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# CRITERION

ROAD TO SUCCESS



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# CONTENT

## Foreword

Volunteering

**Esraa Abdelgawad**

Yes, you can distract yourself!

**Alaa Ahmed**

## Interview

International Director

CEO of AGE& CEE Company

**Mina Fayed**

Founder of Super Be

**Islam El-Murr**

## Trends & Beyond

Chatgpt

Unleash The Power Of 6G

Digital Transformation

**Gallery**

## Future of Earth & Energy

key to Net Zero

**Energy4kids**

## Marketing World

Marketing in Recession

## Real Facts

Except For the Unexpected

Why Facts Don't Change Our Minds?

Shiny Object Syndrome

## Digitalization

Technology for Hr's Digital Transformation

Magazine Team

**Chapter News**

**2**

**3**

**4**

**6**

**8**

**10**

**12**

**14**

**16**

**19**

**20**

**22**

**24**

**26**

**27**

**28**

**29**

# FOREWORD



**Esraa Abdalgawad**

**Criterion COO**

**“ Volunteer In simple words  
it’s something which makes  
you a better person ”**

You learn to think about others before you think about yourself. You understand the harsh realities of life. You develop empathy towards people who are less fortunate than you. Volunteering is serving people without any selfish motives, without any expectations! You don't need to move mountains for it, it is as simple as helping a blind person to cross the road.

Let's agree that the idea of volunteering itself will benefit you with many things, but the first thing you must choose is the right place that will benefit you and deserve to do your best.

That's why before I volunteer in SPE, I asked myself whether I can benefit from and introduce a benefit to this place or not?

My presence during this season helped me discover many needs such as my passion in the field of HR and other fields such as Operations and Marketing. I discovered skills that I did not know that I have and also developed from them and gained experience in such a field through my dealings with all the quotas in their different fields. I learned how to enjoy life with that small moments. And most importantly in volunteering in general,

**“don’t forget to leave a mark, because volunteering is a great imprint and a good memory that will be remembered.”**

I wish I would leave even if it was a simple thing in someone's mind, I remember during this session, and I wish anyone would think that he was taking the step, seeking to benefit others, and leave a fingerprint or a good memory to form it.

# FOREWORD



Alaa Ahmed  
Criterion CEO

**“ Yes, you can distract yourself! ”**

As soon as we hear the word distraction, its bad meaning comes to mind, but there is another meaning that we must consider.

At the beginning of your entry into university life, you find yourself facing a new society for you that holds a lot, and you discover new things and many doors open for you. You then feel confused about what to choose and what is best. This is what happened to me, and probably to most of us. I was confused between many fields, and I felt passionate about all of them, and I wanted to try them all, but those around me advised me to focus on only one thing until I mastered it and to focus on it so as not to distract myself.

In fact, I listened to them and actually decided to focus on one area and give it all my time, but halfway through, I discovered that this is not my passion and it is not the area I want to continue in.

I found myself starting in a new field from the beginning, and here I began to think about what is bad about being distracted and what is bad about discovering more than one field at the same time, as long as I can balance them and learn them without neglect. Indeed, I started from the beginning, but this time with my own beliefs about starting in more than one field until I find my passion and what I am actually good at.

My saying does not mean that you should start dispersing yourself in more than one field or that those who advised me to focus on one field are wrong, but that this is their own way of focusing on things, and each person has his own abilities, and there is no right or wrong way, but rather there is a way suitable for each individual.

The bottom line is that you are the only one who knows your abilities, and you are the one whom must discover them to know what you are actually capable of doing and what the limits of your abilities are, so do not be afraid to try and do not be afraid of failure. Just be afraid when you stop trying.

# Interview

## WHO IS HE ?

He studied computer science at Ain Shams University, and after graduation, he worked in a production company as a graphic designer and web pages.

Then he joined French University in Egypt to learn montage and directing. After that, he made the decision to travel to start his career. At the beginning of his career, he made an advertising campaign for BMW International. Now, he is an official director of international brands and media officer for one of the football clubs. He was honored as the best director for the year 2013.



## Mina Fayed

International Director | CEO Of AGE&CEE Comapny

### 1. Could you please tell us about global awards you received ?



In the beginning, I won the “BMW International Director Award for Best Director in 2013”, and I organized the World Swimming Championships for six consecutive years as a media officer. The last edition of the championship topped international newspapers and was described as a copy that will not be repeated organizationally.

I was honored in Lausanne by the President of the International Swimming Federation in Vienna, President ‘Julio Magalona’. I also carried out two media campaigns for “Real Madrid” as a media officer, and I was honored by the former club president, Ramon Calderon, with whom I have a strong personal friendship. I was honored in an international forum in the German city of Schalke on the sidelines of world player Raul Gonzalez’s retirement match, and the match was between the Qatari Al Sadd and Real Madrid teams.

At the time, it reviewed the plan for the 2022 World Cup, with 60,000 viewers attending. I was honored with the Man of the Year Shield from the Global Foundation to Combat Human Trafficking for the year 2019 for my active role in the Foundation. In the same year, she also received the award for best director from PUMA International. In 2020, I was honored by FIFA for the best advertisement, which was 8 minutes

long and was talking about the Corona pandemic and how the White Army responded to it, and it was a message of thanks to them. I was also honored as the best media officer in the Gulf, and there is an award that I am very proud of: I was honored in Munich by one of the largest companies specializing in sports equipment for the best media plan for two years in a class year. There are other many awards and honors.

### 2. Which award are you proud of the most and why ?



Certainly, I cannot say that there is one award or honor that I am more proud of because each award has its own taste and circumstances; all of them are of value, and most of them I dedicate to Egypt because Egypt is very special to me and this is the least I can offer it, such as honoring me in Schalke in Germany. In front of sixty thousand Europeans while I was explaining the World Cup file, I received my honor in Switzerland from Giulio Baglioni for the best version of the FIFA World Cup when he described me at the time as the “Egyptian Pharaoh”, and in fact, I remember this word well because I love to be known by this title and I am proud to be the Egyptian Mina Fayed. Each award has its own taste and place in my heart because they all came after hard work and effort, so they are all special. Like my children, my awards are my journey and the legacy that I will leave to my family, and they are more valuable than money.

### 3. What obstacles did you face during the beginning of your career journey ?



I have faced many obstacles, but I always believe that in every journey in which a change occurs that was not expected, God will close one door with His wisdom and open another door with His mercy. And there is always an opportunity to turn the obstacle that you will face into a success that you can be proud of. I never used to blame those around me or the people who let me down. Other than that, I always set my sights on my goal and overcome everything in order to continue to succeed and achieve more. We are here in this life to achieve goals and create glory that we are proud of first, and then others who trusted us will be proud of us.

### 4. How do you balance between your personal life and work ?



As are the beginnings, so is all your time and effort devoted to work because you are trying to prove yourself, appear, and make your name. And I was like that. At this stage, work is the most important thing, but after a period of gaining more experience and becoming known in your field, you will be able to achieve a balance between your work and your personal life. And now I balance them well; when I am in the rest period, I refuse any work whatsoever, because after a while you discover that your personal life and your inner peace are very important. You must rethink everything to come back and give more, especially after every success. You must rest and forget about success so that we can do more successful things. Because thinking about past successes distracts you from new ones, it is best to separate your work from your personal life.

