Exercise: MSA Model Construction Example

58119125 蒋卓洋

mas = <A, E, OBJ, Rule> mas = Architecture Design Company

1. A = Working Groups =

{MO("market operation group"),
RAO("risk assessment operation group"),
SD("structural design group"),
CE("construction equipment group"),
AD("architectural design group"),
MR("mode research group"),
I("information group"),
FM("file management group"),
F("finance group"),
A("administration group"),
HR("human resources group")}

2. E = Management, Cooperation, Division-of-labor and Information-exchange =

 ${E_m(A,x), E_m(HR,x), E_c(x1,x2), E_d(x1,x2), E_i(x1,x2)}$

 $E_m(A,x)$: Management from administration group to the other groups.

 $E_m(HR,x)$: Management on member structure from human resources group to the other groups.

 $E_c(x1,x2)$: Cooperation between two different groups to achieve the same task

 $E_d(x1,x2)$: Division-of-labor between two different groups to achieve different tasks of the same project

 $E_i(x1,x2)$: Information exchange between the two groups

3. OBJ = Profit and Artistic-creation =

{P, A}

P: Profit pursuit to ensure the profit income of architectural design projects

A: Artistic creation pursuit to create some important architectural art works and a series of artistic aesthetic models in the human world

4. Rule = Project-management-theory, Architectural design labor division system, Organizational management theory =

{PMT, ADS, OMT}

PMT: Workflow and specification of project bidding and project competition

ADS: Workflow, innovation standards and rules of architectural design

OMT: Rules and regulations of personnel organization and company management