

Performance measurement systems in marketing & sales: quality criteria, basic principles, implementation

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"Marketing must make itself measurable and prove its value." This claim underlines the increasingly perceived need in both science and practice to accurately assess, demonstrate and optimize marketing's contribution to firm performance and value (e.g., Rust et al. 2004, Mintz/Currim 2013, Hanssens/Pauwels 2016). In this context, the use of marketing metrics represents an important control instrument for management. The present article outlines functions, quality criteria and basic principles for developing marketing and sales performance measurement systems. The risks of a one-sided focus on marketing metrics are also highlighted. Furthermore, the authors discuss the implementation of marketing performance measurement systems on the basis of a practical example.

1 Metrics as central elements of marketing management control

Marketing management control constitutes a classic interface between two areas of business administration. The relationship between marketing and management control is ambivalent. On the one hand, both are overarching management concepts. On the other hand, a natural conflict of objectives and interests arises where marketing is regarded as *market-led management* and management control as *results-led management*.

The tasks of marketing management control are derived from the control loop of marketing decisions and outlined in five steps (Reinecke 2020). The model is based on the St. Gallen Management Model (Ulrich/Krieg 1972) and the management control literature (Weber 1999 and Weber/Schäffer 2020, Reinecke/Janz 2007) (see Fig. 1):

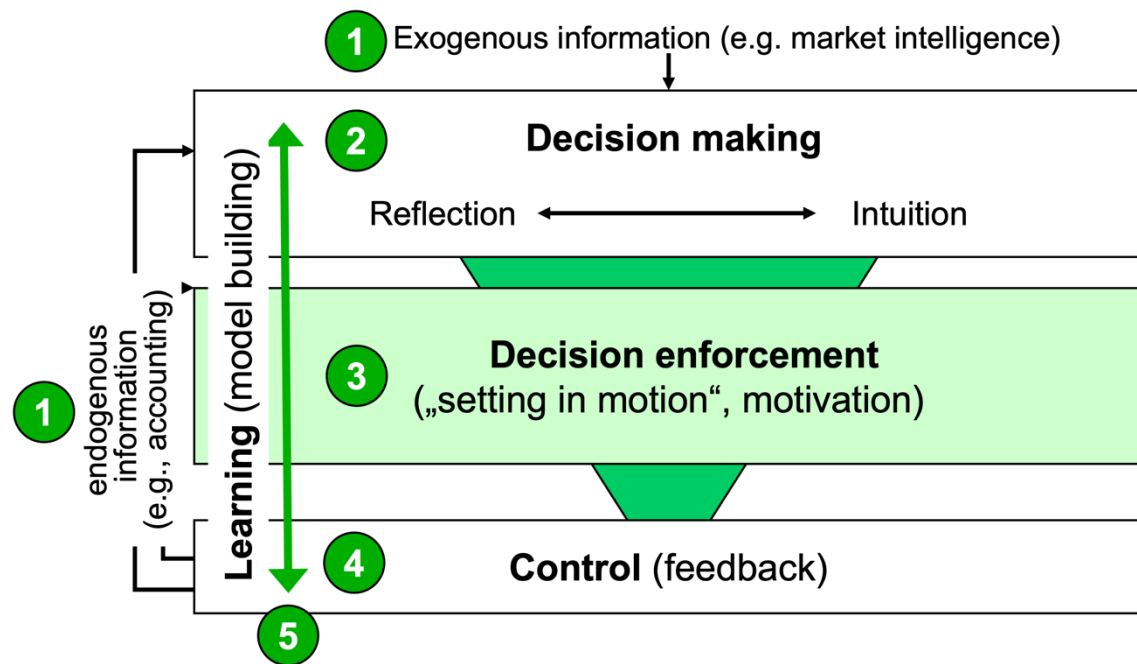


Figure 1: Marketing decisions - the control loop

Source: Reinecke 2020 based on Ulrich/Krieg 1972, Weber/Schäffer 1999 and Reinecke/Janz 2007.

1) *Information supply*: Before a decision is made, it is important to provide a sufficient information base. External information (*market research*) on customers, competitors and sales agents, but also on society, technology and politics is as relevant as internal company data, for example derived from human resources, production, logistics and, particularly, *accounting*.

2) *Decision-making*: The decision-making process entails the evaluation of alternatives and eventually the selection of one. Decisions can be based either on planning (classical reflection) or on the intuition of management (Weber/Schäffer 1999) – also referred to as "gut feeling".

3) *Decision enforcement*: Strictly speaking, the execution of activities is not an actual management task, but the "setting in motion" (Ulrich/Krieg 1972) and thus the motivation of those assigned with execution is. Consequently, this step is strongly associated with human resources management and leadership.

4) *Control*: Controls are comparisons of actual and target performances (Weber/Schäffer 2020, p. 272). In most cases, setting target indicators is only purposeful if they are also controlled - and control ultimately only makes sense if consequences can be derived. Hence, the following principle applies to marketing: Marketing management control is hardly possible without

marketing planning, and marketing planning without control is mostly pointless (see also Böcker 1988, p. 22).

5) *Learning*: This aspect of the decision-making process refers to the use of control information to optimize the information basis for future decisions. "Learning does not happen automatically. It requires a systematic examination of our experience" (Russo/Schoemaker 2002, p.198 f.). In the view of the authors, this area provides the greatest potential for optimization of marketing planning and control.

The key function of marketing management control is to ensure the *effectiveness* (efficacy) and *efficiency* (profitability) of market-oriented management (Reinecke/Janz 2007, p. 38 f.; analogously Hanssens/Pauwels 2016, p. 177). The use of marketing metrics is crucial to fulfill this function. Metrics are deployed at all five outlined steps in the marketing management process: in information supply, actual decision-making, decision enforcement, control, and the learning process. They are thus *indispensable* for management control.

Effectiveness and efficiency are understood as follows (in detail Lasslop 2003, p. 8 ff. and Bonoma/Clark 1988): *Effectiveness* in the broad sense refers to the efficacy of a given strategy, and thus to performance output: Are pre-defined objectives being achieved? This requires absolute indicators to operationalize the objectives. *Efficiency* is a question of degree: A measure producing a certain output/input ratio is said to be efficient where no other measure could create a better ratio (whereby output must exceed input). Thus, efficiency is usually expressed by means of ratio indicators.

