Control system philosophy - what is the best setup?

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Throughout the last decades we've seen thousands of customer applications. The more complex the applications the more important the conceptual work and everything starts with a philosophy - in this article the electrical control philosophy.

The following slides were created because a customer project team questioned the control concept on a very high level. Therefore we provided our point of view, based on customer feedback, which we gathered throughout the last years. I hope you'll find this helpful as well... (the following considerations are independent of selected suppliers)

control system layers

Woodward's controllers the system:

It is possible to cover a lot of functionality in Layer 3. What are the advantages and disadvantages of such an approach?

Generic & typical differences between the different Layers

Typical functionality in Layer 2, which Woodward covers in it's controls

For very complex applications, it makes sense / one could consider to move the breaker logic and sequencing to Layer 3. If there are too many different factors, which would influence these scenarios.

This is how it could work with a simple PLC on layer 3, which drives actions on layer 2.