### 5. Could you please give us advice in communication especially you have a good communication with huge celebrities like Lionel Messi ?



As for communication, I think it is a gift from God, and my friends always tell me that I can make new friends with strangers, and you can feel that we have known each other for many years. But also, communication requires experience, so if someone doesn't have experience, they won't be able to communicate. In order to talk, you need a lot of practical and life experience to manage the conversation, and to talk to people like Messi or anyone of any educational or social level, you have to be skilled in using your thoughts and words to manage a good conversation with anyone of any level. For example, if I bring a simple-minded person and talk to him about technology, I will eventually lose contact with him because he will feel that he cannot communicate

### 6. What's your favorite movie for the great director Alfred Hitchcock ? and why ?



Alfred Hitchcock is considered one of the most important directors in history. He started working in the silent film era, then started working with other directors in the sound film era. As for the best of his films, of course, "Rear Window" in 1954 Still his first film, the famous of his masterpieces which is always chosen as one of the best movies presented in cinema.

### 7. what's the most important thing you advise the youth ?



Youth are the spring ponds of society's tree. They are like the seeds hidden in the flowers and the seeds that are hidden in the fruits. A bright and prosperous life will be born from these fruits and seeds. By saying youth, that means the future, the future of any country, and without them, a non-existing country will be in consideration, and if the transfer of the human nation's values to future generations is a burden, then the reason for this burden is the non-existence of youth.

As a result, it is very important to ensure the presence of strong youth from all sides. Youth with noble morals, brave hearts, and conscious and bright minds George Donald, a well-known storyteller, says, Our function in life ends when we cease to understand youth. That is, youth is the unknown that must be known and the password for the future door that must be found.

If we compare this time with a tree, then its past is the roots and its future is the fruit, and to obtain ripe fruits from the tree of this country, we must direct the youth to the sun of truth and the right path. That is, the spirit of youth needs special care, and their thoughts and feelings need attention and control.

Here are my humble tips:

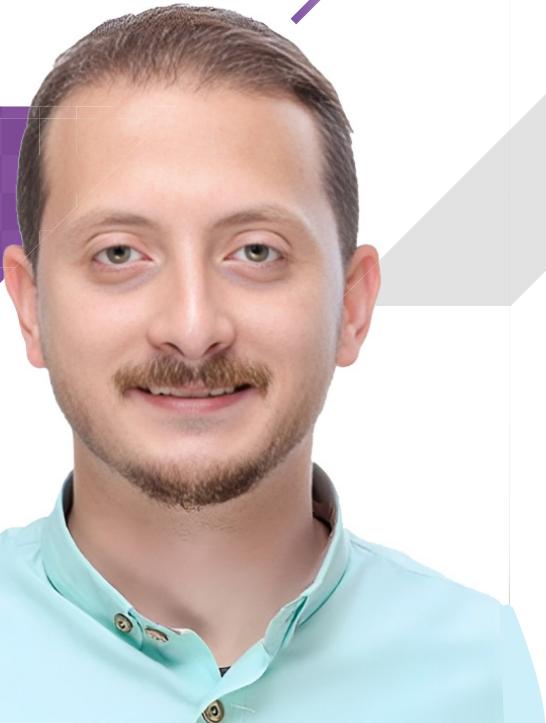
1. Satisfaction is the secret of long-life happiness.
2. Don't waste your time regretting the past.
3. Don't ever be afraid of the future.
4. Be wiser day after day and learn more from your mistakes.
5. Tolerance is a symbol of strength.
6. Make yourself happy with simple things, and you will be satisfied.
7. Set your goals and put them in front of you; do not waste your time and get busy with others.
8. Every day that passes by will remain in the past, so make yourself memories that you can be proud of in front of everyone.
9. Your life is yours alone; you are its hero, so do not be disturbed by others'; not all of them are true.

# Interview

## WHO IS HE ?

I am Islam El-Murr, and I graduated from Al-Ahram Canadian University in Software Engineering. I was the president of the student union at the time, and I was the founder of the largest student activity at the university.

Shortly after graduation, I worked at Vodafone as Technical Support, and then I decided to establish Super Be.



**Islam El-Murr**

Founder of Super Be

### 1. Could you tell us more details about SUPER Be?



Super Be is a marketplace and delivery service app located in Port Said Governorate, and our actual beginning was in the year 2020.

We have now fulfilled more than 470 thousand orders, with sales exceeding 50 million pounds. We are currently spread across the Delta and Canal governorates, and we serve more than 21 categories such as restaurants, fish, vegetables, butcheries, pharmacies, and many other needs.

### 2. How did you draw up your success story to start your personal project?



The success story for us is that we started making our beta version, and it succeeded and hit the market in 2019. Then in 2020, we started the actual work, and our gross started in 2021, and our real launch was in 2022 and 2023.

The market here in Port Said, and the delivery

point for food or groceries in general, was a somewhat strange culture, so we started to enter the market, and it was difficult in the beginning to change the culture of the people, but we did this by making it possible for people to enter the application and request all their requests, whether butcher, grocery, poultry, or anything.

Another thing that helped us was the spread of Corona at that time, so the idea began to spread more among people, and we reached 200% gross daily growth, and from this moment on we began our journey of success.

### 3. What are the biggest challenges you faced in the beginning and how were you able to overcome them?



The biggest challenge we faced was the lack of belief in the idea, and people saw that there was nothing new in what they were doing, but when the Corona virus came, all expectations were upended, and orders began to be delivered to people in their homes as much as they wanted, so they began to change their culture and accept the idea.

#### 4. How did the idea and purpose of participating in the “Al-Fursa” Program come from?



We were participating in the Techne Summit, and there they conducted an interview with me. We met Lamis Al-Hadidi, and she advised us to participate in the program, and we took the step and participated.

#### 5. What are the goals of the coming period, and do you aspire to compete for the entire Egyptian market with international companies?



- Our strategy is that we can listen to the customer and implement flexible operating policies for the stores or the customer, and there is diversity for customers through more than 21 categories in the stores.
- We focus more on spreading in markets such as Delta, Canal, and Upper Egypt, and far away from Giza, Cairo, and Alexandria markets.
- As for the prices, we insist that they are real—the same price as what is in the store. We have it to provide the customer with high-quality and real service.
- As for the commission that we take from the stores, we put it in a fair proportion so that it makes it easier for the store to cooperate with us more without financial pressure on the store or on us.



#### 6. Could you send a message to the success partners in your project?



At Super Be, we treat stores and customers as partners in our success, and the relationship between us is great. In offers and campaigns, the partnership is 50% for 50% between us and them. There is also 24-hour customer service, and the solution to the customer's problem does not exceed an hour, regardless of whether it is stores or customers.

#### 7. Could you leave a message for fresh graduates and senior students who are about to start their career?



When I first entered the university, all I had in mind was that I would finish the semester well and succeed, but after that, I entered student activity, and this culture was new, but this subject changes the personality. It teaches you presentation skills, communication skills, and out-of-the-box ideas because you lead people with enthusiasm and the idea, and you convince them, and it wins you.

