Liquid Cooling Systems are 1,000 times more effective than traditional air-cooling and by switching to liquid cooling our company would reduce energy costs by 90% every year (Bevanger). Liquid cooling is an alternative method to preventing a CPU from overheating by using water as a cooling medium, as opposed to fans (commonly referred to as heat sinks). By investing in liquid cooling our company will save on energy costs, allow a more efficient cooling process, and make our data centers more environmentally friendly.

Liquid cooling, also called water-cooling, is the best solution to rapidly remove heat from any computer system. It is the only solution that successfully removes heat from the critical spots of the computer, such as the CPU, with almost no constant maintenance (EKWB). When our current air-cooling system needs maintenance, we must shut off that specific unit. This will interrupt productivity and can be very costly. Even though there is a drastic reduction in temperature, the current air cooling system still produces heat that just blows the heat out of the window. The liquid cooling system passes the heat from the water in the pumps and allows it to be transferred to other areas of the building where the energy can be recycled. (Fanning). Some examples of this recyclable energy include heating up certain parts of the building, reusing the water for faucets, or heating conventional radiators.

Every year, data centers cooling systems make up around two percent of global power consumption (Fanning). With a liquid cooling system we are reducing our energy by 90% alone just from the costs to cool our systems. Additionally, we can recycle the heat being used for different parts of the building, which can lower our costs even more. If we switch to liquid cooling we increase our energy efficiency, increase our operations knowing that our systems will not overheat, and reduce our costs by recycling the heat our system already produces. This ensures us saving time and money in the future while immersing our company in the future of global computing.
Sources


Flash Research Assignment #2: Liquid Cooling