

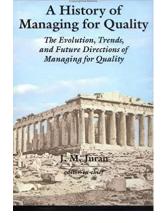
ASQ North Jersey General Section Meeting in Fall 2021

"A Short History of ASQ and the Quality Profession"

Roderick A. Munro, November 17, 2021

ASQ North Jersey

A place for Quality Professionals to network, learn, share and grow.



Learning Event



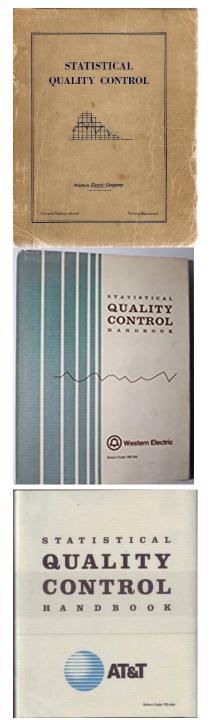
- Purpose
 - Some Fun With The History Of Quality
 - Where Did We Come From?
 - North Jersey Section 0304 started 1964
 - The Quality Explosion 1980's
 - Going Forward From Here



What Is Quality?

- Juran's A History of Managing for Quality
- 1750 UK Industrial Revolution LR 1760
- Fredrick Taylor Henry Ford
- Shewhart First Control Chart 5/16/1924
- Hawthorne Plant Cicero, Illinois
- 1950's Japan Deming & Juran
- 1980 If Japan Can, Why Can't We
- 1980's Quality Explosion in USA
- 1990's, 2000's, 2010's Future ???
- ISO 9001:TBD

http://westernelectric.sectorlink.org/company/index.html



3

Quality Profession Timeline

SIX SIGMA

Interchaangeable Parts

Standardized Work Time Study & Work Sta

ry Ford Assembly Lines

ine Teel D

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rank Gilbreth

Manufacturing Strate

Edwards Deming

0

IED MATHINE & ENCINE

Joseph . Ishikawa SPC TOM

Process Chart Motion Study

wing Conventions

derick Taylor

1850

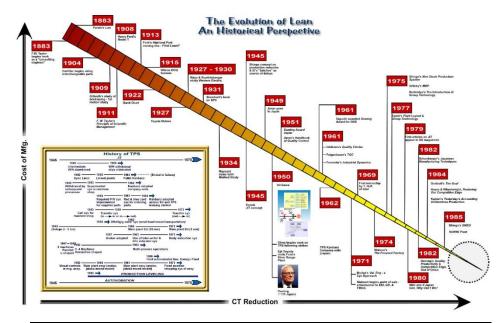
American Civil War

1900

World -

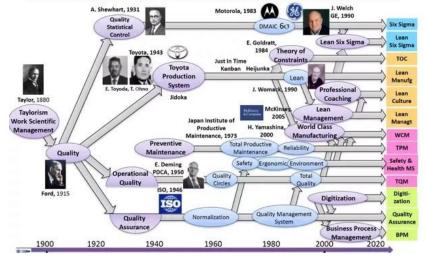
1950-

2000



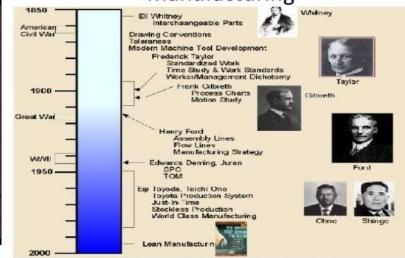
LEAN SIX SIGMA

A BRIEF -HOWEVER COMPLEX- HISTORY OF LEAN Several branches & trends influence its evolution