Skills such as communication or sales skills because you are selling your idea, and the advice to people at the university is to participate in student activities and develop their personal skills because this point is very important, and we do not get it from regular study at the university.

You must be able to develop your skills because this is what makes you able to keep up with the market, and you must gain practical experience on your own and be able to develop and market your idea so that it can pass the interview and develop from one company to another, and there is nothing called the best position. As long as you are here, you will continue to learn, so you must always have the ability to learn.



# ChatGPT



## Ethan Mollick

Associate professor of management at The Wharton School of the University of Pennsylvania

### Intro

Less than two weeks ago, Open AI released Chat GPT, a powerful new chatbot that can communicate in plain English using an updated version of its AI system. While versions of GPT have been around for a while, this model has crossed a threshold: It's genuinely useful for a wide range of tasks, from creating software to generating business ideas to writing a wedding toast.

## Chat GPT is a Tipping Point for AI

While previous generations of the system could technically do these things, the quality of the outputs was much lower than that produced by an average human. The new model is much better.

Put simply, this is a very big deal. Businesses that understand the significance of this change and act on it first will be at a considerable advantage. Especially as Chat GPT is just the first of many similar chatbots that will soon be available, and they are increasing in capacity exponentially every year. At first glance, Chat GPT might seem like a clever toy. On a technical level, it doesn't work differently than previous AI systems; it's just better at what it does. Since its release, Twitter has been flooded with examples of people using it to strange and absurd ends, including writing weight-loss plans and children's books and offering advice on how to remove a peanut butter sandwich from a VCR in the style of the King James Bible.

There are other reasons to be skeptical besides the unusual use cases. Most pointedly, despite years of hype, AI notoriously only sort of works in most applications outside of data analysis. It's pretty good at steering cars, but sometimes it rams into another vehicle. Most of the time, it provides good answers to queries, but sometimes it seems to make up the results entirely.

But a deeper exploration reveals much more potential. Chat GPT, now open to everyone, has made an important transition.

Until now, AI has primarily been aimed at problems where failure is expensive, not at tasks where occasional failure is cheap and acceptable or even ones in which experts can easily separate failed cases from successful ones. A car that occasionally gets into accidents is intolerable. But an AI artist who draws some great pictures but also some bad ones is perfectly acceptable. Applying AI to creative and expressive tasks (like writing marketing copy) rather than dangerous and repetitive ones (like driving a forklift) opens a new world of applications.

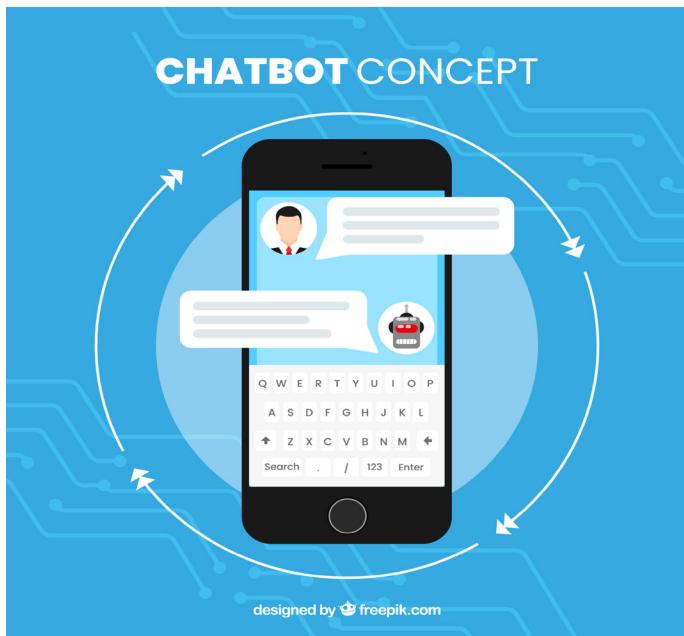
What are those applications, and why do they matter so much? First, not only can this AI produce paragraphs of solidly written English (or French, or Mandarin, or whatever language you choose) with a high degree of sophistication, it can also create blocks of computer code on command. To give you an idea of what this looks like, I introduced my undergraduate entrepreneurship students to the new AI system, and before I was done talking, one of my students had used it to create the code for a startup prototype using code libraries they had never seen before. They completed a four-hour project in less than an hour.

This is a major change. Massive increases in speed have been

seen in a randomized trial of AI code tools. One good programmer can now legitimately do what not so long ago was the work of many, and people who have never programmed will soon be able to create workable code as well.

Second, it has an incredible capacity to perform different kinds of writing with more significant implications than might initially be apparent. The use of AI in writing can greatly increase the productivity of businesses in a variety of industries. By utilizing AI's ability to generate written content quickly and accurately, businesses can save time and resources, allowing them to focus on other important tasks. This is particularly beneficial for industries such as marketing and advertising, consulting, and finance, where high-quality written materials are essential for communicating with clients and stakeholders. Additionally, AI can also be useful for industries such as journalism and publishing, where it can help generate articles and other written content with speed and accuracy. Overall, the use of AI in writing will greatly benefit businesses by allowing them to produce more written materials in less time.

An AI wrote the previous paragraph. It also actively revised it in response to my criticism to improve the material. (See the image for details.) In tests of whether it could make other parts of my job as a professor easier, it took seconds to write a reasonable course syllabus, class assignments, grading criteria, and even lecture notes that could be potentially useful with some editing.



This highlights the third major change that happened with this release: the possibility of human-machine hybrid work. Instead of prompting an AI and hoping for a good result, humans can now guide AIs and correct mistakes. (Despite what my AI writing partner claims above, it's not always accurate.) This means experts will be able to fill in the gaps in the AI's capabilities, even as the AI becomes more helpful to the expert.

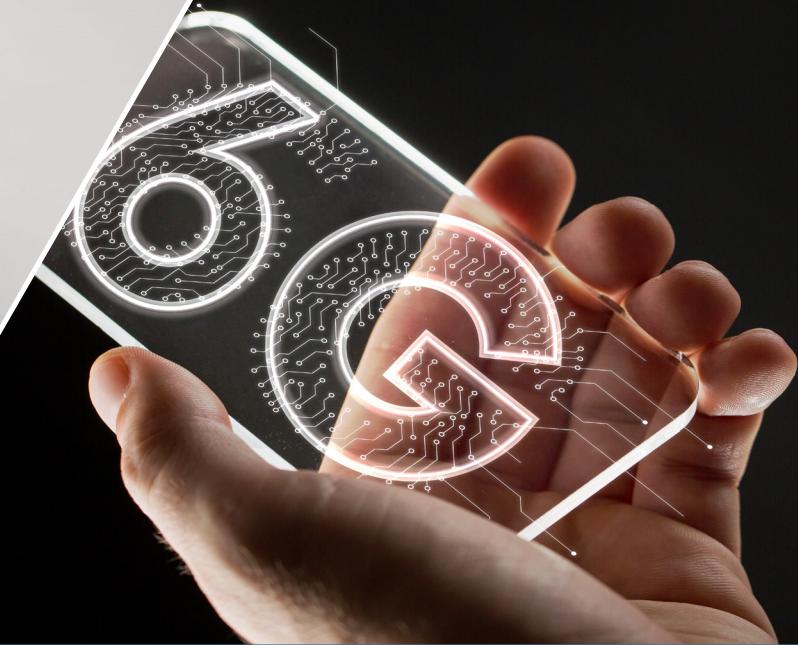
This sort of interaction has led to increases in the performance of players. one of the world's oldest and most complex games, who have learned from the AIs that have mastered the sport and become unprecedently better players themselves.