2 Objectives and quality criteria of performance measurement systems

"Metrics [...] are figures that inform about a quantifiable state of affairs in a condensed form" (Staehle 1967, p. 62). The intrinsic characteristic of metrics is thus *the condensation of quantified information* (Wolf 1977, p. 11; Gritzmam 1991, p. 30 f.). They reduce the risk of technical and semantic communication disturbances from the information transmitter to the receiver to a minimum (Staehle 1973, p. 223). In principle, however, metrics only gain significance through *comparisons* (Siegwart/Reinecke/Sander 2010, p. 24): These are either

internal time comparisons, target-actual comparisons, or object comparisons, in which different business units or companies are analyzed with regard to the same metrics at the same point of time or period (Küting 1983, p. 239).

In the following, performance measurement systems are understood as a purpose-oriented, structured outline of business metrics. They link selected performance indicators that are interdependent and complementary to each other. Similar to individual metrics, performance measurement systems primarily fulfill information tasks. Three *functions* can be distinguished (Geiss 1986, p. 104 ff.; Caduff 1981, p. 45 ff.): the *analysis function* (example: metric system of the balance sheet analysis), the *steering* or *control function* (certain metrics are used as target values, for example return on investment, market share or customer satisfaction) and the *documentation function* (recording of target-actual values).

What are the requirements for performance measurement systems (see also Siegwart/Reinecke/Sander 2010 based on Diller 1976; Caduff 1981; Geiss 1986; Reinecke 2004)? A metric system is useful (purposeful) if it is problem-related, consistent, flexible, user- and organization-friendly, and efficient (see Figure 2).

A system of key figures is *problem-related* if the metrics used correspond in time and fact to the objective pursued (Geiss 1986, p. 11). In particular, a distinction must be made here as to whether the system is designed to serve comprehensive, analyzing diagnoses by means of a large number of metrics or whether it is to be a strongly focused control system with few metrics. Principally, only one metric should be assigned to each planning and control-relevant issue (Palloks-Kahlen 2001, p. 523). It is not possible to name a maximum or ideal number of metrics for a system; however, with reference to psychological studies by Miller (1956), no more than seven (plus/minus two) metrics should be selected in focused performance measurement systems, as this would correspond to the maximum processing capacity of the human mind.

A useful performance measurement system is ...	
problem-related	• Metrics correspond in time and fact to the objective pursued as a diagnostic or control instrument • Adequate level of information (level of aggregation, timeliness, periodicity) • Adequate information quality (validity and reliability) • Robustness (protection against manipulation and unwanted suboptima)
consistent	• Cause-and-effect relationship (i.e., usually model-based, early warning) • Free of contradiction • Balanced selection • Clear operationalization for measurement
flexible	• Possibility to dynamize the system, adaptability to changes (possibility to add and eliminate key figures) • Integrability of external data (e.g. from market research or digital sources) • Modularity
user- and organization-friendly	• Compatibility with organizational culture • Perceived usefulness of the system for users or stakeholders (subjective meaning, affectedness, response options, information content) • Credibility of the system (realism, completeness, specificity, consistency/validity) • Standardization • Integration into management and control processes • Compactness, transparency • Visualization and compression
efficient	• Reasonable effort of data collection and processing • Automation, degree of support through information technologies

Figure 2: Requirements for performance measurement systems

Source: Based on Siegwart/Reinecke/Sander 2010, p. 55 f. and Reinecke 2004, p. 77 and the literature cited therein.

Problem adequacy also means that data is provided at an appropriate level of information. Depending on the problem at hand, certain standards are expected with regard to completeness, truth, topicality, accuracy and objectivity of the information provided. For example, different information is required for sales force management than for strategic brand management. Furthermore, the constructs to be measured also influence the periodicity: driver variables, such as the number of sales force visits, should be reported more frequently, while more inert result variables such as customer satisfaction should be reported less frequently (Hronec 1996, p.

161). If a metric's values remain unchanged over a longer time period, its information value should be questioned. However, if the values are extremely volatile, it should be checked whether the metric actually is a suitable, reliable indicator. Problem adequacy ultimately also includes the question of *robustness*: How difficult is it to obtain diverging, perhaps even manipulated results from the metric system (Caduff 1981, p. 30)?

Consistency refers to the notion that a metric system should comply with the "principle of freedom from contradiction" (Küting 1983, p. 240). It facilitates the analysis of cause-and-effect relationships. Consequently, a marketing performance measurement system should be based on a suitable model, if applicable (see also Hanssens/Pauwels 2016, p. 181) - for example, the marketing mix, the AIDA formula, the customer journey, the sales funnel, or the core tasks of marketing. To ensure consistent comprehensibility and interpretation, metrics must be clearly operationalized and documented.

The required degree of *flexibility* depends on the problem at hand. Metric systems in marketing accounting should generally not be flexible, whereas strategic marketing performance measurement systems must always be adapted to the respective situation and objectives. A modular structure increases flexibility (Schwaninger 1994, p. 300).

The requirement for *user- and organization-friendliness* is crucial. As previously outlined, a performance measurement system fulfills information tasks. From an application-oriented perspective, this raises the question of whether and when a person actually uses information from a performance measurement system. This depends on the one hand on the perceived (!) usefulness and on the other hand on the credibility of the information. The perceived usefulness of information is driven by the subjective meaning, the degree of innovativeness, and the target relevance (= involvement) for the user as well as by the degree of influenceability by the user (Shrivastava 1987). The credibility of information is influenced by the following properties of the information provided: the relation to reality, the scope and degree of completeness and accuracy, the degree of specificity with which a problem is treated, consistency, and the validity from a theoretical and methodological point of view (John/Martin 1984).

The more specifically a metric system can respond to user requirements, the higher its benefit is valued and the more intensively it is used (Day 1976, p. 47). However, this results in a conflict of objectives for performance measurement systems between user and job specificity and

standardization. Standardization of performance measurement systems has many advantages, as it promotes uniformity, traceability, and comparability of information over time. One way of resolving this trade-off is to distinguish between a standardized, person- and user-independent part and an individual, customized subsystem (Gritzmam 1991, p. 39 ff.).

Numerous studies outline that a management-oriented depiction of information influences its use: A visualization in the form of a so-called "cockpit", "dashboard" or "scorecard", entailing meaningful graphics, can effectively support information processing by illustrating developments and cause-and-effect relationships (Hanssens/Pauwels 2016, p. 184 f.). Focus, clarity, and trend recognition are key opportunities of cockpit representations, but they can also become a risk if they are applied in a one-sided, schematic, and incomplete manner (Brunner et al. 1999, p. 25). Performance measurement systems should therefore be commented on in two ways: First, the principle "No figure without comment!" already applies to the preparation phase (Horváth/Gleich/Seiter 2020, p. 331). Second, performance measurement systems should be the basis for internal discussions and thus be commented on when they are used. The more the system is geared to control aspects, the more important it is to integrate it into the management process. At the Liechtenstein company Hilti (fastening technology), for example, marketing cockpits are the basis for discussion at both top management meetings and meetings between profit center or sales managers and their superiors.

