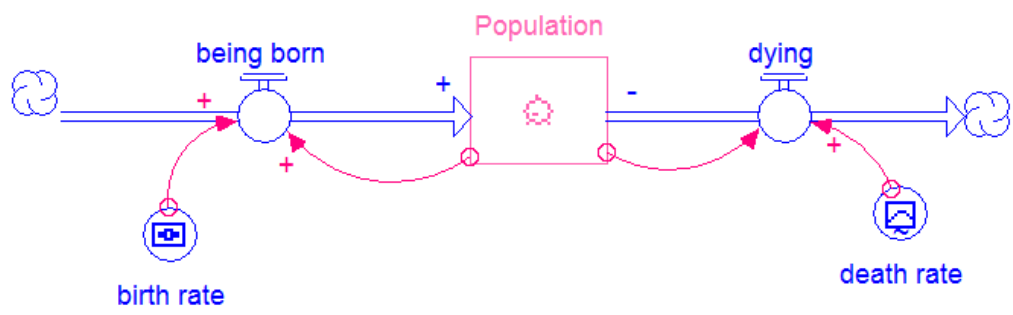
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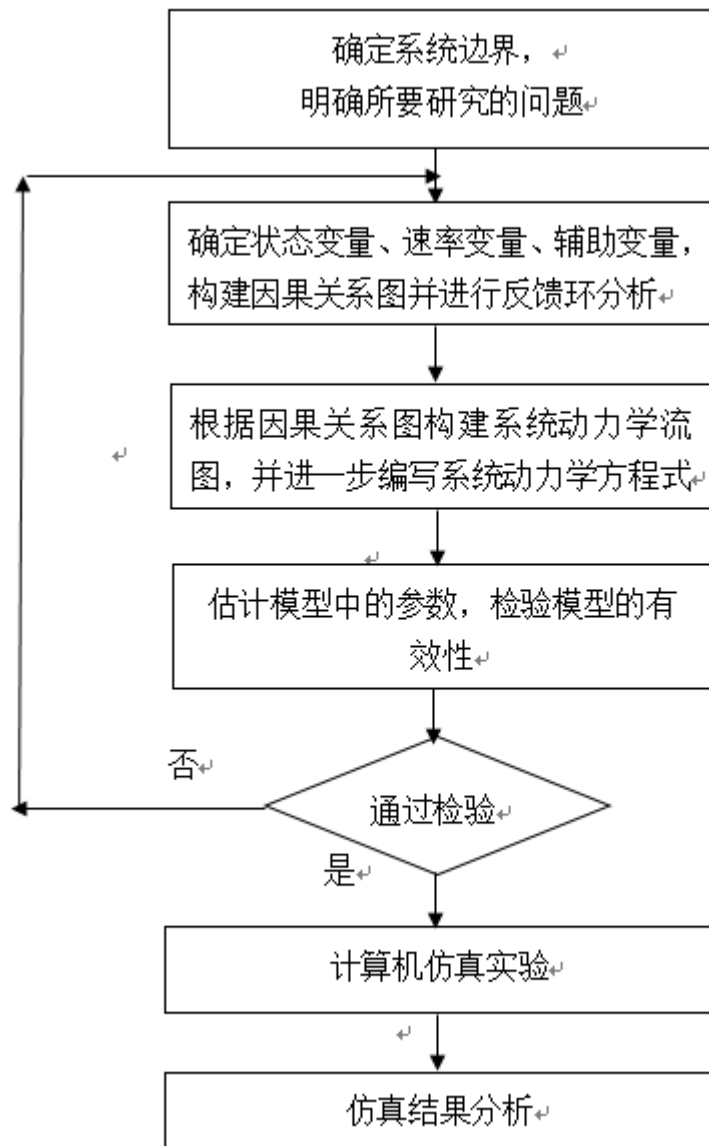
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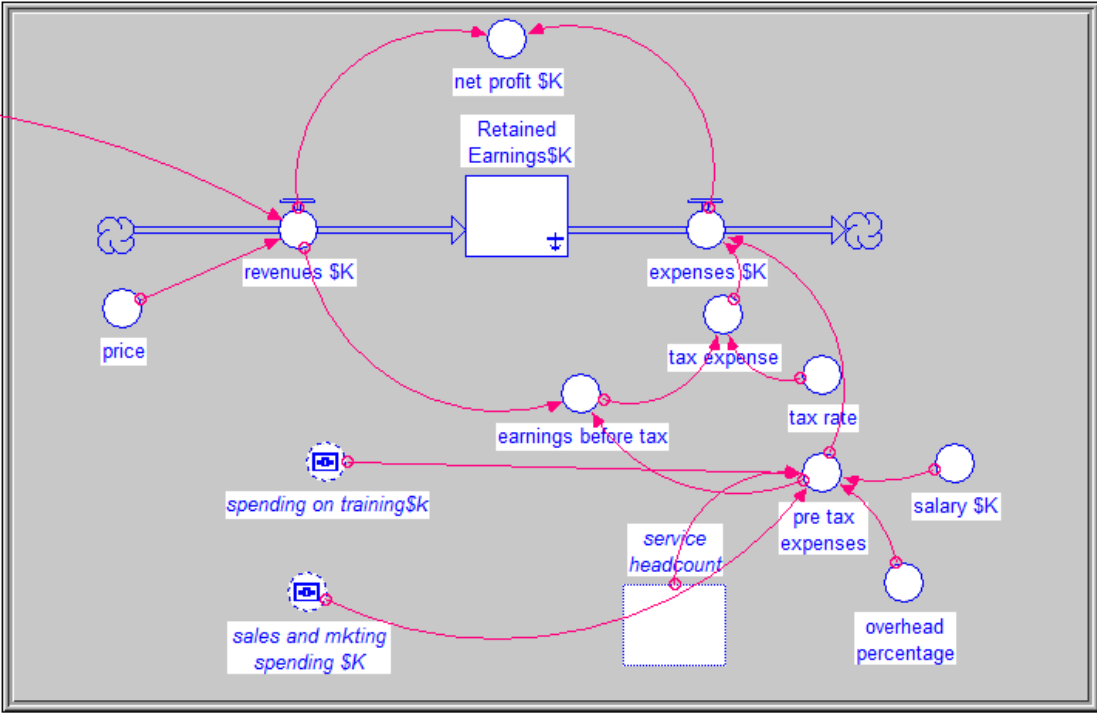