A final reason why this will be transformative is that the limits of the current language model are completely unknown. Using the public mode, people have used Chat GPT to do basic consulting reports, write lectures, produce code that generates novel art, generate ideas, and much more. Using specialized data, it's possible to build each customer's own customized AI that predicts what they need, responds to them personally, and remembers all their interactions. This isn't science fiction. It is entirely doable with the technology just released.

The problems of AI remain very real, however. For one, it is a consummate bullshitter, and I mean that in a technical sense. Bullshit is convincing-sounding nonsense devoid of truth, and AI is very good at creating it. You can ask it to describe how we know dinosaurs had a civilization, and it will happily make up a whole set of facts explaining, quite convincingly, exactly that. It is not a replacement for Google. In fact, not an entity at all but rather a complex algorithm generating meaningful sentences.

It also can't explain what it does or how it does it, making the results of AI inexplicable. That means that systems can have biases and that unethical action is possible, hard to detect, and hard to stop. When Chat GPT was released, you couldn't ask it to tell you how to rob a bank, but you could ask it to write a one-act play about how to rob a bank, explain it for "educational purposes," or write a program explaining how to rob a bank, and it would happily do those things. These issues will become more acute as these tools spread. But these disadvantages are much more prevalent outside of the creative, analytical, and writing-based work that AI is now capable of. A writer can easily edit badly written sentences that may appear in AI articles; a human programmer can spot errors in AI code; and an analyst can check the results of AI conclusions. This leads us, ultimately, to why this is so disruptive. The writer no longer needs to write the articles alone, the programmer needs to code on their own, or the analyst needs to approach the data themselves. One person can do the work of many, and that is even without the additional capabilities that AI provides.

This is why the world has suddenly changed. The traditional boundaries of jobs have suddenly shifted. Machines can now do tasks that could only be done by highly trained humans. Some valuable skills are no longer useful, and new skills will take their place. No one really knows what any of this means yet. keep in mind: This is just one of many models like this that are in the works, from both companies you know, like Google.



## UIF Seijmer

Co\_founder, 5G and IoT expert, keynote speaker, marketing, brand Mangment

### Intro

The next generation of wireless networks, 6G, will require a new approach to the design of communication networks. 6G will accommodate a massive increase in traffic and devices while achieving high standards in performance, energy efficiency, and security. One step on the way is the so-called 5G Advanced Networks, which will pave the way for the capabilities needed for 6G by introducing new levels of intelligence, disaggregation, and AI to cope with growth.

### "Next-Generation Mobile Networks with Limitless Possibilities"

The future of mobile networks is rapidly evolving with the advent of 6G technology. This new technology is expected to bring advancements in imaging, presence technology, and location awareness alongside artificial intelligence and is set to be launched commercially in 2030.

6G networks will operate using signals at the higher end of the radio spectrum, enabling faster sampling rates, higher data rates, and better throughput than 5G. The development of 6G networks will connect the physical and virtual worlds through faster communication and better support for immersive technology, potentially becoming a part of the metaverse.

### 6G advantages:

6G networks are expected to offer several advantages, including robust security measures against cyberattacks, AI-powered personalization of network experiences, enhanced performance, and the emergence of new technological innovations. Furthermore, 6G networks will offer vast coverage areas, reduced interference between devices, and improved service. The network will be able to sense its surroundings and provide situational information using signals bouncing off objects.

6G will achieve extreme connectivity through the Ultra-Reliable Low-Latency Communication (URLLC) service, and network architectures will become more advanced and specialized.

At the same time, security and trust will be paramount.

### New bands to follow:

6G will pioneer new spectrum bands and enable larger capacity through extreme Multiple Input, Multiple Output (MIMO) and peak data speeds exceeding 100 Gbps. Additionally, 6G will reduce latency to less than 0.1 milliseconds, facilitating the seamless execution of delay-sensitive real-time applications. 6G will focus more on machine-to-machine connectivity, enabling the connectivity of up to 10 million devices per square kilometer, and prioritize energy efficiency, optimizing power consumption to less than one nanojoule per bit. The rise of new architectures will allow 6G networks to be built in heterogeneous cloud structures, including a combination of private, public, and hybrid clouds. Finally, AI and machine learning will optimize connectivity by achieving superior efficiency and reducing computational complexity.

### The race is on:

As the race to 6G continues, many industry players are vying for dominance in the 6G market, which is expected to be intense. However, while 6G will significantly improve over 5G in several ways, it will not be the same as the Metaverse. The Metaverse is a network of virtual worlds focusing on social connections, strongly supported by virtual and augmented reality. In contrast, 6G technology unites the human, physical, and digital worlds into one, intending to provide faster communication and better support for immersive technology.

The future of wearables and smart devices will also be affected by 6G technology, with more and more devices expected to use a controlled spectrum like cellular networks instead of Wi-Fi.

6G technology is set to revolutionize the industry, enabling cyberspace to support human thought and action in real time through wearable devices and micro-devices mounted on the human body.

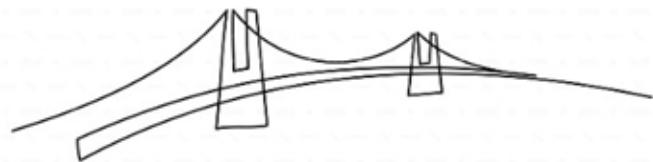
### The development of 6G:

Technology is poised to bring significant advancements in technology and connectivity, providing numerous opportunities for government and industry approaches to public safety and critical asset protection.





## Digital Transformation (DX): What It Is and Isn't?



### DX: Bridging the Divide

#### What Is Digital Transformation, and Why Is It Important?

- Digital transformation is not the same as digitization. Digitization is using technology as effectively as possible to optimize your processes.
- The digital transformation is finding technology-based ways to do business more effectively, even if it changes how it is done.

Digital Transformation is about reinvention; digitization is about incremental improvement, and while in this newsletter we're focusing on reinvention, keep in mind that while you transform your business, it's great to continually look for ways to digitize.

Digital transformation is what will keep you in business, as there are too many potential competitors out there, and if you don't figure out how to use technology to find new ways to solve customers' problems, someone else will. Digital transformation is not about building cool technology but rather solving problems by leveraging technology.



**Brigid McDermott**

Digital Transformation leader, business and tech Innovator, strategic vision and Execution

#### Intro

##### Digital Transformation (DX): What It Is and Isn't?

Digital transformation is about leveraging technology to differentiate your business in a competitive environment. Before we run the obstacle course, though, we need to make sure we're clear on two fundamentals:

- 1.What is digital transformation, and why is it important?
- 2.What do you need to transform successfully digitally?