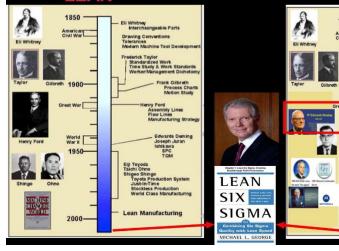


History Timeline for Lean

Manufacturing



LEAN

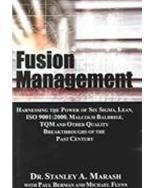




Quality 1.0 – 4.0



Period	Summary description	Quality	Summary description
Industry 1.0— Prior to 1890	 Humans harness water and steam power to build industrial infrastructure. Crude machines gain productivity over independent craft work. Increased output is achieved using mechanical advantages. Work focuses on performing tasks faster and more consistently. Transportation/moving goods occurs more frequently. 	Quality 1.0	 Quality is assured through measurement and inspection. Production volume is emphasized rather than quality. Inspection does not focus on cost reduction, eliminating wastes, or loss and inefficiency. Work conditions are not important; maximizing worker productivity takes precedence.
Industry 2.0—1890 to 1940	 Electricity powers industrial machines. Performance capability gains occur through application of new mechanisms. Scale of automation becomes broader as motor size can be varied to fit specific circumstances. 	Quality 2.0	 Maximizing productivity continues to be the primary focus. Adherence to standards that reflect the minimally acceptable quality level is prevalent. Financial quality is measured based on scrap and rework. Labor performance is used to measure productivity.
Industry 3.0–1940 to 1995	 Computer power provided to workers to increase productivity. Use of information and communication technology drives improvements. Human participation in workplaces declines. Stand-alone robotic systems replace manual work. 	Quality 3.0	 Quality is a business imperative. Meeting customer requirements (customer satisfaction) is emphasized. Continual improvement is applied. Gains in productivity occur by stabilizing highly efficient processes, standardizing work and involving all workers in the activities that create quality. Standardization activities (ISO 9001) and achieving business excellence through organizationwide assessment (such as the Baldrige Criteria for Performance Excellence) emerge.
Anticipated changes that will occur during Industry 4.0—1995 to present	 Integrated cyber-physical interfaces automate working environments. Automated processes deal with end-to-end systems. Humans serve only in positions where human judgment cannot be automated and human interactions cannot be simulated. Machines learn to learn (artificial intelligence). 	Quality 4.0	 Digitization is used to optimize signal feedback and process adjustment, and adaptive learning supports self-induced system corrections. Quality shifts its control-oriented focus from the process operators to the process designers. Machines learn how to self-regulate and manage their own productivity and quality. Human performance is essential; the emphasis shifts from production to system design and integration with the business system.



Evolution of Quality Profession

FIGURE 3-1 EVOLUTION OF SIX SIGMA

Acceptance Sampling)20s
* Control Charts	20s
* Hawthorne Studies	30s
 Design of Experiments	30s
 Statistical Quality Control	940s
 Management by Objectives	950s
* Zero Defects	960s
Participative Problem Solving	970s
★ Quality Circles1981 Quality Circle Magazine Predates Quality Digest19	970s
Total Quality Control/Companywide Quality Control	970s
 Statistical Process Control	970s
* Kaizen	70s
Total Quality Management	980s
* Quality Gurus	980s
Statistically Aided Management [™]	980s
* Lean Enterprise	980s
* Baldrige Award	980s
Six Sigma	990s
* Statistically Aided Management is a trademark of STAT-A-MATRIX Inc.	

Time Line Details



L I						
1924 🗙	Walter A. Shewhart, a statistician at Bell Laboratories, developed the control charts, and principles of statistical process control					
1925	Sir Ronald Fisher published the book, Statistical Methods for Research Workers, and introduced the concept of ANOVA					
1927-1933	Elton Mayo starts the Hawthorne Studies at Western Electric plant in Cicero IL					
1930s	Statistical Quality Control (SQC) – application of statistics to quality control					
1931	Shewhart publishes Economic Control of Quality of Manufactured Products					
1937	Joseph Juran introduced the Pareto principle as a means of narrowing on the vital few					
1940	The acceptance sampling plan was developed by Harold F Dodge and Harry G Roming					
1943	Kaoru Ishikawa developed the cause and effect diagram (Ishikawa or fishbone diagram)					
1944	Industrial Quality Control Vol 1 No 1 July 1944 – Society of Quality Control Engineers					
	with cooperation of the University of Buffalo					
1944	Dodge & Roming publish Sampling Inspection Tables Single and Double Sampling					
February 🕇 16, 1946 🎽	The American Society for Quality Control (ASQC) was formed					
May 1946 🇙	The Union of Japanese Scientists and Engineering (JUSE) established					
February 23, 1947	The International Organization for Standardization (ISO) founded Geneva, Switzerland					
1947 🏋	Dr. W. Edwards Deming was sent to Japan to help Japanese rejuvenate their industries					
1948	Shewhart Medal First Awarded by ASQC					
November	USA Military Procedure MIL-P-1629, Procedures for Performing a Failure Mode,					
9, 1949	Effects and Criticality Analysis (FMECA) forerunner to Mil-Q-1629 Procedures for Performing a FMECA (later the FMEA) – 1974, 1977, MIL-STD 1629A:1980					
1						

Case 18013

WAS-724-5-16-24-FQ

MR. R. L. JONES :-

Enc.:

Form of Report.

