Table 1. Classical Versus Bayesian Economic Plan.

Factor	Classical Plan		Bayesian Plan (Not Economic)		Bayesian Plan (Economic)	
	Attribute	**Variable**	**Attribute**	**Variable**	**Attribute**	**Variable**
Parameters	α, β, c, s AOQ, ATI	α, β, X, L, U	$\alpha, \beta, c, s, \sigma_\mu^2$ p Has Known Distribution	$\alpha, \beta, X, L, U, \sigma_\mu^2$ μ Has Known Distribution And x, $f(x\|\mu)$	$\alpha, \beta, c, s, \sigma_\mu^2$, Cost Parameters, $\omega(p)$ Assumed	$\alpha, \beta, X, L, U, \sigma_\mu^2$, Cost Parameters, $h(\mu)$ Assumed And Deduce $\omega(p)$ Or $\omega(p)$ Assumed And Deduce $h(\mu)$
Compute	p'	p'	$E(p\|x), E(p\|\mu)$, $E(p\|\overline{x})$	$E(p\|x), E(p\|\mu)$, $E(p\|\overline{x})$	$E(p\|x), E(p\|\mu)$, $E(p\|\overline{x})$	$E(p\|x), E(p\|\mu)$, $E(p\|\overline{x})$
Decision	If $s < c$ Accept Lot	If $L < x < U$ Accept Lot	$E(p\|x), E(p\|\mu)$, $E(p\|\overline{x})$ Control Limits	$E(p\|x), E(p\|\mu)$, $E(p\|\overline{x})$ Control Limits	$E(p\|x), E(p\|\mu)$, $E(p\|\overline{x})$ Esimated For Each Decision To Dispose Lot	If $\overline{x} < \overline{x}_{n1}$ Reject Lot If $\overline{x} > \overline{x}_{n2}$ Reject Lot

α = Producer's Risk β = Consumer's Risk s = Sample Size c = Acceptance Number
X = Quality Characteristic L = Lower Control Limit U = Upper Control Limit
AOQ = Average Outgoing Quality ATI = Average Total Inspection p' = Fraction Defective