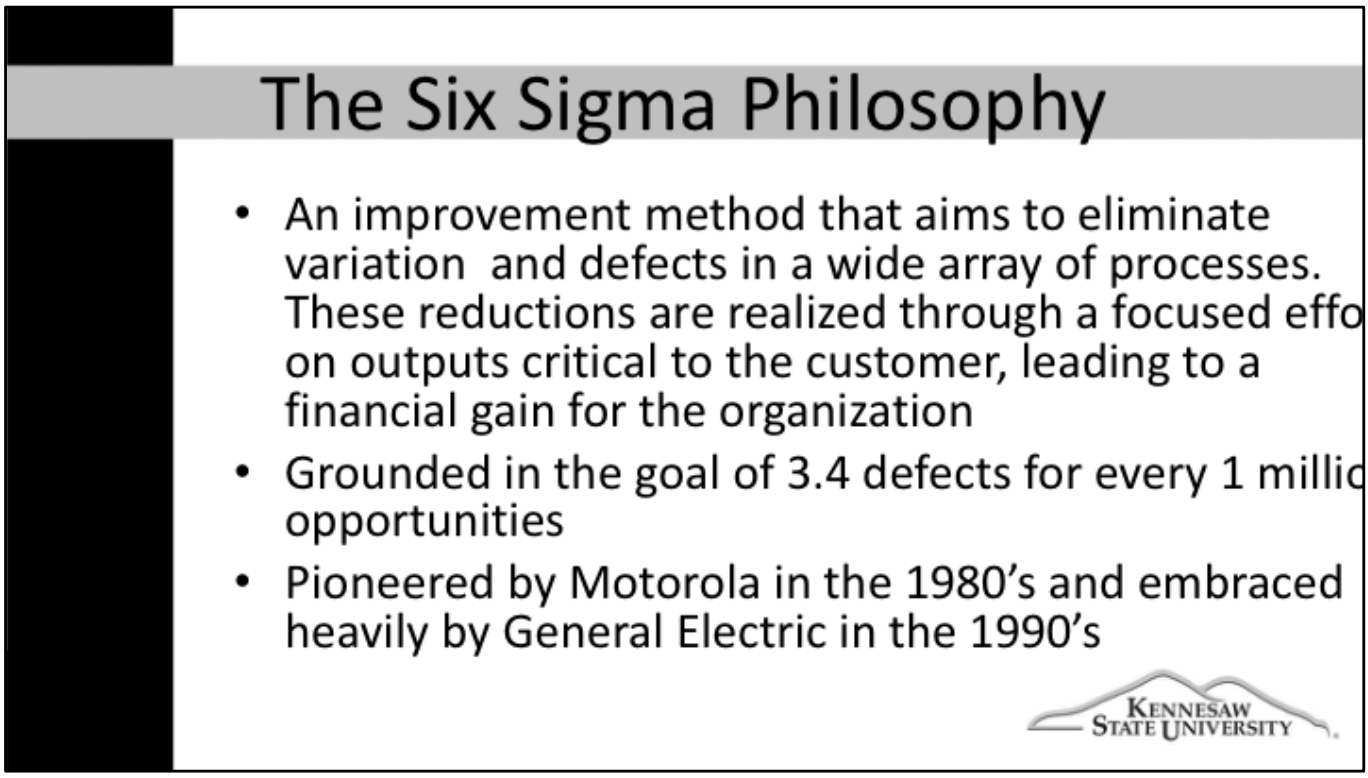
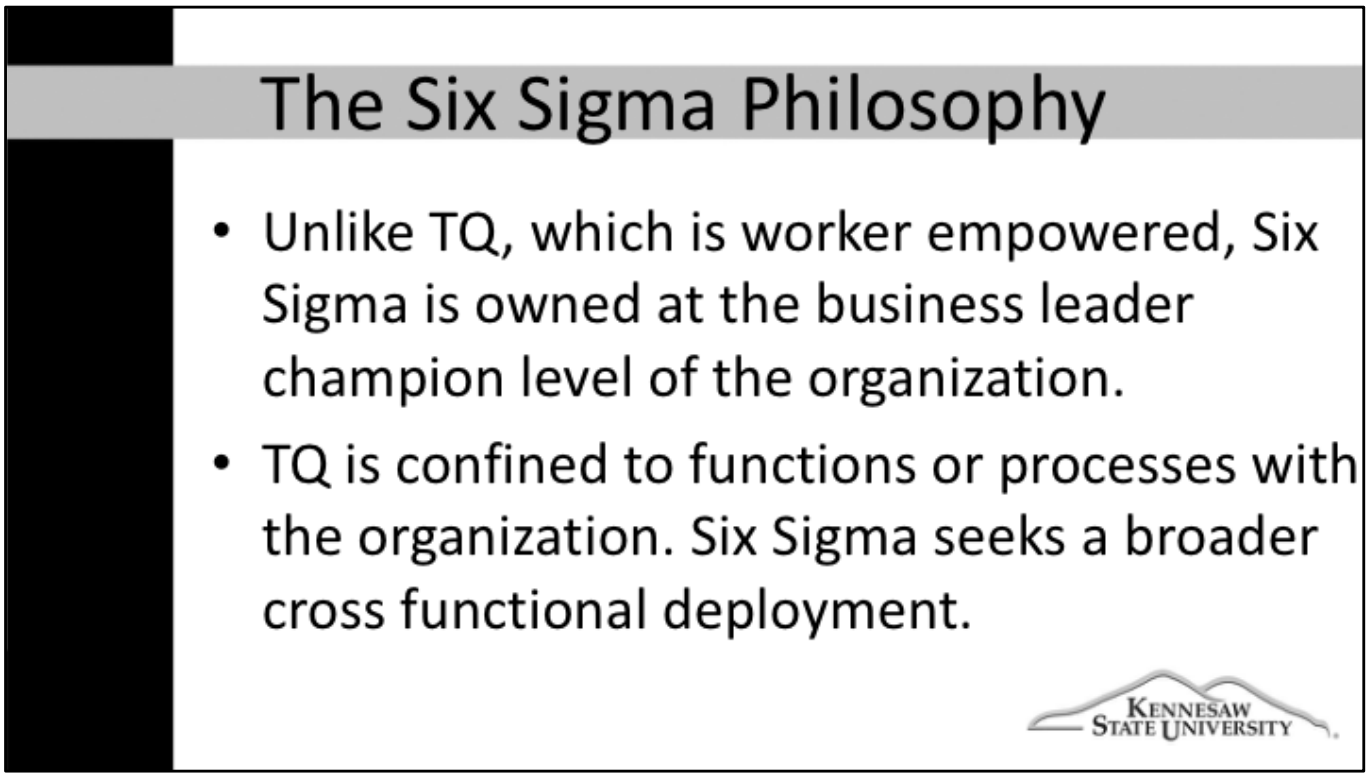