## What Do You Need to Successfully Digitally Transform?

There are three principal components to a successful digital transformation strategy:

### 1. Commitment to the ongoing transformation:

Companies must commit to digital transformation and work together to make it happen if it is to be successful.

### 2. Engagement of all constituents:

The commitment to digital transformation needs to be supported by making the right resources responsible for the strategy and adapting the company's strategy and processes. This is not old-school, bottom-up digitization, where a few crack guys from IT install a new router or put up the first website, but rather a partnership to identify business transformation opportunities and position the enterprise for market leadership. The CIO and IT leader need to be on the team, but so do some of the best business leaders.

### 3. Clarity on business differentiation:

Companies need to understand what value they offer to their clients, but this can be difficult due to the complexity of their offerings. Imagine that you are visiting New York City for some client meetings and have just finished an indulgent lunch. Instead of standing outside in the 90+ degree heat and 100% humidity, you go into a coffee shop and buy a coffee for the right to a seat and air conditioning. The value of this coffee shop is its location, not the quality of the coffee. The secret to success in today's crowded markets is to figure out where you provide value or differentiation and treat everything else like a commodity. Digital transformation is about enabling business transformation with technology, and the most successful projects are business-led, customer-focused projects that require significant IT enablement.

This sounds great, but it also sounds hard. Digital transformation isn't easy, but it is worth it. It is not something that you need to do once, but rather commit to working together to introduce a digital transformation culture and follow the guidance of this newsletter. Each digital transformation effort is different, but the obstacles are predictable. I will introduce the different priorities and activities and highlight the obstacles. The more you understand the obstacles, the easier it is to face them.









Eng. Maxim Mikhaltsev  
Sr. Geoscientist at SLB

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## Intro

The Earth's carbon budget is running out. Practical and economic decarbonization solutions are needed across all industrial sectors to achieve net-zero greenhouse gas emissions. As the gap between cumulative CO<sub>2</sub> emissions and net-zero ambitions widens, carbon capture, utilization, and sequestration (CCUS) are becoming key to addressing the challenge of global warming

However, the uncomfortable truth is that so far, deployment has been slow and CCUS has not lived up to its promise (Fig.1). It has consistently accounted for <0.5% of annual global investment in clean energy and energy-efficient technologies. The late 2000s saw a surge in the number of CCUS projects announced, but approximately 60% of them did not move forward, mainly because of high project costs and lack of policy support. Most of the remainder were focused on enhanced oil recovery (EOR), a process whose feasibility depends on oil prices.

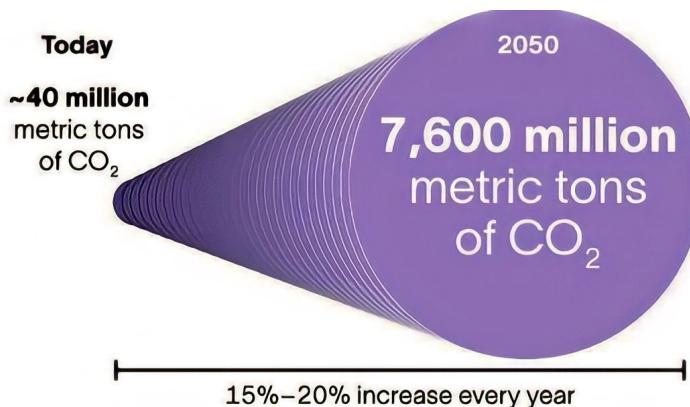


Fig. 1—Today, approximately 40 million metric tons of CO<sub>2</sub> are captured and stored annually worldwide. CCUS at the gigaton scale is required to reach net zero by 2050.

However, with climate change gaining prominence on the global agenda, CCUS is poised for a resurgence. In 2021 alone, close to 100 projects were announced - more than double the number compared with the previous peak in 2008.

Unlike existing projects, the new ones aim to capture CO<sub>2</sub> and store it permanently underground.

Another important difference is a primary focus on areas with the lowest cost of carbon capture, such as hydrogen production and natural gas processing, so that implementation is swift. Projects aimed at power generation plants have also been announced, but in contrast to the previous cycle, they are not the main objective. As mentioned above, project economics are one reason for the slow uptake. Capture costs represent about 60%–70% of the total cost of CCUS, although they decrease dramatically when CO<sub>2</sub> concentrations are high and only compression is required, as in the case of natural gas processing, fertilizer production, and coal-fired power plants.

**Transportation and storage** account for the remaining cost, which depends on the mode of transport, volume of CO<sub>2</sub>, nature of the reservoir (saline aquifer vs. depleted oil and gas field), its accessibility (onshore vs. offshore) and physical characteristics (size, porosity, permeability, pressure), and the existence of legacies (wells, infrastructure). However, CCUS has a unique advantage in that the technology already exists to enable decarbonizing energy and industrial production across all sectors. It is the only large-scale decarbonization mechanism that is technically viable today. The economics will inevitably improve over time through technology breakthroughs and scaling.

Recent policy initiatives are already improving the economic feasibility of CCUS through incentives and penalties. The emergence of Voluntary Carbon Markets (VCMS) and green premiums is complementing policies, although these solutions are still in the early stages. Over time, additional ways to pay for CCUS will continue to materialize. As the saying goes, “**Necessity is the mother of invention.**” But for CCUS to become a significant force in the fight against global warming, CO<sub>2</sub> emitters must make the decision to invest.

### Multifaceted challenge

A CCS project is a complex challenge, with technological, political, and economic aspects



Fig. 2—A large number of diverse factors determine the success of a CCUS project.

### Site selection

The first step in CCUS is the screening of potential candidates for a suitable storage site. Subsurface storage across multiple decades represents one of the highest risks in the CCUS value chain. Site preselection and evaluation technologies are critical to shorten the timeline and derisk the final investment decision by ensuring that the reservoir is capable of meeting long-term CO<sub>2</sub> capacity and injectivity requirements.

A significant number of geological formations around the world have the technical potential for CO<sub>2</sub> storage. Typically, they are abandoned or producing oil and gas fields, which are very likely to have impermeable boundaries, given that they held oil and gas in place for millions of years. However, the size of a field can limit its storage capacity and well activity can compromise sealing capability. Other formations, such as saline aquifers and coal seams, can also be considered potential storage alternatives for CO<sub>2</sub>. The objective is environmentally safe and secure storage of CO<sub>2</sub> in the subsurface.

Selecting the correct storage site is key to minimizing appraisal costs. Fortunately, a wide range of methods for screening geological basins and comparing different sites is available. The key criteria for appraisal are as follows:

- **Capacity**
- **Injectivity**.
- **Containment** during and after injection.

Fig. 3 illustrates some of the issues that must be taken into account. Effective storage requires precise selection, planning, construction, operation, and monitoring of the sequestration site.

