

INTERVIEW WITH

DR. SH. FAY AL KHALIFA

SPECIALIST IN SMART SUSTAINABLE CITIES
AND DIRECTOR OF E-LEARNING AT THE
UNIVERSITY OF BAHRAIN

- ▶ MAINTCON 2022 Updates
- ▶ New Asset Management Series
- ▶ Competition Winner Announced

FEATURED CEOs

Ali Al Baqali
CEO, Alba



Troy Lambeth
Group CEO, Sanad



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Quarterly eNewsletter by:



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Dear Valued GSMR Members,

Last year around this time, we were hoping to overcome the effects of the global pandemic but here we are, still fighting. The good news is we know better now – we're stronger, wiser and ever more determined to brave the new normal.

In this edition of your beloved magazine, Osool, we channelize this undying spirit of optimism, determination, disruption and innovation in our industry, highlighting success stories in our industry in the face of COVID – how organizations are being resourceful and creatively finding solutions to deal with the challenges of the global pandemic.

GSMR Virtual Academy celebrated its first anniversary on May 20, 2020. It is an honor for me and my brothers on the GSMR Board to share this milestone with all our patrons who supported this platform by way of being presenters, panelists, moderators and, of course, a wonderful audience – this is your achievement too! GSMR Virtual Academy

promises to continue bringing knowledge, ideas and best practices to you at your fingertips.

On behalf of GSMR's Board of Directors, I wish all young professionals a happy International Youth Day (August 12). The future of our world and industry rests on your shoulders – a noble responsibility. We, at GSMR, are always committed to facilitating youth development and catalyzing their career growth through our wide range of initiatives and programs, and invite you to support this worthy objective of GSMR by joining our Youth Committee.

Asset Management is an important field in our profession. In this region, however, it's still a growing discipline and hence, GSMR's Asset Management Committee is committed to educate professionals and spread the value and culture of AM through a wide range of awareness programs including an ongoing series of articles starting with this issue.

I sincerely hope you enjoy reading this issue, and, as always, I look forward to your honest and valuable feedback.

Eyad Al Basrawi
Chairman

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PART OF THE
GSMR FAMILY!

Join GSMR's growing community of maintenance, reliability and asset management professionals. Enjoy a wide range of benefits and programs including free webinars with certificates, discounted online certified workshops, opportunities to be featured across GSMR's media channels and publication, extensive networking with and exposure to regional and international professionals, and MUCH MORE!



ONE YEAR OF SHARING
KNOWLEDGE & EXCHANGING IDEAS & BEST PRACTICES

Launched on May 20, 2020

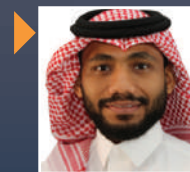
Messages from **Our Patrons**



“As a GSMR Board Member, I’m proud of this milestone achievement. We, at KIPIC, have collaborated with GSMR Virtual Academy several times in the past year as webinar speakers, moderators and attendees, as well as for tailored training. We will continue to encourage our employees to be part of this knowledge sharing and professional enrichment culture.” - **Ahmed Al-Khalidi, Kuwait**



“It has been an honor for me to be part of GSMR Virtual Academy’s journey from the start. I’m privileged to have hosted the first webinar a year ago during the Holy Month of Ramadan. The Academy provides a platform of perseverance and continuity of GSMR’s promise of knowledge sharing with some of the great minds in the industry.” - **Husain Al Ali, Bahrain**



“In complex and unexpected circumstances such as the Corona pandemic and the changes that occurred, GSMR played a pivotal role in spreading knowledge through many webinars and virtual programs that led to an impressive success. The Event Management Committee is proud to be part of this success.” - **Abdulrhman Al Dossry, Saudi Arabia**



▶ “I attended GSMR’s virtual training workshop and passed the CAMA exam on the first attempt. I’m very happy with the course and exam experience, and highly recommend GSMR Virtual Academy’s workshops to expand your knowledge and expertise, and upgrade your skills with the exams offered.” – **Yerem Davtyan, UAE**



▶ “I am a regular attendee of GSMR Virtual Academy’s webinars and virtual events. It’s truly one of the leading global platforms for sharing knowledge and promoting excellence.” – **Pipin Azrin, Indonesia**



▶ “It has been a real privilege to be part of the GSMR Virtual Academy. I look forward to contributing more and sharing my knowledge and experience with practitioners. Wish you all the very best and keep up the great work!” – **Dharmen Dhaliah, Canada**



▶ “GSMR Virtual academy is a gateway to professional development; I connected with experienced subject matter experts on an international scale through moderating a wide range of technical topics and participating in prolific discussions.” – **Husain Al Dailami, Bahrain**



“Greeman Asset Management Solutions Inc. joins GSMR Virtual Academy in celebrating its 1st anniversary. Our President was a 2020 guest, and we were very impressed with the quality of the topics, speakers, and audience. We wish you many more anniversaries as a top-notch institute in the Gulf region.” – **Canada**



▶ “GSMR Virtual Academy is one of GSMR’s best initiatives that allows us members to build and expand professional knowledge internationally and locally. Thanks to all who have been involved in making this happen especially those behind the scenes!” – **Dr. Wesam Beitelmal, Oman**



▶ “GSMR Virtual Academy is the ideal platform to ignite my passion to learn from leading subject matter experts and technology providers worldwide. Thank you for promptly issuing the certificates, which helps me earn learning credits.” – **Suriya Narayanan, Saudi Arabia**

“I’ve had the privilege to attend several webinars from the comfort of my home on varied topics. All of them were really informative and well planned. Thank you for giving me the opportunity to attend.” – **Dr. Svetlana Boshnakova, Bulgaria**

“GSMR’s virtual workshops are not only educational but also interactive, thanks to the facilitators’ skills and collaborative nature. I would like to thank GSMR Virtual Academy for conducting a tailored virtual session specifically for KIPIC.” – **Latifa Al Qallaf, Kuwait**



INTERVIEW WITH DR. SH. FAY AL KHALIFA

Specialist in Smart Sustainable Cities and Director of E-learning at the University of Bahrain

WHAT INSPIRES YOU ABOUT SMART AND SUSTAINABLE URBANISM?

Environmental consciousness and sustainability are everyone's responsibility. I've always been interested in research and decided to pursue my Master's in conservation and regeneration. I then went on to get a Ph.D. in Landscape, focusing on the interrelationship between cultural change and urban sustainability, particularly in the Arabian Gulf context. I aspire to contribute to the understanding of sustainable urbanism within the context of transformed cultures, urban islands, and urban archipelagos. I am also interested in the importance of sustainability in real estate as an asset class, the dynamics of considering sustainability assessment tools in real estate development, and the influence of visualization on the opinions and actions of decision-makers. The urban landscape has radically shifted over the past couple of decades, and continues to incorporate more green, environmentally friendly and sustainable designs, which is the need of the hour.

HOW DOES TECHNOLOGY INFLUENCE SUSTAINABILITY?