Like all management tools, performance measurement systems are subordinate to the imperative of *economic efficiency*. However, it is hardly possible to quantify what economic value the better decision support by performance measurement systems will provide in advance. Even so, economic efficiency should be taken into account during the implementing phase, particularly when information technology is selected. Information technology facilitates the collection of information (e.g., online marketing data) through automation. It increases the codification of information, thus making its content more precise, and improves the diffusion of information within an organization (Simons 1995, p. 186 ff.): Information can be distributed faster, more securely and more widely than with traditional paper flow. However, a useful marketing metrics system is not primarily a matter of information technology. In the view of the authors, it is not always advisable to invest in specialized software for performance measurement systems in marketing and sales. Rather, it can be advantageous to keep the initial software solution relatively simple (for example, by means of prototype programming based on standard software already available in an organization).

3 Ideal basic structure of a marketing performance measurement system

The following explanations describe a feasible ideal-typical basic structure (Figure 3) for designing an integrated marketing performance measurement system for a business unit (e.g., division, brand, national or sales entity) (for an overview of classic marketing KPI systems, see Reinecke 2004). Thus, the measurement system is not limited to a single marketing instrument (e.g., advertising), a channel (e.g., social media), or a specific area of responsibility (e.g., key account management or online marketing), but rather comprises the overall marketing and sales area. As such, it entails both target/planned variables and actual/control variables for management.

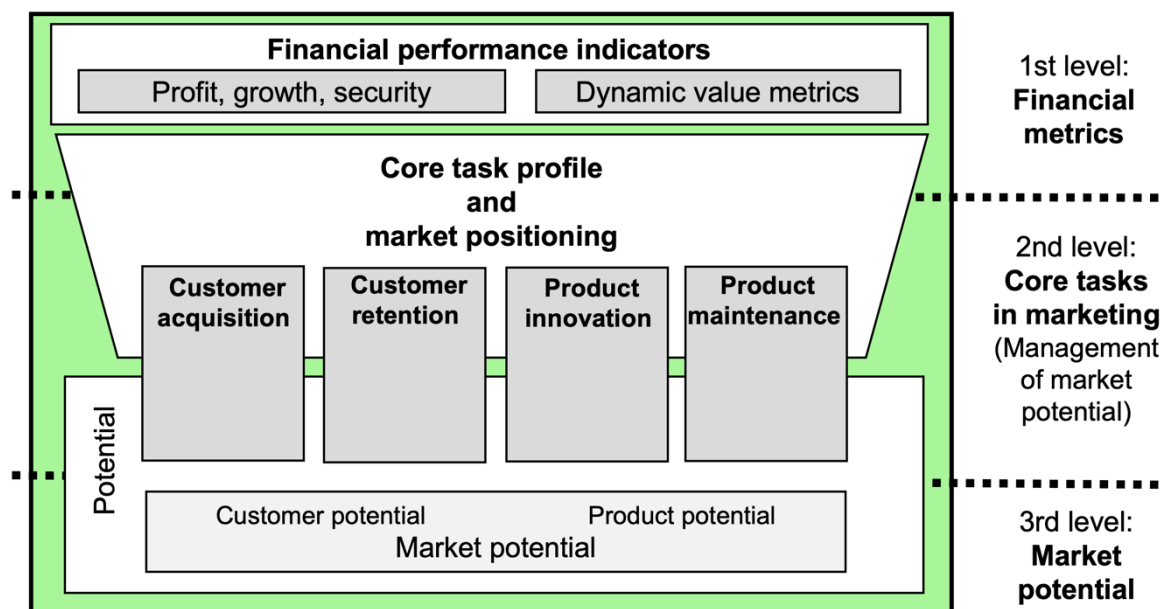


Figure 3: Ideal-typical structure of a task-oriented marketing performance measurement system
Source: own presentation based on Reinecke 2004, p. 384.

At the heart of the *first level* of the metric system are *key financial metrics*. These measure the extent to which the pre-defined profit, growth and security (risk-avoidance) targets of a company or business unit have been achieved. These formal economic performance indicators can be specified with the help of the core task profile: It operationalizes the areas (customer acquisition and retention, product innovation and maintenance; Tomczak/Kuß/Reinecke 2016) in which profitable growth is aimed to be achieved.

Since financial indicators alone cannot express the content of marketing results nor implement strategies, the management of customer and product potentials is represented on the *second*

level; of particular significance are performance indicators on market positioning as non-monetary target and result variables. This *task-related level* defines and substantiates the marketing strategy.

In addition, the *third level* in the performance measurement system evaluates long-term market potential. The treatment of market potential (2nd level) is not only reflected in the financial results (1st level), but also has an impact on potential itself (3rd level). Effects stemming from changes in brand and customer equity must be taken into account to ensure marketing effectiveness in the long term (Ambler 2003, p. 7) - and in particular to prevent the implementation of marketing measures that temporarily maximize financial results but jeopardize the company's own potential at the same time (for example, milking the value of a brand or jeopardizing a previously sustainable customer base). Since third-level metrics only change in the long term, they are often not integrated in marketing cockpits or scorecards. This level is also not discussed further in this article; reference is made to the literature (Reinecke 2004, p. 333 ff.).

3.1 Financial performance indicators as the first level of the performance measurement system

As key *performance indicators*, financial metrics fulfill the function of reducing complexity; they also serve to link the marketing performance measurement system and cross-functional corporate management control. Classic financial performance measurement systems tend to focus on return-on-capital factors, such as return on equity or return on investment (as in the DuPont System of financial control). However, taking a functional view on marketing and sales, such indicators are largely unsuitable because it is extremely difficult to define marketing-specific capital/asset factors which are attributable and controllable, or usefully relate these to marketing results (Kiener 1980, p. 168 and Köhler 1993, p. 288).

Marketing scientists and managers alike have made attempts to define the "optimal" financial performance indicator (see also Hanssens/Pauwels 2016, p. 175 ff.). However, bearing in mind that every metric is a model, and that every model is always a simplified expression of reality, there cannot be such thing as an optimal performance indicator. In particular, metrics such as "return on investment" or "return on marketing" have been heavily criticized in scientific literature (see Ambler/Roberts 2006). In marketing science (Diller 2001, p. 6), it has proven to

be effective to differentiate among the target categories of profit or *profitability*, *growth* and *security* (risk avoidance). As these targets both complement and conflict each other to a certain degree, they cannot all be maximized at the same time. This necessitates goal prioritization and weighting. For listed corporations, growth is often the guiding principle of corporate development, whereas family-owned companies accord a greater priority to risk avoidance. This has a significant impact on marketing metric selection and deployment.