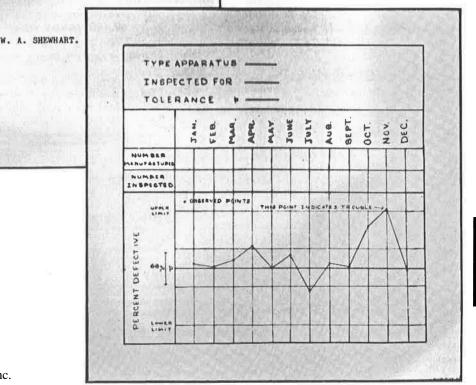
A few days ago, you mentioned some of the problems connected with the development of an acceptable form of inspection report which might be modified from time to time, in order to give at a glance the greatest amount of accurate information.

The attached form of report is designed to indicate whether or not the observed variations in the percent of defective apparatus of a given type are significant; that is, to indicate whether or not the product is satisfactory. The theory underlying the method of determining the significance of the variations in the value of p is somewhat involved when considered in such a form as to cover practically all types of problems. I have already started the preparation of a series of memoranda covering these points in detail. Should it be found desirable, however, to make use of this form of chart in any of the studies now being conducted within the Inspection Department, it will be possible to indicate the method to be followed in the particular examples.

Walter Shewhart First Control Chart

A few days ago, you mentioned some of the problems connected with the development of an acceptable form of inspection report which might be modified from time to time, in order to give at a glance the greatest amount of accurate information.

Written 5-16-1924



INDUSTRIAL QUALITY CONTROL

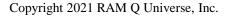
> Reprinted in IQC August 1967



Hawthorne Studies

- Elton Mayo 1927-1933
- In 1927, a group of researchers led by Elton Mayo and Fritz Roethlisberger of the Harvard Business School were invited to join in the studies at the Hawthorne Works of Western Electric Company, Chicago. The experiment lasted up to 1932. The Hawthorne Experiment brought out that the productivity of the employees is not the function of only physical conditions of work and money wages paid to them.
- Overhead Lighting Experiment







Manufacturing Knowledge



A history of the Hawthorne experiments

Richard Gillespie

Communication

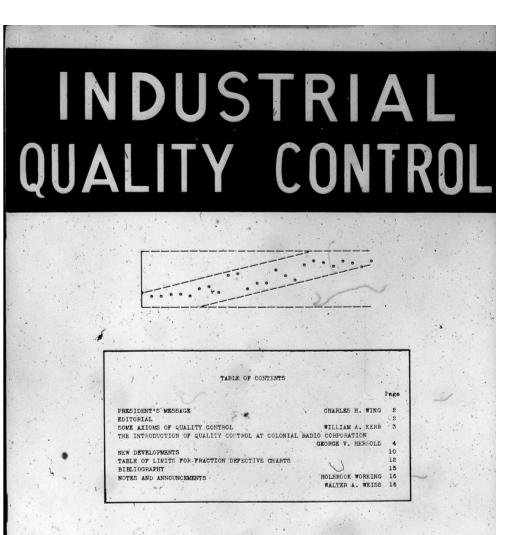
- Grew to over 800 subscriptions
- 1968 QP





Mr. Pareto Head (cartoon) - December 2004

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SOCIETY OF QUALITY CONTROL ENGINEERS IN COOPERATION WITH THE UNIVERSITY OF BUFFALO VOL. 1 JULY 1944 NO. 1



Dorian Shainin

Fax: (203) 645-0551

Carson City, NV 89721 U.S.A. Tel: (703) 281-0783

P.O. Box 20977

Res: 35 Lakewood Circle So. Manchester, CT 06040-7018 Tel: (203) 646-4429



DR. ARMAND V. FEIGENBAUM PRESIDENT

Berkshire Common - South Street - Pittsfield, MA 01201 USA Tel. (413) 499-2880 Fax. (413) 443-7548

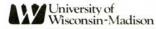
W. EDWARDS DEMING, Ph. D. Consultant in Statistical Studies

> WASHINGTON 20016 4924 Butterworth Place Tel: (202) 363 - 8552

AMERICAN SUPPLIER INSTITUTE, INCORPORATED

Center For Taguchi Methods

DR. GENICHI TAGUCHI EXECUTIVE DIRECTOR Six Parklane Boulevard, Suite 411 • Dearborn, MI 48126 • (313) 336-8877



George Box, F.R.S. Director of Research Center For Quality and Productivity Improvement WARF Building 610 Walnut Street

610 Walnut Street Madison, Wisconsin 53705 608/263-2520



Statistician

Professor Emeritus School of Engineering Princeton University Shewhart Medalist Deming Medalist 503 Lake Drive Princeton, N.J. 08540 Tel : 609 924 5644 Fax: 609 683 8756 stu@soil.princeton.edu