There is no field where technology doesn't play a major role. The arrival of Industry 4.0 has taken digital

transformation to the next level. Sustainability of institutions today depends largely on their ability to adapt to the requirements of the digital age. The real estate sector, for instance, is witnessing exponential growth due to the adoption of green infrastructure technologies and artificial intelligence in real estate development projects. Investment in modern technology is a must to improve the level of services and ensure their sustainability and flexibility to adapt to all circumstances.

Technology is the vehicle that is helping us navigate the physical challenges posed by the global pandemic. Ever since COVID-19 struck, our dependence on technology has increased manyfold. The use of AI techniques in real estate allows buyers to view homes and real estate without having to visit the property, which saves time, money, and effort for the buyer, seller, and real estate broker alike. The idea is to leverage digital transformation to unlock substantial improvements in sustainability. Blockchain technology, for instance, is playing an emerging role in sustainability.

WHY IS GREEN TECH THE FUTURE OF DIGITAL TRANSFORMATION?

I'd like to answer this in the context of real estate. From an economic point of view, developing green real estate projects contributes to saving money and energy, developing the agricultural sector and meeting public demand. Both developers and investors in the real estate sector are noticing

an increased demand and awareness among homebuyers of the importance of a smart, sustainable lifestyle. Thus, modern homes should come equipped with all the necessary technologies that meets the aspiration of the new generation of home buyers.

Real estate developers have a wrong view when evaluating the implementation of real estate projects that depend on green infrastructure technologies and sustainable development. According to their perception, these technologies increase financial burdens and carry huge budgets, but recent studies have shown that such projects receive great acceptance by buyers, are sold quickly because of their green label, and are also more feasible in the long run which confirms their economic feasibility. Despite the challenges in the real estate sector, green tech is witnessing high rates of investment, which confirms its lucrativeness.

WHAT ARE THE EMERGING TRENDS IN SMART SUSTAINABLE CITIES?

There is a growing need for new approaches to urbanism that respect the environment and are sustainable. Culture also plays a huge role when designing smart cities. The notion of smart sustainable cities entails more than just the implementation of technologies and strategies aimed at meeting today's needs without compromising those of future generations. It is also about understanding the city itself: its identity and its goals, its stakeholders and their priorities, and in that way, identifying the attributes that would tailor to the uniqueness of each city while enhancing its overall living quality and sustainability with the support of ICTs.

There are a number of technologies that could be utilized to enhance the smartness and sustainability of the real estate sector and building industry for instance. Blockchain technology could be utilized to avoid fraud, to develop smart contracts, and to reduce the number of mediators especially brokers in the selling and renting of units. It could also be used to develop mechanisms for fractional ownership, a concept that is receiving growing demand in Bahrain. Blockchain could also be used to ensure up to date and relevant property information.

Another technology is virtual, augmented and mixed realities. Such technologies can be used for remote viewing and virtual tours, for decision-making and for increasing the efficiency of property marketing. Another use for AR/VR and MR is to cover the




multiple stages of sales, buying and even decorating processes.

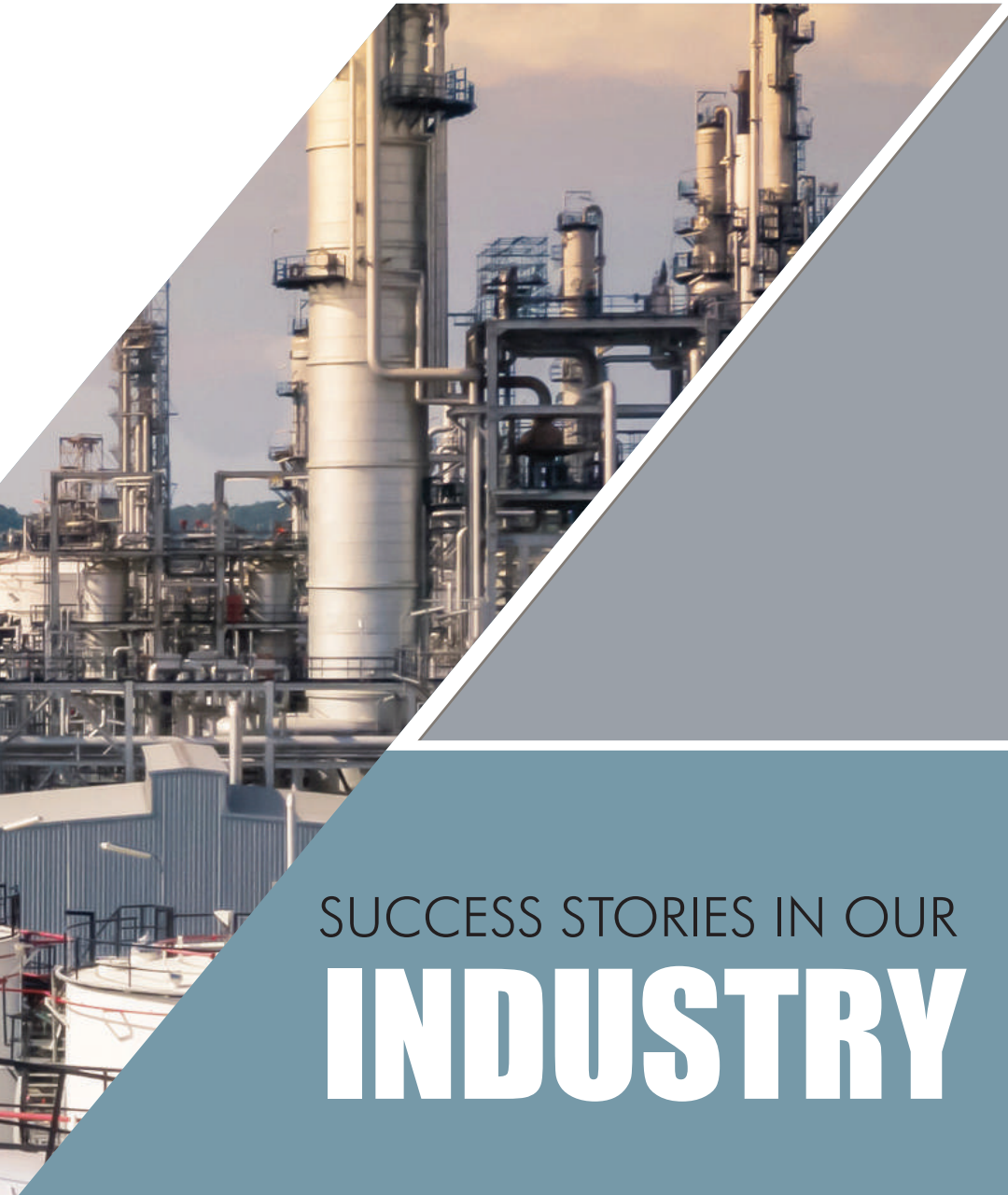
Business intelligence is also gaining popularity in the real estate sector, which helps achieve the goals of smart, sustainable communities. Everything is data today! Thus it is important to implement business intelligence processes and solutions to deal with data and use it to take decisions. Business intelligence is important also to predict relationships and improve interactions between stakeholders.

