

A STRATEGIC SYSTEM MANAGEMENT ON COST INFORMATION
ABOUT MANUFACTURE BUSINESS ENTITY

原価情報の戦略的システム管理
— 製造業について —

IWAO HAYAKAWA

早川 巖

ABSTRACT In this paper, I would like to report about cost information management on manufacture corporation matched to present management changes. I think, I'd like to research and report the theory and the practice on these cost information system as economic matter of cost and profit management on manufacture corporation.

1. INTRODUCTION

The top managers in business entity manufacturing and selling various products have been making up their important mind about product cost and manufacture-technology based on incorrect management information. That is the reason, alternative information to caution these managers the incorrectness of that product costs is almost nothing, most corporation find this problems after the competitiveness and it's profitability of these corporation have dropped. For defend one's corporation from another companies, I think I'd like to discuss and resolve the problems of product manufacture-costs and it's management, at the same time to study the strategic information management, measuring the correct costs, making the right decision on costs. It's one is strategic cost information management by activity based costing matched to global economic dropping age. It's second is problems of software production cost and costability or assets-ability on manufacture corporation. It's third is cost comparison(DSS) and working improvement on TOYOTA PRODUCTION SYSTEM.

2. STRATEGIC SYSTEM MANAGEMENT BY ABC MATCHED TO U.S. ECONOMY-DROPPING.

The activity based cost management different from traditional cost management is based on the concept of long term variable cost, cost driver, relevant cost etc, and long-term variable cost is fixed cost in short-term, but it is cost of decision support department and supplement management department on variable set-up costs, and operating preparatory costs,

design costs, test & receipt costs in long term. This special character of activity based cost system is a calculatory method to charge manufacture indirect cost to products, by using a lot of allocated base to be said cost driver.

The reason that is emphasis this method in particular, is that calculation to charge manufacture indirect cost to products can be made it more correct, and also, can be computed correctly product costs. The calculation of reasonable products costs result to create the useful cost information about sales strategic plan of products, and the evaluation of management result, cost management etc. Activity based cost systems is to offer business managers useful information to make a corrective decision by using the activity related base be said cost driver and calculating correctively a lot of manufacture cost.

2.1. THE COSTABILITY OF SOFTWARE PRODUCTION COST

With the rapid industrial development of information system, as the importance of software cost measurement is increasing, a theme of cost management on software entity, that is, a theme of assets-ability or experience-nature on software cost is regard it as important, therefore, I would like to study this subject. and I think, I want to match to modern theme of software management.

3. ASSETS-NATURE ON SOFTWARE COST

If I reconsider the meaning of assets-nature to study the assets treatment or the expenses treatment, there are a lot of

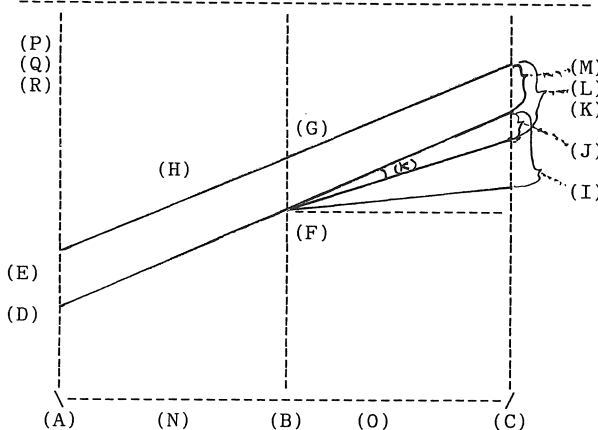
[1] PROFIT MANAGEMENT-TABLE

S:	SALES
V1:	VARIABLE COST UNDER STANDARD COST
DP1:	DISTRIBUTION PROFIT UNDER STANDARD COST
V2:	COST-REDUCTION OBJECTIVE AMOUNT UNDER COST IMPROVEMENT SYSTEM
DP2:	DISTRIBUTION PROFIT
F1:	FACTORY FIXED COST
F2:	SELLING & MANAGEMENT FIXED COST
OP:	OPERATING PROFIT

[2] COST-DOWN POLICY TABLE

COST NAME	COST-DOWN BASE	OBJECTIVE BASE
1.MATERIAL COST		
1.DIRECT MATERIAL COST	AMOUNT/PER UNIT	(%)
SUBJECT MATERIALCOST	SAME	(%)
PURCHASE PARTS COST	SAME	(%)
ANOTHER MATERIAL COST	SAME	(%)
2.INDIRECT MATERIAL COST	SAME	(%)
2.WORKING COST		
1.DIRECT WORKING COST	AMOUNT/PER UNIT	(%)
2.INDIRECT WORKING COST	AMOUNT/PER UNIT	(%)
3.EXPENSE COST		
1.FACTRY DEPRECIATION	COST AMOUNT/PER UNIT	(%)
2.SUPPLEMENT DEPARTURE	COST AMOUNT/PER UNIT	(%)
3.VARIABLE DIRECT	COST AMOUNT/PER UNIT	(%)
4.VARIABLE INDIRECT	COST AMOUNT/PER UNIT	(%)
5.TRANSTORTATION	COST AMOUNT/PER UNIT	(%)
6.ANOTHER	COST AMOUNT/PER UNIT	(%)

[3] COST IMPROVEMENT SYSTEM MODEL TABLE



A:PRECEDING TERM HEAD.
 B:PRECEDING TERM END.
 C:CURRENT TERM END.
 D:COST LINE.
 E:SALE LINE.
 F:PRECEDING TERM END ACTUAL RESULT COST.
 G:CURRENT SALE RESULTS.
 H:PRECEDING SALE RESULTS.
 I:EXPECTED COST IMPROVMENT AMOUNT.
 J:COST REDUCTION OBJECTIVE AMOUNT.
 K:COST REDUCTION OBJECTIVE RATE.
 L:EXPECTED OBJECTIVE PROFIT INCREASING AMOUNT.

