

# PREPARING FOR THE DIGITAL ERA

## Idea Report



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## SUMMARY

# Digital Transformation



## DIGITIZATION

We, the students of Lockheed Martin Leadership Institute, have dedicated our time to researching digital transformation. We have studied the importance of digital transformation and the role it plays in the future, why people need to be informed and take notice, the effect it has on companies who embrace it, and what happens to those who don't. This report summarizes our findings, and is a representation of our knowledge to date, as well as a guide to our thoughts about what our fellow students can do to prepare.

**Digital transformation at its core is the integration of digital technologies into all aspects of a business.**

### Key Takeaways

**Students must be more informed.** In academia, many students are only taught technical skills. Soft skills are a crucial competency in the career world

**Embracing change is imperative.** The mental model that change is a force to be feared must be reversed, as changing technologies indicate change will always be present.

**Automation is not evil.** Many reports paint a bleak picture for the future – automation will help to create new jobs yet to exist.

**Digital transformation cannot wait.** Companies that fail to embrace the process of digital transformation will be replaced by those that do, no matter their standing.



### Empower Employees

By empowering employees and executives, everyone will want to grow with the company.



### Identify Crucial Questions

Problems must first be identified in order to be solved. Once the crucial questions have been identified, innovative thought and creativity can overcome obstacles.



### Cultivate Culture

Investment in the future of an organization is the best motivator for overcoming digital challenges.

# Everything You Need To Know

🖥️ About Digital Transformation 🖥️



### Think Long Term

Focus on the future of your industry. The chances of it evolving are high.



### Be Adaptable

In a competitive and rapidly changing workforce environment, adaptability allows you to compete with ever-changing technology.



### Continuously Learn

Possessing a growth mindset will only further prepare you for a disruptive technological revolution.

## INTRODUCTION

# Why It's Important

**Digital transformation:** it's become a widespread term in today's ever-changing business climate, but many businesses still fail to grasp the full importance of the term. It's easy to state that digital transformation means incorporating technology into all aspects of business, but different to comprehend it. When looking at the history of the S&P 500, the average length of time that a company would stay on that index was 61 years in 1958. When 2011 came around, the average was just 18 years, and today, companies are replaced on that list every two weeks. The driver behind this change? **Technology.** Only a decade ago, cell-phones were a luxury item that some were fortunate to have access to. Their purpose was to send text messages and make phone calls. Now, they are a staple, a ubiquitous piece of technology appearing everywhere - from the hands of elementary students, to older generations. This grants with access to the internet unparalleled by anything of the past. In the current technological climate, news can reach the hands of millions through the press of a button. This could be policy and government, or video of rockets to Mars; it is crucial that companies come to understand the power that this single technology has.



Companies can be crushed in a day through poor business practices that are revealed on social media. Tesla's once Chairman/CEO Elon Musk demonstrated this clearly when a single tweet resulted in stock volatility, a SEC investigation, and ultimately, the loss of his chairmanship among other penalties. To understand how some companies have conquered this enhanced communication, look at the most popular social media (Facebook), the largest taxi company (Uber), and the largest accommodation provider (Airbnb). The common ground? None of them produce their own content. All of them are self-driven by the community they have built.

“**Businesses don't transform by choice because it is expensive and risky. Businesses go through transformation when they have failed to evolve.**”  
Howard King, The Guardian contributor

“

There is no way back. Nobody is untouched. It is almost incredible that just ten years ago, our phones were primarily used for talking. Glance over your shoulder on the bus and you realize that time has passed: the device most of us keep in our hands for large parts of our day is much more than a phone. For many youth, it's hardly a device for actual talking.