HOW CAN INDUSTRIAL ORGANIZATIONS COLLABORATE TO BUILD SMART SUSTAINABLE CITIES?

Private public partnership (PPP) is essential in this process. It is important that we have the right governance including the facilitating and governing laws, regulations and processes from the regulatory and governing authority as well as from the private sector to act upon those. Organizations are always very interested when there is an incentive and an economical return. This has now been proved to be the case for smart and sustainable solutions.

WHAT IS YOUR MESSAGE TO GSMR MEMBERS?

My message would be to adapt to the change before becoming obsolete. 'The only constant thing is change' and unless they adapt soon to the needs to be 'smarter' and more 'sustainable' they will soon find themselves out of the race. The future requires us all to put our hands together and unify our efforts for a smarter and more sustainable living. This can only be done with the commitment of all stakeholders. GSMR is an essential contributor to the development of cities and their understanding of the importance of smart, sustainable futures will help us progress greatly in this direction. 



SUCCESS STORIES IN OUR **INDUSTRY**

Organizations and professionals across the GCC celebrate major achievements, exhibiting creativity and determination and spreading positivity and hope in the midst of a global pandemic.

LEADING BY EXAMPLE

ALUMINIUM BAHRAIN B.S.C.

Ali Al Baqali, CEO, Alba

The year 2020 was a year like no other with world-shifting challenges due to the COVID-19 pandemic. While this crisis changed the way we operate, our priority on 'Safety First & Always' has helped us build a strong safety culture all-year-round as well as empowered us to successfully navigate 2020 and finish strong.

This crisis emphasized that nothing is more important than our health and safety. As a responsible corporate citizen, Alba took the lead in enforcing strict protocols and procedures, in addition to the measures given by the National Medical Taskforce for combatting Coronavirus, early as January 2020.

Under the leadership of CEO, Ali Al Baqali, Alba's COVID-19 response was initiated as early as January 2020. Alba activated its Emergency Preparedness and Business Continuity Plans, along with proactive COVID-19 initiatives for both employees and contractors' personnel. Alba measures include: COVID-19 awareness sessions for employees and contractors' personnel by Alba Health Care team regularly via video-messaging and online platforms; work-from-home and reduced working-hours, where applicable, especially for the female staff; plant-

wide temperature checks at the entrance gates for all working shifts; social distancing protocols in office, shop-floor areas and transport vehicles; frequent sanitization of all operational and non-operational areas; distribution of protective kits; installation of hand sanitizer dispenser units across the Company and multilingual posters across our facilities. Moreover, numerous safety campaigns on COVID-19 awareness as well as vaccination drives were held periodically. Employees and contractors also joined Alba's volunteering team that is part of TEAM Bahrain to help fight the spread of COVID-19.

While Alba came together and stood as one team to ensure the safety of its people, the Company is now focusing its efforts to also increase the number of vaccinations amongst its employees and contractors' personnel. Alba has been performing successfully on this front with more than 91% of its workforce being vaccinated as of June 24, 2021.

Throughout this crisis, Alba has remained responsive and resilient. We have emerged collectively - employees and contractors - stronger than before. 🛠️

INDUSTRY 4.0 IN KIPIC'S WORKSHOPS

WORKSHOP MANAGEMENT SYSTEM (WMS)



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KIPIC prides itself in paving the way for new beginnings in Kuwait by creating new opportunities for future generations, advancing local operations and progressing economic growth. The complexity and structure of modern refineries require enhancing old systems into more efficient ones to achieve operational excellence. This shall be done by the collaboration of different departments in the company by working together efficiently as one team. Luckily, KIPIC is supporting new, innovative ideas to digitally transform the company to the fourth industrial revolution (Industry 4.0). Some examples are SmartSupply where the program will automate and integrate key business processes to improve productivity, service quality, and decision-making. Another example is Maximo where KIPIC's assets are monitored, tracked and maintained. Safety, quality, cost and time are key factors that are being tracked in all of KIPIC's management systems in order to reach the highest level of global standards and professional requirements. KIPIC is certified for Integrated Management Systems (IMS) such as the following to achieve its targets.





ISO STANDARDS

- Quality Management System (QMS) – ISO 9001:2015

Quality Management System in short focuses on the quality aspect in the organization by ensuring that they get quality products or services consistently mainly in the core business area of the organization.

- Environmental Management System (EMS) – ISO 14001:2015

Environmental Management System is a systematic framework to manage the immediate and long-term environmental impacts of an organization’s products, services and processes on the shops.

- Occupational Health & Safety Management System (OH&S) – ISO 45001:2018

OH&S is an International Standard that specifies requirements for an occupational health and safety OH&S management system, with guidance for its use, to enable an organization to proactively improve its OH&S performance in preventing injury and ill-health.

- Energy Management System (EMS) – ISO 50001:2018

Energy Management System provides a framework for establishing energy management best practice to help organizations to improve their energy efficiency plus make a return on investment

- Risk Management (ERM) – ISO 31000:2018

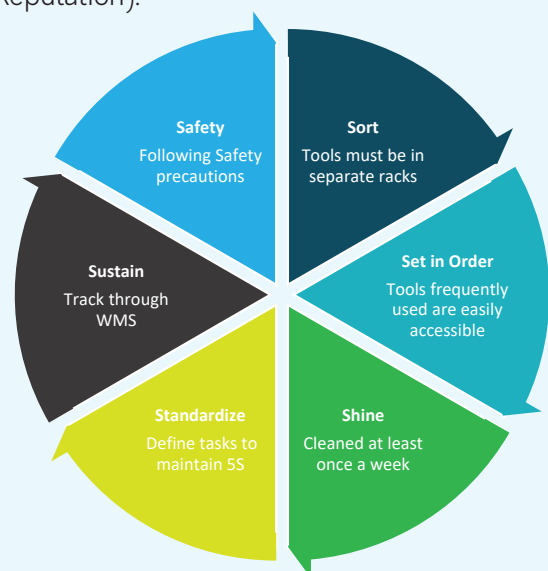
Risk Management can help organizations increase the likelihood of achieving objectives, improve the identification of opportunities and threats and effectively allocate and use resources for risk treatment.

In addition, KIPIC is also working with the following methodologies.

5S + 1 METHODOLOGY

The idea of 5S is to have an organized and clean workplace to improve productivity:

- Sort is the first element from the 5S organization methodology. It means that everything must be sorted and in their own place.
- Set in Order is the second element from the 5S organization methodology. It means to have everything in order in the most logical way.
- Shine is the third element from the 5S organization methodology. Basically, it is housekeeping.
- Standardize is the fourth element from the 5S organization methodology. It means to routinize the tasks necessary to maintain the 5S in the organization.
- Sustain is the fifth and final element from the 5S organization methodology. It means to make the 5S a long-term plan and to sustain the system.
- Safety is an additional element from the 5S organization methodology. Safety precautions must be followed in order to prevent any harm or loss for PEAR (People-Environment-Assets-Reputation).



