new training for FrPD front-line leaders
To build the body of knowledge and the corresponding skill sets, FrPD set out to radically redesign its officer training program.
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SVP appointment
Nabeel A. Al-Jama’ was recently appointed as senior vice president of the newly established Human Resources & Corporate Services (HR&CS) service line.
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an oasis of green on the red sands of Shaybah
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With restrictions now lifted ...
we must not become complacent in controlling COVID-19
Do Your Part by
Wearing a Mask in Public
maintain physical distancing of 2 meters at all times

by Mohammed Maaraqi, Maha Alabdulkarim, and Masudtek Nazibekov

In the third part of our series of articles to understand the coronavirus impact, we explore the potential fallout of the pandemic on the global value chains (GVCs). Approximately 70% of international trade today involves GVCs, a trend that came to be known as globalization, and they accelerated economic growth through job creation, increased productivity, industrialization, knowledge transfers, and boosting tax revenues. The GVCs fundamentally were all about cost optimization and manufacturing efficiency and an ever-increasing specialization of labor across countries, with much-touted benefits of mutual synergies and dependencies that should ensure overall global stability. While many would argue global stability was never realized, facts still credit globalization with pulling more than 1 billion people out of poverty in emerging economies, empowering an unprecedented economic convergence across the globe.

As efficient as this model may have appeared in the past, the recent COVID-19 outbreak has impacted the established economic models. The pandemic has not only brought entire industries across the globe to a halt, but it has also resulted in suppressed consumer demand because of massive income loss, the collapse of business investment, and divestment from production hubs. For example, the global manufacturing PMI collapsed in April at a rate not seen since the height of the Global Financial Crisis, and WTO estimates the fall in international trade by 13% to 32% in 2020. As a result, the COVID-19 pandemic could permanently change value chains due to business- and policy-related reasons.

First, businesses may alter their production systems, changing the attitude from "Just-in-time" to "Just-in-case." According to the Bank of America, 80% of multinational companies are considering plans to re-store or relocate part of their production. An increasing volume of goods and services are likely to be produced closer to locations where products are consumed and sourced from several locations. As a result, businesses are likely to shrink their multi-step, multiple country value chains, with scrutiny on the origins of their supplies, and trading off efficiency for redundancy to protect against future disruption. Furthermore, thanks to 4.0 technologies, an increasing volume of goods and services are likely to be produced using robots, 3-D printing, and other advanced manufacturing techniques.

Second, on a policy level, countries may introduce policies aimed at inward manufacturing development, leading to an increased share of localization of goods and services produced domestically. Indeed, the U.S. Commerce Secretary Wilbur Ross said that the fallout from the pandemic would "help accelerate" the return of jobs to North America. At the same time, the U.S. president’s Trade Adviser, Peter Navarro, stated, "We cannot necessarily depend on other countries, even close allies, to supply us with needed items.

Third, a potential redistribution of existing GVCs may result in increased regionalization of the value chains. Increased economic nationalism and localization may lead countries to reduce dependence on other countries for key inputs, flows of investment, technology, and people. Furthermore, countries may opt to develop and maintain different standards, which could result in incompatibility between products drawing a cordon around the value chains.

The COVID-19 pandemic is likely to change the way global value chains operate, ensuing an age of deglobalization. People, confronted with the social and economic consequences of the coronavirus, are looking to their national governments to protect them. Businesses will have to adapt to a new environment of more inward-looking policies, and the development of new economic zones. The potential fallout from this pandemic may be a global economy with value chains integrated at the regional level.
Firefighting is a team effort, with the outcome dependent on everyone doing their job correctly at the right time. With a mission of “Saving Lives and Protecting Assets,” Saudi Aramco’s Fire Protection Department (FrPD) puts a lot on the line when the fire crews respond to emergencies.

All firefighters are trained extensively on a wide range of skills. Some are complex skills required to fight emergencies, which can include fires, chemicals, vehicle accidents, and more. Working closely on its Strategic Realignment Initiative several years ago, one area identified as having critical importance was front-line leadership, i.e., the officers on the “frontline” of emergency response.

Specifically, this pertains to the captain (leader of a single crew), deputy chief, and battalion chief (leaders of several crews working together). Having effective leadership in these positions was viewed as a critical aspect to effective and efficient emergency response.

A multifaceted approach to training leaders

The front-line leadership component of the Strategic Realignment Initiative was developed to build solid leadership through a multifaceted approach focusing on a broad body of knowledge on the technical aspects of emergency response, excellent organizational and station management skills, and field experience — all being verified using valid and reliable methodology.

