KDFM eXplorer

27/10/2020

New feature announcement: KDFM eXplorer "Supplies Intelligence Dashboard"

Today, we announce that a new tool called "**Supplies Intelligence Dashboard**" is available on the KDFM eXplorer Portal's Analytics page.

Its function is to provide, through an easy and guided user interface, forecasts and information on the consumption of Toner and Photoconductors, supporting the user in managing future shipments and the analysis of historical consumption, to reduce costs and improve operations in the print fleet management.

Here are the main features of the tool:

1. ***Predictive consumption analysis***

The **KDFM eXplorer** system can make accurate predictions of the cartridges' expected end dates present in the devices at the time of data collection.

This information is aggregated and analyzed in the Supplies Intelligence Dashboard to provide users with the following predictive features:

- Forecasts of the quantities of consumables that will run out in the future for your entire fleet and individual customers; this information can be analyzed and represented by type, color, and also by single Part Number
- Expected end dates of every single consumable present within the managed devices, aggregatable for any category (by type, color, customer, date, etc.)
- Economic values of the costs for future shipments, also broken down by period, type and color, customer, etc.

The predictive analysis aims to help you optimize your consumables warehouse's procurement and management, indicating
with the highest possible accuracy what are the expected needs over time for each Part Number.

If you assign a value to each consumable in **KDFM eXplorer**, the analysis is processed in both quantity and value.

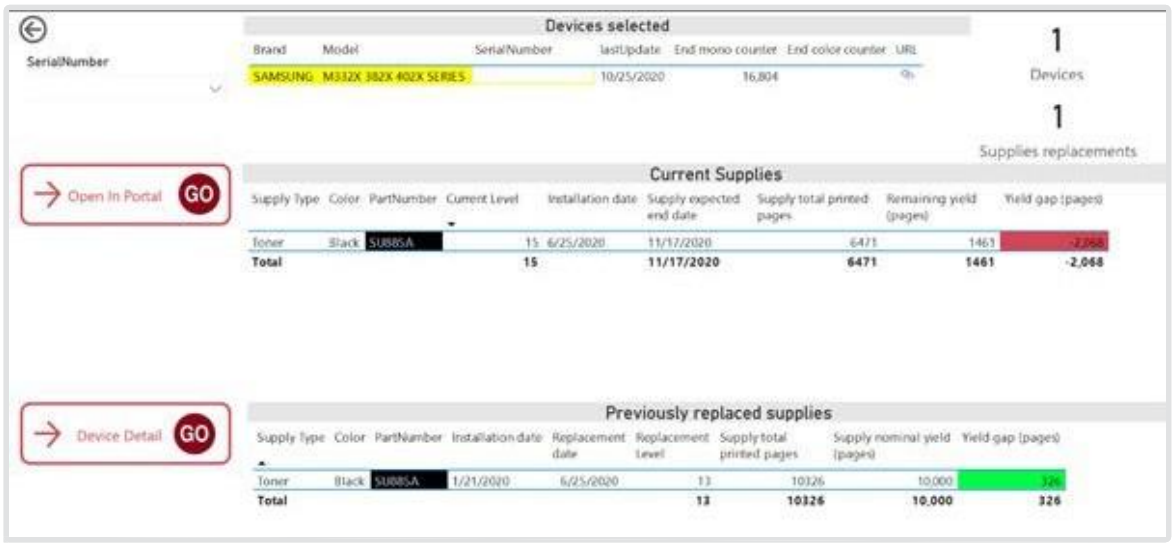
The analysis also allows you to identify abnormal trends that need further drill down, like an unusually high consumption forecast on a customer or Part Number.

The availability of this information in a predictive way will enable you to prevent and, as far as possible, avoid future anomalies, rather than remediating problems already happened.

2. ***Yield Gap calculation***

The Dashboard provides various analyses related to the use of consumables on devices based on their consumption history, volumes of pages produced, and time. Examples are:

- History of consumable replacements is present for each device, with insertion and replacement dates and the number of pages printed for each cartridge.
- Comparison of the pages produced by each cartridge with the theoretical Yield declared by the manufacturer, and consequent calculation of the Yield Gap (difference in duration), that is, the more (or less) pages produced by each cartridge compared to the nominal Yield.

