ROI Analysis - QIT Complaints/Issues Management System

1) Customer Complaints Process

Customer Complaint Process	W/O a system	Manual System	In-hours system	QIT System	Remark
		Process Time (minute)			
Service Rep. takes customer complaints	0	10	10	0	In QIT System Customer can enter complaint directly online
Service Rep. sends information to QA	0	10	2	0	In QIT system no information needs to be sent
QA reviews and identifies key issues	0	20	5	1	
Total Minutes for a Complaint	**0**	**40**	**17**	**1**	

2) Nonconformance Process

Nonconformance Process	W/O a system	Manual System	In-hours system	QIT System	Remark
		Process Time (minute)			
Employee submits a nonconformance	0	5	5	5	
QA collects and enters information	0	10	0	0	In QIT system no information needs to be sent
QA reviews and identifies key issues	0	20	5	1	In QIT system, the instance reports will help user identify key issues by using cost or risk as index.
Total Minutes for a Nonconformance	**0**	**35**	**10**	**6**	

3) Corrective Action Process

Corrective Action Process	W/O a system	Manual System	In-hours system	QIT System	Remark
		Process Time (minute)			
QA initiates CAR	0	20	5	5	
QA sends CAR	0	10	1	1	
Responsible Person receives CAR	0	5	1	1	
Responsible person analyzes CAR	0	10	10	10	
Responsible person conducts root cause analysis	0	60	30	15	QIT system has a built-in root cause analysis tools which will help user conduct in-depth root cause analysis
Responsible Person sends CAR back to initiator	0	10	1	1	
Initiator reviews CAR	0	20	5	5	
Initiator closes CAR	0	10	1	1	
Total Minutes for a CAR	**0**	**180**	**64**	**45**	

4) Productivity Comparison

Annual Cost for 300 CARs	W/O a system	Manual System	In-hours system	QIT System	Remark
		Total Administrative Time (minute)			
Annual process time for complaints (100 complaints/year)	0	4000	1700	100	
Annual process time for nonconformance (500 nonconformance/year)	0	17500	5000	3000	
Annual process time for CAR (300 CARs)	0	54000	19200	13500	
QA summarize CAR Cost, Failure Mode, and other reports	0	11520	12	12	
Total Annual Administrative Time (minute)	**0**	**87020**	**25912**	**16612**	
Total Annual Administrative Time (hour)	**0**	**1450**	**432**	**277**	81% productivity improvement after moving from the manual system to QIT system

5) Total Cost Comparison

Cost Driver	W/O a system	Manual System	In-hours system	QIT System	Remark
		Cost			
Administrative Cost ($36/man hour)	$ -	$ 52,212.00	$ 15,547.20	$ 9,967.20	
First Year Software Cost	$ -	$ -	$ 40,000.00	$ 30,000.00	Develop an in-house system will take two experienced engineers (80K/year) at least 3 months to develop and test the system.
Penalty cost for 100 complaints and 500 nonconformance	> 1 M?	$ -	$ -	$ -	
Total Cost	**> 1 M?**	**$ 52,212.00**	**$ 55,547.20**	**$ 39,967.20**	24% cost saving comparing to Manual System
					28% cost saving comparing to In-house system

6) Conclusion

1) A Complaints-nonconformance system is needed for any business who is concerning about customer, cost and productivity.

2) Using QIT System will improve your productivity by 80%.

3) Comparing to a manual system, using QIT System will save operating cost by 24% in the first year and 72% thereafter.

4) Using QIT System will help you improve customer loyalty and customer retention by reducing the response time on complaints.

5) Using QIT System will help you identify cost reduction opportunities. Most of our customers identified > $ 1M improvement opportunities per year.