It is important to note that the weighting of key financial objectives is ultimately a decision made by the company's owners, which must be accepted by marketing management as a guiding principle for action. For example, the marketing management of a listed company must support a strategy oriented toward shareholder value. Likewise, marketing executives of family businesses would have to accept that top management occasionally deliberately forgoes growth because this could jeopardize the security goal of independence from investors.

Profit	▪ One-period-result: profit, imputed profit (balance of revenue and costs), marketing/sales contribution to operating income (profit contribution less fixed costs) ▪ Capital profitability: return on investment, return on assets, return on equity ▪ Relative to achieved growth: sales profitability, ratio of marketing or sales contribution margin to revenue ▪ Value-based profitability: revenue to expense ratio
Growth	▪ Revenue (growth), market share (value): absolute, relative (to industry or main competitor) ▪ Sales (growth) (units), market share (units): absolute, relative (to industry or main competitor) ▪ Capital turnover: net sales to total capital ratio ▪ Stock turnover: rate of inventory turnover
Security (risk avoidance)	▪ <i>Analysis of receivables: account receivables, write offs, credit period</i> ▪ <i>Liquidity ratios: cash ratio, quick ratio, current ratio, ratio of liquidity to cash receipts</i> ▪ <i>Autonomy: debt to equity ratio, degree of equity financing</i>

Figure 4: Selected key financial indicators

Source: own presentation based on Reinecke 2004, p. 247.

Figure 4 outlines selected key performance indicators of the three target categories; particular reference is made to key performance indicators frequently applied in reality (Reinecke 2004, p. 142 ff.). In this context, the profit contribution serves a central interface function as a growth and profitability figure (Becker 2019, p. 61; Meffert et al. 2019, 292).

The metrics in the three target categories often attract criticism on account of their static nature (Reichmann/Kißler/Baumöl 2017, p. 314 f.). In theory, *cash flow* has become the established gauge for evaluating both the financial position and the earnings situation (Horváth/Gleich/Seiter 2020, p. 274 f.). The discounted cash flow integrates all three target categories as well as the time factor: It focuses on discounted profit while taking account of growth as a value driver. The objective of risk avoidance and security is reflected in the selected interest rate as well as the plausibility of the underlying basic assumptions.

The following aspects regarding financial ratios relevant to marketing must be emphasized:

1. The determination and prioritization of principal corporate objectives (growth, profit and security) significantly influences the selection of key (marketing) performance indicators.
2. The key financial metrics should reflect the target system. From empirical results (Reinecke 2014) it can be concluded in most cases that profit and security targets must be integrated in performance measurement systems to a greater extent than it was previously the case. Growth targets tend to be sufficiently covered.

The *core task profile* serves as a pivot point between formal economic factors on the one hand and the psychographic parameters of purchasing behavior on the other: The latter form a central hub in marketing. The connection is established via the realized purchases (as a result of complex buying behavior) and sales (as a driver of growth and profit).

The core task profile to which a company aspires indicates which of the four core tasks (customer acquisition, customer retention, product innovation, and product maintenance) should be the focus of marketing planning (detailed Tomczak/Kuß/Reinecke 2014, p. 142 ff.). It may be planned and controlled, for example, by means of sales and profit contribution analysis. The example in Figure 5 shows the typical core task profile of a so-called potential exhauster, in which the sale of existing products (product maintenance) to existing customers (customer retention) accounts for both the greater part of sales and an even greater proportion of the profit contribution generated.

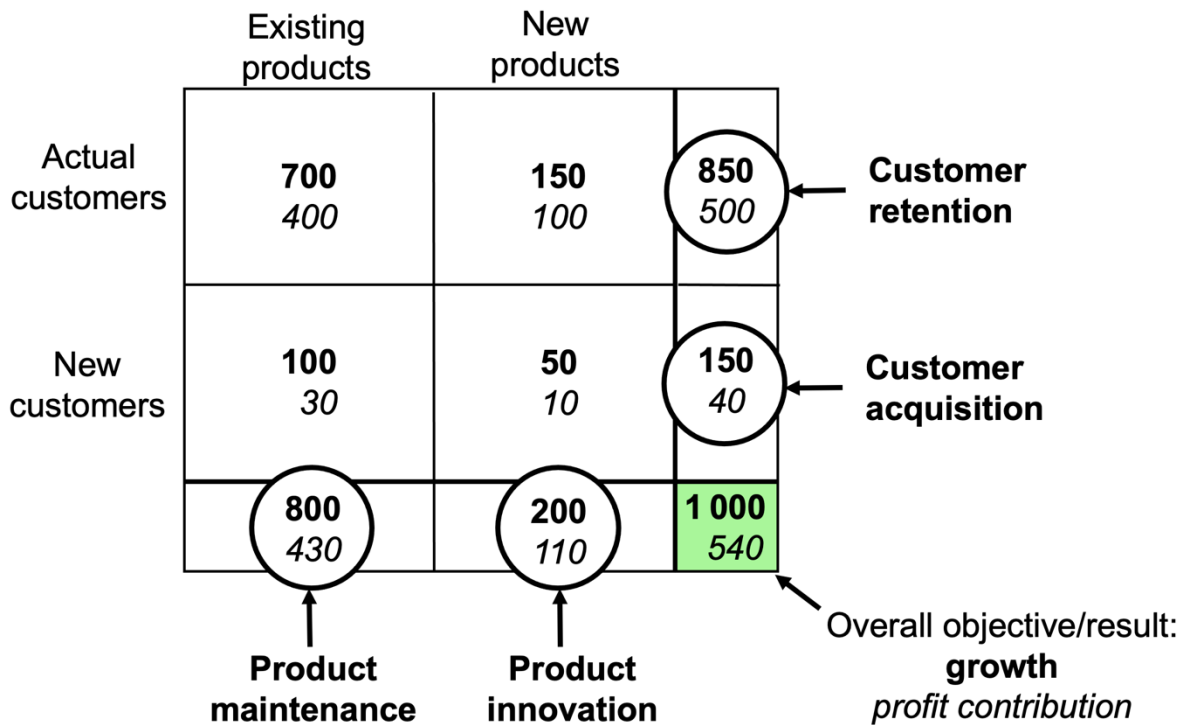


Figure 5: Analysis of the core task profile
Source: Reinecke 2004, p. 253.