LEAN SIX SIGMA METHODOLOGY

Lean Six Sigma is a methodology that combines two of the most important organization methodologies to reach operational excellence. Lean focuses on maximizing customer value by using fewer resources. On the other hand, Six Sigma's goal is to reduce variation by increasing quality and consistency.

PREVENTIVE MAINTENANCE

All machines for the shops are maintained every six months or as per KIPIC's procedures. Records are maintained with each respective team. This is necessary for the Quality Management System (ISO 9001) as well as to prevent unnecessary breakdown of machines.

All management systems and methodologies in KIPIC are maintained with the use of various computerized management systems. A database was developed to keep track and improve the use of tools inside KIPIC's workshops which focuses more towards the 5s+1 and Lean Six Sigma methodologies.

To achieve the above requirement and support the company's targets, the Workshop Management System (WMS) is designed to be a computerized management system that tracks workshop inventory regarding usage/cost/maintenance/repair/etc. of tools and machines along with calculating future demand and cost of workshop inventory. It integrates and utilizes the workshops inventory data with loaning data using an electronic database in order to improve data calculations through estimation and monitor/optimize performance.

WMS will categorize workshop's assets by tracking and managing inventory quantity based on conditions and availability. This will be done by identifying if the tool is new, in good condition, in need of repair, lost or damaged. Also, the system will show that if the tool is currently in loan along with the designated person that loaned the tool.

The system is designed to be user-friendly to minimize mistakes and to maintain accurate data. Users will be able to enter data and amend data easily. The program automatically calculates inventory data such as available and loaned tools as soon as a tool or machine is loaned. If the item is overdue, the system will notify owners along with



users contact information. Once the item is returned, the responsible person will assess the tool and enter the data into the system.

The database is also designed to track the maintenance of machines in the shops such as lathe, milling, welding, drilling machines, etc. A logbook is created for each machine to monitor the history of either breakdown or preventive maintenance. A reminder notification occurs two weeks prior to when the preventive maintenance is due.

All information and data that are fed into the program are well organized. This will help in extracting useful data. A couple of algorithms are created to help engineers to order tools. For example, there is an algorithm that calculates tube expander consumption for condensers. It calculates the consumption of mandrels and roll sets and compares different manufacturers regarding quality. This can help in future case studies to analyze what expanders to buy. Another algorithm that was created is tool usage in shutdowns. It calculates what type of tools and sizes were used in unit shutdowns. All this information will be better over time since the program will have more information.

The system is a special system for KIPIC that is built by Workshop & General Works Engineers. It will provide solutions by utilizing historical data and calculating usage of tools along with the costs. Also, the quality of the tools will be assessed depending on variables such as material and manufacturer which would help in ordering future tools. This is applicable to be used in all tool rooms and not only in the workshops. The system is the beginning of continuous improvement cycle whereas much data is collected now in an accurate and organized way, costs can be reduced efficiently, and the organization shall move towards operational excellence and making more possible. 🛠️



The key to an efficient and productive shutdown is good planning and teamwork,

says **Sarah Hussain**

Maintenance Planning Engineer at KNPC.

My first position in KNPC was as a procurement engineer, which came with many duties and responsibilities. I truly relished the responsibilities handed down to me as it gave me the chance to thrive in my work. My day-to-day activities involved the acquisition of essential parts and materials for the safe running of the refineries, and to ensure that the workflow remained uninterrupted. In 2018, I moved on to a new position as a planning engineer, bringing with me the vital experience I gained over the past years.

My first experience of a shutdown came in 2019, which felt daunting at first. However, my previous experience in procurement greatly helped me to quickly adapt and manage the immense workload of a shutdown. My first opportunity to plan a shutdown for Gas Oil Desulfurization (GOD) Catalyst Change Out arrived in 2018, where preparation started more than one year ahead of schedule.

The main goals of a shutdown are to increase production and to reduce downtime and operation costs for future maintenance jobs, while maintaining product quality. A successful shutdown is realised through a multi-step process and involves reaching a series of predetermined milestones throughout a certain time frame. The initial stage of a shutdown involves the procurement of the required spare parts and equipment. Additionally, the Inspection and Corrosion Recommendations (ICRs) and Inspection Advice Tickets (IATs), which are raised by the inspection and corrosion engineer earlier must be followed by the undertaking of appropriate action on my part. As a planning engineer, I utilize bar charts to create job plans for the due and overdue

equipment, in line with the scheduled maintenance duration. This approach simplifies the process for the mechanical maintenance engineer, who is also the cell leader, to follow-up and execute the job. My other duties involve evaluation, recommendation and planning of the required manpower and heavy equipment for the preventive and corrective maintenance jobs. It is imperative that all the work is documented and evaluated to increase the efficiency of future shutdowns. Finally,

following the completion of a shutdown, the actual shutdown cost has to be compared and evaluated against the estimated budget from the shutdown plan.

The objective of the core team was to execute all works necessary to ensure a safe and reliable plant operation until the next unit endorsement period. From a personal standpoint, I believe we achieved this with the main highlights being that the scope of work was well integrated, there were no accidents or injuries, quick compliance to Health Safety Environment initiatives, completion of U#44 three days ahead of schedule, and conducting a daily meeting with all concerned departments throughout the process.

From my personal experience, I believe that the key to an efficient and productive shutdown is good planning and teamwork. I was lucky to be involved with a great group of people and would never have completed the shutdown to a high standard without the support of my team leader, Mr. Haidar Darweesh, and my previous senior, Mr. Abdullah Naqi who was the best mentor. 🛠️

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A SHUTDOWN SUCCESS STORY



AME REGION TERMINAL OF THE YEAR

KHALIFA BIN SALMAN PORT

BAHRAIN



Kevin Blakey, Head of Asset Maintenance attributes a proactive mindset combined with a strong focus on planning and reliability to successful maintenance performance.

The operator of the Khalifa Bin Salman Port (KBSP), AP Moller Maersk (APM) Terminals Bahrain has been honoured with the 'AME (Africa Middle East) Region - Terminal of the Year 2020' award at the APM Terminals Africa and Middle East Region awards. The recognition is a huge testament to APM Terminals Bahrain's relentless efforts in evolving KBSP, the Kingdom's only commercial port, as a major regional trade and transportation hub through its world-class infrastructure, services and highly skilled talent.

The only APM Terminals-operated port to have earned this award in the GCC region, the honour demonstrates the successful partnership between APM Terminals Bahrain and the Ministry of Transportation and Telecommunications working together to contribute towards Bahrain's economic development and the people's future.

APM Terminals Bahrain is the gateway for 90 per cent of all consumer goods and is a critical artery for the Kingdom. One of the main objectives since COVID started was to ensure that it did not spread on the terminal. A serious outbreak would potentially close the port with no way of supplying the Kingdom with required goods like food, medicine and consumer goods. They implemented proactive steps very early to protect their workforce and the terminal operation from the threat of COVID: very quickly

enhancing sanitization measures, introducing daily meetings focusing on the pandemic and ensuring that maintenance material stock requirements were reviewed and adjusted.