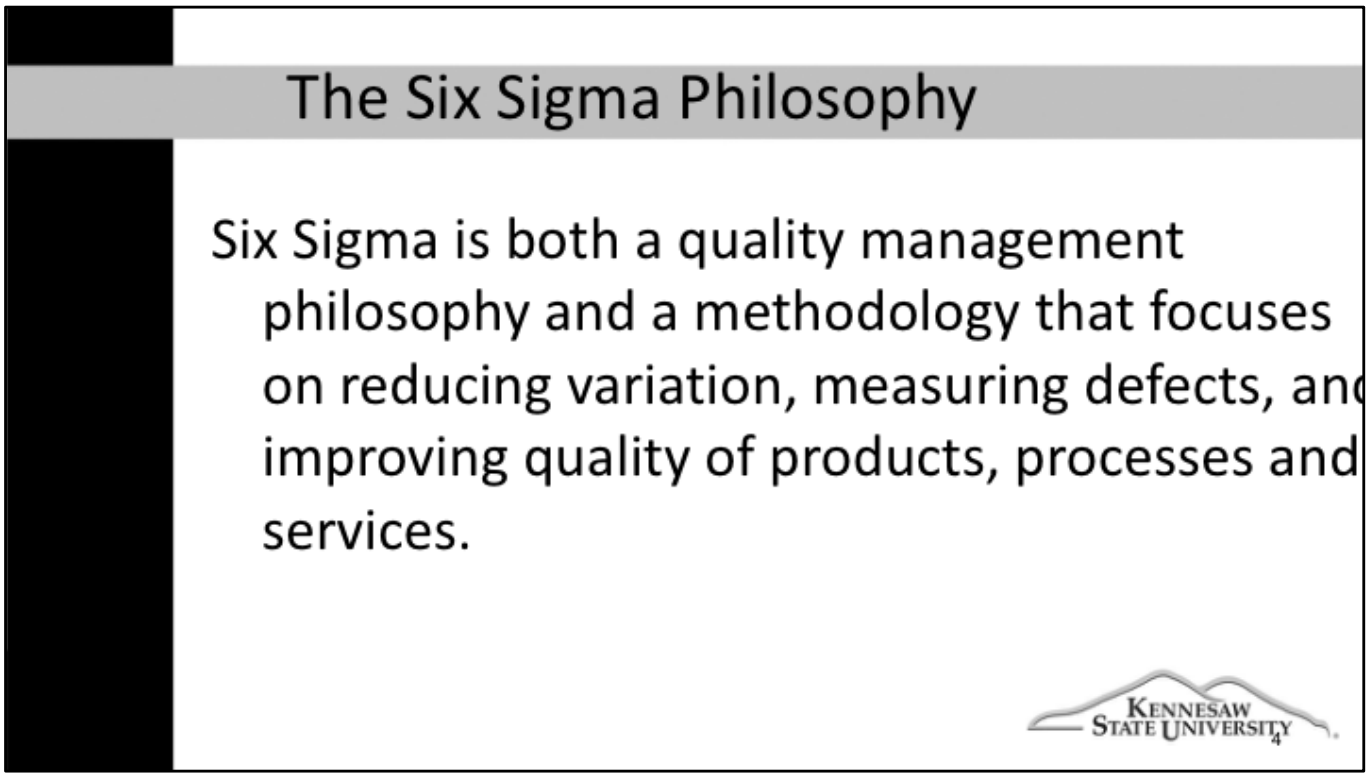


Six Sigma is a process improvement approach. In Juran's trilogy, this falls in the third part: quality improvement. It can also be part of quality planning, since it should be strategic. This approach is very focused, and follows a 5 step model. There is also a heavy reliance on statistical methods.



TQ stands for Total Quality. It is reflective of Deming's ideas and embodied in the Malcolm Baldrige criteria. Some differences between Total Quality and Six Sigma are pointed out here. Although there are differences, these two approaches work quite well together. Total Quality tends to focus on culture change: empowering workers and teams, and much of the improvement takes place within departments or functions. Six Sigma focuses on high level cross functional processes with involvement from upper management, and relies on experts to implement.
Total Quality generally uses simple tools for process improvement. But, these simple tools can be very powerful. You do not need complex statistical methods for everything. It is important to use the approach that fits the situation. Six Sigma uses a 5 step model called DMAIC to shape improvement projects, and focuses on outcomes in terms of benefits for the company.



Six Sigma focuses on reducing variation, measuring defects, and improving quality of products, processes and services.

The Six Sigma Philosophy

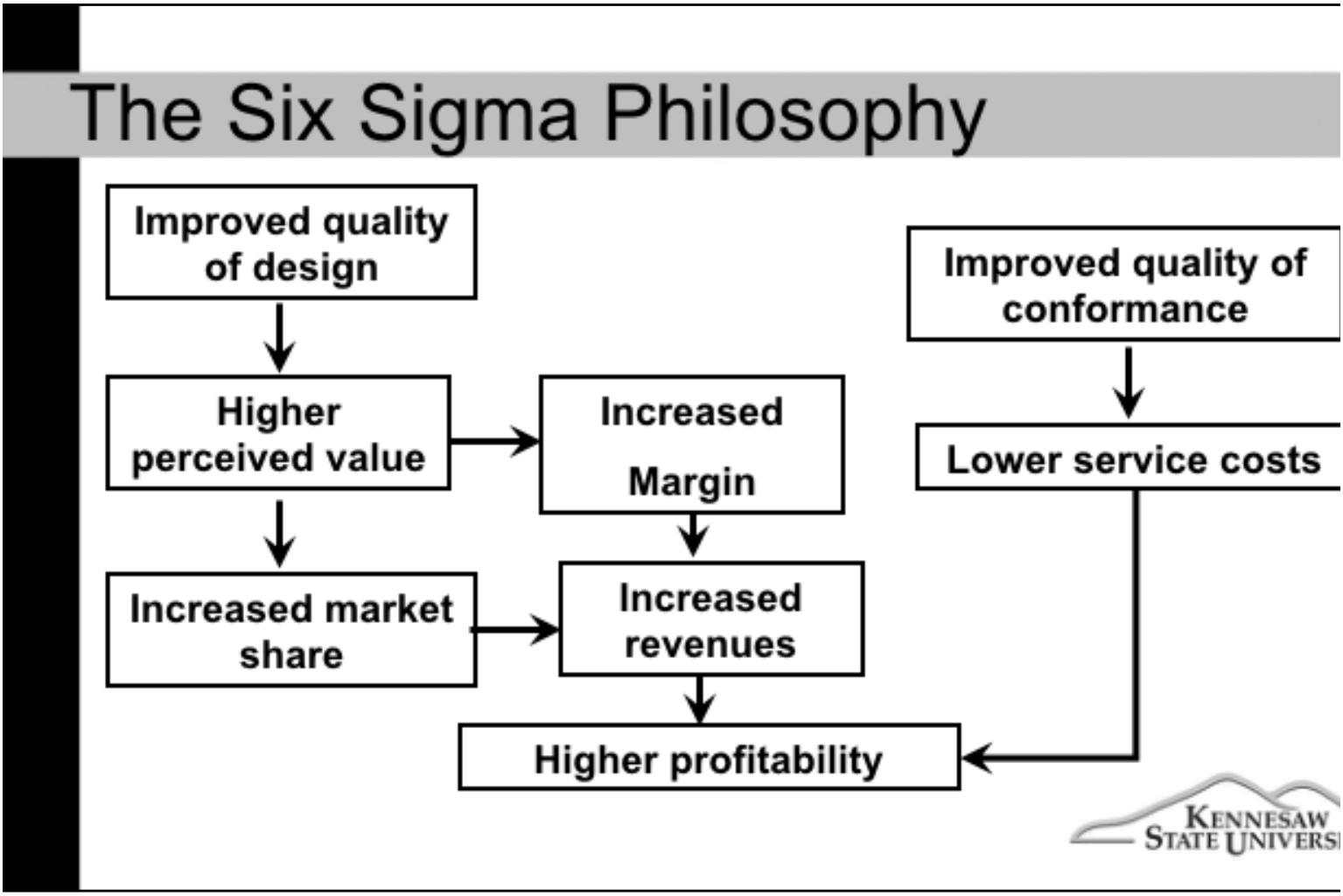
Event	Time	Impact	Era
Motorola Pioneered	Early 80's	A systematic approach to solving complex part and process problems and the launch of an effective process improvement process	Goal
Computer and Software Capability	Early 90's	Advanced degrees in statistics and many years of problem solving were no longer needed to solve tough business problems.	Enabling