To build the body of knowledge and the corresponding skill sets, FrPD set out to radically redesign its officer training program. The Fire Officer Candidate Schools (OCS) were developed. OCS I was implemented to develop captains, while OCS II was designed for deputy and battalion chiefs.

The new program, which was lengthened, is far more heavily oriented toward live-fire exercises and actual emergency response, while also exposing our personnel to a legacy fire service management.

Moreover, while this ensures the company’s mission of being a safe and reliable oil supplier, it does not afford many opportunities for firefighters and officers to practice their craft under actual emergency conditions. Responding to emergencies provides the experience component crucial to the development of FrPD personnel.

Since training can only go so far in providing experience, FrPD sought out other opportunities. This issue required a unique and innovative solution. FrPD formed a partnership with the International Association of Fire Chiefs to develop the solution.

The result was a first-of-its-kind, fellowship program in the U.S. that sent specially selected officers or aspiring officers to busy fire departments throughout the U.S. While there, the personnel were fully embedded on duty fire crews and responded to emergencies, taking on active roles. This provided the much-needed experience in actual emergency response, while also exposing our personnel to a legacy fire service culture.

Testing capabilities

The last component of the original Frontline Leadership Initiative was developing a means of verifying an officer’s skills and abilities. Enter the Fire Officer Assessment Center (FOAC), which was developed in-house. FOAC has numerous components and was specifically designed to assess fire captains, deputy chiefs, and battalion chiefs.

To enroll in the FOAC program, the employee must meet a variety of training, physical fitness, and job certification requirements. Upon meeting these, they must take an entry test.

Those passing these requirements are assessed at the Advanced Fire Training Center under live-fire conditions. A team of assessors judges the candidates’ scene management capabilities using standard metrics. A set of soft skills is also assessed for each respective rank.

More than 400 assessments have been conducted. Candidates who do not meet the standard for a “Ready Now” rating are given a remediation plan that allows them to re-test after a time, and when the plan has been completed.

FOAC has proven accurate in identifying capable officers while also raising the skills of those needing development. The proof has been evident at emergency scenes where “Ready Now” officers prove more proficient compared to pre-FOAC periods.

tackling the next challenge

Given the success of these programs, the focus turned to the next logical step in the process — developing fire chiefs at the unit head level. Fire chiefs bridge the gap between FrPD administration and operational crews.

A team was formed, and the Fire Chief Development Program (FCDP) was developed in-house. Like the FOAC, FCDP requires candidates to meet high standards to be accepted, including being a “Ready Now” deputy or battalion chief. With such competence already established, FCDP focuses on the administrative component of fire service management.

FCDP candidates begin by taking a three-week, internationally accredited course at the Fire Officer III and IV level. After passing that course, candidates advance to a Field Development Experience (FDE). FDE pairs a candidate with a highly competent fire chief at a busy FrPD fire station for a two-week full immersion experience where the candidate shadows the fire chief and learns many of their daily duties. The FDE is graded according to a set metric and must be successfully completed before the candidate can move on to the next components.

Candidates must complete several courses at the Leadership Center, including the business application.

The final step in FCDP is a panel presentation exercise where the candidate brings his/ her finished projects from Fire Officer III and IV and presents them to a specially selected group of subject matter experts. The candidate must be able to clearly present his/ her project results and provide sound rationale for his/ her decisions. Candidates successfully completing all components are deemed highly competent and able to fill the role of fire chief.

With this final piece of the puzzle in place, Saudi Aramco’s FrPD possesses one of the most robust officer development programs found anywhere in the world.

reliability and asset management through digitalization

Saudi Aramco and the importance of reliability have been intrinsically linked since the company’s early days.

Moreover, as it remains a critical focus area for us, increased business challenges, and the role digitalization plays in meeting those challenges, are even more important in today’s world.

This was the driving force by the first Upstream Integrity Connect Roundtable in Saudi Arabia, conducted by the Ras Tanura Cluster Shared Services Department (RTCCSD) in coordination with the Reliability Community of Practice.

The theme of the event was “Advancing Reliability and Asset Management through Digitalization.”

As Saudi Aramco’s reputation for performance grew, so did the company’s recognition of the need to take a proactive approach to its operational reliability. The company has always viewed reliability as a key component of its business success.

A solution for today’s challenges

Hamad Al Mehtel, head of RTCCSD, opened the first-ever roundtable by emphasizing the importance of digitalization and its pivotal role in reliability and asset management.