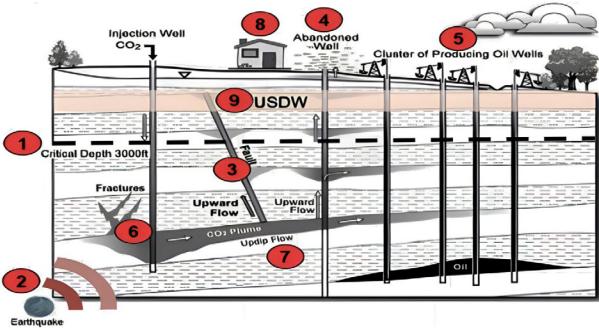


Fig. 3—Evaluating a site for carbon sequestration involves numerous considerations. SLB New Energy, modified from Kang, 2014 .

## Offshore Northern Egypt

The Mediterranean Sea offshore Egypt presents a wide range of geological settings and seismic imaging challenges, including shallow gas, shallow and deep channels, mud volcanoes, steeply dipping faulted blocks, carbonates, and unconformities (Dolson et al., 2001). The Nile flows into the Mediterranean, and its delta basin is one of the most important basins in northern Egypt; it is situated between three major tectonic elements—the Red Sea Rift, African-Anatolian plate boundary, and Syrian Arc (Ghassal et al., 2016). Encompassing about 60,000 km<sup>2</sup> onshore and offshore (Ghassal et al., 2016), the Nile delta basin produces gas, condensate, and small amounts of oil; it is considered one of the most productive petroleum basins in Egypt and the eastern Mediterranean region, especially for gas. This petroleum province is characterized by thermogenic hydrocarbons that migrate upward across the 80°C isotherms and enter the deep biosphere (Böker et al., 2020). The lobate form of the delta began its buildup during the Oligocene, forming a very thick section of Late Cenozoic sediments, which indicate rapid and continuous sedimentation. The delta is covered by thick Neogene clastics (Dolson et al., 2000), while the subsurface sedimentary succession has a thickness of more than 6 km and covers sedimentary records from the Oligocene to the Quaternary.

## First CCS screening project in Egypt

In 2022, the Egyptian Natural Gas Holding Company (EGAS), Egypt Upstream Gateway (EUG), Shell, and SLB undertook the first CCS screening project in Egypt, with support from the

University of Aberdeen's Center for Energy Transition. The objective is to conduct an integrated feasibility study screening potential sweet spots for carbon storage in the shallow water offshore the Nile delta & proving the feasibility of the technique for subsequently identifying such areas in additional basins of Egypt.

The study area is located in water depths of <100 m (Fig. 4), extending from Port Said and the surrounding area near the Suez Canal entrance to Alexandria in the west. Operating areas, available data, and existing field information limit the study to a maximum distance of 60 km from the shore. The study was split into two phases, consisting of roughly equal eastern and western areas, respectively.

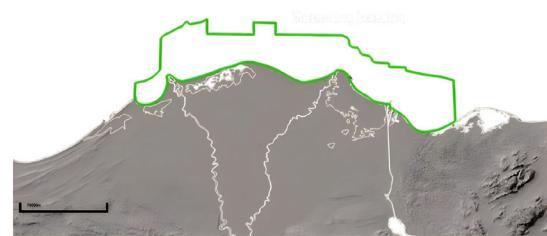


Fig. 4—The area screened for CCS lies in the Mediterranean, off the Northern coast of Egypt.

**The Egyptian study** focuses on the preselection phase of a CCS project. Its key elements are

- conceptual integrated project feasibility assessment
- basin screening for aquifer storage complexes.
- site identification and screening in abandoned and declining fields
- high-level play-based storage feasibility studies
- evaluation of potential carbon sources.

The results of this study will enable informed decisions regarding where to invest during the next stage of a CCS project.

Some of the results of the study are shown in Fig. 5. Phase II is currently in progress.

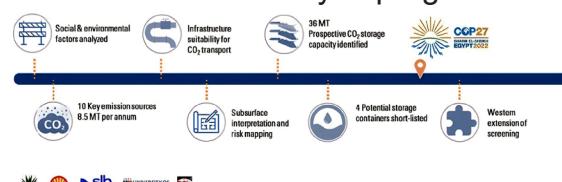


Fig.5—Phase I results were presented by the project team during COP27.



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## Marketing in a Recession



**Sally El-Akkad**  
Marketing director,  
E-commerce director ,  
Business strategist , Driving  
business growth with data-  
driven insights management

### Intro

Let's remember that after the devaluation "Cut Marketing Budget", you entered into thousands of meetings to improve your investment and reformulate your plans. A Deja-vu for all marketing and business fellows! We saw an economic downturn in 2008, then in 2016, and in 2022. What we are facing is a mixture of economic decisions by the cabinet of banking regulators in Egypt.

In February, Egypt will only accept letters of credit for executing the refund process. In March, the Monetary Policy Committee of the Central Bank of Egypt raised interest rates by 10%.

In times of uncertainty, companies act differently. Some companies see the recession as an opportunity for investment, to gain an advantage over organizations, and to strengthen their businesses. And some companies take a different approach to dealing with the economic downturn.

They cut back their marketing spending and waited for the recession to pass. Is this an effective way? Maybe EBIT will support them, but you need to consider the future implications. Binet's marketing is in the doldrums. 10 Things That Cost Cutting Properly: "A PIMS analysis shows how more than 1,000 companies reacted to past downturns. Some cost-cutting strategies are more profitable than others".

Companies that cut budgets for marketing tend to perform poorly. A recession can be both an opportunity to beat the competition and a threat at the same time. You need to maintain a balance between reducing the investment to provide profitability in the short term and a loss in the long term.

The question here is: will you invest in a recession?

You may increase prices to reduce profits and losses, investigate portfolio improvement, make promotions, etc.

Maintaining consumer loyalty is not easy.

You need to remind them of the value of your product to “justify the price increase.”

The competition’s financial structure will not be able to absorb the economic hit, and their investments will be realized.

They will try to fix their homes, losing market share to those who keep them. Communication with the consumer will result in a better share and ideally protect both current and future sales. It gives a consistent picture of the company’s stability, shaken by the economic. Don’t forget your business partners; you work in an ecosystem, so look at the impact on the whole chain. Distributors are the main factor in achieving success.

**ABM conducted the studies and scored based on the research results in the “Advertising Values During an Economic Downturn” document.**

The benefit of increased marketing spending during an economic downturn is well reflected in the level of profit during the recovery period. During the recovery, companies that reduced their spending during the downturn saw profits drop by 0.8%; companies that maintained their spending saw an increase in profits of 0.6%; and those that increased their marketing spending during the recession enjoyed a 4.3% increase.

In profit, The same trend in market share was observed in the first two years of the recovery. Companies that reduced their marketing spend during the economic downturn gained an average of 0.6%, those that maintained their marketing spend gained 0.9%, and those that increased their marketing spend gained 1.7% in the first two years of the recovery.