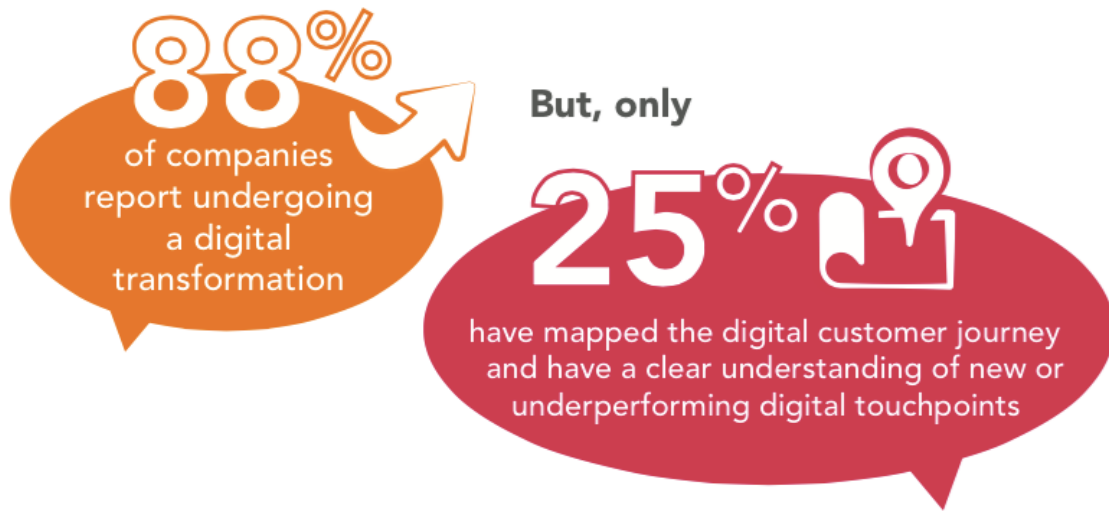
Sigve Brekke, President and CEO,  
Telenor Group, on the rapid pace of  
digital transformation

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# THE DIGITAL TRANSFORMATION DIVIDE

## A Notable Disconnect:

Digital strategists and executives are investing in digital transformation, but without insight or purpose.



### The Dangers

While it is easy to cite the vast benefits technology brings to the table, it is imperative that the dangers that come with it are recognized and avoided. There's no way around it -- jobs will be lost. But per Ben Pring, Malcolm Frank, and Paul Roehrig, authors of *What to Do When Machines Do Everything*, only 12% of jobs are at risk of being fully replaced by automation. 75% will be enhanced by it, and new jobs will comprise 13% of the market. Important business meetings will take place remotely, and without the technical skills and access to technology to take place in these meetings, other smaller companies or those who have failed to prepare will be swept under the rug. Illegal or shady business practices that can hurt a company's reputation can be broadcasted to the world from anyone's Twitter account, blog, or other

social media. Secrecy rarely exists in the digital world.

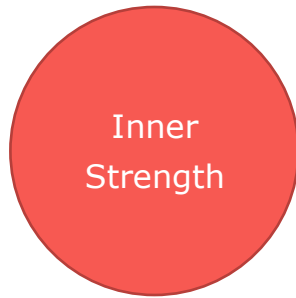
### Why change is necessary

There is only so much that digital transformation and new technologies will fail to touch. Implementing these new technologies means real change, and real change means real adaptation. Adopting technology is no longer a strategy to get ahead, it is a strategy to survive. Going from stone to bronze may have been a fundamental change in society, but the smartphone revolutionized society in the same way – just a millennium quicker. Humanity is fast approaching another one of these periods of time, one propelled by artificial intelligence and a growing web of interconnectivity. To be clear – **if you do not adapt, you will not be useful.**



# HOW TO BE

PERSONAL DEVELOPMENTS TO SUCCEED



## FOUR DYNAMIC TRAITS OF SUCCESS

We've have researched four key characteristics of individuals that, when going into the digital era, are crucial to success. These are soft skills not fully taught in academics, and while they are thought to be reinforced, many students do not fully grasp their importance. These traits are **resiliency, inner strength, strategic thinking, and collaborative spirit**, or **RISC** for short. Let's start with resilience.

### Resilience

Resiliency is a measure of elasticity, how much an object can be pressed, stretched, bent, pulled, yet still return to its original shape. In humans, resiliency represents our ability to face the negatives and come out unscathed, learning from the process and becoming better from it. Resilience is an important quality in an ever-changing climate. With change, there are many negatives before positives are seen, and the ability to pull

through the negatives knowing success is on the horizon will be imperative to an individual's success.

### How to become more resilient

The famous psychologist Albert Ellis proposed a model for developing resiliency coined the ABC model:

- **Adversity** - *The current challenge or setback.*
- **Beliefs** - *The current thoughts about this challenge.*
- **Consequences** - *The ramifications of giving in to adversity.*

By understanding your beliefs and strengthening them, you can mitigate the consequences, which makes you better at handling adversity.

