

# WHAT YOU NEED TO KNOW ABOUT

Walter A. Shewhart



## Early Life

Shewhart was born in Illinois in 1891 and gained his Doctorate in Physics from the University of California in 1917. Shewhart joined the Western Electric Company at the Hawthorne Works in 1918.



## Initial work

Shewhart's work at Bell focused on improving the reliability of their transmission systems (telephones). From 1924 Shewhart in effect started to apply what we now refer to as control charts to monitor quality and reduce variance.



## Next Steps

In 1925 Shewhart moved to Bell Telephone Laboratories to advance his theories and link statistics, engineering and economics. His 1931 book *Economic Control of Quality of Manufactured Product* made SPC mainstream.



## Famous Allies

Shewhart taught and worked alongside many other pioneers. Shewhart mentored both Joseph Juran and W. Edwards Deming during 1925-6. Much of Deming's work is based on the theories put forward by Shewhart and Six Sigma uses many of his concepts.



## Awards and honours

Shewhart was founding member and president of the Institute of Mathematical Statistics. In addition: first honorary member of American Society for Quality, honorary fellow of Royal Statistical Society, Holley medalist (American Society of Medical Engineers).



## Colossus

Shewhart must be recognised as a true colossus. His work on Statistical Process Control is legendary. His contribution to our understanding of how workers behave - the Hawthorne Effect - is significant. The *Shewhart Cycle* adopted what we refer to as the Plan-Do-Check-Act approach.