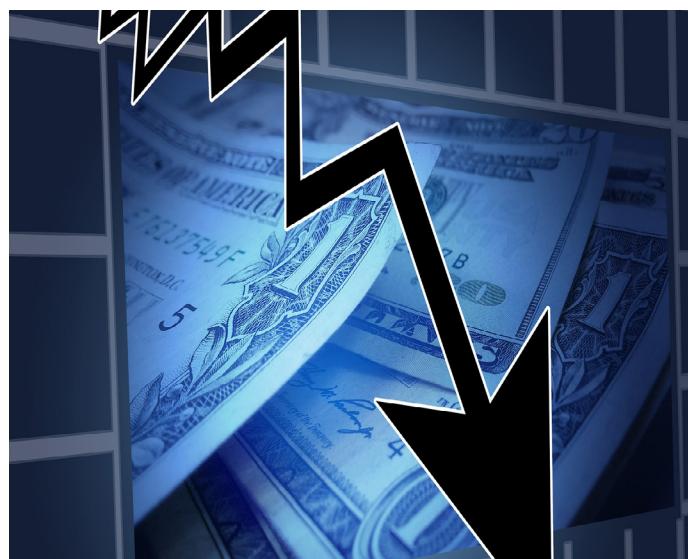
Unless you’re experiencing unusually low stock, a cash crunch, or you’ve had bad financial years and an economic downturn is making it hard to keep your business going,

cut your marketing budget, train, freeze hiring, sell some assets, and hopefully be enough without initiating layoffs. “And please be respectful and transparent. Don’t play the employee safe; don’t stress them out with irrational demands—that’s not right!”.

Marketing is a long-term discipline. If the leadership team is not involved in the marketing strategies, they will take the easier call to protect EBIT by cutting the marketing budget in the short term, and the result could be a brand that suffers in the long run.

Resources, articulating the long-term consequences of cuts to stakeholders. Don’t give up on your brand and strategies in difficult times.

Finally We saw an economic downturn in 2008, then in 2016, and in 2022. What we are facing is a mixture of economic decisions by the cabinet of banking regulators in Egypt.





## Almostafa Abdelfatah

Project management,  
consultant PMP/ RMP/ PMM/  
MBA, CEO for mega projects  
for ARAMCO.

### Intro

The future is uncertain. When you leave your home, you start a journey of risk. For example, if your car does not start, the risk is seen as a bad thing, but it can also be positive, for example, if you get your dream job.

In business management, risk management became an industry science that began to be studied after World War II.

[Snider](#) noted that there were no books on risk management, and it was associated with the use of insurance to protect individuals from various losses. And risk governance, risk management government, integrated risk management, and the position of CRO became necessary.

In the past decades, project management has become accredited with a certificate, and it all started with the American Project Management Institute (PMI), which has been associated with industries with a high degree of risk.

The old industries developed the principle of risk management as “coexisting with it” was part of business practice to increase the profitability of the project. It includes unknowns such as environmental conditions and is considered to be present in all projects. And the project is known to me as something we have not done and may not do in the future. The old industries developed the principle of risk management as “live with it”, considering it part of the business practice, to increase the profitability of the project.

[Leung, Mak, and Tummala](#) asked engineers about cost estimation in construction to ascertain how the construction industry perceived risk. And I knew “the possible changes and the consequences of them”. Kerzner defines risk as “a measure of the probability of not achieving a goal and its consequences” and says it should not be limited to negative things only. The Project Management Institute (PMI) defined it as

something uncertain that affects goals positively or negatively.

Kerzner defined risk management as the process of reducing a risk or its impact. He explains that it is an organized method for identifying risks and positive options to deal with them.

Project risk management is essential. For example, the shuttle Columbia disintegrated into several pieces upon its re-entry into the atmosphere on February 1. In August, the Commission of Inquiry issued a report stating that it was possible for the Columbia crew to repair the damage and for the shuttle to remain in orbit until February 15.

Another example is in the oil sector, where, due to harsh conditions, risks have become an essential part of project implementation plans and are being planned.

An appropriate level of risk management helps ensure project success and maintains the schedule. Dealing with team management in a non-literal way leads to the destruction of the project. It is important to pay attention to project risks and develop response plans.

Risk management has become part of project management in all sectors, for example, by analyzing the threats of cyberattacks and providing solutions for them.

Risks can be classified as:

- **A known risk** is an event that can't be accurately measured and occurs at a relatively high rate, such as labor productivity.
- **Known Events - Unknown events** are known events, but they are not expected and their probability is low, such as earthquakes.
- **The unknown - The unknown** is a set of circumstances that cannot be predicted and are catastrophic elements, and the probability of their occurrence is low, such as in the Ukrainian war.

Risk management has become a process of anticipating the future to identify aspects such as the financial crisis of 2008.

It is difficult to predict these events by adding a contingency amount to their budget, but there are weaknesses, and the provision is included on a once-for-all basis with no clear method for updating. This number is usually reached by default and is not appropriate, and this method tends to steer clear of time risks. The traditional approach is not only unsuitable but also a limited statement for catastrophic events such as earthquakes.

And he must know how to predict something catastrophic, such as the impact on the oil sector due to COVID and the cessation of projects.

The Project Management Institute (PMI) has developed techniques to identify risks and, more importantly, be qualified to forecast. And there are two methods. 1- Brainstorming. Those who have influence are gathered in a workshop to explore risks. 2: Delphi's method depends on collecting risks from different work teams. It is important to collect the lessons learned to know the risks, and they will have an impact on the brainstorming of the project. For example, political stability is one of the risks of providing projects. It is said "there is no profit without risk," but that is not true because it requires a strong risk management plan with an execution strategy. One of the worst risks is an epidemic. Human nature does not learn from its mistakes. for example, the Spanish flu, which infected 50 million people in the U.S., and COVID-19, which caused almost the same number of deaths in the U.S.

#### How do you protect your company from risks?

- conducting interviews with experts in different sectors. For example, if your company provides an economist who informs you of delays in the supply chain, another example is interviewing a real estate agent about, for example, the availability of certain properties.
- Research indicates that the attitudes that individuals adopt in dealing with threats differ from organization to organization and are considered a source of difference in decision-making. More should be understood about attitudes toward facing risks, and this should include unconscious influences when making judgments. The first step is to enhance self-awareness.

To start the risk management process, the following questions can be asked:

How do I feel in this situation, and why? Is my response appropriate for achieving the goals? What should I do?

Focusing on benefits creates a motivational force. And if the administration considers that identifying opportunities is one of the basics, then all teams will respond. Individuals understand risk management and can adopt attitudes appropriate to the situation.



## Elizabeth Kolbert

Staff writer for The New Yorker and the author, most recently, of "Under a White Sky: The Nature of the Future." previous book, "The Sixth Extinction," received the Pulitzer Prize for general nonfiction in 2015.

### Intro

In 1975, at Stanford University, a study of suicide was done by getting students to choose between two suicide memoirs, one fake and one true, and there were brilliant students who identified the truth and others, but this was a trick.

This was not the real goal of the experiment; it was to see how well they thought they were right or wrong.



The result was that the successful team always believed they were right, and the other team always believed they were wrong. Both beliefs were unfounded, and it was hard to change them. A few years later, a similar experiment was done in a different way, and the result was that even after these beliefs were destroyed, people could not properly investigate their truthfulness.

The studies became popular in the 1970s, and the result was that people couldn't think properly. But how did we become this way?

The two scientists, Hugo Mercier and Dan Sperber, tried to answer this question. They said that the reason is an advanced trait of humans, such as walking or tricolor vision. Without cognitive science, the previous assumption somehow works. The biggest advantage of human beings is cooperation, which is difficult to establish, and the mind evolved not to solve problems, whether abstract and logical or to draw conclusions, but to work to solve the problems posed by living in cooperative groups. The mind then adapted to the social setting.

