Improvement in electrical devices through digital input

The **digital revolution**! We are in the era of the accuracy and smart technologies in the engineering technology. After the invention of the smaller transistors, the digital integration into electrical industry also evolved in an exponential way.

This digital revolution makes things easy and more precise in the field of **electrical devices**. The most important side that digital revolution made the things better, in my opinion, is in the electrical measurement devices area.

Although nowadays analog measurement devices seem more powerful, the human reading error factor of the analog measurement makes it less accurate compared to the digital measurement.

Especially I remember some bad memories about accuracy. For example one day one of the engineer working on the electrical power regulator of a PLC made only 1 volt mistake in design and it resulted in a day off for the factory. So accuracy is important and digital makes it easier to control.
Another change happened because of the **digital circuits** is in our lives. We use lots of **digital circuits** now in our cars, with our washing machines, home energy distribution systems and more.
The example here I want to give is the washing machine. The washing machines made before the wide use of the digital circuits includes only basic circuit. This basic circuit is just fixed to a constant number of revolutions and has only several functions for several type of the fabric.
Now the latest washing machines are more than that. They have lots of functions, lots of features and digital screen to follow the steps. We have more control over the electric motor and correspondingly the machine. This can be applied to industry also you now we have more complex drive methods and more control ability over the industrial motors with the help of the digital control circuits.
The last and the most important use of the digital circuits are in the control side of the industry (and nowadays in the low voltage side). You know PLC is the heart of the control in the industry. These days a factory or an industrial electrical control system without a controller circuit seems antique.
Another usage is in the home automation side. Smart homes becoming more and more popular these days and these revolution in the home electrical wiring side forces the people working in this area to convert their wiring methods more convenient to these kind of systems or making agreement with the firms developing these kind of systems.
I advice to be in this home automation side if you working on the electrical wiring in buildings since the usage of these systems will be a must in the next age. These systems also works as an energy usage controlling systems by measuring the electrical energy input and switching some electrical loads in a smart way so that the user don't need to think about these things all the time.
There are lots of examples like these, anyway the digital revolution made it, got us to the next level, let us use the potential at best.

Conclusion

The digital circuits and their usage in the control and application side of the electrical systems are becoming a must. It seems like we can't resist the digital revolution in the electrical industry.

The thing we need to consider is how to apply and what to add to these technologies to make it more effective, economical and user-friendly.

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