KPIshare: A Collaborative Space for BPM Practitioners for Full Definitions and Discussions on Process KPIs[*]

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Abstract. The definition of process-related key performance indicators (KPIs) is a key part of performance measurement and one of the most challenging because of the lack of one best way to define business-applicable KPIs that are both aligned with the strategic goals that the organisation wants to achieve and, at the same time, measurable and as objective as possible. In this demo, we present KPIshare, which is a web platform whose main goal is to provide the BPM community with a knowledge base of well-defined, mature KPIs and a place where they can discuss, collaborate and create process-related KPIs that are applicable in real business situations. To this end, KPIshare introduces a detailed structure for KPI definition and the concept of operational KPI challenge as a mechanism to foster the collaboration in the platform.

1 Introduction

One of the major challenges when implementing a performance measurement system for continuous improvement of business processes is related to the lack of one best way to define business-applicable process-related KPIs that are aligned with the strategic goals that the organisation wants to achieve while, at the same time, are measurable and as objective as possible [3, 4]. Because of this reason, most process best practice or reference frameworks such as ITIL, SCOR or CMMi encourage and even provide KPIs for the processes defined in them. However, those KPIs are defined at a high level of abstraction and they must be customised to the specific processes implemented in the organisation. The same problem is found in web platforms such as KPILibrary[3], whose KPIs are also defined at a very high level of abstraction. In addition, in these platforms

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[3] http://www.kpilibrary.com

there is a lack of discussion and collaboration concerning the definition of KPIs, a huge amount of duplicated KPIs and little information about the goodness of the KPIs defined.

To overcome these problems we present KPIshare (`http://kpishare.co`), which is an online collaborative space aimed at providing the BPM community with a knowledge base of well-defined, mature KPIs and a place to discuss, collaborate and create process-related KPIs that are applicable in real business situations. To this end, two novel features have been implemented in the platform, namely: a detailed structure for KPI definition based on templates following the SMART criteria [5, 6] and the concept of operational KPI challenges, which is the cornerstone of the content found on the platform and enables users to crowdsource solutions for their process measurement questions.

The remaining of this paper is structured as follows. In the next section, we detail the platform and describe mechanism behind the operational KPI challenges. In Section 3, we describe the main design goals of KPIshare and how it supports them. Finally, Section 4 discuss the maturity of the tool and its signficance to the BPM community.

2   The platform: KPI challenges

The content found on the platform revolves around solving operational KPI challenges. The goal of a KPI challenge is to complete the description of a KPI that fulfills some operational and/or strategic goal set by the user that raise the challenge. In this sense, a KPI challenge can be seen as a process measurement question that is raised by users of the platform to the community, the KPI challengers, while other users of the platform, the KPI solvers, provide solutions to the challenge. Furthermore, all KPI challenges solved constitute an evolving KPI knowledge base that can be used not only as a library of KPIs but also for educational purposes.

Next, we detail the high-level overview of the user flow we will aim at presenting in the demo for each of these two types of users.

2.1   KPI Challenger: Raising a KPI challenge

Enterprise business professionals have trouble finding the best way to measure the performance of the process they manages. They look for a crowdsourced solution, so they log on to KPIshare and look if their question is already answered in the KPI repository. If they do not find a suitable answer, they may decide to raise their own KPI challenge. To this end, they document their situation – the industry they work in, the process they want to measure and the strategic or operational goal they want to achieve (e.g., Ensure customer satisfaction; Avoid overdue orders; Decrease expenses) – and they leave blank the fields they are looking an answer for. These fields are defined so that the user is encouraged to follow the SMART criteria, which is a recommended criteria for KPIs [2, 7], and include the *measurement definition* and *units of measure*; the *target* of the KPI

and the *filter*, which specifies the process instances that must be considered to compute the KPI value are defined [6].

SMART is a mnemonic that broadly conforms to the following words: Specific, it has to be clear what the KPI exactly describes and the context within which it is defined; Measurable, it has to be possible to measure a current value and to compare it to the target one; Achievable, it makes no sense to pursue a goal that will never be met; Relevant, it must be aligned with a part of the organisation's strategy, something that really affects its performance; and Time-bounded, a KPI only has a meaning if the time period in which it is measured is known.

Note that what makes a KPI challenge different from a classical Questions & Answers forum is that the KPI challenge provides these predefined fields as a structure that frames the process measurement questions and solutions.

2.2   KPI solver: Contributing to a KPI challenge

Users who want to spread their knowledge and promote best practices, usually process measurement specialists – consultants and academics –, log on to KPIshare, search or browse all KPI challenges raised in the platform and contribute to them by completing some or all of the fields of the KPI structure left blank by the KPI challenger. In addition, they can comment on resolved KPIs, vote for the community answers they find valuable and report all answers they find wrong or inadequate.

Ultimately, the continuous contributions of the two user types – KPI challenger and KPI solver – creates an ecosystem of knowledge exchange, which moderates itself. Best practices are promoted by users of stature to reshape or replace common practices, leading to continuous innovation in the field of process measurement and analytics.

3   Design goals

To make KPIshare a platform capable of providing a knowledge base of well-defined, mature, process-related KPIs, we have designed it according to the following design goals:

Design goal 1: Promote the creation of well-defined process-related KPIs. One of the problems of similar platforms is that many KPIs are incomplete or do not provide enough detail to be able to understand and apply them in a concrete scenario, which may hinder its usefulness. To avoid this problem, in KPIshare each KPI follows a template that encourage users to define KPIs that follows the SMART criteria as detailed in [6].

Design goal 2: Foster the collaboration amongst users. KPIshare is a social-based platform in the sense that its contents are provided by their users. In order to foster the collaboration amongst users, KPIshare introduces the concept

of KPI challenge as a mechanism to promote the interaction between users. In addition, the fact that all KPIs have the same structure makes it easier to collaborate in its fulfillment as it has been shown in other fields such as Requirement Engineering [1].

Design goal 3: Inform about the quality of the KPIs. KPI quality is enforced mostly by the community and its ability to vote for good quality answers and discard low quality information. This method is successfully implemented and used across different online communities and forums, such as Yahoo Answers, Quora and StackOverflow. As a second level of policing, discussions are moderated by members of KPIshare and a board of experts.

4   Maturity and Relevance to BPM

To the best of our knowledge, no other similar platform exists to define process-related KPIs. KPIshare has been developed from research results on how to define process KPIs in a user-friendly manner, and its main novelty lies in the collaborative way of defining them, so that experts can interact and contribute to others' KPI definitions. Thus, KPIshare enable its users to have easy access to a knowledge base of well defined, mature KPIs that are above all "business valuable".

Maturity. The KPIshare platform is currently in a closed beta phase, in which some experts have been invited to test the platform. The major risk identified in this phase is the anticipated difficulty during the implementation of the operational KPIs defined in a KPI challenge. The group of experts interviewed during the development of KPIshare outlined repeatedly the very complex, larger context within which KPIs exist, the need for options to map and link the processes within this context, as well as the option to link them with the enterprises strategic visions. In order for this linkage to occur, BPM professionals should be given an option to observe the "layers" of the KPIs: Even if the process is small, it would need to be linked to a bigger "mission", a bigger KPI. The experts have noted that KPIs are the concrete measurements that have a high correlation or even causality with strategic, as well as operational goals. The certainty of the correlation between textually expressed goals and more tangible measurements (KPI) is a precondition for ensuring the right support for the measurement process and performance. To mitigate this risk, KPIshare enforces the user to set the context of the KPI and to link it to operational and strategic goals during the definition of the challenge as detailed. However, more empirical evidence is necessary to evaluate the effectiveness of this measure.

In addition, KPIshare also presents some limitations that need to be addressed, such as dealing with a potentially unclear or conflicting understanding of KPIs and the way they are defined. Such disparate views can occur when KPIs are interpreted by different people in different business situations. Another limitation lies in the detection of duplicate KPIs. In this sense, semi-automated

mechanisms to detect such duplicates are planned to be integrated in the platform.

Significance to the BPM Field. KPIshare follows an approach that will both resolve many issues that are currently troubling BPM professionals, as well as push forward the idea that process measurement is the only way to improve overall business performance. It provides a place where users can discuss, collaborate and create SMART KPIs that are applicable in real business situations. It is through this platform that we want to share our own unique vision of how only by getting and giving feedback, you continuously improve your work processes.

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