M:OBJECTIVE PROFIT.
 N:LAST TERM.
 O:CERRENT TERM.
 P:SALE .
 Q:COST.
 R:PROFIT.

definition on assets-nature, According to solomon's definition in the Guiding Principle on Financial Report Standards, he describes on asset as the property or right to manage on entity, something that can be expected to create future economic benefits.

In a word, for that software is calculated as assets, can be expected to create future economic benefit, and it should be clear that software have been managed by entity report the financial statement.

Therefore, If we think the manufacture of software as research activity, the software product haven't future economic benefit as it's result. The software development cost until now is similar to research activity cost, so that international accounting standard declared to be expensive as research development cost about software product. But, at present, a lot of software product have been using present coding method, and creating the new technology as basing it's present using-technology. Therefore, software production is fundamentally same ideas with traditional costing standard. And also, if software products have two standard that is most important technological feasibility (use value) and sale ability (exchange value), usefulness, as a standard to judge future economic benefit essential character of assets, it's software products should be calculated as assets this two standard. we should judge having or not future economic benefit and we should discuss assets nature of software products about opinion of Japan and U.S related to assets-nature or expensive.

4. JAPANESE ORIGINAL PATTERN COST & PROFIT MANAGEMENT MATCHING TO CHANGE OF MANAGEMENT ENVIRONMENT

About Japanese pattern cost and profit management matching to change of management environment, It's developed that is objective cost management by cost planning based standard costing and, cost management technology method on only Japanese cost improvement system by small adjustment.

As usual, on cost management system on products manufacturing, There is cost management system by standard costing. This system is to maintain it for arrive from actual cost. And, for matching to changes of economic environment, It is necessary to cost improvement technology method related to standard costing of TOYOTA production system (JIT), total quality control (TQC), total productive maintenance etc. on the manufacture time-point. The cost improvement activity maintain present cost, and It says activity reduce this cost to expect cost, and it is divided the product cost improvement activity and factory departure cost improvement activity.

In this point, It is discussed about factory departure cost improvement activity and It is studied about Japanese original cost improvement system, and then, It's discussed about budget profit management table, cost-down policy table and cost improvement system table.

5. CONCLUSION

On fundamental command of Japanese corporation tax law that is software accounting standard, Japanese only one rule, it have been providing that software included within computer machine is calculated as fixed assets, and the purchase software and entrust software is calculated as postponed assets. About one's home development software, the expensive treatment is permitted, and it's depreciation term is five year equal treatment.

In a view point of future economic benefit, the purchase software and the acceptance software should be calculated on the basis of general principles as assets. But the entrust software, about a lack

of the future economic benefit in a view point of the substantial situation on economic transaction, it's possible to treat as expenses and a such standard is necessity. About development software of one's own company, the used-products in one's own company should be treated as expense on the basis of general principles, about selling software, the products having technological feasibility and sales-ability is calculated as assets and it's scope is from system analysis to test after accepted-orders. So this is thought to matching to the actual condition of economic transaction at present.

With regard to depreciation term, the development technology of software have been advancing, life-cycle have got more-shot, so that, It is necessary to take a measure to decide the depreciation term by all kind of software. In a word, we have been discussing a subject of software management for activity based cost system and cost management. As it's result, cost management of software have been developing, there is a possibility changing by economic and social environment, so that we would like to think to studying steady the standard matching to it's situation, and that it is necessary to establish the standard have been a suitable to that management environment.

REFEREMCE

Michiharu Sakurai; Software accounting: assets calculation or expense treatment, ACCOUNTING NO.139-6. 1991.

Hisaya Inoue; The theory on tax accounting of software expense, Business Accounting Vol.44 No.2 1991.

Osamu Nishizawa; Accounting standard on Information processing cost, Business Accounting Vol.42. No.5 1991.

King, Alfred M., 1991.; The Current Status of Activity-Based Costing: An Interview with Robin Cooper and Robert S. Kaplan. Management Accounting [NAA], Vol.73, No.3, September 1991. pp.22-26.

Yasuhiro Monden; Kaizen Costing: It's Concept and Mechanism compared to Standard Cost System. ACCOUNTING NO.143-2.1993. pp.63-74.

Masayasu Tanaka; Cost Improvement Techniques in Cost Profit Engineering system (CAPES) of new products. The Journal of Cost-Accounting Research. Japan Cost Accounting Association. 1992. Vol. 17. No. 1. pp. 1-19.

Iwao Hayakawa; Foundation of The Profit Management Theory. aug. 31. 1992 printed in dou bun kan printed company.

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