3.2 Task-related metric modules as second level of the performance measurement system

Without a strategic foundation, value-oriented metrics are meaningless. For this reason, formal economic indicators must be supplemented with marketing-related performance indicators. In contrast to formal economic targets, formal mathematical analyses are of little relevance to psychographic marketing metrics because the underlying complexity of buying behavior cannot be "calculated" (Köhler 1981, p. 280, Meffert et al. 2019, p. 292 ff.). Two metric areas can be distinguished:

1) Comprehensive performance indicators of market positioning

At a higher level, key performance indicators must reflect the content of the marketing strategy and the (targeted) *market positioning*. Taken together, these marketing objectives signify those preferred states to be aimed for (Meffert et al. 2019, p. 292) through the application of marketing instruments. Reference to the relevant market is invariably critical to the corresponding operationalization of positioning variables according to content, scope, and time (Meffert et al. 2019, p. 294). These *non-monetary key performance indicators* (Figure 6) are strongly

influenced by the strategic orientation of the company (Tomczak/Kuß/Reinecke 2014, p. 95 ff.). A universal catalog is not possible.

Metric		Operationalization
Market share	Unit based	Percentage of own sales in units on total sales in units of all suppliers in the relevant market
	Value based	Percentage of own revenue on total revenue of all suppliers in the relevant market
	Customer based	Percentage of own customer base on total (potential) customer base
Pricing	Relative price / price premium	Ratio of value based vs. unit based market share
	Price range compliance (unit based)	Percentage of sales in units achieved within the targeted price range of total sales
	Price range compliance (price based)	Percentage of revenue achieved within the targeted price range of total revenue
Market penetration	Numeric distribution rate	Percentage of stores that have listed the own brand on the total number of stores that have listed brands in the same category
	Weighted distribution rate	Percentage of the revenue of stores that have listed the own brand on the total revenue of stores that have listed brands in the same category
Awareness	Recall (unaided awareness)	Percentage of target customers that name the own brand spontaneously
	Recognition (aided awareness)	Percentage of target customers that recognize the own brand
Image	(Brand) likeability	Percentage of customers in the relevant market that rate the company/brand as likeable
	(Brand) consideration	Percentage of customers in the relevant market who would consider the company/brand when making a purchase.
	(Brand) status	Ratio of awareness, (brand) likeability, and (brand) usage
	(Brand) image	Type and degree of attributes and competencies associated with the company/brand/product
Customer satisfaction	Customer satisfaction index	Percentage of customers who are (very) satisfied with the company/brand/product
	relative customer satisfaction	Ratio of own customer satisfaction index to customer satisfaction index of the main competitor

Figure 6: Selection of key performance indicators for market positioning

Source: own representation closely based on Reinecke 2004, p. 258 and Becker 2019, p. 65 ff.

2) Task-oriented key metric modules

In addition to the key performance indicators of market positioning, *metrics* can be defined *for the four core tasks customer acquisition, customer retention, product innovation, and product maintenance* (Reinecke 2004, p. 255 ff.). They address the questions of why a company is particularly successful at a respective core task and which measures could be appropriate for successfully tackling another core task.

To ensure a structure, it is necessary to base each of the four core tasks on a (simple) model which enables cause-and-effect analyses to be performed. For example, a simplified *chain of effects of customer retention* can be summarized as follows: Actions focused on customer retention initially result in customer satisfaction, which leads on to positive customer intentions and thus to customer retention (Zeithaml/Berry/Parasuraman 1996, p. 33 and Helm 1995, p. 29), which in turn produces economic success (Homburg/Bruhn 2017). For a company to evaluate its success in this core task, it must analyze customer retention measures (processes enacted between company and customer) and apply *intentional effectiveness control* (indicators of intended purchasing behavior which can only be measured indirectly) as well as *actual effectiveness control* (measurement of actual purchasing behavior) (Figure 7) (Diller 1996 and Homburg/Bruhn 2017). In addition, indicators that measure the customer structure must be taken into consideration.

Processes	Contact intensity: Number of contacts with regular customers within a defined period Offer pace: Average duration of offer preparation Number of offers: Number of quotes provided to regular customers Perfect Order: Share or number of deliveries that have been completely and correctly delivered with the correct invoice to the right place at the designated time
Image	(Relative) customer satisfaction: Comparison of customer expectations with perceived customer expectations (in comparison to competitors). Perceived price: Regular customers' evaluation of the affordability of the good offered by a supplier Perceived value for price: Regular customers' evaluation of the price-value ratio of the goods offered by a supplier
Intentions	Willingness to cooperate: Willingness of the customer to cooperate with a supplier (e.g. regarding a new product development) Willingness or intention to recommend: General willingness or actual intention of the own customers respectively to recommend the supplier to other customers (measurement e.g. via Net Promoter Score).
Customer behavior (besides purchase)	Social media engagement: Number of customer reactions (likes, shares, comments) on social media platforms Visit frequency/duration: Number and duration of customer visits (e.g. stationary store, web store, webpage) Referrals: Number of referrals within a defined period
(Buying) behavior	Revenue per purchase: Average purchase amount by regular customers Purchase intensity: Number of purchases within a defined period Repurchase rate: Percentage of customers (of the total customer base) that made a repurchase (Weighted) customer retention rate: Percentage of customers of t_0 that remained customers in t_1 (per year or regarding the duration of the customer relationship) (possibly weighted by revenue or profit contribution) Discount share on revenue: Average value of discounts granted to regular customers (Weighted) cancellation rate of regular customers: Percentage of cancelled orders from regular customers on all orders from regular customers (possibly weighted by revenue) Customer penetration rate: Percentage of the customer's needs met by the supplier in relation to the customer's total needs (= Share of Wallet). Coverage: Percentage of own customers on total (potential) customer base

Financial results	Revenue with regular customers: Achieved turnover with customers that have bought more than once Profit contribution with regular customers: Achieved profit contribution with customers that have bought more than once Loss of receivables: Amount of resp. share of loss of receivables with regular customers
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Figure 7: Selected metrics for measuring customer retention effectiveness

Source: own representation closely based on Reinecke 2004, p. 282 and Dittrich 2002, p. 204.

Figure 8 summarizes the simplified cause-and-effect chain with selected indicators for the various levels. These indicators can be supplemented with metrics for measuring the customer structure (e.g., share of target or promotional customers) and efficiency metrics (e.g., profit contribution achieved per full-time position). It should be emphasized, however, that the overall aim is not to cover the process as comprehensively as possible, but to ensure a *focus on a few key metrics* that ideally cover various stages of the underlying functional chain and represent suitable control variables for the company in question.