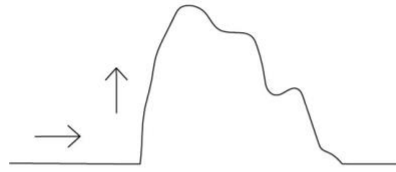
The American Psychological Association has developed a list of 10 ways to increase resiliency as well, and the Positive Psychology Program has a simple infographic that lists all 10 steps, as seen on the next page.

# Ψ 10 Ways to Develop Resilience

1. Make connections and building your social support network.



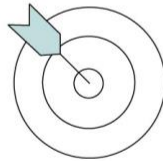
2. Avoid the tendency to view crises as insurmountable challenges.



3. Accept that change is a natural and unavoidable part of life.



4. Move towards your realistic goals.



5. Take decisive action that will help you face your challenges.



6. Look for opportunities that promote self-discovery.



7. Nurture a positive view of yourself and your abilities.



8. Keep things in perspective and in context.



9. Maintain a hopeful outlook on life.



10. Take care of yourself.

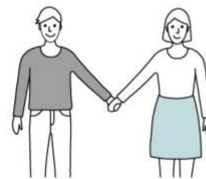


## Four Themes of Resilience training:

Resilient Thinking



Effective Relationships



Managing Emotions



Building on Strengths





## Inner strength

Inner strength is just as it seems; it is the knowledge of who we are on the inside. This includes knowledge of our personality types, our strengths, our weaknesses, understanding the growth mindset, and staying humble. As we go through inner strength, some aspects may sound identical to resiliency, and that would be correct. Being resilient only makes our inner self stronger.

### Self-awareness

Understanding who you are on the inside is a key part of inner strength. This includes understanding your strengths, how you can apply those strengths, what your weaknesses are, and how you communicate. Some common ways to become more self-aware involve:

- *Myers-Briggs Type Indicator*
- *CliftonStrengths (prev. StrengthsFinders)*
- *SWOT Analysis*

The first two, the MBTI and CliftonStrengths are inventories with a plethora of questions meant to dive into your subconscious and inform you more

about yourself. The MBTI helps to understand how you communicate and schedule, while CliftonStrengths gives you your top 5 innate strengths. The SWOT Analysis is a personal that asks you to identify your top 3 strengths, weaknesses, opportunities, and threats. At the end of it, you will be prepared with a solid guide for how to grow yourself and what you are doing right.

### Understanding the growth mindset

Discovered by Carol Dweck, the growth mindset is a simple concept, but practicing it constantly requires conscious effort. Numerous papers have been written about the growth mindset; at its core, the growth mindset is the theory that attributes are malleable qualities that can be shaped and improved. It involves always trying to perform better, iterating and improving every step of the way. Having this mindset catalyzes transformation, and allows those who adopt it to rebound from failure and ask themselves the single most important question: "Why?"

# Changing Our Mindset

Carol Dweck, world-renowned Stanford University psychologist, talks about the power of our mindset or our beliefs (especially around challenge). We can either have a Fixed Mindset where we let failure (or even success) define who we are, or a Growth Mindset where we see setbacks as opportunities to grow and improve ourselves. Just like how we learned how to walk... there are many stumbles along the way, but to reach our potential and live the life we desire, it takes practice and perseverance. We always have a choice about which view we adopt for ourselves... and it's never too late to change. What's your view?

*It's up to you!*



## FIXED MINDSET

Belief that my intelligence, personality and character are carved in stone; my potential is determined at birth



## GROWTH MINDSET

Belief that my intelligence, personality and character can be developed! A person's true potential is unknown (and unknowable).

	FIXED MINDSET	GROWTH MINDSET
<b>DESIRE</b>	Look smart in every situation and prove myself over and over again. Never fail!!	Stretch myself, take risks and learn. Bring on the challenges!
<b>EVALUATION OF SITUATIONS</b>	Will I succeed or fail? Will I look smart or dumb?	Will this allow me to grow? Will this help me overcome some of my challenges?
<b>DEALING WITH SETBACKS</b>	"I'm a failure" (identity) "I'm an idiot"	"I failed" (action) "I'll try harder next time"
<b>CHALLENGES</b>	Avoid challenges, get defensive or give up easily.	Embrace challenges, persist in the face of setbacks.
<b>EFFORT</b>	Why bother? It's not going to change anything.	Growth and learning require effort.
<b>CRITICISM</b>	Ignore constructive criticism.	Learn from criticism. How can I improve?
<b>SUCCESS OF OTHERS</b>	Feel threatened by the success of others. If you succeed, then I fail.	Finds lessons & inspiration in other people's success.
<b>RESULT ...</b>	Plateau early, achieve less than my full potential.	Reach ever-higher levels of achievement.

