

Key Performance Indicators and Metrics for Service Innovation

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Key Performance Indicators and Metrics for Service Innovation

1. Service
2. Innovation
3. Key Performance Indicators (KPI)
4. Metrics
5. Conclusions

Key Performance Indicators and Metrics for Service Innovation

1. Service

- Many people struggle with the concept of innovation in the services sector, but in essence the so called intangibles of the services sector can be made just as tangible as physical products once we dissect services to understand what is meant.
- A good definition of the offering of the services sectors is as follows:
 - **A business that provides information, labour, facilities or products to meet a need.**
 - **Information** is a category that includes consultancy, financial advice and data provision etc.
 - Lawn mowing service providers, book keepers and food and beverage waiters fall into the **labour** category
 - Hotel, accommodation, entertainment venues and the like are **service facilities**, and,
 - In the case of **products**, this does not refer to manufacturers, but providers, such as shops and supermarkets.

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2. Innovation

Innovation = *Change that Adds Value*

(La Salle Matrix Thinking™ – A structured approach to Business Building, 1999)

Innovation = *The process of ideation, evaluation, selection, development and implementation of new or improved products, services or programs*

(Douglas Merrill, CTO Google, 2007)

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In a global economy you compete with everyone from everywhere for everything.

- It doesn't matter what industry you are in, someone, somewhere right now is building a product, process or business model designed to kick your butt.
- What would happen if someone in YOUR industry came up with a product or service that radically outperformed yours and cost half as much?
- How could you survive? When the winds of creative destruction blow at gale force and everyone around you is hunkered down hoping that the storm will pass, the only way through the uncertainty is to **Accelerate Innovation!**
- In a world where everyone and everything around you is getting better, where technology waits for no one, and where smarter, more sophisticated customers who are “wired and dangerous” demand more, people are constantly in search of **the next big thing.**

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Nr.	Type of innovation	Description
1.	Innovation	Small, step-wise product improvements
2.	Innovation with side effects	A new product/market combination for an existing product
3.	Transformational innovation	A complete <u>new way</u> to perform things better, easier and faster than is common today

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Objectives of innovation

- 1. Increased number of new ideas**
- 2. Improved quality of ideas**
- 3. More efficient implementation of quality ideas**
- 4. Improved resultant success achieved from the implementation of new ideas.**

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3. Key Performance Indicators (KPI)

- **Measure** - A number or a quantity that records a directly observable value or performance. All measures are composed of a number and a unit of measure. The number provides magnitude (how much) for the measure, while the unit gives number a meaning (what). Examples of unit measures are: dollars, hours, meters, inches, etc.
- **Indicator** - Indicators are defined in many ways but the common sense for all of them is that they refer to specific information. Thus, the Organisation for Economic Co-operation and Development (OECD) defines an indicator as “a qualitative or quantitative factor or variable that provides a simple and reliable means to measure achievement, to reflect changes connected to an intervention, or to help assess the performance of a development actor”.
- **Metric, Performance Measure or Performance Indicator** - A generic term encompassing the quantitative basis by which objectives are established and performance is assessed. It helps quantify the achievement of a result, the quantifiable component of an organization's performance. In the context of measuring and managing performance these terms are used interchangeably.
- **Key Performance Indicator (KPI)** - A selected indicator considered key for monitoring the performance of a strategic objective, outcome, or key result area important to the success of an activity and growth of the organization overall. KPIs make objectives quantifiable, providing visibility into the performance of individuals, teams, departments and organizations and enabling decision makers to take action in achieving the desired outcomes. Typically, KPIs are monitored and distributed in dashboards, scorecards and other forms of performance reports.

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Key Performance Indicators are quantifiable measurements, agreed to beforehand, that reflect the critical success factors of an organization

The benefits of measuring Key Performance Indicators

- Can allow management to see the company or department performance in one place.
- A team can work together to a common set of measurable goals.
- It can be a very quick way of seeing the actual performance of a goal or strategic objective
- Decisions can be made much quicker when there are accurate and visible measures to back them up.

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Four major factors affect the performance of project based professional service firms:

Health factors

- the ratio of senior to junior staff referred to as the firm's leverage,
- the average fee charged per unit of time,

Hygiene factors

- the percentage of billable time referred to as utilisation, and
- the profit margin

(Maister, 1997, p. 32-39).

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KPI for services are mainly related to:

- service quality,
- service productivity,
- regulatory compliance, and
- **sustainable service innovation**

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If a Key Performance Indicator is going to be of any value, there must be a way to accurately define and measure it.

"Generate More Repeat Customers" is useless as a KPI without some way to distinguish between new and repeat customers.

"Be The Most Popular Company" won't work as a KPI because there is no way to measure the company's popularity or compare it to others.

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The formulation of the right KPIs should follow certain specific steps. First of all, avoid reinventing the wheel. The World Wide Web gives access to a vast range of KPIs and may therefore be great help in a first orientation.

Secondly, attempts to formulate a complete indicator straight away seldom results in good quality KPIs. Therefore, based on the characteristics of **SMART KPIs** (*Specific, Measurable, Achievable, Relevant, Time-bound*) during the formulation of a KPI, the following questions need to be asked:

- **What?** (brainstorm on the variables, which may provide means to measure change in the objectives or phenomena)
- **How much?** (to define the magnitude of the change we want to achieve)
- **Who?** (in order to clarify who belongs to the target group)
- **Where?** (specific information on the intervention area)
- **When?** (definition of the time frame)

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During the use and applications of KPIs certain principles should be taken in consideration:

- ***KPIs should not be an end in themselves***, but be considered as an aid to management. They are a start to a proper informed debate that should lead to a plan for improvement.
- ***KPIs should be seen within their local context*** and have more a meaning as a comparison over time than as a comparison between organizations.
- ***A set of KPIs should be balanced***. For example, measures of efficiency should be set against measures of effectiveness and measures of cost against quality and user perception.
- After being proposed and applied, ***KPIs should be reviewed and updated***. The review determines the management utility of each indicator and the feasibility of getting source data for continuing use.
- The targeted performance description, which is described in measurable terms through the KPIs, must be deployed to the organizational level that has the authority and knowledge to take the necessary action.