Philip B. Crosby

P.O. Box 2687 • Winter Park, FL 32790-2687 Tel: (800) 223-3932 • (407) 682-6930 • Fax: (407) 682-6688 www.philiperosby.com • phileros@aol.com



Taguch

Plant Location: 409 Signal Min. Rd. Chartaneoga, TN 37405-1917

Walling Address: P.O. Box 558 Chefanooga, TN 37805-0168 Direct Dial Tet: (811) 757-0301 Tet: (815) 267-1068 FAX (515) 267-1031

11

1926-

2001

1981-

1967

1915-

1989

1909-

1990

Ishikawa

Shinao

hiaeo Shinao

Shewhart

Walter Shewhart

Crosby

ASQ Honorary Membership

- 1947 Walter A. Shewart
- 1949 George D. Edwards
- 1960 Martin A. Brumbaugh
- 1965 Mason E. Wescott
- 1965 Harold F. Dodge
- 1965 Simon Collier
- 1968 Eugene L. Grant
- 1968 Joseph M. Juran
- 1970 W. Edwards Deming
- 1978 Ellis R. Ott
- 1982 Harry G. Romig
- 1986 Kaoru Ishikawa
- 1986 Armand V. Feigenbaum
- 1992 William A. Golomski
- 1995 Dorian Shainin
- 1996 George E.P. Box

- 1997 Genichi Taguchi
- 1998 J. Stuart Hunter
- 2000 Philip B. Crosby
- 2003 Dr. Lloyd S. Nelson
- 2004 John D. Hromi
- 2004 Frank M. Gryna
- 2004 Yoshio Kondo
- 2009 Yoji Akao
- 2014 Douglas C. Montgomery
- 2015 Sr. Mary Jean Ryan
- 2015 Dr. Noriaki Kano
- 2018 Ronald Snee
- 2018 G. Geoffrey Vining
- 2019 Dr. Marcos E. Bertin
- 2020 Gregory Watson
- 2020 H. James Harrington
- 2020 A. Blanton Godfrey



FRANK M. GRYNA Researcher, Author

Distinguished Professor of Industrial Engineering Emeritus Bradley University

331 Shetland Valley Court Chesterfield, MO 63005-4840 636-519-0008





ASQ Medals



- 1948 Shewhart Medal
- 1959 Edwards Medal
- 1967 Grant Medal
- 1979 Deming Medal
- 1981 Lancaster Medal
- 1993 Ishikawa Medal
- 2000 Juran Medal
- 2000 Feigenbaum Medal

- 2000 Freund-Marquardt Medal
- 2001 Distinguished Service Medal
- 2002 Crosby Medal



- 2004 Shainin Medal
- 2009 Hutchens Medal
- 2017 Hromi Medal

Section 6

Any member may become a Founding Member by paying an additional sum of not less than five dollars before June 30, 1947.

ASQC Minutes February 16, 1946

- Federated Societies
 - Buffalo
 - Michigan
 - Rochester
 - Syracuse
- Society for Quality Control – IQC 1944
- 12 Member Societies

When the history of the beginnings of Quality Control development in this country is written, february 16, 1946 will be an important date. On that date representatives of seventeen local quality control societies and leaders in the field met at the Edison Electric Institute in New York City for the announced purpose of launching the American Society for Quality Control. Regional members selected thus far are:

New England Region—C. J. Hudson

Northern Region—Alfred J. Winterhalter

Middle Atlantic Region—Paul S. Olmstead

Central and Southern Region — Midwest Region—Frederick J. Halton

Western Region-

The boundaries of the six regions are as follows:

- Region I: New England States Maine, New Hampshire, Vermont, Massachusetts, Rhode Island and Connecticut (except western part).
- Region II: Northern
- New York (except metropolitan New York area), Northern Pennsylvania, Lower Michigan (and Toledo, Ohio), and adjacent Canada.

Region III: Middle Atlantic States Metropolitan New York area, Western Connecticut, New Jersey, Eastern Pennsylvania, Delaware, Eastern & Maryland, District of Columbia, and Foreign.

Region IV: Central

Ohio (except Toledo), Western Pennsylvania, Western Maryland, Virginia, West Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi.

Region V: Western

Indiana, Illinois, Upper Michigan, Wisconsin, Minnesota, North Dakota, South Dakota, Nebraska, Iowa, Missouri, Kansas, Arkansas, Oklahoma, Louisiana, Texas.

Region VI: Western

Montana, Wyoming, Colorado, New Mexico, Idaho, Utah, Arizona, Nevada, California, Oregon, Washington.