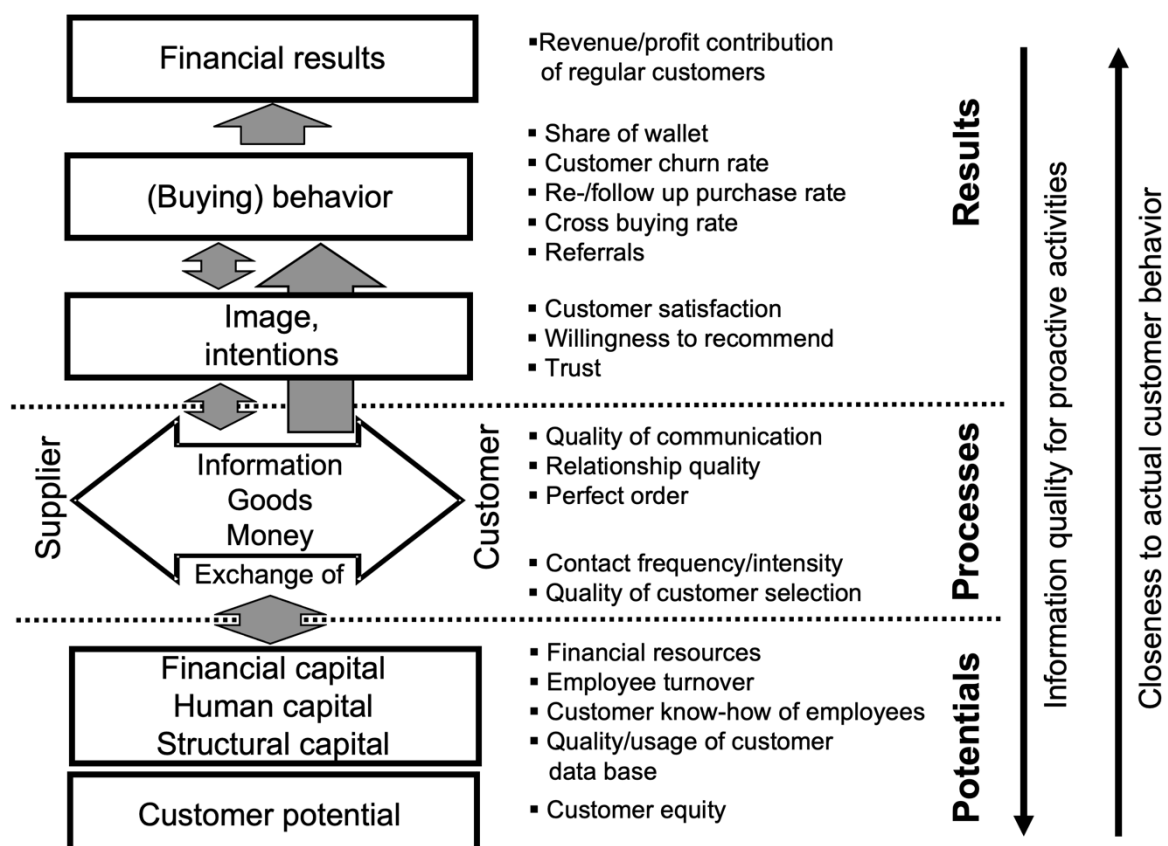


Figure 8: Functional chain for measuring customer retention effectiveness

Source: own representation closely based on Reinecke 2004, p. 288 and Dittrich 2002, p. 198.

The task-related performance indicators operationalize the marketing and positioning strategy; the latter is substantiated through the selection, prioritization and definition of metrics. Marketing performance measurement systems are *company-specific*, and thus *situation- and strategy-specific*. Not all core tasks have the same importance to every company; for example, the issue of whether a company prefers to focus on customer acquisition or on retention depends on the market situation and that company's particular competencies. Therefore, it is hardly reasonable to propose universally valid "generic metric modules" for the four core tasks. Klingebiel (2000, p. 304 ff.) explicitly warns against such a "one size fits all" mentality. Important requirement criteria for marketing metrics are:

- Generally, key performance indicators should not be related to a single marketing instrument or medium (e.g., website), and rather should be *task-related* and, if possible, selected one aggregation level higher (e.g., in the case of customer acquisition, "unaided awareness" as the result of all communication measures).
- A mix of task-related input, process, and result measures is important to cover the *cause-and-effect chain* of each core task.
- Metrics should cover the company- and industry-specific *success factors* of each core task (e.g., in the case of customer retention, the level of employee training serves as a driver of service quality).
- The *operationalization* of metrics should be clear and, whenever possible, competitor-oriented (e.g., relative market share as the ratio of one's own market share to that of the main competitor).
- Metrics should be *action-oriented*. Indicators that hardly change over time have little information content. For example, in some industries the customer satisfaction values of suppliers hardly fluctuate at all due to low customer involvement, so that instead of "customer satisfaction" it is better to use a more responsive variable such as "willingness to recommend".

Figure 9 illustrates a selection of marketing metrics that have proven their worth insofar as they have been integrated into numerous marketing performance measurement systems. However, this selection should not be misunderstood as a "master cockpit"; at best it contains heuristic potential for a specific marketing metric system.

Customer acquisition	Customer retention
• Average amount of first purchase • Number of new customers • Offer success quota • Cost per acquisition • Contact frequency with new customers • Sales force qualification	• Share of wallet • Churn rate/customer migration rate • Repurchase intention • Relative customer satisfaction • Customer frequency • Employee satisfaction
Product innovation	Product maintenance
• Revenue share of new products • New product success rate • Average time to market • Image index of new products • Number of new products launched • Customer acceptance index of new products	• Change in market share • Availability/weighted distribution rate • Product range index • Share of voice • (Brand) image index • Awareness (aided/unaided)

Figure 9: Frequently used task-oriented metrics
Source: own illustration.

3.3 Integrating marketing performance measurement systems into the management process

How can a marketing performance measurement system be integrated into the management process? Five central aspects are important:

1. A marketing performance measurement system is not only used for control purposes; it is only fully effective when combined with *marketing planning* and thus *marketing budgeting*.
2. For a task-oriented marketing performance measurement system to be appropriate for a particular organization and its respective users, *different perspectives* on an integrated system are required. Metrics should always be job-specific because they are not only linked to pre-defined targets, but also to the functional and temporal frames of reference for decision-making situations (Gritzmann 1991, p. 47 f.). In marketing, for example, it is often necessary to distinguish among sales, product, customer viewpoints, which are reflected in different targets for different jobs. A task-oriented marketing performance measurement system must ultimately secure a *compromise between integration and job specificity*. It is useful here to refer back to the *basic principles of the selective metric concept* (Weber et al. 1997). The task-oriented key figure system comprises the superordinate variables. From

these, a few metrics are selected as top-down targets with particular relevance to the operational marketing units. The respective position holder is then responsible for determining further drivers on a bottom-up basis, which help that person to achieve the operationalized targets (see Figure 10). It is essential that the respective employee perceives actual, personal benefits within the system, such as relief from routine tasks, more up-to-date customer knowledge, time savings, improved forecasting options or decision support.