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KPI reflecting the **sustainable service innovation** (1)

HUMAN RESOURCES

- **1.1** Share of firms engaged in training for innovation purposes
- **1.2** Share of firms reporting lack of qualified personnel as an important issue

INNOVATION DEMAND

- **2.1** Share of firms reporting uncertain demand as an important issue
- **2.2** Share of firms reporting no need to innovate because no demand for innovation

PUBLIC SUPPORT FOR INNOVATION

- **3.1** Share of firms that received any public funding for innovations

PRODUCT AND PROCESS INNOVATION

- **4.1** Share of firms engaged in intramural R&D
- **4.2** Expenditures in intramural R&D (% of total innovation expenditure)
- **4.3** Share of firms engaged in acquisition of machinery etc.

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KPI reflecting the sustainable service innovation (2)

PRODUCT AND PROCESS OUTPUTS

- **5.1** Share of firms with highly important effects in reduced materials and energy
- **5.2** Share of firms with highly important effects in improved flexibility
- **5.3** Share of firms with highly important effects in improved quality
- **5.4** Share of firms with highly important effects in reduced labour costs

NON TECHNOLOGICAL INNOVATION

- **6.1** Share of firms that introduced organisational and/or marketing innovations
- **6.2** Share of firms that introduced organisational innovations
- **6.3** Share of firms that introduced marketing innovations

Key Performance Indicators and Metrics for Service Innovation

KPI reflecting the **sustainable service innovation** (3)

NON TECHNOLOGICAL INNOVATION OUTPUTS

- **7.1** Share of firms with highly important effects in reduced time to respond
- **7.2** Share of firms with highly important effects in improved quality
- **7.3** Share of firms with highly important effects in reduced costs

COMMERCIALISATION

- **8.1** Turnover of new and significantly improved products only new to firm (% of total turnover)
- **8.2** Share of firms that have new or significantly improved products new to market

INTELLECTUAL PROPERTY

- **9.1** Share of firms that applied for a patent
- **9.2** Share of firms that registered an industrial design
- **9.3** Share of firms that registered a trademark

4. Metrics

- In developing metrics for service industries it is useful to compare services with the world of manufactured tangibles in order to get a reference point for understanding the differences.
- In manufacturing we measure such things as dimensions, colour, sound level, weight etc and precisely specify and repeatable manufacture products that hopefully customers want. Indeed in manufacturing we even measure the efficiency with which we can make such goods. ([*Service Innovation – Metrics are Essential by Roger La Salle*](#))

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Efficiency and Quality in the World of Tangibles

- In the world of tangibles, one of the best definitions of quality is “conformity to design”.
- That is, decide what is it you wish to make and do it repeatedly without change to meet an agreed specification; and for many manufactured products there is absolutely no benefit to the customer in exceeding the specification or tightening tolerances.
- For example, increasing the tolerance on the diameter of a 75mm long nail from say +/- 0.01mm to +/- 0.001mm would be of little benefit to anybody, but would no doubt cause all sorts of production problems and added costs. In the manufacturing world, for the purpose of Process Innovation it is appropriate to define process efficiency as:
 - *Process Efficiency = *Output/unit time ÷ Costs
- *Consistent with the maintenance of quality.

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Efficiency and Quality in the World of Services (1)

In the services sector things are a little different.

- Let's consider a call centre where the performance specification (or "Service Level") states that staff shall always answer the phone within three rings.
- Suppose somebody then finds a way to answer the phone every time, within two rings. This variance from the specification would be seen as advantageous to everybody, especially the callers. Indeed improving even further and answering after just one ring would be even better.
- Unlike the manufacturing sector, in the services sector, in most cases, there is really no limit to the benefit afforded by improving service level (or quality of service). **The important consideration is, at what cost, and what is the benefit to the customer.**
- Drawing an analogy from Process Innovation in the manufacturing sector leads to a useful metric for Service Efficiency as:

$$\text{Service Efficiency} = \text{*Service Level} \div \text{Costs}$$

**The secret in the service domain is in properly defining "Service Level" as it applies to a particular offering and develop typically five key performance or quality measures.*

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Efficiency and Quality in the World of Services (2)

For example, some metrics in a call centre for each individual may be:

- Answer the phone within three rings
- Spend less than 2 minutes per caller
- Have less than 1% of calls referred to a supervisor
- Having less than 0.5% of dissatisfied callers calling back
- Having less than one complaint per week

Key Performance Indicators and Metrics for Service Innovation

5. Conclusions

- It is important to establish these metrics or KPI's for key people and the deliverables in the services of an enterprise and to use these as a basis to systematically “innovate” the service efficiency.
- Without these properly defined and quantifiable metrics there is little point in attempting any sort of innovation at all.
- Finally, even though the above metrics for service efficiency refer largely to the service sector, must be remembered that even a manufacturing enterprise has a significant element of service fulfilment in the interface with his customers. This too can be measured and innovated in much the same manner.

(Roger La Salle, Matrix Thinking, 2008-2009)