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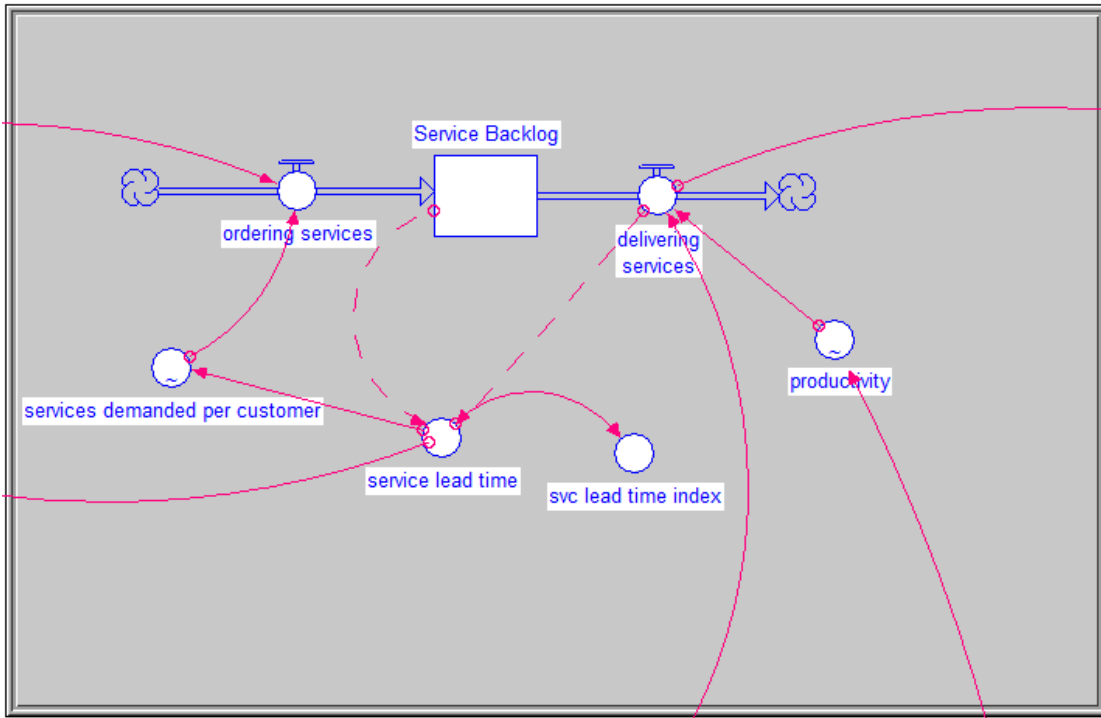
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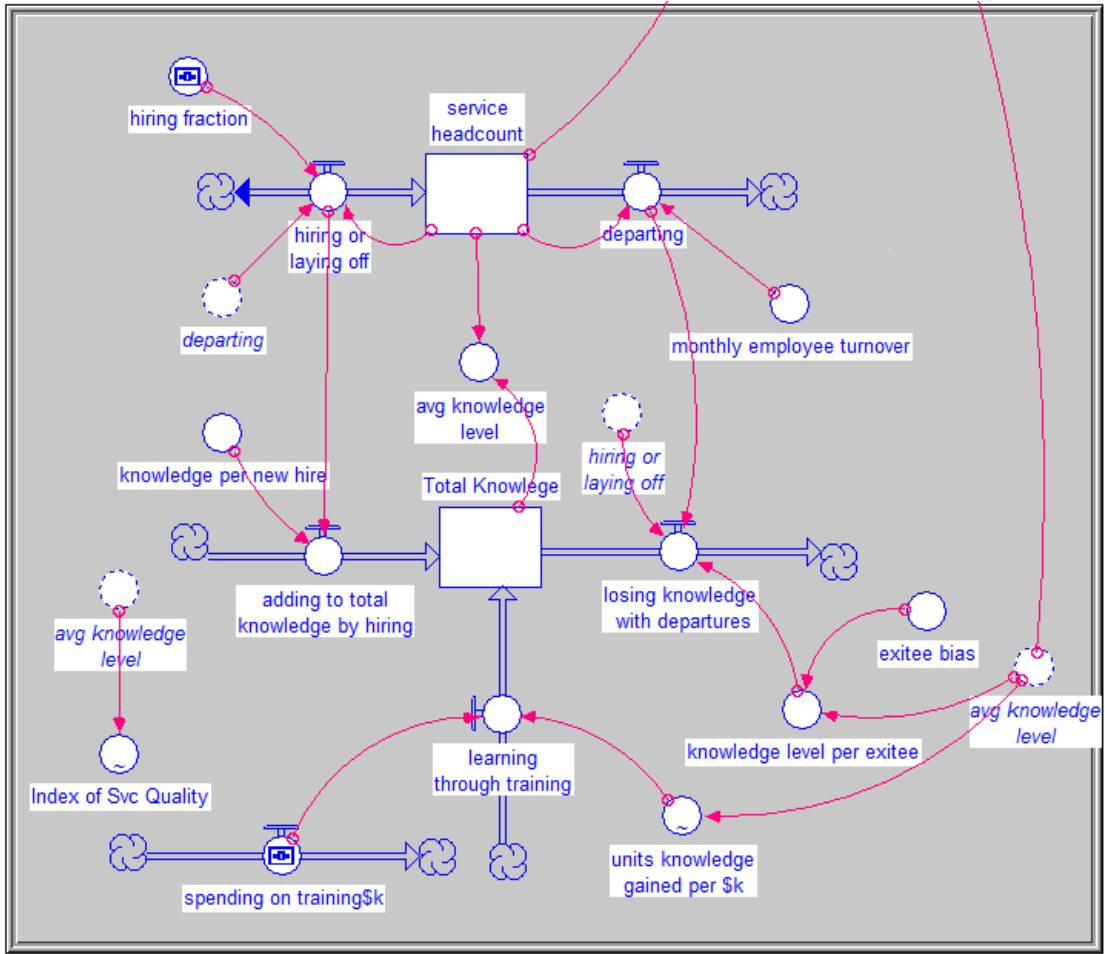
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