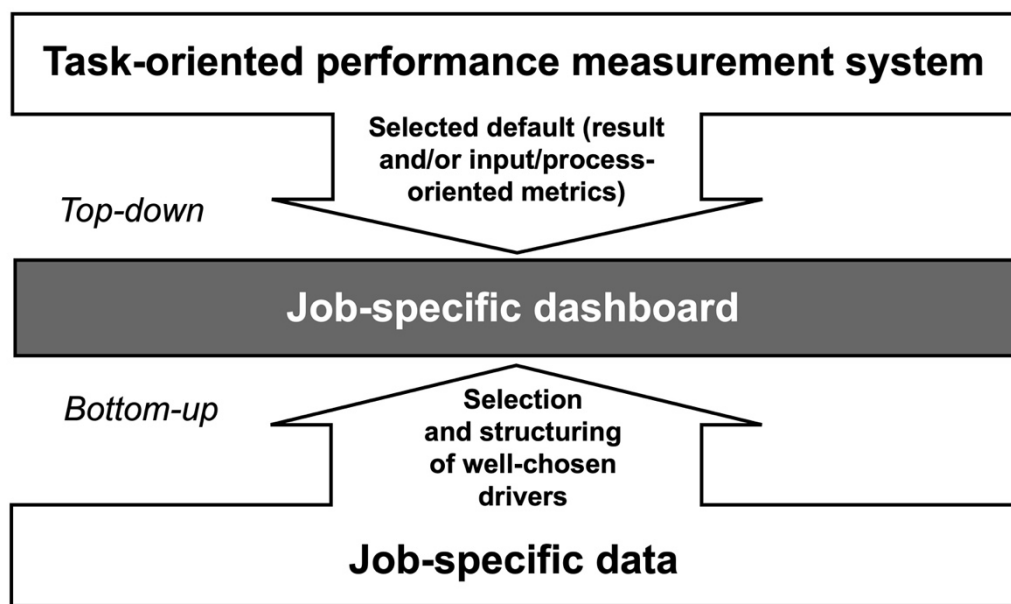


Figure 10: Basic construction of job-specific dashboards

Source: Reinecke 2004, p. 406.

3. The *information and reporting function* should be connected to the performance measurement system. Productive reporting appropriately condenses information in terms of content (e.g., references to competitors) and time. Driver variables should be reported with greater frequency, inert result variables less often (Hronec 1996, p. 161). Reporting must ensure an adequate visual presentation of the information (Horváth/Gleich/Seiter 2020, p. 335 ff.): focus, clarity and trend recognition are key opportunities offered by such "*cockpits*" – which can also become a risk when used in a one-sided, schematic and incomplete manner (keyword: loss of information).
4. *Motivation and incentive systems* must be aligned with the performance measurement system. Empirical studies investigating the issue of whether metrics should be linked to (monetary) incentive systems have product varying findings (see Garbers/Konradt 2014 for a meta study). However, there is a consensus that it remains a major challenge to establish a suitable system that will not be circumvented and can actually have a motivating effect

(Drucker 1974, p. 340, Schaffer 1991 and Simons 1995, p. 73). Employees should be involved in order to combat resistance and reservations towards metrics (Bentz 1983, p. 182 f. and Gritzmann 1991, p. 46).

5. A marketing performance measurement system should not exist in isolation and rather be integrated into a *company-wide control system*. Cooperative collaboration between marketing and finance is positively associated with the satisfaction with marketing performance measurement systems (Marketing Leadership Council 2001, p. 15). Any marketing performance measurement system should be linked to the financial system; at the very least, a common "language" (= metric definitions) should be established. On the other hand, if the company as a whole is managed with a balanced scorecard (Kaplan/Norton 1996, 2001; Reinecke 2004, p. 108 ff.), it makes no sense for a marketing performance measurement system to be isolated, as this would contradict the interdisciplinary function of marketing.

4 Case study "Task-oriented marketing cockpit"

The following explanations illustrate the conception and the benefits of a task-oriented marketing performance measurement system. This exemplary system is used to manage the youth segment of an insurance company, but its key components can be adapted to other industries.

The *task-oriented marketing cockpit* establishes a connection between the fulfillment of the four core marketing tasks - customer acquisition, customer retention, product innovation, and product maintenance - and the resulting overall marketing performance (see Figure 11). The top level of the cockpit outlines the *superordinate marketing objectives* and the business unit's *core task profile*. This allows for overall marketing performance assessment, the detection of set priorities, and identification of strengths and weaknesses with regards to the fulfillment of the four core tasks.



Figure 11: Exemplary task-oriented marketing cockpit of an insurance company

Source: own illustration.

Overall marketing performance is assessed with the aid of economic variables such as gross profit, sales or (relative) market share. Additionally, non-monetary performance indicators such as awareness, image and market penetration are reported. The consideration and prioritization of marketing objectives depends on the purpose of the investigation, the industry, the corporate strategy, as well as on the data availability and quality of the selected metrics figures in the respective company. Actual/target value comparisons for each of the aforementioned metrics highlight potential deviations. The consideration of the time dimension allows for the identification of trends or disruptions in trends; an annual, quarterly, or monthly time interval view can be selected in the cockpit shown.

The *core task profile* shows to what extent a company focuses its activities on individual core tasks and how successful the company is in doing so. In the present case, it is measured by gross profit realized with new or existing customers and new or existing insurance solutions. Companies rarely pursue all core tasks with the same emphasis. Instead, some tasks are usually prioritized over others. In this case, for example, service innovation plays a rather subordinate role.

How can the outlined cockpit be interpreted for the insurance deploying it? To answer this question, a two-step approach is recommended.

Step 1: Assessment of overall performance

The overarching marketing objectives of the business unit allow an assessment of its overall performance. In the youth segment, for example, the insurance company can boast a positive sales and gross profit development as well as increasing awareness. However, declining market shares compared with the main competitor, declining image values, and insufficient market penetration were recorded in the last two periods.

Step 2: Identification of the causes

An analysis of the core task profile shows that there is a strong focus on customer acquisition and retention as well as on product maintenance. Service innovation is given a subordinate priority. It is important to note that it is necessary to check whether this is in line with the strategic intention or whether adjustments need to be made to the current strategy. Weaknesses are particularly apparent in customer acquisition. Here the target values are not achieved. Consequently, a more in-depth analysis of customer acquisition is necessary.



Figure 12: Customer acquisition cockpit

Source: own illustration.