“Given the increased business challenges, it is important to address each and provide the appropriate mitigation solution,” he said, noting that reliability is one of four focus areas in the company’s Operational Excellence program. “Digital transformation is a reality today at Saudi Aramco, where its digital platform is already established.”

The event also featured presentations from external subject matter experts to the approximately 50 attendees from various Saudi Aramco organizations, as well as other companies, e.g., SATORP, SASREF, SAMREF, Ma’aden, and the Saudi Electricity Company.

Presentations and their correlating open dialogue pivoted around asset management, digitalizing, and Fourth Industrial Revolution concerns, including:

- Digital twins
- Artificial intelligence
- Asset concern management
- Work execution management.

Maura Abad, director of Women in Reliability and Asset Management, presents at the first Upstream Integrity Connect Roundtable in Saudi Arabia, conducted recently by Saudi Aramco under the theme “Advancing Reliability and Asset Management through Digitalization.”
Chocolates aren’t the only thing she’s carrying

Abeer wanted to pay Nouf a visit and bring chocolates to congratulate her on the birth of her baby boy. Nice friend, right?

But Abeer didn’t know that she was an asymptomatic carrier. She was carrying the coronavirus and while she had no symptoms, she could easily infect Nouf and her baby.

**Never let your guard down.**

Because it’s not only about you. It’s about everyone’s safety.

Unsafe personal behaviors can destroy lives. Do your part to keep us all safe.
On June 21, Saudi Arabia lifted restrictions that had been put into place since the outbreak of the Coronavirus (COVID-19) back in March. With the lifting of the restrictions, restaurants and retail shops, barbershops, gyms, and beauty salons have been allowed to re-open, provided they have the necessary precautionary measures in place. In addition, the curfew hours have been set aside. But as the government has provided some welcome relief after months of lockdown, we must all maintain the same level of vigilance about our own health and that of our families as we have since the crisis began in March.

Social distancing still required

Under the new rules, the wearing of facemasks is required outside your home. Failure to wear masks carries a steep fine. Facemasks are required as the elderly or those with preexisting health conditions, depends on our adhering to the health and safety behaviors we have learned. This means maintaining personal hygiene, washing our hands for 40 seconds after contact with surfaces that may be contaminated, even if we are unpacking groceries from the store.

Stay vigilant

The risks of COVID-19 are still very much present. As of June 22, there were 54,523 active cases in Saudi Arabia, 2,045 of them critical cases, and anyplace from 3,000 to 4,500 new cases each day. COVID-19 is one of the most infectious diseases in the world, and for a vulnerable few — those who are elderly, with high blood pressure, asthma or other breathing problems — it is exceptionally fatal. Our vigilance is the one thing we can do to protect those around us, and to keep our families, our communities, and our workplaces safe. Lifting the restrictions has brought a sense of relief, to be sure. It has allowed us to engage in a broader range of activities, to see friends, to engage in a little "retail therapy," to get back to that long-neglected workout routine, and to finally get a decent haircut, from a professional instead of from a child or spouse. The last three months have been challenging times for all of us. As individuals, we all must navigate the reopening at a pace that feels right for each of us, and it is certainly a time for respect and understanding for others who must readjust as we lay the foundation of the new norms.

At the same time, we must recognize that we can never go back to the way things were before COVID-19. The "New Normal" will require a level of personal responsibility to our own health and those around us that can never be relaxed or dropped. The New Normal starts now.

Your Voice

Now is NOT the time to relax — don’t be caught off-guard

After COVID-19 started spreading and the Ministry of Health reported the first case in Saudi Arabia, I realized I needed to educate myself. I started reading all kinds of articles, books, and even chatted with doctors. Surprisingly, much of the information was contradictory, with some even indicating it's a normal flu that will quickly disappear.

Positive cases kept rising daily, with fatalities being reported around the world. Now, it's apparent that it's serious and that we have to take stringent precautions and action to protect ourselves, our families, and our friends. Luckily, I was assigned to develop the COVID-19 Emergency Response Plan with a team, so it was a great opportunity to educate myself through virtual meetings and phone calls. I have learned a lot of information and started sharing this with my family and friends, keeping myself updated every day of any new developments.

I designed my own lockdowns at a personal level, at work, and with family. At work, I frequently cleaned my office, wore a mask, and maintained a safe distance. On the personal level, I'm the only one who is shopping, and I shop at lower peak hours. When I get home, I always remove my clothes and wash completely before I even see my family.

In regard to my family, after school attendance was suspended, we had no visitors and were not going out. We made our home a safe haven with all our needs and entertainment. We never ordered food from outside. I made a temporary washing station in the front yard to wash all materials and groceries to avoid virus cross contamination.

