



Achieving SDGs with Lesser Cost By Adopting Quality Management Strategies

by

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“Leaving No One Behind”.

Adopting Quality Management strategies can help Governments and other organizations save billions of dollars in implementing UN Sustainable Development Goals and help realize vision of “ No One Left Behind”. Paper shares examples & success stories of how Quality Management strategies, standards & tools can help achieve SDGs with lesser costs while enhancing citizen satisfaction.

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In September 2015, world leaders from 193 countries adopted the 17 Sustainable Development Goals (SDGs) also known as Global Goals (Fig. 1), that set ambitious quantitative objectives to be achieved by all countries – rich and poor – by 2030. SDGs are focused to end poverty, protect the planet, and ensure prosperity for all people of the planet. The goals are underpinned by 169 targets with each goal having specific Indicators with a total of 230 SDG Indicators. Indicators are interconnected e.g. Indicator “1.5.1 Number of deaths, missing persons and persons affected by disaster per 100,000 people” is repeated in Indicator No. 11.5.1 and 13.1.2. Achieving these goals is challenging and requires Governments, Public Sector, Private sector, Non-Government Organizations (NGOs) and people to contribute time, effort, knowledge, resources, finance etc.



Fig. 1 – United Nations Sustainable Development Goals

Fig. 2 provides a sample illustration of UN SDGs with relevant targets and indicators. As can be seen, the Goals, Targets and Indicators are well aligned and easy to understand. This will help to ensure consistent communication, understanding, deployment, achievement and reporting by all including signatory nations and by different Government departments within each nation. Goals will also help promote collaboration among various Government departments within each nation and help develop an integrated Government focused on serving people.

Goal No.	Goal	Targets	Indicators
1	End poverty in all its forms everywhere	1.1) By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day	1.1.1) Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural).
3	Ensure healthy lives and promote well-being for all at all ages.	3.1) By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births.	3.1.1) Maternal mortality ratio. 3.1.2) Proportion of births attended by skilled health personnel.
		3.6) By 2020, halve the number of global deaths and injuries from road traffic accidents.	3.6.1) Death rate due to road traffic injuries.
12	Ensure sustainable consumption and production patterns.	12.5) By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.	12.5.1) National recycling rate, tons of material recycled.

Fig. 2 – Sample of SDG with relevant Targets and Indicators

Inefficiencies Is a Way of Life with High Cost of Poor Quality

The chronic wastes are known to be huge. We experience inefficiencies and poor quality almost on daily basis. As a result, delays, errors, accidents, failures & frustrations are a way of life.

“We have learned to live in a world of mistakes and defective products as if they were necessary to life. It is time to adopt a new philosophy in America.”
-W Edwards Deming
1900-1993

The Cost of Poor Quality is estimated to be about 15-25% of total cost (Figure 3) and involves different types of wastes such as producing defective products, high inventory, waiting for information, producing goods & services which customers don't want, rework etc. Such wastes

should not be allowed to be continued on and on, since they add to overall costs and are passed over to the civil society.

With projected costs of achieving SDGs to be in billions of US Dollars, there is a huge opportunity to save costs by adopting Quality management strategies. To illustrate the potential of savings, let us assume annual total budget for achieving SDGs to be committed by several nations is USD 1 trillion. With Cost of Poor Quality at say 20 %, the savings can be as high as USD 20 billion annually. This can add up to USD 375 billion till 2030.