Clicking on the customer acquisition chart opens a more specific cockpit (see Figure 12) designed for this core task:

- *Customer acquisition goals:* The gross profit realized with new customers from the core task profile serves as the superordinate objective of customer acquisition. At the same time, the offer success rate and the number of new customers represent additional targets. The proportion of new customers who have converted during a marketing campaign is also shown.
- *Leading indicators of customer acquisition:* The leading variables provide information on the attractiveness of the new customers (customer structure, revenue at first closing), the channels and scope of the leads acquired (contacts with target group, qualified leads/contacts, qualified leads by channel), and the prospects for future customer acquisition (level of awareness in the customer segment, willingness to recommend of existing customers).

The simultaneous consideration of target results and leading variables (drivers) reveals causes for a certain development and therefore provides a starting point for specific marketing actions. In this case, the reasons for unachieved gross profit can be found in the reduced attractiveness of new customers (growing proportion of C-customers), the declining success of offers (declining visits, offer submissions and contracts) and the declining willingness of existing

customers to recommend the company (especially in comparison with the main competitor). Based on these findings, it is advisable to conduct in-depth causal research and - if possible - to initiate countermeasures. Starting points could be:

- Examining the offering of the main competitor, who is experiencing growing market share and improving willingness to recommend scores,
- Increasing customer satisfaction and improving image among existing customers with positive effects on their willingness to recommend the company to others and consequently on customer acquisition,
- Increasing the attractiveness of acquired new customers through more careful selection and targeting of attractive customer groups.

The outlined example is a vivid illustration of the benefits of marketing performance measurement systems and marketing cockpits: If the company were to rely only sales and gross profit as key performance indicators, there would be no evident reason to correct the present marketing activities, since the targets for these two key performance indicators are still being achieved. In the worst case, negative impacts only become apparent when it is already too late to intervene. In the present case, however, the consideration of further metrics already reveals problems at the top level of the cockpit, which can be assigned to a specific core task. Further analysis of this core task helps to better isolate identified problem areas and derive specific countermeasures.

Analogous cockpits also exist for the other core tasks, so that a targeted, in-depth analysis can be performed based on the issue at hand. However, the scope and specific design of, and metric selection for these core task cockpits must be adapted to the company-specific situation, and so do the superordinate marketing objectives.

Conclusion: The task-oriented marketing cockpit enables the simultaneous assessment of marketing performance and the fulfillment of marketing's core tasks. In addition, it provides starting points for specific marketing measures by outlining reasons for the achievement or non-achievement of pre-defined objectives in the respective core tasks and highlighting existing opportunities and threats. In this regard, the system provides valuable decision-making support on a rational, measurable basis.

The presented marketing cockpit was designed to control marketing of an entire business unit. However, customized cockpits are also used to answer a wide variety of specific questions from

marketing and sales, for example for brand monitoring, campaign tracking, coordination of marketing activities across individual marketing channels, control of individual marketing measures (e.g., in online marketing), coordination of sales activities in a selected territory, or key account management.

For the successful implementation and application of marketing performance measurement systems, it is crucial that the objectives, scope, and user groups are clearly defined. Key target variables and leading performance indicators must be defined and operationalized. For this purpose, a top-down approach should be combined with a bottom-up solution to ensure both the cockpit's integration into the corporate strategy and acceptance by its users.

5 Limitations of metrics and performance measurement systems in marketing

Performance measurement systems are merely *one* component of a comprehensive management control system (Vollmuth 1987, p. 52). They complement, but in no way substitute instruments such as gross profit or investment calculations for new product launches. Especially in marketing, numerous areas can *only* be inadequately *captured with metric deployment* (e.g., strength/weakness or gap analyses). The field report of a salesperson who has just met with a key account may entail a great deal of important information that is lost in a metric report (McKinnon/Bruns 1992, p. 204). Any dialog can only be supported by metrics figures, not replaced. The sentence attributed to Albert Einstein is also valid for marketing: "Sometimes what counts can't be counted, and what can be counted doesn't count (Albert Einstein, quoted from Schomann 2001, p. 1).

Indicator systems are also unable to guarantee *undirected strategic monitoring* or and perform early warning recognition (Krystek/Müller-Stewens 1993, p. 59 and p. 81). Rather, performance measurement systems do not make decisions and interpret themselves. Whether targets have been achieved to a satisfactory extent is a question of the *interpretation of marketing metrics*. A performance measurement system itself cannot anticipate such an interpretation (Gritzmam 1991, p. 42).

In addition to these *content restrictions regarding the scope of* performance measurement systems, typical risks and *errors in working with metrics* are pointed out. The use of metrics is characterized by individual reservations, different qualifications and psychosocial phenomena. If wrong conclusions have already been drawn once from methodically questionable or unclear figure combinations, then this frequently leads to the rejection of metric usage (Radke 1968, p. 148).

The following *formal errors* can be distinguished (Siegwart/Reinecke/Sander 2010, p. 221 ff. and the literature cited there):

- *Design deficiencies* occur when a performance measurement system is (mathematically or formally) incorrect or inappropriate, i.e., not meeting the requirements of the respective decision-making situation.
- *Errors in data collection and processing* may emerge due to insufficient qualification or care. A report with insufficient validity of data collection and processing is of no use (McKinnon/Bruns 1992, p. 200).
- *Application deficiencies* often manifest in dysfunctional effects (Simons 1995, p. 81 ff.): For example, "margins" are inserted into the metrics in the context of planning, so that targets can be achieved in any case. Or ratio deviations are "smoothed out," with reports being adjusted in terms of timing and space without that the observation changed. Occasionally, reports are also manipulated by not reporting events (e.g., customer complaints) or by "unilaterally influencing" them (e.g., unilaterally reporting positive but not negative customer feedback). The risk of manipulation increases when metrics are coupled with incentive systems.
- *Interpretation errors* (Staehle 1973, p. 228, Siegwart/Reinecke/Sander 2010, p. 221 and Gritzmann 1991, p. 45:) are another form of application deficiencies. Metrics are characterized by quantitative exactness and can therefore spark overreactions. In this case, metrics lead to a "paralysis by analysis" or to being regarded as the faithful representation of the truth - without any critical distance (Quelch 1992, p. 4). This neglects the fact that, by definition, metrics narrow down a relevant circumstance

(Weber/Schäffer 2020, p. 205 ff.) and never reflect it completely (Eccles/Noriah 1992, p. 169).

In summary, it can be stated that performance measurement systems are not an end in themselves. Metrics provide important information for managerial decisions but cannot and should not substitute decisions (Gaitanides 1979, p. 57). Drucker (1974, p. 208 f.) expresses this as follows: "To make a control system take care of exceptions misdirects and undermines both the work process and the control system." Metrics are thus indispensable in management and marketing to substantiate and implement decisions.

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