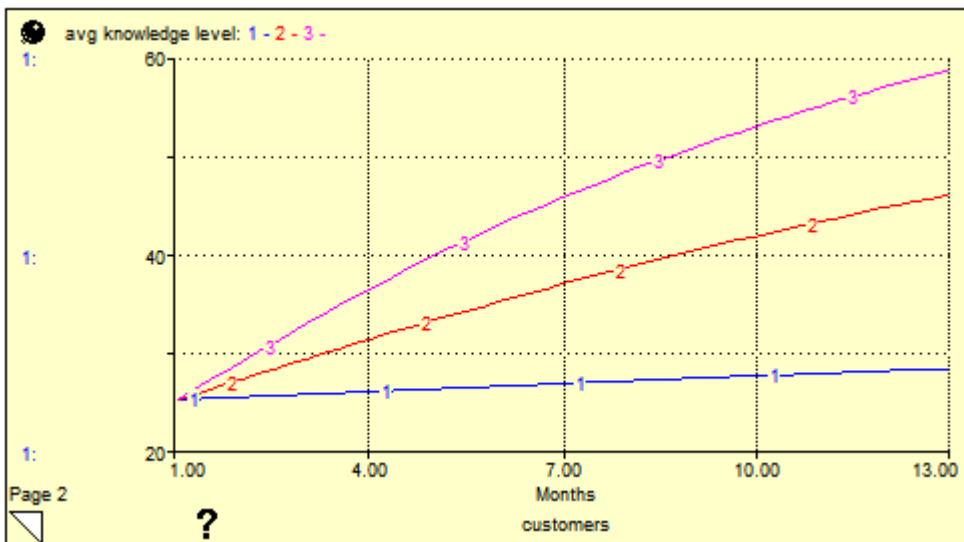
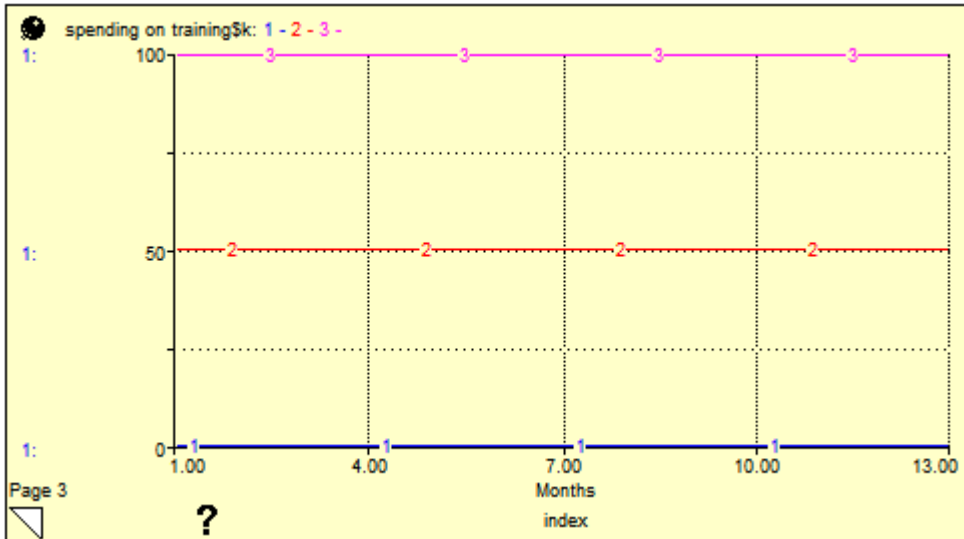
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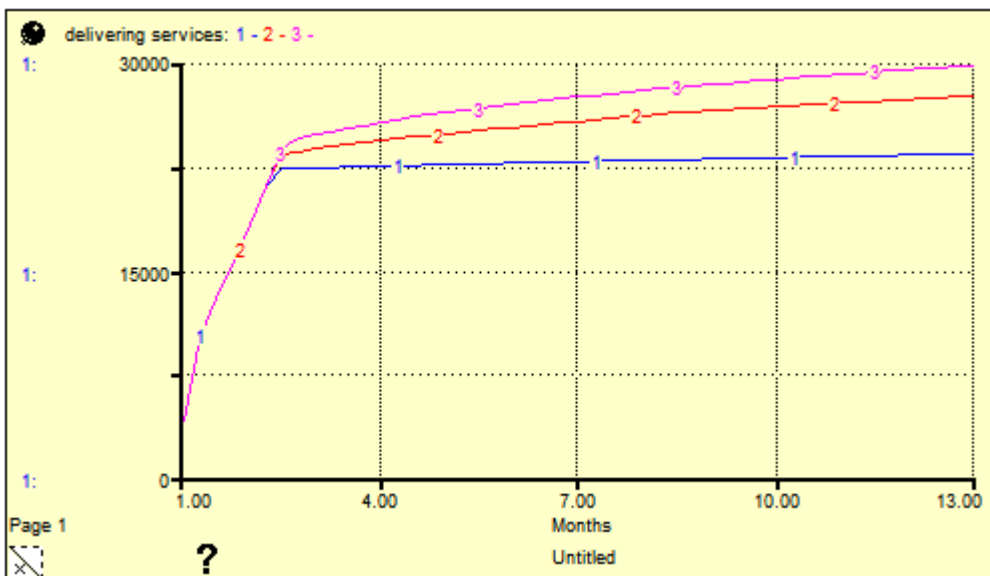
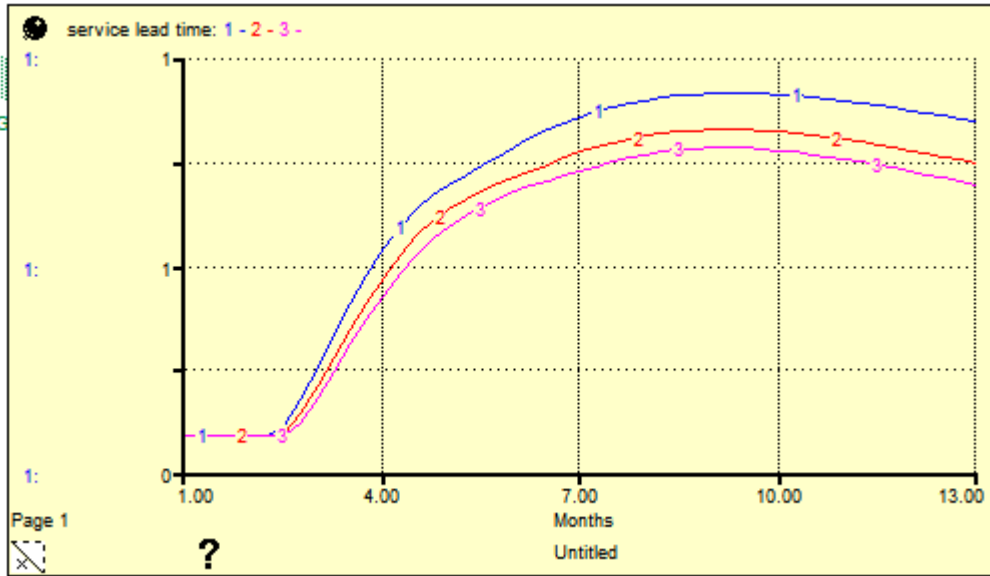