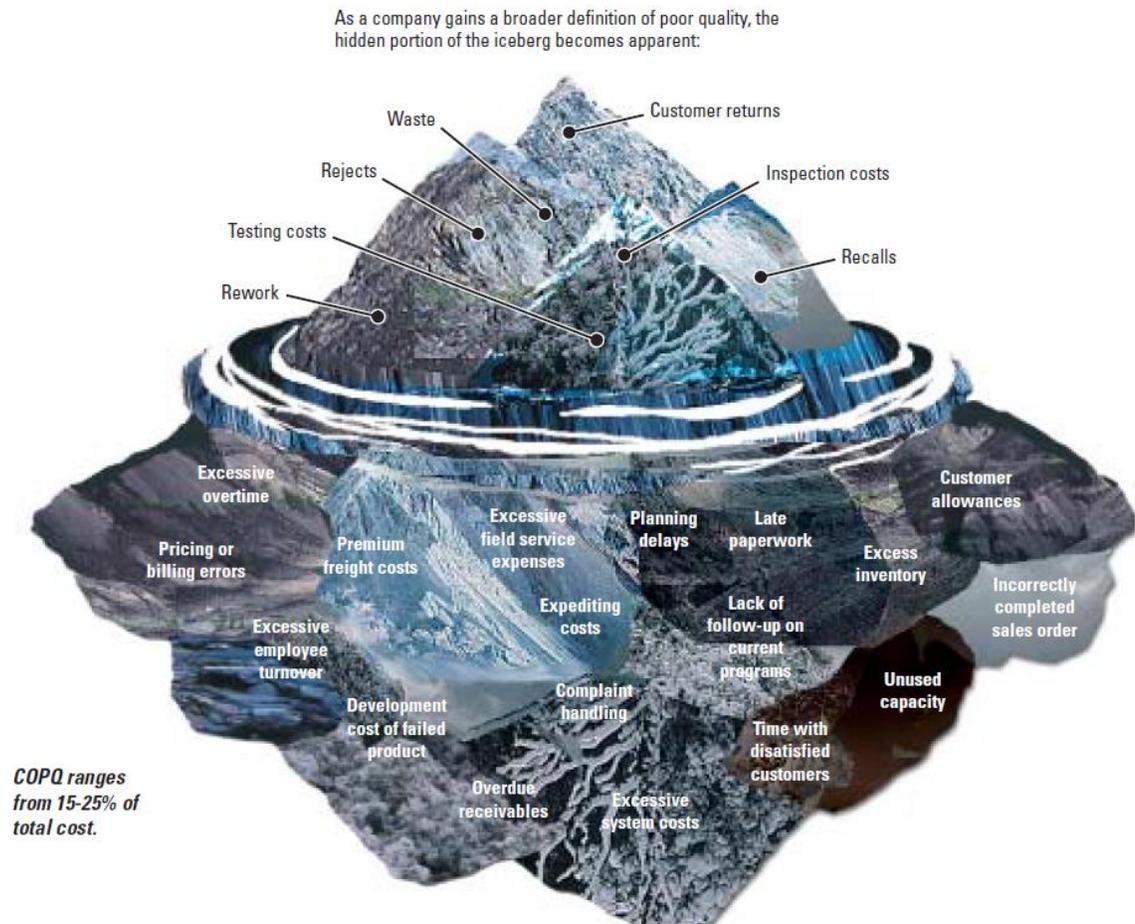


Fig. 3 Cost of Poor Quality

Impact of Quality Strategies in Implementing SDGs

Different agencies around the world have started implementing UN SDGs through political leadership, policies, programs, proven strategies, creative and innovative solutions etc. Success stories and experiences are being shared in conferences, publications, social media, etc. with the objective to inspire many more organizations and people to get involved in UN SDGs, demonstrate the impact of SDGs, help others adopt / adapt best practices and make this world a better place for all to live.

Based on my 25+ years of professional experience of working with several Government departments and my regular interactions with political Leaders, top Civil Servants, Professionals, etc. I realize there is little awareness about the role and impact the Quality management strategies can make in implementing SDGs. Adopting principles of Quality management can help Governments and other organizations unlock inefficiencies, reduce cost of implementing SDGs and thereby release scarce resources for re-deployment to serve citizens better.

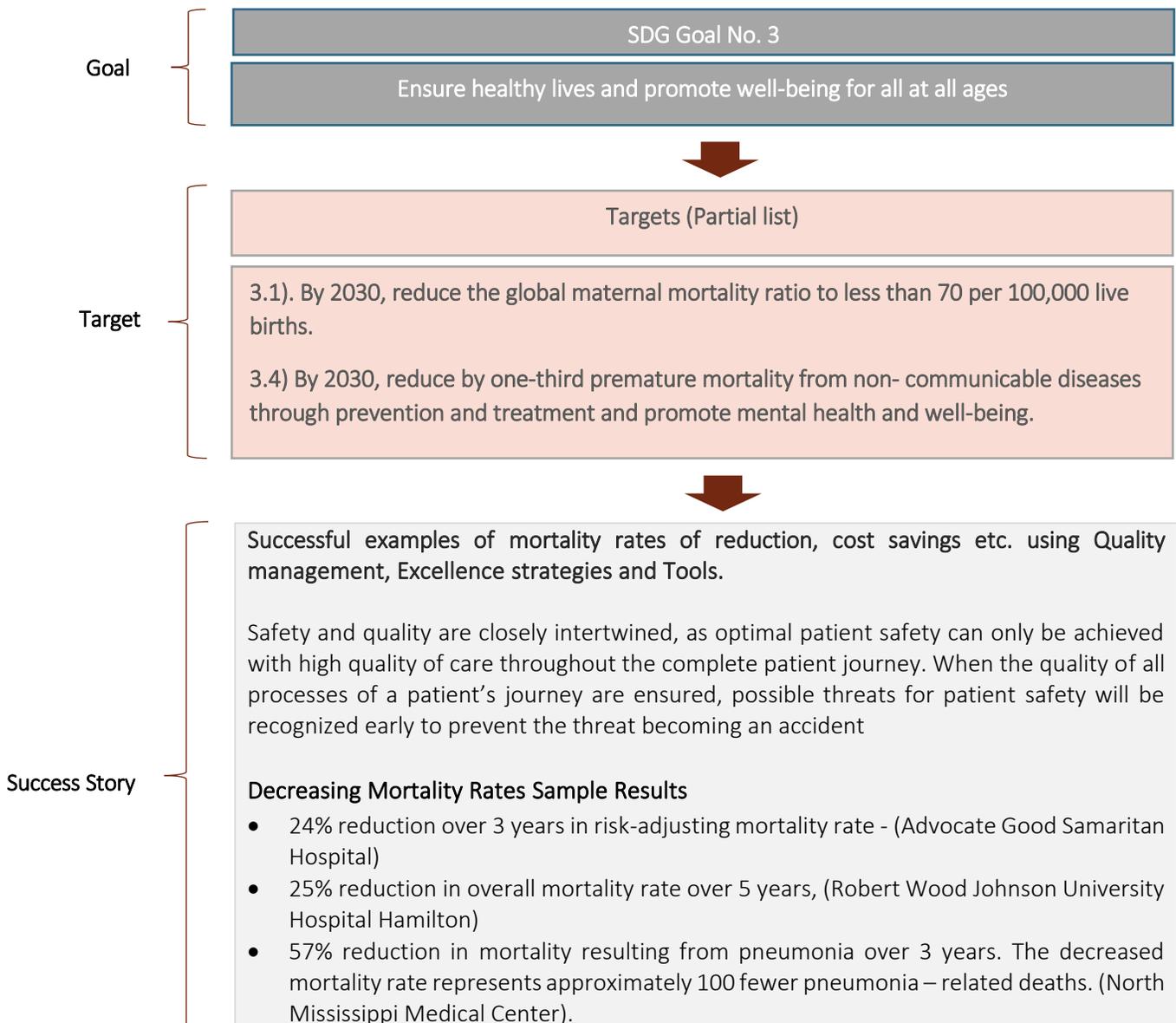
Interestingly SDGs and Targets are also focused on adopting Quality management strategies. Terms such as Enhance, Improve, Increase, Waste Reduction, Safety, Reliability, Affordable, Prevent,

Productivity, Efficiency etc. appear at least 100 times in the SDGs demonstrating need and importance for adopting Quality strategies in implementing SDGs.

Applying Quality Principles & Strategies to Achieve SDGs - Illustration.

Quality improvement extends to all parameters such as improving productivity, performance, safety, speed, reliability, citizen satisfaction while reducing cost, errors, and so on. This section demonstrates examples of application of Quality management principles, strategies & tools, with success stories, for achieving SDGs.

Adopting principles of Quality management can help Governments and other organizations save billions of dollars in implementing SDGs and thereby release scarce resources for re-deployment to serve citizens better.



Continuing the
Success Story

- 38% reduction in mortality resulting from congestive heart failure over 4 years. (Mercy Health Systems)

In addition to reducing mortality rates, adopting Quality and Excellence strategies have helped reduce cost, patient care & satisfaction. E.g.

The Charleston Area Medical Center Health System (CAMCHS), USA, recipient of prestigious Baldrige Performance Excellence Award in 2015, implemented Six Sigma, Quality improvement strategy, aimed at redesigning patient work processes to reduce waste, increase direct time at the patient's bedside and improve the overall quality of care. Some of their notable achievements due to improvement efforts are:

- Annual cost reduction of USD \$12.5 million with cumulative costs reduction of US \$155 million from year 2002 to 2014.
- CAMC ranks in the top 10 percent nationally for outpatient satisfaction in all areas, including wait times, communication, staff courtesy and respect, doctor time with patient, and information given to patients for self-care.
- Overall In Patient Quality care – approx. 95 % in 2013 (Top decile)

Source: Baldrige 2020 Featuring Data & Stories from Organizations That Used the Criteria to Become US Role Models. Baldrige Award Recipient Information

<https://www.nist.gov/baldrige>

International Standards, Quality Management Strategies & Tools Used (Partial List for illustration purposes)

- Process Improvement Methodology: Six Sigma DMAIC process,
- Quality Improvement Tools: 5S, Lean, Visual Management, A3 Problem Solving, Waste Walk, Standardized Work, Root Cause Analysis, Quality Management Systems (ISO 9001) and others.



