METRICS AND MANAGEMENT

"Are we measuring and rewarding the specific behavior we want?"

Jack Welch[1]

Metrics are a *sine qua non* condition of an efficient management. Indeed, management cannot be based only upon intuition: it has to be underpinned by figures. Those figures come from various operations of the company, from initial design to after-sales servicing, and are gathered either automatically from applications programmes such as ERP as well as from transactions ETL or from manually reporting by agents themselves. Relative figures or trends are sometimes as useful if not more than absolute ones.

The collected figures are crunched and translated into key indicators or diagrams: they are used namely to verify whether the results are consistent with objectives (they allow too to make decisions and to look forward to the future); in case of insufficiency of obtained results, corrective actions must be worked up: this is one of the main roles of supervisors who are helped for this task by peculiar softwares displaying dashboards in very smart ways.

In fact, the difficulties are laying elsewhere: the choice of the indicators, their link to the objectives and their strategic value, the weight to be assigned to them in terms of performance and cascading accountabilities. To solve those issues, several features have to be considered:

- outputs vs outcomes

- short term vs long term

- suboptimization vs global optimization

- lagging vs leaders indicators

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[1] Jack Welch with John A. Byrne, Jack, straight from the gut, Warner Business Books, New York, 2001

Outputs vs outcomes

When you are trying to evaluate a process, the first thing you do is to look at what is going in and what is going out of a black box which symbolizes the process or the involved task/activity, that is inputs and outputs; you measure them and you may take into account what takes place inside of the black box such as immobilized assets during operation for instance. In doing that, you deal with quantitative data and you miss qualitative features which qualify the result of the operation and consequently the operation itself. You must have in mind that a process is always intended for the benefit of a client –not necessarily in the commercial meaning of the word- and that the client's satisfaction is of prime importance; let us observe that there may be several clients, each one having his own desiderata. Thus, it is not sufficient to measure the outputs if the outcomes do not suit to the expected results. Let us observe that every outcome is not always aspired to because there sometimes exists side-effects.

This implies that you must weigh your figures by qualifying them according to various criteria; those criteria in turn may be qualified by other criteria and so on, in a recurrent way. The idea is that the figures you keep in after weighing must mirror the degree of the client's satisfaction or the alignment of results with objectives.

At the same time, the figures ought to be used as an incentive to improve the results; thus, the principles of weighing have to be quite transparent, especially if they come into the computation of rewards.

Short term vs long term

Of course, management is concerned about both short term and long term results. In fact, market value of a public firm includes current value and an increment exhibiting the future value (taking risk into account). If future value expectation is partly based upon current value, it does not entirely depends on it; it is possible that current value would be swollen to the prejudice of future value for, when you give up some assets, you may momentarly increase the present profit but pledge the future

Thus, the figures and associated incentives ought to take this dilemma into account. This implies that managers would be conscious of the consequences of present actions upon the future situation and able to communicate their conclusions to the concerned stakeholders The greatest difficulty, of course, is that they have not all the same interests and the same time horizon.

Suboptimization vs global optimization

You may try to get the best performances for a given operation, function or business unit. This does not mean that this is the best solution for the company as a whole. Sometimes, you may have interest in not obtaining the best figures to the extent that they would reduce the productivity elsewhere in greater proportion,either upstream or downstream.

This means that every manager has to consider any result holistically and act for the sake of the organization. Therefore, incentives must be designed to stimulate them to have this state of mind.

Lagging vs leaders indicators

Among the various available figures, you have ones that only express the past results: they are important of course but they need to be mined in order to discover early signals; more useful for the future are key drivers which are the seeds for future development.

If we look at a sequence of events or operations, we commonly observe that the item preceding another one is its cause and the following one its consequence though this is not always true. Some simultaneous or isolated features of a cause may be taken for leaders indicators or performance drivers (it depends on the kind of obtained effect) whereas some features associated to an effect may be considered as lagging indicators. Those indicators are most of time multi-dimensional. Such cause-and-effect relationships may be used to foresee events or to improve behaviors/outcomes.

Of course, sometimes, it is not at all obvious to identify features of an item (whether be it an agent or an action, an opinion and so on) and cause-and-effect relationships between them. This may involve statistical and analytical studies for which there exists sophisticated softwares. The true difficulty is sometimes to gather trustworthy data.

Conclusion

Metrics are not a simple mania, they are a genuine management tool; but figures must be very cautiously chosen. They have to be in the service of the firm’s strategic goals and not only of the efficiency (metric more related to productivity) of such or such part of the organization. Effectiveness (metric more related to quality, sense, intention and so on) must always be sought for: that is outcomes, long term, global optimization and leaders indicators.

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