

Hands-on Statistical Software Training for Effective Six Sigma Implementation (March 27 & 28, 2003)

Time
9:30am-5:00pm
(Please arrives at 9:15am for registration)

Fee
HK\$3,000
lunch included

Introduction

Six Sigma is a proven powerful methodology to improve quality and productivity in many manufacturing and service industries. Statistical techniques play a very important part in Six Sigma implementations. Minitab is known to be the most widely used statistical software in Six Sigma improvement projects in the world but its public training courses are normally held in the USA. The trainer has been trained by Minitab and will guide the participants to use the software in practising different work example

<p>Content: Data Entry and Manipulation</p> <ul style="list-style-type: none"> ➤ Learn how to use the software's window, menus and toolbars ➤ Enter and manipulate data ➤ Create and interpret graphs ➤ Generate reports ➤ Create new data <p>Graphical Analysis</p> <ul style="list-style-type: none"> ➤ Evaluate distributional properties using graphical summaries and normality tests. ➤ Analyze defect data using Pareto charts, cause-and-effect diagrams, time series plots, and run charts. ➤ Use brushing tools to identify data points in graphs. ➤ Customize graphs and automate graph production using exec files. ➤ Clean up data sets using data subsetting tools. <p>Introduction to Inferential Statistics</p> <ul style="list-style-type: none"> ➤ Test the null hypothesis using t-tests and confidence intervals. ➤ Assess the power of a hypothesis test using power analysis. <p>t-Tests and Tests of Proportions</p> <ul style="list-style-type: none"> ➤ Evaluate the difference between a process mean and a target value using a one-sample t-test. ➤ Evaluate the difference between two sample means using a two-sample t-test. ➤ Evaluate the difference between paired observations using a paired t-test. ➤ Evaluate the difference between a proportion and a target value using a test of one proportion. <p>Introduction to Factorial Designs</p> <ul style="list-style-type: none"> ➤ Understand the structure and use of factorial design. ➤ Understand main effects and interaction effects on a response. 	<p>Analysis of Variance</p> <ul style="list-style-type: none"> ➤ Compare group variances using a variance test. ➤ Compare means for samples collected at different levels of a single factor using a one-way ANOVA. ➤ Compare means for samples collected at different levels of a single factor using an analysis of means. ➤ Compare means for samples collected at different levels of more than one factor using a balanced ANOVA. ➤ Compare means for samples collected at different levels of more than one factor using a general linear model. <p>Quality Planning Tools</p> <ul style="list-style-type: none"> ➤ Prioritize quality problems and focus improvement efforts using Pareto charts. ➤ Organize ideas about the potential causes of a problem using cause-and-effect diagrams. ➤ Identify nonrandom patterns in time-ordered data using run charts. <p>Gage R & R Study / Measurement System Analysis</p> <ul style="list-style-type: none"> ➤ Assess how the precision of the measuring device and the operator affect the variability of a measurement system using gage R & R studies. <p>Data in Subgroups</p> <ul style="list-style-type: none"> ➤ Evaluate process control using X, R, S, and historical charts ➤ Evaluate capability using Capability Analysis. ➤ Evaluate capability with non-normal data using a Box-Cox transformation. <p>Full Factorial Designs</p> <ul style="list-style-type: none"> ➤ Determine the sample size for a full factorial design ➤ Replicate a full factorial design. ➤ Calculate the power of a full factorial design 	<p>Sequential Experimentation</p> <ul style="list-style-type: none"> ➤ Reduce the number of experimental runs using fractional factorial designs. ➤ Detect curvature in your model using center points. <p>Multiple Response Optimization</p> <ul style="list-style-type: none"> ➤ Find factor settings that minimize one response variable ➤ Find factor settings that optimize multiple response variables. <p>Who Should Attend Participants are expected to have prior experience in using PC based softwares. This course is designed to train people with very little knowledge on statistics.</p> <p>Training Methodology Each participant will be allocated a computer with Minitab software. Extensive time will be spent on practicing the software following the trainer's guidance. Explanation on statistics will be kept to a minimum. The objective of the course is to let the participants gain the experience of using statistical software to solve problems.</p> <p>Speaker Daniel Chan is a Chartered Engineer in Electronic Engineering. He is a Senior Consultant of Hong Kong Productivity Council and has been trained in Japan and the U.K. Daniel has over 19 years of experience in design and setting up of industrial systems having chemical, mechanical, electrical and electronic elements. He is officer-in-charge of the HKPC Reliability and Calibration Center.</p> <p>Enquiry Winnie Fung ☎ 27885767 winnief@hkpc.org or Jennie Kwok ☎ 27885756</p> <p>Enrolment Enrollment Counter, 1/F., HKPC Building, 78 Tat Chee Avenue, Kowloon Tong, Kowloon [All cheques should be crossed and made payable to the "Hong Kong Productivity Council" with one copy of the enrollment form copy]</p>
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<p>Enrollment Form : ➤ Please fax to 27885405 for registration. <i>Please type it for our record</i></p>	<p>Hands-on Statistical Software Training for Effective Six Sigma Implementation</p>	<p>March 27 & 28, 2003 Time: 9:30-5:00pm Fee: HK\$3,000</p>	<p>04015667</p>
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English Name (Mr/Mrs/Miss/Ms)			Chinese Name		
Company Name			Position		
Company Address					
Telephone Number			Fax Number		
Mobile phone			Email Address		
Contact person	Tel:	Fax:	Co. Sponsor	Yes / No *	

Important Notes:

1. Course fee must be accompanied this form (or its photocopy), otherwise enrollment may be rejected.
2. HKPC has adopted a Personal Data (Privacy) Policy. The policy statement is available at HKPC enrolment counters for collection.
3. Enrollment fee is not refundable unless HKPC is notified in writing of your withdrawal at least 5 working days before the course commences.
4. HKPC reserves the right to reject any applicants in any circumstances and for whatever reasons.
5. Classes will be cancelled if typhoon signal no. 8 or above or black warning is still hoisted at 6:00a.m./11:00a.m./4:00p.m..
6. Students will be notified when the class will be made up as soon as possible. Speakers or Content may subject to change without prior notice to students.

NOTE: If you would prefer not to receive further promotional materials, please fax to 2788-5405 with your fax number:

