

**ACHIEVING THE SUSTAINABLE DEVELOPMENT GOALS (SDGs)
WITH LESSER COST BY ADOPTING QUALITY MANAGEMENT STRATEGIES**

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Abstract

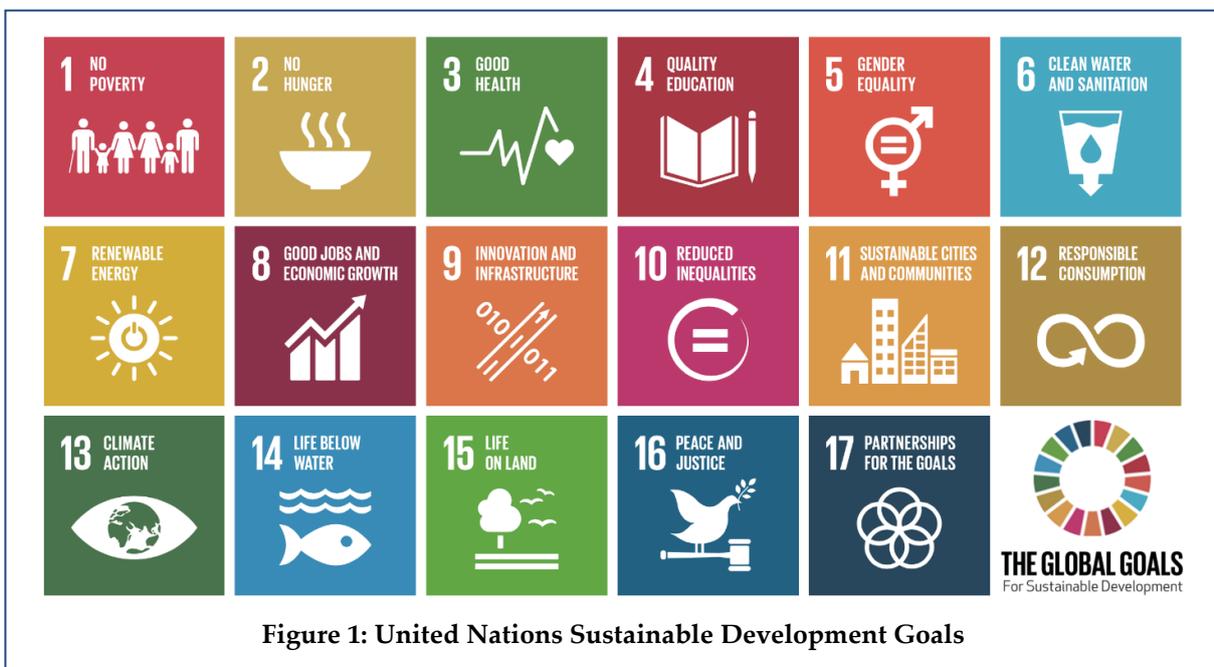
Adopting Quality Management strategies can help Governments and other organizations save billions of dollars in implementing UN Sustainable Development Goals and help realize the vision of “No One Is Left Behind”. Paper shares examples & success stories of how Quality Management strategies, standards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

Keywords: Database, MIS, GIS, e-Governance, Ethnic minority.

Introduction

In September 2015, world leaders from 193 countries adopted the 17 Sustainable Development Goals (SDGs) also known as Global Goals (Figure 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. The goals are underpinned by 169 targets with each goal having specific Indicators (230 SDG Indicators in total).

Goals and Indicators are interconnected. Success on one will involve tackling issues more commonly associated with another, e.g. promoting sanitation (Goal 6) will help support good health & wellbeing (Goal 3); indicator No “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, the public and private sectors, non-governmental organizations (NGOs) and people at large to contribute time, effort, knowledge, resources, finance, etc.



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Figure 2 below 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 and help develop an “integrated government” focused on serving the 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.

Figure 2: Sample of SDGs with relevant Targets and Indicators

Understanding Goals

Let us take Goal No 2 (“End hunger, achieve food security and improved nutrition and promote sustainable agriculture”). There is more than enough food produced in the world to feed everyone, yet 815 million people go hungry. One of the greatest challenges the world faces is how to ensure that a growing global population - projected to rise to around 10 billion by 2050 – has enough food to meet their nutritional needs. To feed another two billion people in

“Starvation is the characteristic of some people not having enough to eat. It is not the characteristic of there not being enough food to eat.”

Professor Amartya Sen, Nobel Laureate

2050, food production will need to increase by 50 percent globally. One third of food produced for human consumption, i.e. about 1.3 billion tons per year is lost or wasted globally. Food is lost or wasted throughout the supply chain, from initial agricultural production down to final household consumption. Food losses represent a waste of resources used in production such as land, water, energy and inputs, increasing the green gas emissions in vain. Food security is a complex condition requiring a holistic approach to all forms of malnutrition, the productivity and incomes of small-scale food producers, resilience of food production systems and the sustainable use of biodiversity and genetic resources.

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

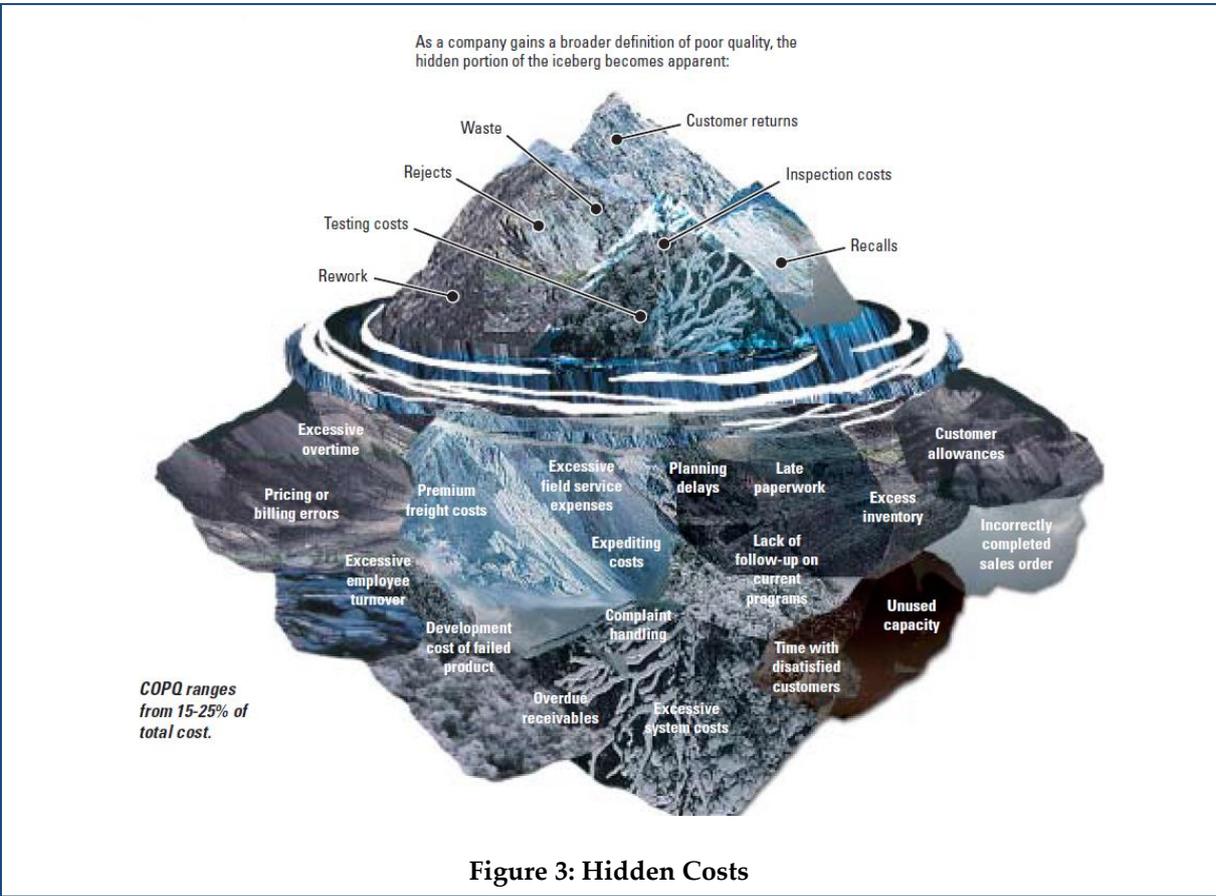
The chronic wastes are known to be huge. We experience inefficiencies and poor quality almost on a daily basis. As a result, delays, errors, accidents, failures & frustrations are a way of life.

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 do not want, rework, etc. Such

“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.”
Dr W. Edward Deming (1900 – 1993)

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

With projected costs of achieving the SDGs to be in billions of US Dollars, there is a huge opportunity to save funds by adopting quality management strategies. To illustrate the potential of savings, let us assume an annual total budget of USD 100 billion for achieving the SDGs, is committed by several nations. With the cost of poor quality estimated at a minimum of say 15 %, the savings can be as high as USD 15 billion annually. This can add up to USD 225 billion till 2030.



Impact of Quality Strategies in Implementing the SDGs

Different international organisations and agencies around the world have started implementing the SDGs through political leadership, policies, programmes, 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 the SDGs implementation, as well as to demonstrate the impact of SDGs, help others 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 have realised that there is little awareness about the role and impact quality management strategies can play in implementing the SDGs. Adopting principles of quality management can help governments and other organizations unlock inefficiencies, reduce implementation costs, and thereby release scarce resources for re-deployment to serve citizens better.

Interestingly SDGs and its 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 the need and importance for adopting quality management strategies in implementing the SDGs. Quality improvement extends to all parameters such as improving productivity, performance, safety, speed, reliability, citizen satisfaction while reducing costs, errors, and so on. This section illustrates examples of application of quality management principles, strategies and tools, with success stories, for achieving the SDGs.

Illustration 1:

Goal:

SDG Goal No 3
Ensure healthy lives and promote well-being for all at all ages

Target (partial list):

3.1. By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births.
3.4. By 2030, reduce by one-third premature mortality from non- communicable diseases through prevention and treatment and promote mental health and well-being.

Success Story:

Successful examples of mortality rate reduction, cost savings, etc using quality management excellence strategies and tools.

Safety and quality are closely intertwined, as optimal patient safety can only be achieved with high quality of care throughout the complete patient journey. When the quality of all processes of a patient’s journey are ensured, possible threats for patient safety will be recognized early to prevent the threat becoming an accident.

Decreasing Mortality Rates Sample Results

- 24% reduction over 3 years in risk-adjusting mortality rate (Advocate Good Samaritan Hospital).
- 25% reduction in overall mortality rate over 5 years (Robert Wood Johnson University Hospital Hamilton).
- 57% reduction in mortality resulting from pneumonia over 3 years. The decreased mortality rate represents approximately 100 fewer pneumonia-related deaths (North Mississippi Medical Centre).
- 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. For instance, the Charleston Area Medical Center Health System (CAMCHS) in the United States – a recipient of the prestigious Baldrige Performance

Excellence Award in 2015 - implemented the 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 USD 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>

Illustration 2:

Goal:

SDG Goal No. 16

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable, and inclusive institutions at all levels

Target (partial list):

16.6) Develop effective, accountable and transparent institutions at all levels

Success Story:

Millions of organizations around the world, of all types and sizes and in many different industries use various standards to establish management systems. Various functions such as finance use International Financial Reporting Standards. The 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, e.g. the OECD Principles of Governance, the EFQM model, etc.

Implementation of management systems standards such as the ISO 9001 (Quality Management System); ISO 37001 (Anti Bribery Management System), and others require organizations to establish policies, organizational roles, responsibilities, authorisation procedures, documented policies, processes, performance management, enhanced communication modalities, etc. All these and more, if properly utilised for effective execution lead to enhanced accountability, transparency, performance and trust.

As per the 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 awarded to the end of 2015. These initiatives have led to enhanced trust, transparency and accountability. Quality Management and Excellence frameworks also focus on stakeholders and their needs & expectations, risk-based thinking, including disclosures for enhancing transparency enabling organizations to build strong governance systems.

Get Involved – Become a Goal Keeper

The 2030 Agenda is deliberately ambitious and transformational. It requires commitment and involvement from one and all. However, as the SDG 2017 progress Report shows, the

rate of progress in many areas is far slower than needed to meet the targets by 2030. There is an urgent need for additional mobilisation and action to implement the Global Goals on time. In this context, there are many opportunities, ways and means to contribute, e.g.

- Help make Goal(s) famous - create awareness about the SDGs, their impact & the challenges involved.
- Help build competencies in many such areas as quality strategies and tools, as well as measurement methods.
- Influence policies.
- Raise financial resources
- Mobilize support from corporations to get involved.
- Inspire students to get involved.
- Collaborate on an ongoing project.

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, a quality management guru, in his classic book “Quality Control Handbook” writes that “for projects at the \$100,000 level, the investment in diagnosis and remedy combined runs to about \$15,000, i.e. a ROI of almost 6 times.

The examples provided above are only a snapshot of the costs and benefits and of the impact of using quality management strategies and tools. Quality strategies also improve other aspects of management such as building people’s competencies, managing organizations through a framework of management systems, fact based decision-making, creating a culture of customer (citizen) service, and incorporating a continuous improvement process in an organisation.

Governments and organizations committed to achieving the SDGs can seriously consider implementing quality management strategies such as “Lean management”, “Six Sigma”, “Reengineering”, and adopting frameworks such as “EFQM, ISO: 9000”. These may significantly help reduce the cost of achieving the SDGs, as well as implement them faster and to the satisfaction of citizens and greater good of the society (Figure 4).



Figure 4: Global Prosperity through Quality

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