Having kids at home, it was challenging to make them understand the consequences of their actions and behaviors, so we designed a home experiment. I placed a greasy substance on their hands, and I told my son and daughters to wash their hands as they normally do. To their surprise, after using a UV light in a dark room, they were able to see that that regular hand washing is not enough. I showed them a video on how to better wash their hands for 20 to 40 seconds, and the result was amazing.

Being careful is always important. A friend told me that everywhere he went, he always wore a mask, gloves, and maintained a safe distance. One day, his friend got sick and tested positive for COVID-19. Surprisingly, he picked up the virus from a retail outlet. After being tested, he asked himself many questions, like how did I fail to protect myself from the virus?

He thought that by smelling the disinfection chemicals and maintaining a safe distance, he was safe and maybe didn't need to wear gloves and a mask. After further consideration, he realized that he was deceived by store's appearance and lax in his own judgment. It then occurred to him that sick people were also going out.

In these unusual times, please be extra careful, or you may be caught off-guard when you least expect it. We all need to be more disciplined, because the virus is not going ask for permission.
Shaybah — The company’s community in Shaybah has established a solar powered greenhouse to become self-sufficient in landscape supplies, reducing costs, emissions, and enhancing supply resilience. By becoming self-sufficient in landscape requirements, having to truck supplies from Dammam (approximately 800 kilometers away) can be avoided, thereby reducing emissions and improving traffic safety.

“We went the extra mile by using solar because we wanted to build an environmental friendly nursery to continue to beautify the Shaybah camp,” said Abdullah Al Shemaly, acting manager of North/West Area Community Services Department. “This is in line with the company approach of using renewable, clean energy sources to apply the circular economy principles that are in line with the Kingdom’s Vision 2030.”

solar powered and efficient

The 1,076-m² greenhouse commenced operations in the fourth quarter of 2019, and it has the capacity to grow 100,000 seedlings per year. The greenhouse, called Shaybah Nursery, uses solar panels to power water pumps and smart fans. A sensor activates the fan only if the temperature goes above the optimum level. These efficiency features ensure that the solar power system is optimized while meeting all the nursery’s electricity requirements.

It is unsurprising that the Shaybah community will be avoiding an estimated $60,000 in costs per year because many of the preexisting resources are being leveraged in operating the nursery, including the manpower. Additionally, the difficult logistics of delivering plants and other landscape materials is eliminated.

“This initiative shows that the company will go out of its way to come up with creative solutions to reduce its environmental impact, including emissions. Meanwhile, we will continue to provide a vibrant, green community to our residents to retain employees and enable them to excel,” said Saeed M. Al Ghendi, superintendent of the North Area Remote Camps Services Division.

treated wastewater and drip irrigation

Shaybah gardeners use treated wastewater to nurture plants, shrubs, and flowers — applying the concept of resource efficiency in the circular economy.

The Shaybah Nursery is near the wastewater treatment plant, which utilizes membrane bioreactor technology to reduce the pumping requirements. Drip irrigation is used to maximize the nourishment of each water drop.

The solar powered greenhouse and associated equipment were procured from a Riyadh-based vendor, ensuring that spare parts and maintenance is more readily available, thereby aligning with the In-Kingdom Total Value Add (iktva) initiative.

Additionally, benefits include enhancing the quality of flowers and increased agility in meeting demands. During the lengthy trucking process, a certain percentage of the shipment is usually damaged. With the plants now grown on-site, this challenge is resolved, and flowers are more likely to thrive because gardeners have more flexibility over the exact timing of planting. More importantly, the gardeners can respond more swiftly to green landscape requirements in preparation for visits and events.

Located against the majestic sand dunes is the Shaybah Nursery. With its very own solar panels (left), it enables the Shaybah community to become self-sufficient in landscape supplies, reducing costs, emissions, and enhancing supply resilience.

In coordination with the Management and Professional Development Department and the Career Development Division, Power Systems (PS) launched the Harvard ManageMentor Leadership café for all PS chief position holders. The four sessions were attended by 120 chief position holders in PS to learn about “Emotional Intelligence,” “Building Trust,” and “Engaging and Motivating Employees.” The café provides a unique opportunity to work with Harvard thought leaders to motivate and boost leadership expertise by leveraging the university’s remarkable online learning platform. The program includes self- and online-based learning, as well as an interactive session facilitated by Harvard. It will be followed by “on-the-job” application.