Success Story

Millions of organizations around the world, of all types, sizes and industries, use various standards to establish management systems. Various functions such as Finance uses International Financial Reporting Standards, Audit function uses International Standards for The Professional Practice Of Internal Auditing standards etc. In addition, for enhanced Governance, various frameworks have been developed and implemented used such as OECD Principles of Governance, EFQM Model etc.

Implementation of management systems standards such as Quality Management System (ISO: 9001), Anti Bribery Management System (ISO: 37001) etc., require organizations to establish policies, organizational roles, responsibilities, authorities, documented policies, processes, performance management, enhance communication etc. All of this and more, if done right, with effective execution leads to enhanced Accountability, Transparency, Performance and Trust.

As per ISO Survey of Management System Standard Certifications 2015 report, a total of about 1.5 million plus ISO certifications for Quality, Health, Safety, Environment, Social Accountability, Energy, Business Continuity etc. have been issued till Dec. 2015. These initiatives have led to enhanced trust, accountability etc. Quality Management and Excellence frameworks also focus on Stakeholders and their needs & expectations, Risk based thinking, including disclosures, transparency enabling organizations to build with strong governance.

Relevant International Standards and Strategies (Partial List for illustration purposes only)

- European Foundation for Quality Management Model (EFQM)
- Baldrige Performance Excellence Model
- Quality Management System (ISO:9001),
- Corporate Social Responsibility (ISO:26000)
- Anti-Bribery Management System (ISO:37001)
- Occupational Health and Safety Management Systems (OHSAS 18001),
- Balanced Score Card (Enterprise wide Performance Management System including Measurement, Analysis, Communication, Reporting and Improvement.
- International Standards on Auditing etc.

Conclusion

Reducing chronic waste and improving quality is not capital intensive. Investments in Quality management has probably the highest return on investment (ROI) as compared to other improvement initiatives. Dr. Joseph Juran, Quality Guru, in his classic book “ Quality Control Handbook writes “for projects at the \$100,000 level, the investment in diagnosis and remedy combined runs to about \$15,000 i.e. ROI of almost 6 times.

“ Funny we don’t have the time to improve, but we have plenty of time to perform work inefficiently & to resolve the same problems over and over”
-Dr. W. Edwards Deming.

Examples given above are only a snap shot of the cost benefits and impact of using Quality management strategies and tools. Quality strategies also improve other aspects of management such as building people competencies, managing organizations through framework of management systems, fact based decision-making, creating a culture of customer (citizen) service, continual improvement etc.

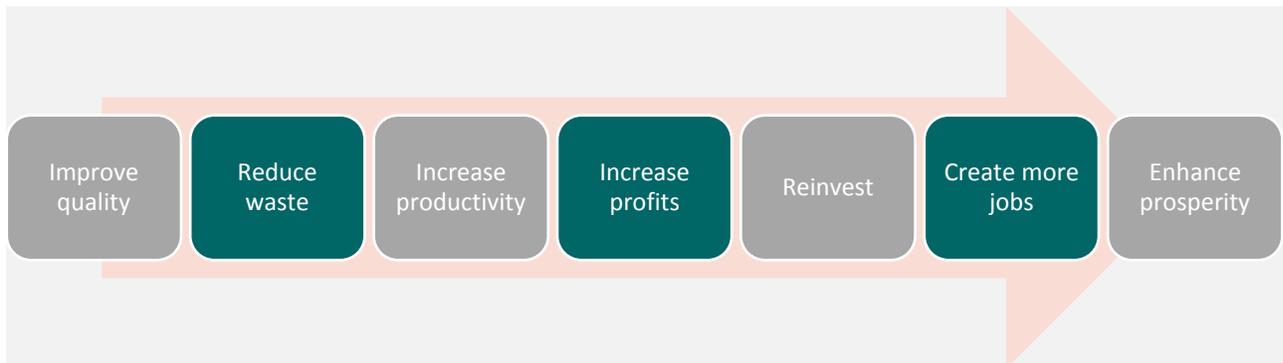


Fig. 4. Global Prosperity through Quality

Governments and organizations committed to achieving SDGs can seriously consider implementing Quality management strategies such as Lean management, Six Sigma, Reengineering, adopting frameworks such as EFQM, ISO: 9000. This will significantly help reduce the cost of achieving UN SDGs and implement them faster and to the satisfaction of citizens and greater good of the society on sustainable basis (Fig. 4).



Mr. Sunil Thawani is Author, Fellow and Member, Board of Directors, American Society for Quality. In 2015 he was awarded prestigious ASQ Lancaster Medal for his dedication and outstanding contributions to the international fraternity of Quality Professionals. Sunil is also Adjunct Professor, Shoolini University, India. He is based in United Arab Emirates and can be reached at contact@qualityindeed.com