

Technical Disclosure Commons

Defensive Publications Series

November 21, 2018

IMAGE QUALITY ANALYSIS CUSTOMIZATION FOR VARIANCE IN CUSTOMER SENSITIVITY

HP INC

Follow this and additional works at: https://www.tdcommons.org/dpubs_series

Recommended Citation

INC, HP, "IMAGE QUALITY ANALYSIS CUSTOMIZATION FOR VARIANCE IN CUSTOMER SENSITIVITY", Technical Disclosure Commons, (November 21, 2018)
https://www.tdcommons.org/dpubs_series/1695



This work is licensed under a [Creative Commons Attribution 4.0 License](https://creativecommons.org/licenses/by/4.0/).

This Article is brought to you for free and open access by Technical Disclosure Commons. It has been accepted for inclusion in Defensive Publications Series by an authorized administrator of Technical Disclosure Commons.

Image Quality Analysis Customization for Variance in Customer Sensitivity

Abstract

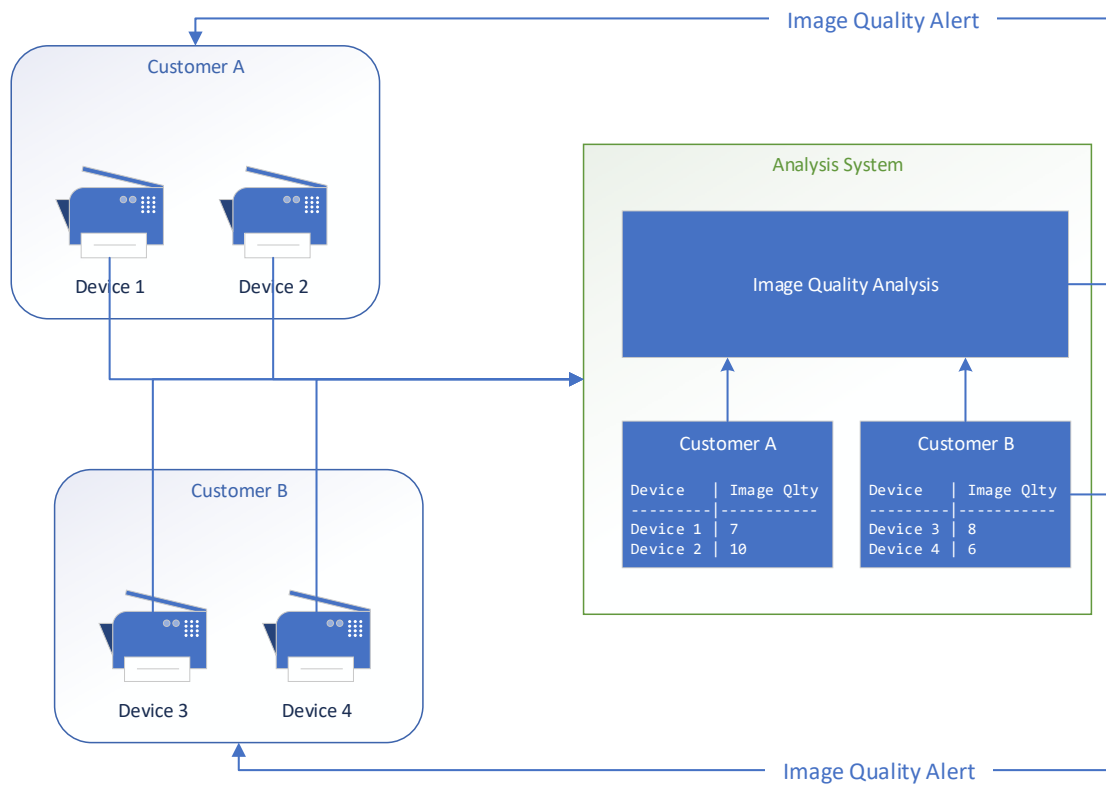
In the development of system that can analyze image quality of a printed page, there is variability in what the customer will consider unacceptable image quality for their print job. The algorithms, be them expert rule based, deep learning, or some other AI variant, will output a value for the image quality that fits within a range. The low end of that range is generally considered good image quality, while the high end is considered poor image quality. With customer variance, any system employing the analysis of image quality will have to take that variance in account. One way to account for this is to allow per-customer, per-device customization of the acceptable image quality threshold.

Solution Description

Our solution to these issues was to allow our customers to specify the threshold in which image quality is acceptable on a per-device basis. In our system, the quality is measured 0-10, where 0 is great quality without defects, and 10 is poor quality with significant defects. At the start, we only monitor the image quality number and a threshold is not set. This way a customer will call in to complain about the image quality for a device. Since we are monitoring it, we know what the image quality number is, and we will set the threshold for that device at the current number minus 1. The system will do this for all devices to set a baseline of what acceptable image quality is on a device for a customer.

Once the system is set up with threshold values, it can then evaluate the result of the image quality processing against that threshold. Once the image quality result reaches the device threshold, the system will alert the dealer that the device is having image quality problems. This system may be coupled with other systems to help diagnose the root cause of the problem. An early alert that the image quality is reaching the unacceptable threshold will let the dealer proactively schedule a visit to the customer to triage the device. Without this system being tuned to the customer, the image quality may pass into the unacceptable range and cause an escalation call with the dealer.

Solution Diagram



Disclosed by Darrel D. Cherry and Daniel Siddall, HP Inc.