

20 March 1992

CTF
Ken Olsen
1992

Professor Raymond R. Reilly
Michigan Business School
University of Michigan
700 East University Street
Room E2540
Ann Arbor, Michigan 48109-1234

Dear Ray:

The name "New Management System" grew informally after we started the process, and in some ways this was unfortunate. It is not a management system. It does not change the traditional responsibilities of a manager and the traditional ways of managing. The list of a manager's tasks and their measurements remain the same.

The New Management System just gives managers information that helps them run the area of their responsibility. It gives them the knowledge and information they need to be business-like. The NMS does not in any way define how a manager should manage; it simply gives them the information a business person should have to allow them to manage. It gives information which allows them to balance the expenses and investments, with the income they expect to develop and the profit they promise. The system then gives them information to see how they are doing relative to their plan, and allows them to adjust and improve the plan as time goes on. It in no way implies a limitation of a manager's responsibility to avoid dumb things, duplication and waste, and to avoid expensive conflicts and internal competition. It also does not limit responsibility to ensure we have, at all times, a complete set of products for both our sales people and customers.

The NMS is not a management system at all. It simply provides information that allows managers to run their operation in a business like way.

A few years ago we were at a banquet in one of the dining rooms of the Great Hall in Beijing. Throughout the evening, the entire conversation with the minister whom I sat next to was through a translator, except when I asked what China did to go from a shortage of food to a surplus. Without the translator, he immediately snapped back by saying, "We had a reform." He was very conscious of how much a farmer could make on every egg, on every chicken, and how many chickens a farmer had to have in order to make more money than a minister.

By allowing freedom and competition and by having a simple capitalistic measurement system for reward, they revolutionized their food production.

A year or two ago, we broke the Company into pieces using the New Management System as the tool to allow each area to be run like a business and to make a profit if they did their job well. However, we have thousands of overhead and finance people who, of course, cannot leave it alone. They want to incorporate all sorts of things into the measurement system to motivate people. Since they are so afraid it is too easy to make too much profit with a straightforward system, they have to keep complicating it to ensure it is not easy to make a profit.

The original New Management System was quite simple. Its only goal was to give information to allow Business Units to run like businesses, with the assumption they would act like businesses.

The Product Generation group which included Engineering and Manufacturing, could make a profit if their product is sold at the price they set.

The selling Business Units had freedom for what and how much they would spend. They made profit if they got more than the sum of the BUP price and all their expenditures.

Of course, in order to keep thousands of overhead people busy, they had to complicate things. But, in spite of this, it revolutionized much of the organization. It was assumed that product groups being run like a business would mean they would have the obvious goal of having a complete line of integrated products to be sold, every day of every year. Instead, we made more products and changed more products than we did before the New Management System. Therefore, we had to make a small change in the New Management System. However, we will not change the sales part of the system, except I would like to get back to a simpler system with a lot less overhead people. We will not try to change Engineering into something they have no interest in doing, but instead, we will give the business plan for products to three marketing groups. These marketing groups will then contract with Engineering for specific, well-spelled-out products, and they will specify their needs. The marketing groups will have a contract with the Board of Directors to, at all times, have a set of integrated products for the Sales Department.

This means, the marketing groups have the obligation of setting the BUP price and measuring the profit with all of their costs, plus the engineering for which they contracted, plus the manufacturing and all the overhead involved. This means, they will then have a contract with Engineering, not only for a specific product, but for the total engineering cost, the manufacturing cost, and completion of engineering and time to first delivery.

The engineering costs will not be just those included in "the engineering budget," but will be the total cost for the product which includes industrial design, tooling, inventory, spare parts, training and all the things that together cost much more than the engineering budget for a new product. Like any contractor, the marketing groups will review every engineering budget once a month on the following specifications: delivery, cost, and competitive position of the product.

The marketing groups will then generate a BUP price, which includes all the costs involved, and they will have the obligation of not only delivering a line of products at all times, but also making a profit.

Under the original New Management System, we never got around to considering the importance of overhead on the cost of products within Engineering. However, with the reformed system, every contract will review the overhead incurred, and whether or not it is worthwhile.

The marketing groups will do several activities, and they all should be budgeted separately. The generation of products is one activity. This includes all the things involved in engineering and manufacturing, but also a certain amount of work within a marketing group. They are responsible for systems engineering, which means specifying everything that makes systems fit together. This is largely mechanical; therefore, it is often avoided by computer scientists. However, this is where the cost of inventory and tooling overwhelms almost all other costs. In order to systems engineer something, the group will often have to build a mock-up system--maybe even a working operating system--in order to test the ease of installation and the simplicity of managing a system. This means they will often demonstrate a system before they contract with engineering to have it built.

There is a tendency in a reorganization to build up staff groups who have no limitations on what they spend, but expect their costs to be automatically dumped on other groups. There will be many people who will want to dump their expenses on these marketing groups, and so it is very important that all costs dumped on their budgets be itemized and spelled out with great care so the marketing groups can accept or reject them.

Most high tech companies are very naive on advertising. They think it is something they have to do blindly and not worry about the cost. It is very important that advertising and other marketing costs be clearly reported and clearly identified as to the effect on the cost of our products.

People have to face the question of whether is it easier to sell a product at a low price with no advertising or at a high price with advertising. There is no easy answer to this, but it is a question at which high tech companies normally do not want to look.

We will continue to give information to all groups, including engineering groups, so they can look at their groups from a business point of view. However, the BUP setting, the selection of products and the systems engineering of products will be done within the marketing groups.

With best wishes.

Sincerely yours,

KHO:eh

To Distribution List:

ROSMOND @GEMVAX @VAXMAIL,
RIZZO @GEMVAX @VMSMAIL,
PETRALIA @CUPMK @VAXMAIL,
ONEAL @SOLVIT @VAXMAIL,
MARCUS @PAMSRC @VAXMAIL,
MAKO @VAXWRK @VAXMAIL,
killeen @buffer @vaxmail,
KADLEC @VAXWRK @VMSMAIL,
ROGER FOULKES @PKO,
FISHER @GEMVAX @VAXMAIL,
FALLON @ACESMK @VAXMAIL,
DICK WESCHE @PKO,
DEB SWAN @PKO,
CATHY SLOAN @PKO,
FARZANEH SHARIFI @PKO,
JAMIE RYAN @PKO,
CAROL ROZWELL @PKO,
CATHY ROBINSON @PKO,
GEORGE PENDLETON @PKO,
bill mish @pko,
lakshmi menon @pko,
MACGILLIVARY @ASABET @VAXMAIL,
RICH HENDRICKSON @PKO,
EYRING @ULTRA @VAXMAIL,
JANICE EIFRIG @MLO,
DONNA CERIANI @MSO,
RON CALABRIA @PKO,
BERGER @ASABET @VAXMAIL

To Distribution List:

omansky @asabet @vaxmail,
BARBRIE @ASABET @VAXMAIL,
BREEDING @ASABET @VAXMAIL,