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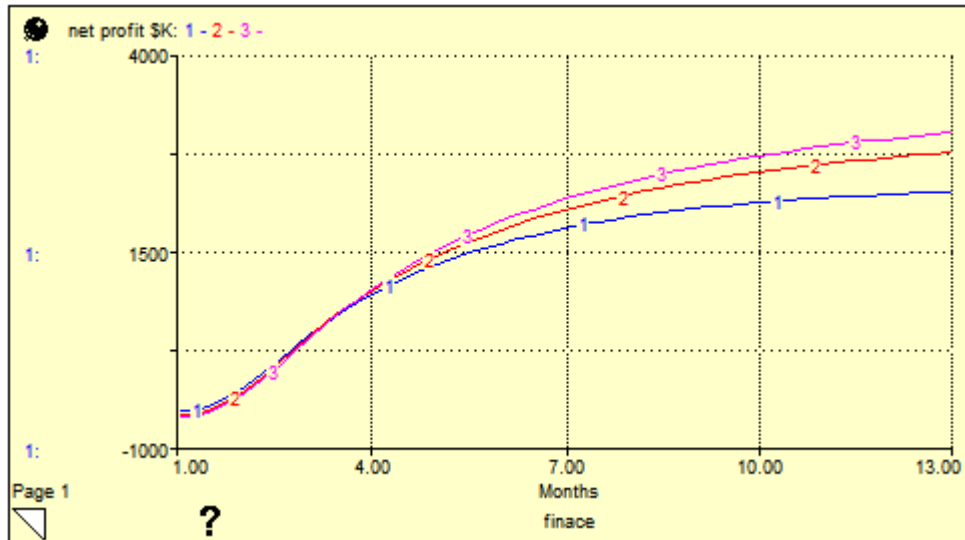


Table 1 (net profit) ?

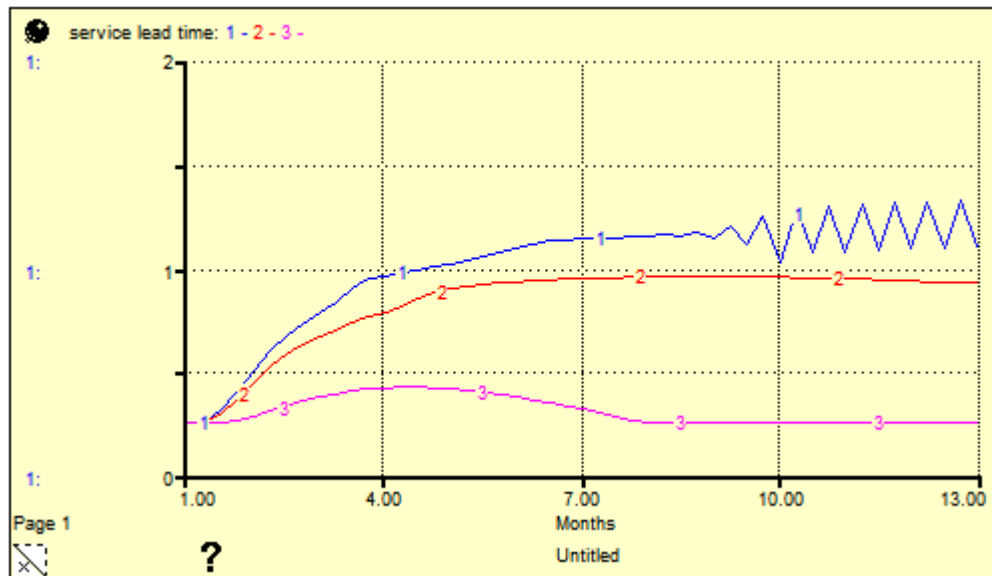
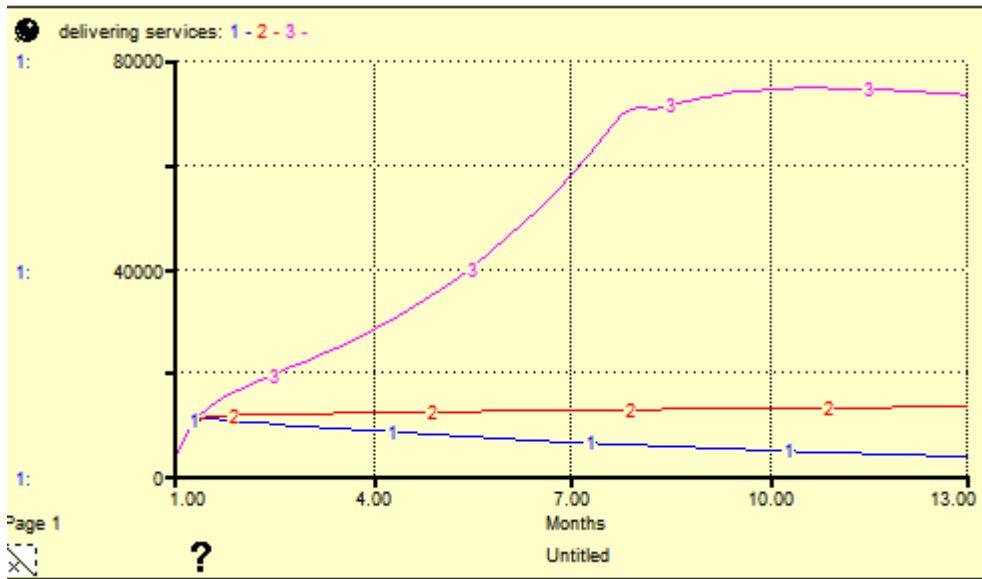
| Months | 1: net profit \$ | 2: net profit \$ | 3: net profit \$ | | | |