The beginnings of Six Sigma can be traced to Motorola in early 80's which later transformed into a enterprise-wide ''strategy'' for business management and improvement.

The Six Sigma Philosophy

Event	Time	Impact	Era
Allied Signal, Texas Instruments & GE	Mid 90's	Transformed Six Sigma from a quality improvement focus to a business improvement focus.	Proof of Capability
Adapted for Transactional and Service Problems	Late 90's	Six Sigma is no longer just for manufacturing, it became one of the most powerful transactional improvement methods available.	Business Mgmt System

- Six Sigma **evolves** from a "Quality Goal" to a enterprise-wide ''strategy'' for business management and improvement



Improved quality of design and conformance create a cascade of impacts on customer perceived quality, lower service costs, increased margin and market share…and ultimately higher profitability

The Six Sigma Philosophy

From	To
Problem-driven	Customer-driven
Reacting to dissatisfaction	Preventing dissatisfaction
Results at any cost oriented thinking	Process oriented thinking
Used to waste and rework	How are results, rework, restarts created and delivered
Special cause focus	Common cause focus
People management	System management
Reward fire-fighting	Reward team effort

Lean Six Sigma requires a fundamental shift in our mindset. Instead of being problem driven, we need to be customer driven. Instead of reacting to issues and dissatisfaction, we should search for ways to prevent issues and dissatisfaction. The existence of waste and rework are viewed as opportunities for improvement, prevention, and reduction.