The adoption of a proactive, preventative mindset driven by great leadership and teamwork were the main drivers for success. The terminal has been fully operational at 100 per cent capacity throughout the pandemic. Equipment reliability has not been impacted and most importantly, safety performance remains high.

Bahrain terminal are proud to announce that 95 per cent of their staff are now fully vaccinated and have experienced 'zero' COVID spread at the terminal.

I recognised a strong link between the COVID response and that of successful maintenance excellence and asset management strategies. Much of my work in asset management has been to transform maintenance organisations by working more efficiently and effectively. These transformations require a proactive mindset combined with a strong focus on planning and reliability. This combination will bring about positive change in maintenance performance. A proactive mindset and good planning have protected our people and terminal from COVID. Thank you to the whole team at KBSP! 🛠️

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Troy Lambeth

Group CEO of Sanad
(in his words)



INTERVIEW

Q1: What are the highlights of your professional journey since being appointed as Sanad's GCEO?

Without question, the most important highlight would be our great team at Sanad and the hard work and innovation they bring to the job each and every day. We all know that our character – as individuals, as leaders and as a group – are tested in challenging times. The pandemic's impact on our industry has been severe, but I could not be more proud of how Sanad has faced the challenge head on. Pulling together as a team during such a challenging period has been a great highlight, not only of my time as the Sanad Group CEO, but also of my career so far.

Q2: Is there a major success story in our industry that you've been a part of/observed during your career that you'd like to share with our readers?

Having spent most of my career in the aftermarket services side of the aviation and defense sectors, I had the opportunity to participate in the development and delivery of a number of large-scale integrated services programmes that have covered nearly the entire scope of aftermarket services including MRO, spares and logistics.

We have to push the boundaries of traditional MRO thinking to allow transformation to happen. With technologies advancing so quickly today, we will need to continue challenging these traditions as we position ourselves to best serve the MRO needs of the industry and continue to provide world-class services in a world of change.

Q3: What is the impact of Industry 4.0 on the Aerotech industry?

We are seeing new technologies surface on a daily basis within the industry and so many of these technologies are driving immediate benefits to longer uptime, shorter downtime, and reduced costs. At Sanad, we have been early adopters of some great technologies. Vo-Collect, Smart Connect Wrenches, RFID, and RPA Automation are just a few examples that we have already adopted – each driving unique benefits.

Q4: How has the slump in the aviation industry owing to the global pandemic affected MRO?

At one point in early 2020, nearly 100 per cent of the world's aircraft fleet was parked. That has come back strongly over the past few months and in some domestic markets, flights have nearly fully recovered to 2019 levels. That said, widebody market recoveries continue to lag but are now seeing global flights approaching 70 per cent of 2019 levels. Anytime there is a disruption of that size and duration, it has an immediate impact on MRO. Less flying means less hours and cycles on aircraft engines and aircraft, which means MRO shop visit volumes reduce as events shift to the right. Moreover, as airlines aggressively work to manage costs, they look for MRO shop avoidance opportunities which can be



accomplished by swapping aircraft or engines that are parked and have green time remaining to fly. The airline MRO industry, Sanad included, has reacted well to the downturn, but the impact was severe.

Q5: What innovative solutions has Sanad provided to support UAE's aviation sector through the pandemic?

Sanad has adopted remote monitoring technology – allowing shift engineers who were otherwise remote, to provide local support remotely which proved invaluable to ensuring the right level of support throughout the pandemic despite the rotational shifts. We introduced this as a measure to ensure the highest levels of safety for our team.

Additional examples include Sanad's adoption of electric torque wrenches and Vo-Collect tools on the shop floor. The technology behind these new tools has ensured streamlined processes and accuracy when performing MRO services on engines and parts. The former, for example, is an advanced tool that can digitally apply a specific level of torque to a nut, bolt or fastener – saving our team valuable time on the shop floor as well as providing critical data on the tightening process and angle required.

Q6: Are there any methods and techniques that Sanad has used in the aerospace industry to help equipment downtime that other sectors can learn from?

We have been early adopters of technologies and tools that have allowed us to reduce downtime in a number of areas. For example, Vo-Collect is a voice activated artificial intelligence platform that has reduced the time to capture data by more than 67 per cent and receive inspection data capture to less than 10 per cent of what we were doing previously. RPA Automation is another example that has reduced the time previously needed to process invoices by more than 75 per cent. Some of these savings are measured in hours and others are measured in

days, but each plays a role in Sanad's daily effort to deliver best in class turnaround times for engines coming into our shop.


Q7: How does Sanad envision / plan the expansion of its capabilities in the near future (other sectors, diversity, etc.)?

The UAE recently launched a new industrial growth strategy called "Operation 300bn" which aims to grow the country's industrial sector from AED 133 billion over AED 300 billion by 2031. Sanad intends to play a significant role in the initiative by growing our industrial services revenues in both existing and new sectors. We have progressed significantly in the exploration of a potential entry into new products and services that we look forward to announcing over the course of the next 12-24 months. At the same time, we are excited to see our existing products and services expanding, including our recent expansion into full overhauls of the GEnx and our entry into the LEAP engine platforms in the near future. These engines will be industry leaders for several decades to come, so we are pleased to see them coming online at this early stage of their lifecycle.

Q8: What do you think is the new normal of the future of the aviation sector and Aerotech industry?

As fast as technology is moving, I think whatever the new normal is will likely be short lived. The engine platforms themselves – whether aviation or industrial – are changing very quickly. In the past month, we have seen industry leaders ordering supersonic aircraft and more than 1,000 VTOL aircraft. That is a great sign of what is coming. OEMs, operators, and aftermarket service providers, will need to be very proactive in leading this transformation.

Q9: What is your recommendation to the engineers to have a successful career in general and the Gulf region based on your experience?

Give 110 per cent to every role you are assigned to and make learning a hallmark of your career. Good organisations are relying on you to perform well and that includes raising your hand when you see things that can be done better. You are embarking on an exciting career in a great industry and in a region that has been a global leader in growth for several decades. 

ASSET MANAGEMENT: A NEED OR TREND?

WHY Asset Management?

Physical asset management is applicable to organizations that involve process plant, equipment, oil and gas upstream and downstream, metals, mining, chemicals, infrastructure like stadiums, malls, buildings, roads, bridges, utilities like power generation, power distribution, water supply, water treatment, healthcare providers, transportation, aviation, defense, food processing and pharmaceuticals to name a few irrespective of the organization's size. Assets create value for an organization throughout their life cycle. In order to achieve that value, organizations must properly plan and execute asset management activities throughout the assets' life.

I have listed some of the challenges in an asset intensive organization. Please try to answer these questions assuming you are in a leadership position in a company:

- Am I able to produce reliable products and services at optimum cost, ensuring safety at acceptable risk levels within a predictable timeframe to achieve customer satisfaction and meet stakeholders' expectations?
- Am I consistently applying and managing all risks uniformly across the organization, improving safety, reliability, and compliance to regulations, and following standardized procedures?