The program is targeted to be conducted throughout the year to provide relevant learning opportunities and to support PS leaders in their leadership journey.
new virtual summer program prepares for roll out

Dhahran — The King Abdulaziz Center for World Culture (Ithra) delivers countless learning activities and entertainment for kids. Through Ithra Connect, Ithra introduces its first Virtual Summer Camp. The Virtual Summer Camp is a fun learning platform for kids, ages four to 15, to explore cultures, art, and inventions.

Ithra’s Virtual Summer Camp will engage kids in exploring new concepts, learning skills, and enable them to have fun while at home. As social distancing is a vital part of our way of life post-quarantine, Ithra instills creative methods to keep kids educated this summer. The Virtual Summer Camp introduces cross-cultural experiences under the camp’s theme, “Travel the world and explore diverse cultures.” Through four tracks — World Inventions, World Art Lab, World Game Maker, and World Filmmaking — kids will have the opportunity to discover their talents through rich learning experiences. Participants will find the online camp experience through live streams, podcasts, DIY videos, and PDF kits. Each track will be 10 days long.

Through the World Inventions and World Art Lab, children (ages four to 12) will learn about inventions and artists around the world. Children will explore the inspirations, ideas, and ingenuity that innovators and artists developed to design devices and artwork.

Through World Game Maker and World Filmmaking, kids (ages 13 to 15) will have the opportunity to build their game making and filmmaking skills. Participants will enhance their communication abilities, creativity, confidence, and more, to produce original games and films.

Ithra believes young minds shape the future. Based on this, the Center focuses on introducing ambitious experiences and projects for kids to learn and develop skills in various subjects. Ithra’s previous summer camp under the theme “Unleash Your Imagination,” helped more than 1,000 kids develop cognitive knowledge and soft skills. Due to COVID-19, this year, the summer camp has gone virtual. The Virtual Summer Camp strives to build an initiative for kids to discover global cultures, arts, games, and inventions.
in search of the ‘Mysterious Structures in Arabia’

by Chiara Ciampricotti Iacoangeli

For two decades, Ghaith A. Al-Shaia has traveled and explored the furthest reaches of the Kingdom in search of the unique and awe-inspiring, but one of his most scintillating experiences has been seeing the geoglyphs found in Saudi Arabia.

A computer engineer and geophysicist who joined Saudi Aramco in 2002 and works as a supervisor in the Geophysical Imaging Department’s Land 2-D Seismic Processing Group, Al-Shaia earlier shared his interest in the “Mysterious Structures in Arabia” to several dozen members of the Arabian Natural History Association (ANHA).

What is ANHA?

ANHA is a Saudi Aramco self-directed group founded in 1966, and is dedicated to furthering the understanding and appreciation of the unique natural, cultural, and historical aspects of the Gulf region in particular, as well as worldwide natural history. This is accomplished at monthly meetings, incorporating lectures, slide/film shows, and arranging local field trips with an emphasis on culture and/or natural history. To become a member, show up to one of their events and register. Individual membership is SR50, family is SR100. Inevitably, questions were raised: What are they? Who built such structures? And why and when?

Though the questions remained unanswered, they produced great curiosity. Al-Shaia became passionate about these studies and went on to expand the observation area by applying the same methodology. He moved the search southward to Harrat Ha-

Uwayrid and Harrat At Raha, triangles point to a circle. Harrat Khyber features rectangular shapes found in an area dominated by the White Mountain. Next to this larger volcano, a smaller volcano on the slopes features numerous visible rectangles, even though they have been covered by lava. This suggests that the formations predate the eruption of the volcano itself.

It is an area in which it is very difficult to walk, but seen from up close, the structures have the shape of low walls, composed of rocks. It is remarkable how they have survived over time, as they are not held together by cement. In some of the concentric structures, there are mysterious rocks with holes inside them.

Few studies have been conducted, but Australian professor Dave Kennedy has traced the structures back to 8,000 B.C. By way of comparison, the Nazca lines are far younger, dating back to 500 B.C.

In 2008, Al-Shaia started conducting several field trips to go deeper, with explorations and studies of these mysterious structures. He believes that hundreds of master and doctoral papers could be written about these structures, which he calls “Aayat Alharrah,” which translated from Arabic means “The Lava Miracles.”

‘The Lava Miracles’

Moving north to Harrat Ash Shamah, rocks have been found forming tree-like shapes with large crowns and trunks, and a little bit closer to the Tabuk area in Harrat Uwayrid and Harrat At Raha, triangles point to a circle.

Harrat Ash Shamah, rocks have been found forming tree-like shapes with large crowns and trunks, and a little bit closer to the Tabuk area in Harrat Uwayrid and Harrat At Raha, triangles point to a circle.