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Reported: Industrial Quality Control – March 1946

14

Founding ASQC Sections

TABLE 2

ASQ Founding Sections

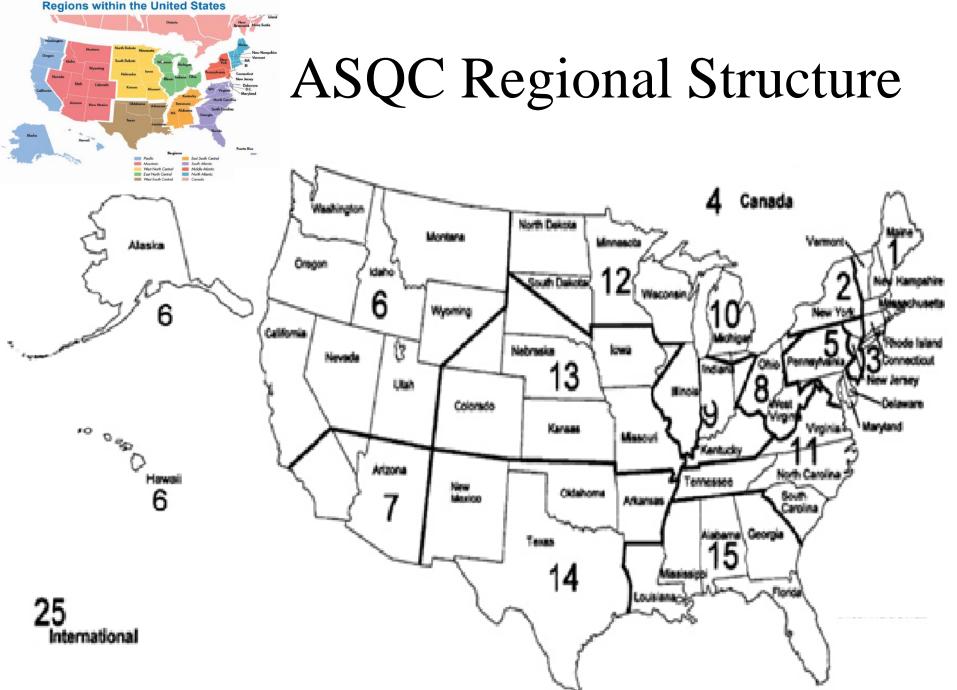
* FederatedSocieties

IndustrialQualityControlV1 N1July 1943

Society for Quality Control

3 October 1945

	Original section name	Current section				
-	Boston Society for Quality	Boston Section 0100				
#*	Society of Quality Control Engineers of Buffalo	Buffalo Section 0201				
-	Chicago Society for Quality Control	Chicago Section 1201				
-	Delaware Society for Quality Control	Delaware Section 0506				
-	The Atlanta Society for Quality Control	Greater Atlanta Section 1502				
-	Illinois Society for Quality Control	Central Illinois Section 1200				
-	Indiana Society for Statistical Quality Control	Indianapolis Section 0903				
-	Society for Quality Control State University of Iowa Group	State University of Iowa Section 1303				
*	Michigan Society for Quality Control	Greater Detroit Section 1000				
-	Milwaukee Society for Quality Control	Milwaukee Section 1202				
-	Newark Society for Statistical Quality Control	None				
-	Northwestern University Quality Control Group	None				
-	Ohio Quality Control Society	N/A				
-	Philadelphia Quality Control Society	Philadelphia Section 0505				
-	Pittsburgh Quality Control Society	Pittsburgh Section 0802				
*	Quality Control Engineers of Rochester	Rochester Section 0204				
*	The Society of Quality Control Engineers of Syracuse	Syracuse Section 0206				



