Solid-state drives make for a great upgrade for your customers, but research by Seagate chairman Alvil Cox suggests SSDs might pose data loss risks if left unplugged in an environment with varying temperatures.

According to the study, the period of time "some" SSDs retain data when unpowered can be slashed in half for every 5°C rise in ambient temperature. In other words, if an SSD retains data for 2 years if kept at 25°C, that length of time is cut down by half (to 1 year) if the temperature rises to 30°C.

Surprisingly consumer SSDs appear to perform better at this test than enterprise models--consumer SSDs tend to retain data for around 2 years when held when held in optimal conditions, while the enterprise SSD data retention period clocks at 20 weeks. As a result, a 5°C increase in temperature can drop that period to just 10 weeks. To think that, in some countries, 30°C is not even too high a temperature…

Thus, while SSDs might have an advantage in both speed and durability (thanks to a lack of moving parts), HDDs appear to be superior when it comes to simply holding data for longer periods of time. The solution? As a KoreLogic blog post suggests, "if long-term storage is required, image the [SSD] onto a mechanical drive and place that drive in storage as well."

Go SSD Standards Presentation

Go SSD Storage-- Ignorance of Technology is No Excuse (KoreLogic Blog)