The mental habits that seem strange or stupid to an intellectual are the ones that may seem subtle when viewed from a social point of view.

Tactical bias is the tendency of your beliefs to reject beliefs that contradict them, and it is the most incorrect type of thinking. In another Stanford study on the death penalty, when pros and cons presented each other's views, nothing changed. Each team has become more aggressive. Tactical bias is very serious; refusing to believe in threats or even thinking about them leads to other problems. That's why we should ban adaptive jobs. These jobs are related to hypercommunication.

We're good at finding someone else's weaknesses, not our own. Hugo Mercier and Dan Sperber called Hugo Mercier and Dan Sperber called it "my side bias."

In a new study by Sperber and some European colleagues, A response has been taken to a number of problems, and an option has been made to revise and edit it, but only a small percentage may not exceed five percent, unless they see it in the second step.

Step three, a trick was done that put two answers to the problem and put their answer as someone else 's answer, and then people became more critical, more than half of the participants rejected the opinions they wanted.

From the study Sperber and Mercier showed that The task of evolution of the mind is to resist collapse when working in a group, where winning arguments is important to our ancestors, but we're not dealing with a different situation, and sometimes it's a fabrication, and the mind is not always letting us down.

Steven Slolman and Philip Fernbach begin their book, "The Knowledge Illusion: Why We Never Think Alone" (Riverhead), and they think that social communication is the key to understanding the human mind, and they've discovered through some studies what is known as the delusion of explanatory depth: humans think they know better than they really do. Other people make that choice; we rely on each other's experience, and they have also concluded that strong feelings about a case do not prevent it, and they did an experiment in 2012, asking people to give their consent on a particular issue, based on how much they did, and asking them to explain in detail, during which time most people had a problem, and then they were asked to evaluate their opinions, and then they downplayed them, and this is the only way to eliminate the illusion of explanatory depth and assertive bias: controversies may prevail in a field, but ultimately methodology prevails and science advances.

In "Denying to the Grave: Why We Ignore the Facts That Will Save Us" (Oxford), Jack Gorman and his daughter, Sara Gorman, studied the gap between science and belief. Although scientific studies show that vaccines are safe, some people think they're lethal. Gorman said that these ideas must be adaptable at some point, but at the same time, people are happy to have supportive opinions, even if they're wrong. Finally, they said that the real challenge is treating the tendencies and emotions that lead to the wrong belief.

The Enigma of Reason," "The Knowledge Illusion," and "Denying to the Grave" were all written before the November election. And yet they anticipate Kellyanne Conway and the rise of "alternative facts.", It would be, and the entire country would have undergone extensive psychological testing, and rational agents would be able to think about solutions, but the literature is not reassuring.



## Zeeshan Ramzan

He is a highly accomplished digital marketer and an MBA Gold Medalist. He has extensive experience in the field of digital marketing and is recognized for his exceptional skills in developing and implementing effective marketing strategies that drive business growth

### Intro

As a freelancer, it's easy to fall into the trap of shiny Object Syndrome. This is a phenomenon where you get distracted by new and exciting opportunities, tools, or tactics that come your way, causing you to lose focus on your core business and goals. The allure of these shiny objects can be strong, but it's important to recognize that they can be a disaster for freelancers, especially in the field of digital marketing.

The allure of these shiny objects can be strong, but it's important to recognize that they can be a disaster for freelancers, especially in the field of digital marketing. The most important idea is to avoid making the same mistakes as I did in order to improve productivity, waste time, and hinder success.

#### The Dangers of Shiny Object Syndrome:

- Spending too much time exploring and learning can lead to a lack of productivity and results.
- Digital marketers must understand their target audience, needs, channels, and tactics to stay competitive and avoid losing their edge.
- It is important to be mindful of expenses and invest in tools and services that benefit your business.

#### How to Overcome Shiny Object Syndrome?

Now that we have explored the dangers of Shiny Object Syndrome, let's discuss how to overcome it. Here are some tips that have helped me stay focused and productive as a digital marketer:

1. Define Your Goals and Stick to them:
2. Stay in Your lane:
3. Evaluate New Opportunities:
4. Limit Your Exposure to Shiny Objects:
5. Stay disciplined:

Shiny Object Syndrome can be a disaster for freelancers, especially in the field of digital marketing services. However, by defining your goals, staying in your lane, evaluating new opportunities, limiting your exposure to shiny objects, and staying disciplined, you can overcome this syndrome and achieve success in your freelance career.



## Technology for HR's Digital Transformation

### Leveraging digital solutions for effective people strategies

Digital technologies offer a range of opportunities to streamline HR processes. For example, automating HR activities such as employee onboarding and attendance tracking can save time and resources. Additionally, digital HR solutions can help organizations find the right talent, measure performance, and improve decision-making and reporting.

Employees also benefit from digital technology solutions. Self-service HR portals give them quick access to important documents, such as pay stubs and leave applications. Digital HR processes enable employees to access the information they need, improving their engagement and performance.

So, how can organizations leverage digital technologies for their HR processes?

Here are a few tips:

- Invest in digital solutions that are suitable for your organization's HR processes.
- Automate mundane HR tasks such as onboarding and attendance tracking.
- Implement a self-service HR portal for employees.
- Collect and store HR data securely to improve decision-making and reporting.

By leveraging digital technologies, HR leaders can develop and implement effective people strategies tailored to the needs of their organization. They can gain insight into the current state of their workforce, ensuring all employees are on the same page and working towards a common goal. Digital technologies can also increase employee engagement and job satisfaction.

For example, digital technologies can help with recruiting by reaching potential candidates faster and easier with job posting and video interviewing platforms. The onboarding process can be made smoother and more engaging with automated onboarding technology. Employee performance can be tracked with advanced analytics and data-driven systems for real-time feedback and support. Online training and development

Programs can be provided to employees to help them stay ahead. Foster a culture of collaboration, teamwork, and innovation with integrated communication and social media tools.

By leveraging digital technologies for HR, organizations can create an environment of success and growth that will drive the success of their business.



### Mohamed Ramadan

ISO Register, Intranet  
Builder, Quality  
Management

### Intro

In today's digital age, organizations face the challenge of keeping up with technological advancements while trying to manage their human resources effectively. Digital technologies have revolutionized the way HR leaders engage with and manage their employees. By leveraging digital solutions, HR leaders can transform and optimize traditional HR processes, reduce costs, and improve efficiency.



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# CHAPTER NEWS



## PETROBOWL MENA

SPE Suez University team won the 1st place in PetroBowl MENA Region Competition that heads to USA for Finals at ATCE.

## Go Clean Initiative

For the first time, SPE Suez launched an initiative "GO CLEAN" in Suez Government and started this project in Suez Corniche.



## Challenge Day

In cooperation with Resala Chairty , SPE participated with people of determination on the Challenge Day for Happiness and Humanity.

## Environmental Day

SPE Suez participated in the Shorouk Academy Environment and Recycling Conference with more than 50 different recycled models from plastic .



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