Regional Lead Sections

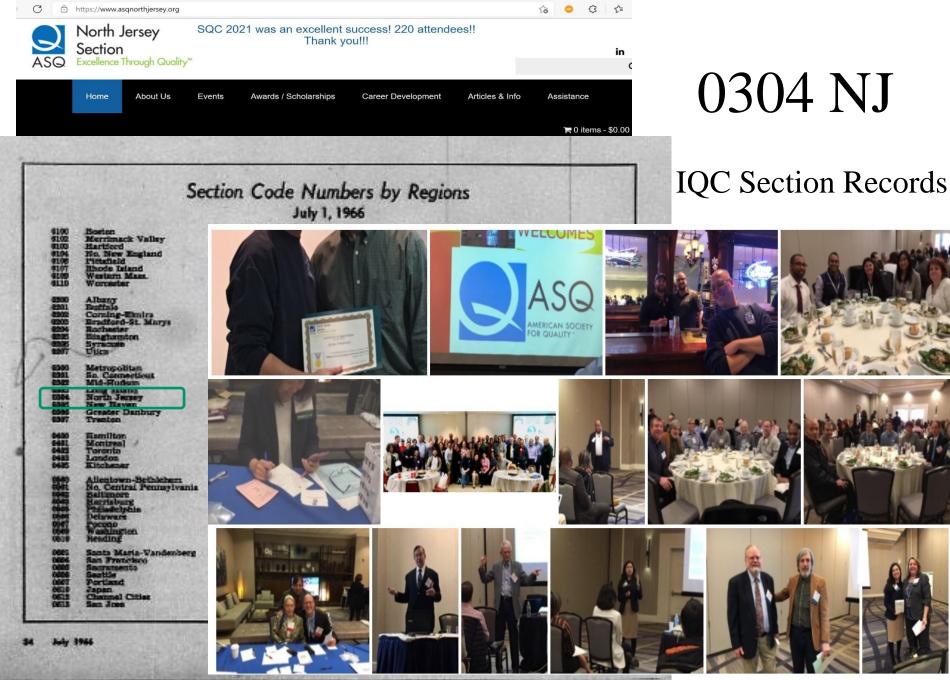
- 0100 Boston
- 0200 Albany
- 0300 Metropolitan NY
- 0400 Hamilton
- 0500 Allentown-Bethlehem
- 0600 Santa Maria-Vandenberg
- 0700 Los Angeles
- 0800 Cleveland

- 0900 Cincinnati
- 1000 Greater Detroit
- 1100 Chicago
- 1200 Central Illinois
- 1300 Denver
- 1400 Albuquerque
- 1500 Birmingham



International Quality

- 1912 Technical Inspection Association (CQI)
- 1951 Mexico City ASQ Section
- 1953 Japanese ASQ Section
- 2000 ASQ's WorldPartner Program Founded
- 2004 ASQ Costa Rica Becomes the First International Member Unit
- 2007 Ron Atkinson Become First ASQ President From Canada



North Jersey Section 0304 Today

		Membership	needra	~				JUL		
T = Student		A = Associate	M = Member	S = Senior		F = Fellow		H = Honorary		
Code I	No.	Section		T	Å	м	S	F	н	Total
0300	Metr	opolitan		1	24	353	59	16	1	454
0301	So.	Connecticut			13	199	35	3		250
0302	Mid-	Hudson		1	3	56	11	2		72
0303	Lone	Island	and the second	3	165	413	34	12	and the	627
0304	Nort	h Jersey	Contraction of the second	4	30	644	54	6	2	738
0305	New	Haven	and the second second	a sete	12	136	11	-2	-	159
0306	Grea	ater Danbury			16	101	13	4		134
0307	Prin	ceton			29	199	8	4		240
0308	Tha	mes Valley			10	71	11	1		93
0309	Тар	pan Zee		1	6	127	22	3		159
Total R	egio	n 3		10	308	2299	258	51	1	2927

- Recognized 1964/1965 Membership Year
- 1994 Larry Turbett Memorial Scholarship
- Inspector / Technician of the Year Award
- ASQ North Jersey Newsletter
- Full Slate Of Officers In Website Records 1982 IQC
- Active Section Website http://www.asqnorthjersey.org

North Jersey: "Pride—Productivity—Profit," the Section's Third Annual All-Day Conference, will be held at Montclair State College in Montclair, N.J., on Nov. 13.

ASQ New Jersey Section 0304

- As Of 2001 Largest Section in 300 or 200
- Forth To Form In Region 0300 Subsection
 NY
 Membership Record



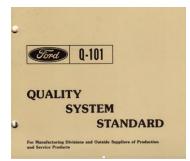
Ξ	MEMBERSHIP CATEGORY										
2001	SECT	ON	STU	MBR	SEN	FEL	HON	TOTAL			
	300	Metropolitan	8	613	26	14	0	661			
31,	301	Southern Connecticut	2	228	31	2	0	263			
	302	Mid-Hudson	1	131	12	4	0	148			
六	303	Long Island	7	877	32	10	0	926			
MARCH	304	North Jersey	16	1520	68	8	0	1612			
7	305	New Haven	Ū	288	1	1	Û	290			
2	306	Greater Danbury	0	166	8	1	1	176			
\leq	307	Princeton	30	1001	22	5	t	1059			
	308	Thames Valley	0	148	12	1	0	161			
	309	Tappan Zee	1	208	9	3	0	22 1			
	Totai	Region 3	65	5180	227	49	2	5523			

