

# Chapter 7

## Performance Measurement Systems Threatened by Pandemic Opportunities in Retail:

### How Managers Struggled to Balance Growing Sales With Unexpectedly Inadequate Supply Chain KPIs

Andrea Girardi

 <https://orcid.org/0000-0002-1589-7565>

University of Modena and Reggio Emilia, Italy

#### ABSTRACT

*Performance measurement systems such as KPIs are necessary managerial tools to set targets and monitor performances. During the outbreak of COVID-19, some companies experienced threats to traditional and consolidated business lines. The retail sector saw no decline in turnover. The aim of the chapter is to uncover and analyse the challenges imposed by COVID-19 to the retail sector as well as possible solutions implemented in order to overcome such difficulties. The chapter reports the case study of the largest retailer in Italy during the COVID-19 pandemic. Although seeing sales increase, the managers had many difficulties on the side of procurement and distribution of goods. The performance monitoring system was suddenly insufficient to manage the emergency. The solutions concerned the adjustment of the algorithms with dynamic components addition to KPIs and the conversion of some efficiency targets into effective ones. The chapter suggests insights on how performance measurement systems can be designed and developed in advance to allow more dynamism during emergencies.*

DOI: 10.4018/978-1-6684-6762-6.ch007

## INTRODUCTION

Performance measurement systems constitute a managerial tool belonging to the macro category of accounting practices (Merchant & der Stede, 2017). They are based on calculations and metrics meant to represent the reality of the results of processes and activities within the company. These systems are generally represented by ratios and percentages (KPIs) of goals achievement (Chan & Chan, 2004; Parmenter, 2020). The most crucial performance indicators can be numerous and divided into effectiveness and efficiency indicators (Almeida & Azevedo, 2016). Altogether they constitute the performance evaluation structure as a foundation for management and corporate strategy.

Managers use these tools for two reasons. On the one hand, they use them to represent the company's reality and take a picture of the business situation accurately and timely (Merchant & der Stede, 2017; Van gorp, 2005). On the other hand, they are essential tools for setting goals to be achieved, whether at the group, department (e.g., sales), office, or even individual level (Yuan et al., 2009).

During the outbreak of the Covid-19 pandemic, companies were overwhelmed by a profound disruption in their core businesses and activities. The performance measurement system, as structured in normal times, in most cases has proved to be entirely unsuitable for the sudden new challenges imposed by the pandemic.

Many recent contributions to the literature (Hohenstein, 2022; Parisi & Bekier, 2022; Rahman et al., 2021) have highlighted that performance measurement systems have encountered two significant categories of weakness in emergency times. The first was related to the timing of data calculation and reporting. The frequency with which data was calculated in normal times turned out to be insufficient during the emergency period. The second concerned the degree of dynamism of the measurements. During the emergency, measurements had to be removed quickly to focus attention on those processes or departments on which the pandemic had the most significant impact. Many companies in this field experienced a drop in turnover (Cowling et al., 2020; De Vito & Gómez, 2020; Hartmann & Lussier, 2020; J. Kim et al., 2021; R. Y. Kim, 2020), putting additional pressure on sales offices (Hartmann & Lussier, 2020) to develop strategies and, as a result, appropriate KPIs to compensate for the sudden extinction of certain established business lines.

The case study (Yin, 1983) reported in this chapter brings a more particular perspective by capturing a particular situation in which managers (heard during qualitative semi-structured interviews) of Italy's largest retail group faced the reverse problem. In this case, sales did not fall but instead increased significantly. At first glance, this seems a new opportunity brought by the pandemic (as it was the case for digital communications and entertainment companies (Barykin et al., 2021)), while actually, the company's managers experienced considerable difficulties in supplying goods (Ivanov, 2020; Ivanov & Das, 2020; Paul & Chowdhury, 2021). These difficulties in the specific context were due to a set of primary factors: the lockdown of some suppliers or suppliers of intermediate components, difficulties in delivering the goods to the shops, the sudden change in sales forecasts, the presence of a single supplier for a particular good (e.g., gift items), the unexpectedly high demand for products in the peripheral stores at the expense of the hypermarkets and the increased demand for non-food goods (because all other stores outside the supermarkets were closed). These factors undermined the system for measuring the performance mainly in two departments: the buyer department and the supplier logistics department. In these two business areas, the traditional performance measurement system quickly proved to be unsuitable to represent the new requirements.

13 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:  
[www.igi-global.com/chapter/performance-measurement-systems-threatened-by-pandemic-opportunities-in-retail/307539](http://www.igi-global.com/chapter/performance-measurement-systems-threatened-by-pandemic-opportunities-in-retail/307539)

## Related Content

---

### Adaptive IoT Technology for Measuring Salinity, Dissolved Oxygen, and pH in Aquatic Environments

Jarrold Trevathan and Dzung Nguyen (2022). *International Journal of Hyperconnectivity and the Internet of Things* (pp. 1-20).

[www.irma-international.org/article/adaptive-iot-technology-for-measuring-salinity-dissolved-oxygen-and-ph-in-aquatic-environments/294894](http://www.irma-international.org/article/adaptive-iot-technology-for-measuring-salinity-dissolved-oxygen-and-ph-in-aquatic-environments/294894)

### Direction and Speed Control of DC Motor Using Raspberry PI and Python-Based GUI

Anup Kumar Kolya, Debasish Mondal, Alokesh Ghosh and Subhashree Basu (2021). *International Journal of Hyperconnectivity and the Internet of Things* (pp. 74-87).

[www.irma-international.org/article/direction-and-speed-control-of-dc-motor-using-raspberry-pi-and-python-based-gui/274527](http://www.irma-international.org/article/direction-and-speed-control-of-dc-motor-using-raspberry-pi-and-python-based-gui/274527)

### Investigation of Human Resource Management Practices After COVID-19: Challenges and Opportunities

Shivani Agarwal, Shubham Aggarwal and Anshika Tyagi (2022). *Handbook of Research on Global Networking Post COVID-19* (pp. 354-365).

[www.irma-international.org/chapter/investigation-of-human-resource-management-practices-after-covid-19/309616](http://www.irma-international.org/chapter/investigation-of-human-resource-management-practices-after-covid-19/309616)

### Structural Changes and Regulatory Challenges in Japanese Telecommunications

Hidenori Fuke (2010). *Networking and Telecommunications: Concepts, Methodologies, Tools, and Applications* (pp. 1812-1830).

[www.irma-international.org/chapter/structural-changes-regulatory-challenges-japanese/49841](http://www.irma-international.org/chapter/structural-changes-regulatory-challenges-japanese/49841)

### Scalability of Pervasive Communication Networks in IoT

Manal Khayyat and Nadine Akkari (2022). *International Journal of Hyperconnectivity and the Internet of Things* (pp. 1-11).

[www.irma-international.org/article/scalability-of-pervasive-communication-networks-in-iot/294895](http://www.irma-international.org/article/scalability-of-pervasive-communication-networks-in-iot/294895)