|--------|------------------|------------------|------------------|--|--|--|
| 1 | -497.57 | -535.07 | -572.57 | | | |
| 2 | -4.17 | -38.38 | -74.73 | | | |
| 3 | 627.96 | 641.32 | 635.90 | | | |
| 4 | 1,095.37 | 1,172.84 | 1,210.43 | | | |
| 5 | 1,430.17 | 1,569.83 | 1,652.71 | | | |
| 6 | 1,671.25 | 1,870.81 | 1,993.08 | | | |
| 7 | 1,846.06 | 2,102.65 | 2,255.92 | | | |
| 8 | 1,973.99 | 2,285.35 | 2,462.09 | | | |
| 9 | 2,068.72 | 2,431.67 | 2,626.60 | | | |
| 10 | 2,139.94 | 2,548.18 | 2,780.36 | | | |
| 11 | 2,194.46 | 2,642.02 | 2,871.16 | | | |
| 12 | 2,237.11 | 2,719.21 | 2,964.61 | | | |

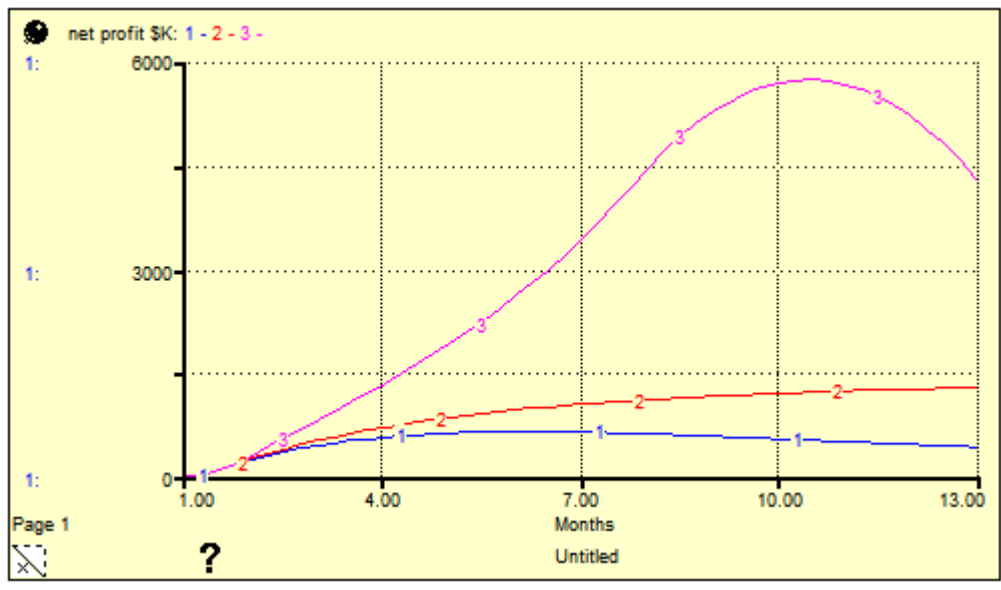
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