ASQ Divisions



- Industry Focus 11
 - Automotive
 - Aviation Space & Defense
 - Biomedical
 - Chemical & Process Ind
 - Design & Construction
 - Education
 - Electronics Communication
 - Energy & Environment
 - Food Drug & Cosmetic
 - Government
 - Healthcare

- Technology Focus 14
 - Audit
 - Customer Supplier
 - Human Development & Lead
 - Inspection
 - Lean Enterprise
 - Measurement Quality
 - Reliability
 - Quality Management
 - Software
 - Six Sigma
 - Statistics



USA Decline & Rebirth

- 1960's 1970's Many Industries in US Lost Quality Battle With Offshore Competition – Cost & Quality
- 1964 First Pan American Congress on Quality Control Held in Mexico
- 1964 Ford Motor Company Q101 & GM SPEAR
- 1965 ASQC International Academy for Quality
- 1968 Industrial Quality Control Became Quality Progress
- 1968 ASQC started CQE
- Note Mid 1970's The USA Automotive Industry Was Feeling Pressure (GM & Ford were the largest companies in the world at the time)

Quality Explosion – Turnaround

	NPC aired the television decumentary "If Jener Can M/by Can't M/c2" nerroted by Heyd
June 24,	NBC aired the television documentary "If Japan Can, Why Can't We?" narrated by Lloyd
1980 💢	Dobyns – <u>https://www.youtube.com/watch?v=vcG_Pmt_Ny4</u>
4000	Professor Noriaki Kano developed the Kano model which classifies customer
1980s	preferences into five categories: Attractive, One-Dimensional, Must-Be, Indifferent,
	Reverse
1980	QCI International was founded by Donald Dewar
1981	Lancaster Medal First Awarded by ASQC
1981	Quality Digest – first issue published under the title Quality Circle Digest
@ 1981 🕁	Eastern Michigan University developing first Master in Quality with Ford Motor Co & W.
	Edwards Deming
1982	Out of the Crisis, published in 1982, Deming offers a theory of management based on his
1902	famous 14 Points for Management
@ 1982 🔺	Transformation of American Industry – jointly developed by Ford Motor, Jackson
	Community College & W. Edwards Deming
1984	The Register of Lead Assessors is created and evolves to the International Register of
1904	Certificated Auditors (IRCA)
1984	October is designated National Quality Month by USA Congress
1985	NASA Excellence Award is established
1985	Total Quality Management – USA Department of Defense drive for organizational
	improvements
1986-1988	Six Sigma formulated by Bill Smith in Motorola
1986	Masaaki Imai established the Kaizen Institute to help Western companies introduce
1900	Kaizen concepts, systems and tools
March 15, 🚽	ISO issued the first version of the ISO 9000 series. (ISO 9001:1987)
1987	130 Issued the first version of the 130 9000 series. (130 9001.1907)
1987 🕁	Malcolm Baldrige National Quality Award was established.
1987	Quality Circle Digest drops "Circle" from its name to become Quality Digest
1988	ASQ Certified Quality Auditor established
1988	ISO 9001:1988 Quality management systems – Requirements – 2 nd 1994, 3 rd 2000, 4 th
	2008, 5 th 2015, 6 th 2022
1988	Motorola becomes the first company to win Malcolm Baldridge National Quality Award
1000	Ford Motor Company created Supplier Quality Improvement (SQI) – first pre-launch
1988	supplier program in the USA (tied to APQP) – merged with SQA in 1993





NBC – If Japan Can, Why Can't We

Deming Institute: On June 24, 1980, Americans widely viewed an NBC documentary called "If Japan Can... Why Can't We." The program, part of NBC's White Paper series, prominently featured Dr. W. Edwards Deming. Produced by Clare Crawford-Mason and narrated by Lloyd Dobyns ...

IF JAPAN CAN, WHY CAN'T WE? A RETROSPECTIVE

Posted on December 5, 2015 by Nicole Radziwill 5 comments



June 24, 1980 is kind of like July 4, 1776 for quality management... that's the pivotal day that NBC News aired its one hour and 16 minute documentary called "If Japan Can, Why Can't We?" introducing W. Edwards Deming and his methods to the American public.