Suriya Narayanan, CAMA, PMP, CMRP, CRP, B.Eng., Consultant - Business Development Manager at Yokogawa Services, Saudi Arabia, and member of GSMR's Asset Management Committee writes this two-part series on the rationale behind implementing asset management in organizations.

- Is there a highly motivated culture across various departments without conflicts, focusing on organizational objectives with clear performance goals?
- Am I able to optimize cost and improve efficiency with well-defined roles and responsibilities of various resources towards achieving organizational objectives?

- Is there a defined process to reduce incidents and avoid emergency situations by advanced planning of activities for efficient execution?
- Do my leaders have a better understanding of the requirements, capabilities and expectations at all levels in the organization?
- What am I doing to make consistent decisions for investment plans to be successful?
- Do I have a clear understanding about ageing assets and when to replace them?

You would have noticed that there are no simple answers as most of the above questions are actually complex puzzles that require a systematic understanding of the business dynamics of the organization. The simple and only way to solve these puzzles consistently is by applying the principles of asset management in the organization as explained in ISO5500x standards.

Asset Management Certification for ISO55001

ISO55001 certification could be a good start for an organization that wants to effectively manage its assets. Asset management is not a destination but a journey throughout the asset life cycle that connects assets with the organization's objectives and helps in the business decision-making process. Organizations embed asset management as a philosophy of continuous improvement rather than seeing it as a one-time transformation program. It's an ongoing journey where everyone contributes their part. Asset management system provides a framework for integrated decision-making that relies on good information with a shared understanding of the decisions to make it collaborative to optimize them. Optimal asset management decisions must maximize the long-term value of assets by aligning them to the objectives and purpose of the business.

ISO5500x standards untangle the puzzle into workable groups and subjects. An organization should consider these subjects with respect to its operating context, apply the appropriate ones and set processes, procedures, and standards, which enable an organization to disintegrate the puzzles into plans for implementation. These plans are then converted into asset management activities that are evaluated periodically for effectiveness and corrective actions are taken to ensure continual improvement. The GFMAM Asset Management Landscape gives a framework that could help companies comprehend the standards with their operating context and refer the groups and subjects suggested in the Landscape that can be adjusted suitably.

Benefits of Asset Management:

- Improve return on investments
- Make the right asset investment decisions at the right time
- Identify and control risks
- Improve service level to stake holders
- Enhance reputation with customers, regulators, employees and society
- Improve organizational efficiency and productivity
- Sustainable, learning organization and to be world class, and
- Finally, it helps you answer all the early questions systematically.

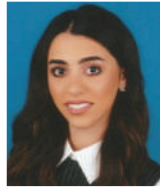
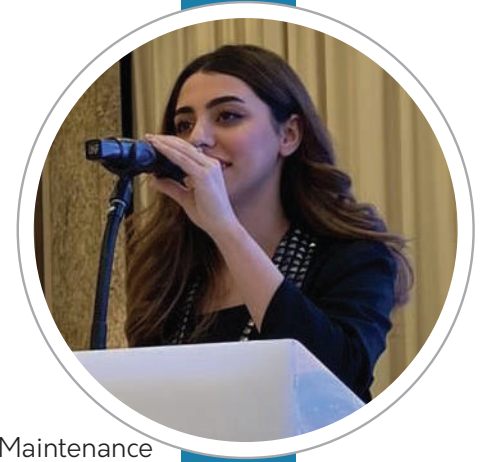
In simple words, asset management is the only way to make sustainable profit. 

To read the GFMAM Asset Management Landscape, visit www.gfmam.org

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MULTITASKING MAESTRO



Shurouq Alqattan, Instrument Maintenance Engineer at Kuwait Integrated Petroleum Industries Company shares insights on balancing a fulfilling day job while running a successful events business.

WHAT ARE THE HIGHLIGHTS OF YOUR CAREER?

In July 2018, I graduated as an Electrical Engineer from Kuwait University. Even though my college journey was filled with hurdles, dedication and commitment were my keys to graduating early. While debating which field to apply to, I utilized my time and developed a small business based on my personal interest, event planning. In Feb 2019, I joined Kuwait Integrated Petroleum Industries Company (KIPIC) as an Instrument Maintenance Engineer where I handle maintaining all instrumentation and control systems at Al-Zour refinery such as Honeywell ICSS system, Bentley Nevada MMS, Siemens PLC and various field instruments (pressure, temperature, flow level, etc.). KIPIC provided me with the opportunity to participate in mechanical completion walkdowns, pre-commissioning and commissioning activities of Al-Zour refinery, especially in Utilities Area.

WHY DOES THE FIELD OF ENGINEERING INSPIRE YOU SO MUCH?

As a child, I was obsessed with electronics and always wanted to know how devices work. My grandfather owned a small electronic workshop, and I tried to absorb as much knowledge from him. When I was 17, I developed an engineering project for Kuwait Oil Company's competition and ranked first. Engineering, I've learned, is not just calculus and physics but about how you think – engineers have a unique point of view and continuously learn something new.

HOW DO YOU OVERCOME THE CHALLENGES OF JUGGLING YOUR DAY JOB AND BUSINESS?

I always deal with time as a friend and not an enemy to keep it balanced. I have learned the hard way that we have to set priorities when we are multitasking. Personally, my priority is my day job and I utilize my free time as an entrepreneur.

HAS ENTREPRENEURSHIP HELPED YOU BECOME A BETTER ENGINEER AND VICE VERSA?

Being an entrepreneur has taught me a lot. For instance, procurement of materials related to my



“Sometimes, it’s only the young who are crazy enough to change the world.”

GSMR’s Board of Directors wishes all young professionals and future leaders happy International Youth Day! May you enjoy immense success and continue to pay it forward.

August 12, 2021

“Be the voice of young engineers who are the future of our profession.”

Omar Al Mubarak
GSMR Youth Committee Chair



business helped me understand the complex procurement cycles in ordering instruments' spare parts; satisfying my own customers' needs with the highest quality and lowest prices possible helped me understand the quality standard followed at work. With respect to schedule management skills, I've learned from my day job, scheduling our instrument maintenance activities.



WHAT IS THE MOST INTERESTING PIECE OF ADVICE YOU'VE RECEIVED?

Two pieces of advice that frequently inspire me are "The road to success is always under construction" and "There is no elevator to success. You have to take the stairs".

WHAT ARE YOUR VIEWS ON INTERNSHIP PROGRAMS TO BETTER PREPARE FOR WORK LIFE?

I strongly recommend pursuing internship programs as they link theoretical knowledge to practical experience. Furthermore, they mentally prepare you for work place requirements and challenges. Additionally, they help in developing your personality, way of thinking, problem solving abilities, leadership skills, and teamwork.

HOW CAN ORGANIZATIONS HELP NEWLY GRADUATED ENGINEERS SETTLE INTO THE WORKPLACE?

Companies can assign a dedicated mentor, provide necessary trainings, set clear roles and responsibilities, keep fresh graduates involved, and monitor their performance and make necessary improvement as required. Additionally, organizations may try to generate an interesting, motivating and exciting work environment, which will help break routine and re-energize power and abilities.