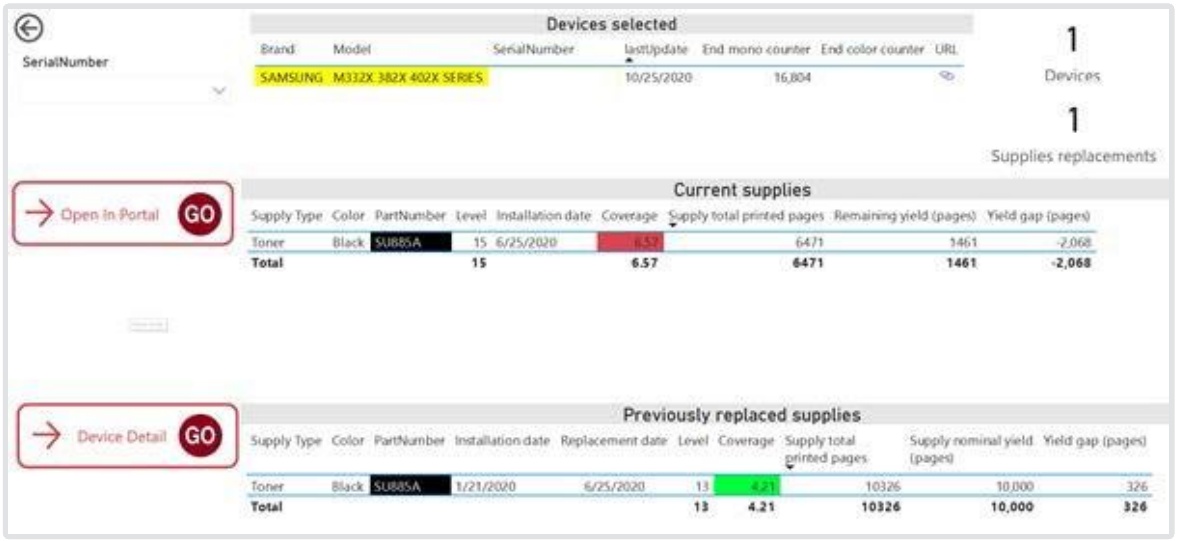


The Yield Gap is a fundamental metric to understand whether the cost-per-page you charge for each device is adequate or not for the number of pages printed with each cartridge and their average coverage.

Suppose you have defined the cost-per-page in a contract, based on the theoretical yields declared by the consumable manufacturer. In that case, the Yield Gap will allow you to determine precisely whether these costs are correct or, for example, if cartridges on a specific device or fleet are producing far fewer pages than their nominal Yield. In this case, to prevent your contract from generating economic losses, it will be essential for you to address the situation with the customer and discuss possible solutions. Having the information in the Dashboard will be useful to conduct this discussion with your customer successfully.

3. ***Toner Coverage***

The **Supplies Intelligence Dashboard** is also extremely useful for analyzing calculated Toner Coverage on each device, based on the history of its consumption, to have accurate information on the contract's real profitability. The system, using specific algorithms based on consumable history detections and changes, can accurately determine the coverage that has occurred on each cartridge replaced in the past on the device, as well as that relating to the cartridge currently in use:



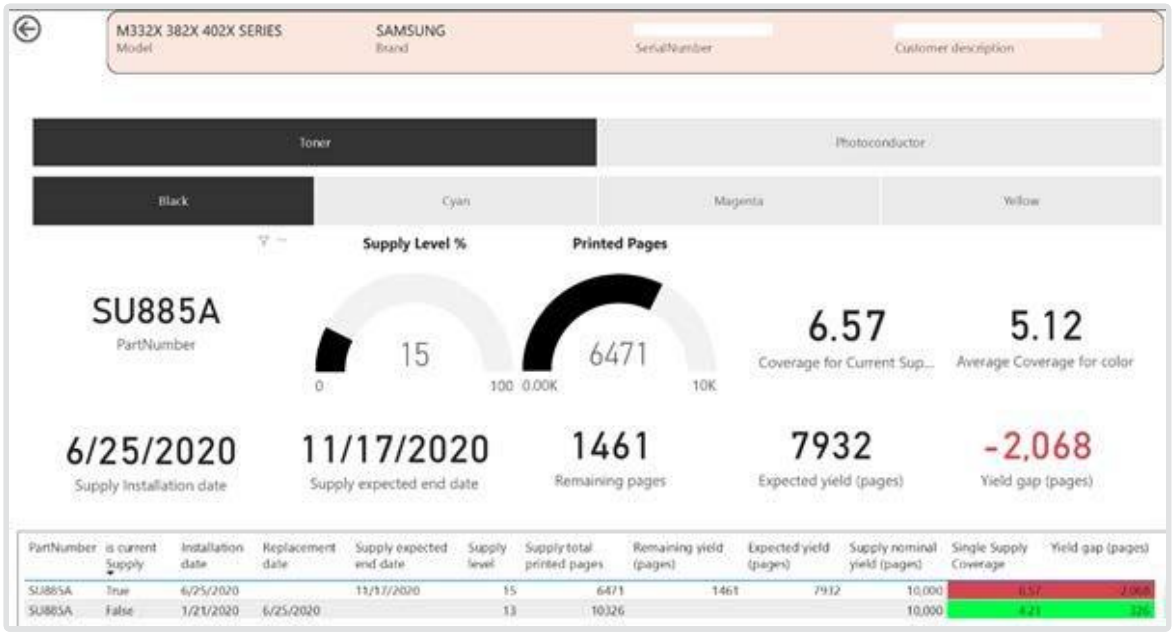
Timely and granular information about the coverage is essential to evaluate and possibly discuss with the customer any situations in which the cost-per-page contract is not profitable due to excessive consumption compared to the volume of pages produced by the device.

The average historical coverage figure is also easily used when renegotiating a contract, supporting the need for a price review, or demonstrating the reasons for a higher page cost than previously applied.

4. ***Single device details***

By clicking on the buttons indicated in the image, it is possible to access the **KDFM eXplorer** Portal device page directly.

You can also view an additional detail page of the Dashboard, which summarizes all the main metrics and information that the algorithm provides, thus having a comprehensive view of the data relating to the individual device and each of its consumables:



Requirements for Supplies Intelligence Dashboard to work properly

The Dashboard provides information processed by the KDFM eXplorer PowerBi Business Intelligence engine, which works on the data collected by your devices during monitoring and the data entered by your users who manage the devices.

If the devices do not have enough complete and correct historical and management data, the Dashboard information may be incomplete or inaccurate.

Meeting the following requirements in the KDFM eXplorer system ensures to get accurate data in the Dashboard:

- The devices must be updated from the Data Collection Agent (DCA) within the last three days and have a good history of regular daily and error-free readings. Any "jumps" or "holes" in the sequence of readings, both for meters and consumables, could cause low accuracy in calculating the Dashboard data.
- Printed volumes and consumables changes must be correctly recorded and have sufficient numbers to have statistical value. Devices under monitoring for a very short time, that print very few pages or for which there are no Alerts or consumable replacements may not provide reliable data in the Dashboard.
- Devices must be associated with their consumables, through Consumable Sets; devices without associated consumables may provide partial or inaccurate information.
- If consumable deliveries are recorded on KDFM eXplorer devices, the algorithm that calculates forecasts and coverages will have more information. As a result, the data provided in the Dashboard will be more reliable. It is therefore advisable to always manage the Alerts by creating their Deliveries according to the procedures indicated in the KDFM eXplorer system documentation.

Our Business Intelligence team is committed to developing methods and controls to improve further the quality of the data provided in the Dashboard and increase the usability of the information.

We will shortly be adding other elements to assess the reliability of the data provided, which will enable the user to decide what actions to take based on the degree of accuracy of the available analyses.

How to access the Supplies Intelligence Dashboard?

To access the Supplies Intelligence Dashboard, open the Analytics page in the KDFM eXplorer Portal, and select the corresponding link.

Like all other Reports in the "System Reports" section of the Analytics page, the Supplies Intelligence Dashboard can also be copied to the "Your Reports" section and edited using the Editing features provided by PowerBI Embedded.

You can then create custom versions of this Dashboard, save them, and share them with other users in your company.

The KDFM support team is available for any help on the use of this too.