The video has been unavailable for years, but as of 2018, it's posted on YouTube. So my sophomore undergrads in Production & Operations Management took a step back in

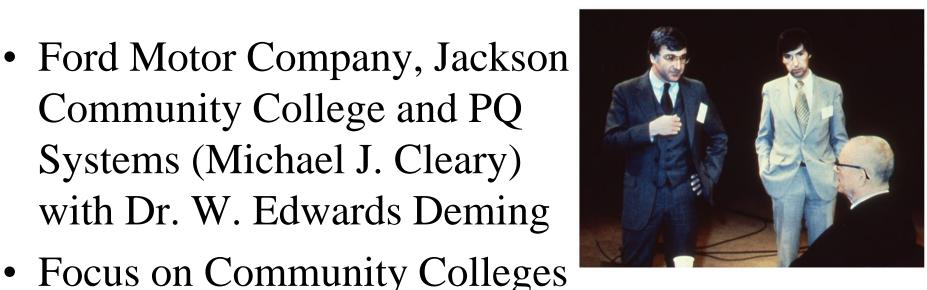
time to get a taste of the environment in the manufacturing industry in the late 1970's, and watched it during class.



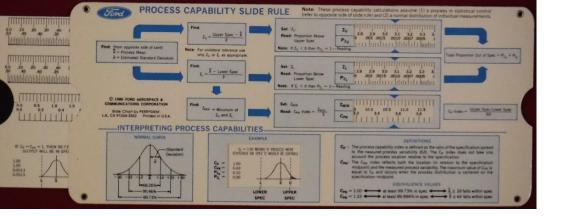
https://www.youtube.com/watch?v=vcG_Pmt_Ny4

Transformation of American Industry

• Ford Motor Company, Jackson Community College and PQ Systems (Michael J. Cleary) with Dr. W. Edwards Deming



Michael J. Cleary, David Schwinn, and W. Edwards Deming at Ford Motor Company in 1984.







Quality Standards



- MIL STD 9858A:1963 (MIL-Q-9858:1956) & BSI 5750:1979
- 1964 Auto Industry Surveys: Supplier Quality Assurance (SQA), Q101 and SPEAR
- Automotive Industry Quality Programs: Pentastar, Q1 & Targets for Excellence
- ISO/ANSI/ASQ Q9001:1988, 1994, 2000, 2008, 2015, TBD
- Quality System Requirements QS 9000:1994, 1996, 1998
- ISO 14001:1996, 2004, 2015, TBD
- OHSAS 18001:1999, 2007 / ISO 45001:2018, TDB
- ISO/TS 16949:1999, 2002, 2009 / IATF 16949:2016
- EnMS ISO:50001, BCMS ISO:22301, others

Quality 4.0 Preparation

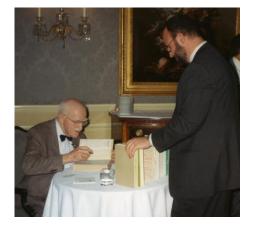
- 1986 Achieves at University of Illinois
- 1997 ASQC Becomes ASQ
- 1988 ISO Releases First ISO 9001
- 1989 Malcolm Baldrige National Quality Award
- 1990 Registration Accreditation Board (RAB)
- 2001 ASQ Purchased First Building At 600 Plankinton Ave. Milwaukee, WI







Recent Items of Note



2015	X	ISO issued the ISO 9001:2015 & ISO 14001:2015 under Annex SL
2015	*	ISO 9001:2015 Quality management systems - Requirements
2016		International Automotive Task Force (IATF) - IATF 16949:2016
2015		ISO 14001:2015 Environmental management systems - Requirements
2017		The CQI launches the inaugural International Quality Awards
2017		Hromi Medal First Awarded by ASQ
2018	*	ISO 45001:2018 Occupational Health and Safety management systems - Requirements -
		replaces OHSAS 18001
2019		ISO 22301:2019 Security and resilience - Business continuity management systems -
		Requirements released
2020		COVID-19 world wide pandemic - things become more virtual



Sustainability: improving our products, people and planet

Celebrate World Quality Week #WQW21



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8-12 November 2021

40 Years Of Lessons Learned

- Get Everyone In The Organization Involved
- Innovation Is A Learned Skill
- History Is Important Deming Was Right
- Empower People To Make Improvements
- Give People The "Why" They Will Figure Out The "How"
- Enjoy What You Do



30





Summary



- Quality Is Not Just A Department Anymore
- The History Of Continual Improvement Hawthorne Experiments & Fusion Mgt
- Timeless Lessons
 - How People Respond
 - Culture Is Powerful
 - Data To Support Strategy
 - Management Engagement







RAM Q Universe, Inc.



For the ASQ North Jersey Section



"A Short History of ASQ and the Quality Profession"



Thank You for Your Participation



Gretchen Peterson, MLIS Knowledge Management Specialist 414-274-2225 | gpeterson@asq.org

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