WHAT ADVICE WOULD YOU SHARE WITH ASPIRANT, YOUNG ENTREPRENEURS?

I always follow the slogan "Do what you love, love what you do". Choose your business depending on your interests — never copy, create! Success doesn't happen overnight — I had to go through hard times to figure it all out — but strongly believe that you will reach your target; fight for it! Be proud of what you are doing no matter how simple and avoid negative relationships. Stay organized and always have a plan B.

WHAT ADVICE WOULD YOU SHARE WITH YOUNG GRADUATES ABOUT TO MAKE THE TRANSITION TO WORK LIFE?

Work is totally different from university life. Always expand your knowledge, keep reading and don't stop learning. Try to build your network and lookout for conferences and trainings that could build your resume. Have the confidence to ask questions as it will expand your knowledge in a shorter time. Don't lose hope and passion. Best of luck! 🛠️

✉️ Sb.alqattan@kipic.com.kw

GSMR is Seeking DYNAMIC PROFESSIONALS Across the Arabian Gulf to Join its Committees

■ EDUCATION & CERTIFICATION COMMITTEE

It is committed to conducting training workshops of a high standard and providing professional certification opportunities for regional professionals.

■ ASSET MANAGEMENT COMMITTEE

It is committed to elevating the asset management profession, and spreading its value and culture through awareness programs.

■ MEMBERSHIP COMMITTEE

It is committed to expanding GSMR's membership, introducing new membership concepts and increasing member value through benefits and incentives.

■ GSMR EXCELLENCE AWARD COMMITTEE

It is committed to promoting excellence in maintenance, reliability and asset management by recognizing high achievers in the region through the Society's iconic GSMR Excellence Award.

■ WIAM COMMITTEE

It is committed to advocating gender diversity, and women inclusion and empowerment in industry and asset management by promoting women professionals and their contributions, and encouraging their participation in GSMR initiatives.

■ EVENT MANAGEMENT COMMITTEE

It is committed to strengthening GSMR's presence regionally and internationally through a wide range of events including webinars, virtual and physical symposiums and conferences, technical dinners and others.

■ STRATEGIC PARTNERSHIP & COLLABORATION COMMITTEE

It is committed to creating mutual partnerships and collaborations with various regional and international organizations in the public, private and non-profit sectors.

■ MARKETING & PUBLIC RELATIONS COMMITTEE

It is committed to positioning and promoting GSMR as the number one maintenance, reliability and asset management partner in the Arabian Gulf through a comprehensive and proactive marketing strategy.

■ YOUTH COMMITTEE

It is committed to empowering young professionals and students in the GCC, and shaping their careers through a wide range of youth centric programs.

■ M&R DIGITAL TRANSFORMATION COMMITTEE

It is committed to promoting digitization, efficiency and the use of technology in the fields of maintenance, reliability and asset management.

■ SOCIAL RESPONSIBILITY COMMITTEE

It is committed to creating a sense of community among GSMR's members through value added activities that support initiatives and causes in the Arabian Gulf.

■ COUNTRY COORDINATION COMMITTEES (Saudi Arabia – Western, Central and Eastern; Kuwait; Bahrain; UAE; Oman)

They represent GSMR in their respective GCC countries and are committed to expanding and strengthening GSMR's presence in the Arabian Gulf.

Applications received will be reviewed by the respective GSMR Committee Chairs. Only shortlisted candidates will join.
For more information or to join, call +973 1718 0398 or email officeadmin@gsmrgulf.org

RECOGNIZING & PROMOTING EXCELLENCE IN OUR INDUSTRY



GSMR Excellence Award committee Chair, Ahmed Barnawi and Vice Chair, Husain Mattar reminisce about their best MAINTCON memories and share hopes and plans for the future of the Conference.

What are your best experiences of past MAINTCON events?

Ahmed Barnawi (AB): Launching the first edition of GSMR Excellence Award in 2018, and conducting the award ceremony during MAINTCON 2018 are arguably the best memories I have from all these years of being actively involved in the Conference. Realizing our vision to recognize excellence in our industry, and watching the winners being felicitated was truly a high point.

Husain Mattar (HM): It's been a sincere pleasure to have a front row seat, watching this flagship conference of GSMR evolve so beautifully over the past decade. The highlight for me is the organic, exponential growth of the Conference from its inception in 2010 to the last edition in 2018 — MAINTCON has steadily grown to be one of the largest gatherings for maintenance, reliability and asset management professionals in the world, which hosts over 1,000 delegates across the region and internationally.



Why must professionals enter the GSMR Excellence Award?

HM: There are a wide range of benefits that all participants – not only winners – can benefit from.

- It brings recognition and success, which offers high exposure and acclaim for your organization
- It allows you to associate with the GCC's elite in this field.
- It provides extensive networking and business opportunities, and avenues for interaction and learning with the Gulf's most successful businesses.
- Last but not the least, it tells your stakeholders, customers and employees how confident and proud you are of your achievements.



What award categories can professionals apply for?

AB: We've carefully designed the award structure and categories to make it inclusive. Individuals who lead or have vastly contributed to excellence in the fields of maintenance, reliability, and asset management, and organizations that have introduced or implemented state-of-the-art value-added programs in the fields of maintenance, reliability and asset management are eligible to apply. There are three main categories available:

- **Organization Award**
- **Achievers Award (for individuals)**
- **Future Leader Award (for individuals)**

When can we expect the next edition of MAINTCON?

HM: Given the current situation, a physical event seems too ambitious. However, we, at GSMR and our regional partners have decided on our next MAINTCON event to be held during November 2022 in Bahrain. The new schedule will give us enough time to review all nominees' reliability and asset management projects.

2022
27-30 November
 Gulf Hotel, Kingdom of Bahrain

Do you have a message for our community of professionals?

AB: Since its inception in 2018, the GSMR Excellence Awards have recognised high performing organisations, individuals and future leaders for their achievements. I invite you all to avail of this unique platform for the industry's best and brightest.

HM: Excellence is a journey. We invite professionals from all walks of life to join us in upholding standards of professional excellence by being part of this iconic award. Our upcoming event will be very special as we will be celebrating GSMR's 10th anniversary, hence, we are going to expect very exceptional projects from all our members, supporters and supporting organizations.

2018 WINNERS



Organisational Award: First Place – Saudi Aramco



Second Place – KNPC



Third Place – Royal Commission of Al Jubail



Future Leaders Award: Dalal Al Asousi



Achievers Award: Bander Abulnassr

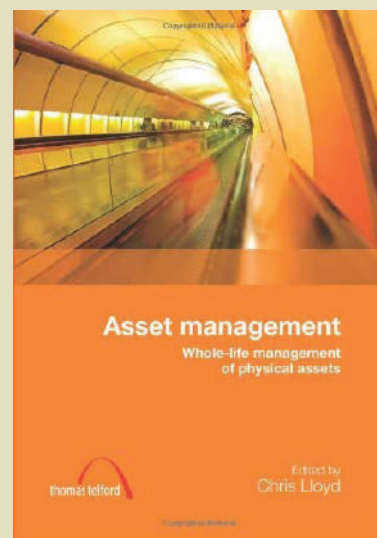
Ahmed Barnawi is also a GSMR Board of Director and Manager, Reliability and Integrity at TASNEE & Husain Mattar is a Founding Member of GSMR and Operations Manager, BASF PAME.

RECOMMENDED Reading

Asset Management: Whole-Life Management of Physical Assets

Originally Published: 2010

Author/ Editor: Chris Lloyd



Available on Amazon.com



A review by:
Dr. Wesam Beitelma, CAMA
Assistant Professor
Dhofar University
✉: wbeitelma@du.edu.om

I found this book will help organizations to speed up the process and put all people on the same page of understanding the fundamentals of Asset Management (AM). Chris Lloyd successfully gathered 10 experts to contribute. The book is divided into three main sections across 12 chapters.

Section One: The Story So Far

It highlights the progress in AM development. Ch. 1 introduces the implementation of AM, focusing on the rail and utilities sectors. He mentions a major challenge organizations face is to have better link between strategies, AM processes and business drivers to influence the organization's environment to accept the new management direction. Ch. 2 discusses AM in the oil and gas sector, concentrating on process and manufacturing sectors; you will learn from other companies' practices. Ch. 3 presents major challenges and difficulties facing public sector AM, highlighting the shifting management focus from technical to organizational strategy and policy level. Ch. 4 discusses the importance of compliance with standards: beyond BSI PAS 55 compliance – a good starting point for any organization aiming to build its knowledge about AM fundamentals and have a successful and smooth AM development.

Section Two: Organizing For Asset Management

It drives the readers' attention towards the internal aspects of the organization to successfully develop, implement, and sustain AM. Ch. 5 begins with leadership and decision-making process. Organizations need to link the measurement of assets and asset performance to planned outcomes. Ch. 6 discusses developing AM culture in the organization, highlighting that, incentives for asset managers

is one of the strategies to motivate staff to accept the new culture. Focusing on who will implement AM, Ch. 7 discusses developing the competence of AM staff and the importance of aligning a strategic plan for staff competence and the strategic deliverables from AM.

Section Three: Future Directions

It highlights three topics that ensure the sustainability of AM implementation. Ch. 8 discusses the importance of considering climate change in AM was presented. The more reliable data the organization has about climate changes, the better prepared it will be to face future events. Regulating AM is an important aspect that supports the transition from traditional management system towards AM as covered in Ch. 9. A major challenge is how to drive the interest of asset managers from short-term targets to long-term. Better regulations are needed to factor asset life cycle costs through the life of the assets in the decision-making processes. Ch. 10 shows the way forward, offering suggestions to asset organizations on how they should learn from their implementation processes. It also presents future trends in AM implementation and why it is an essential solution to many problems that asset organizations face such as world population growth, economic recession, global warming, and ageing physical infrastructure asset.

The important message is that there is no one size fit all in AM implementation. All standards and specifications are developed only to show what must be done but the how must be developed and adapted in each organization case by case, considering its circumstances and internal and external environment. ⚙️

“You were born with wings, why prefer to crawl through life.” – Rumi

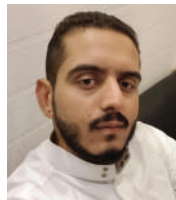
WIN WIN WIN

What is the name of GSMR's flagship conference in association with Bahrain Society of Engineers?

- a.) GulfMaint
- b.) LEWAS
- c.) MAINTCON

Send your answer to melissa.nazareth@gsmrgulf.org with your full name, company name, photo and GSMR ID, and stand the chance to win exciting prizes! Winners will be announced

Last date for entries: September 30, 2021



Winner of the competition published in the April 2021 edition

Ali Al Jamaan, KSA

GSMR ID: 517

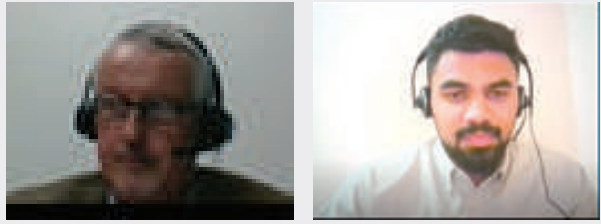
STAVE OFF the Summer Heat

- **Eat Light:** Avoiding big, greasy and spicy meals during the summer. It will help you stay active and avoid sluggishness and bloating
- **Eye Care:** Protect your vision from harsh sunlight by wearing protective eyewear. Relaxing your eyes by placing cotton pads soaked in rose water will offer respite too.
- **Cut Out Caffeine:** Try and keep your caffeine intake to one or two cups a day, not more. Caffeine offers immediate boost but also makes you lethargic as the day progresses. Green tea is the nobler option!
- **Stay Hydrated:** Nothing can replace water so drink plenty of it and flush out those toxins.
- **Be Active:** Indulge in some form of physical activity – boost the adrenaline and be happy!

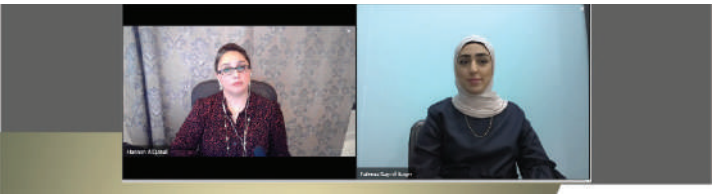


WEBINARS and TRAINING and CERTIFICATION WORKSHOPS April - June 2021

WEBINAR ON
Small Steam Turbine Safety Reliability Improvements



WEBINAR ON
World Health Day Special: Boosting Health & Productivity During Ramadan

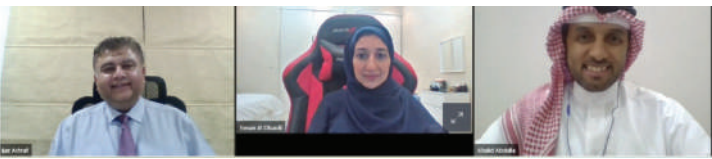


FELICITATION



Mr. Khaled Al-Awadhi, DCEO, Al-Zour Refinery presented the trophy of appreciation to our World Health Day panelist, Ms. Hannan Al Qanai, Team Leader, KIPIC HSE Group in the presence of Mr. Ahmed Al Khaldi, GSMR Board Member and Manager, KIPIC Maintenance Group.

WEBINAR ON
Why Green Tech Innovators will be The Future Trillionaires



Mr. Mahmood Mirza, GSMR Vice Chairman presented a trophy of appreciation and letter of appreciation signed by Mr. Eyad Al Basrawi, GSMR Chairman to Fatema Hussain, Sr. Process Engineer, Technical Services Dept., Bapco for her collaboration and support to GSMR's initiatives.



Mr. Mahmood Mirza, GSMR Vice Chairman presented the trophy to our World Health Day panelist, Dr. Fatema Baqer in the presence of Dr. Abdulla Habib, COO and Mr. Mohamed Khalil Saeed, Director-SHE, Fire and Security of Alba and Mr. Jasim Y.A., GSMR General Manager.