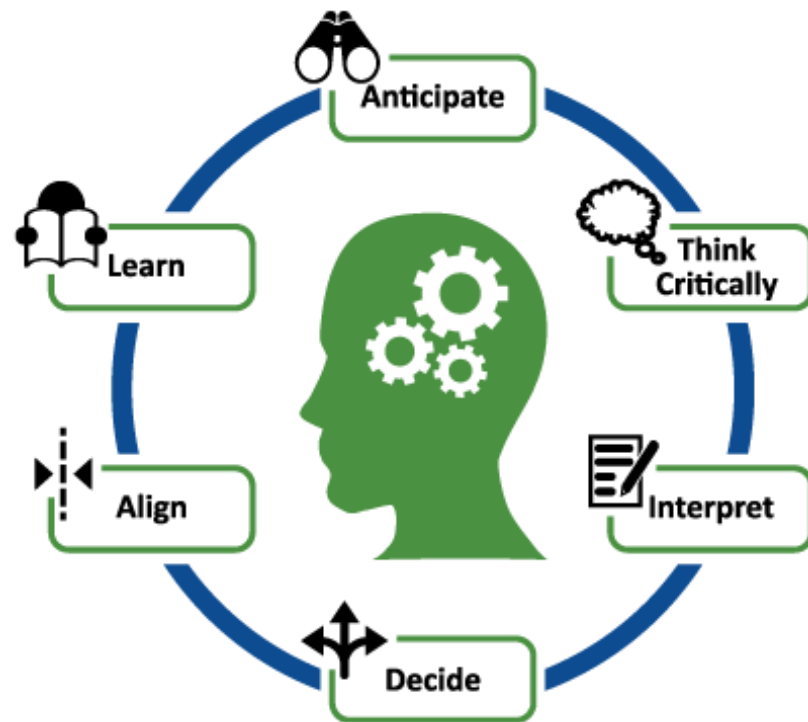
The opposite of the growth mindset is a fixed mindset, which poses many dangers when entering the era of change. It is the belief that our attributes are fixed, and cannot be grown any further. People with a fixed mindset spend their time documenting their current qualities rather than focusing on improvement.

## FURTHER READING

The NeuroLeadership Institute has written an Idea Report on how to adopting growth mindset culture and all 48 pages are information packed, a highly suggested read for a more comprehensive understanding of the growth mindset.

## Strategic thinking

Another ability to account for is the ability to be a strategic thinker. Aspects of a strategic thinker include seeing the big picture, being a forward thinker, having a transformative vision, being an intuitive thinker with ideas rooted in data and history, and being customer driven.



### Big picture

Seeing the big picture is an important aspect of strategic thinking. The Cambridge Dictionary defines the big picture as, "The most important facts about a situation and the effects of that situation on other things." To see this bigger picture, one must move past the minute details surrounding a situation and focus on the overall impact they wish to generate. Only with a clear vision of where one wants to go can the small steps be taken to get there.

### Intuitive thinking

In the times of the past creation has driven humanity forwards – a rare but impactful occurrence. In present times, we are surrounded by new creations every day in the form of technology. Surrounded by all the new technology, it is no longer a question of

what we can create, but what we can do with the tools we have at our disposal. Creators make something from nothing, and the world has long been exposed to the creation mindset. Now, those who can successfully revolutionize a process by using someone else's creation are considered more valuable.

### Customer obsession

Negative customer experiences leave bad tastes in consumers' mouths, and when a customer is unhappy, there is a chance they won't do business with a company again. Dissatisfied customers also spread information far more than satisfied customers, and with the growing interconnectivity of the world, it is highly probable that others will find out and never do business to begin with.

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Dion Hinchcliffe, Vice President and Principal Analyst at Constellation Research, on customer experience in the Digital Era

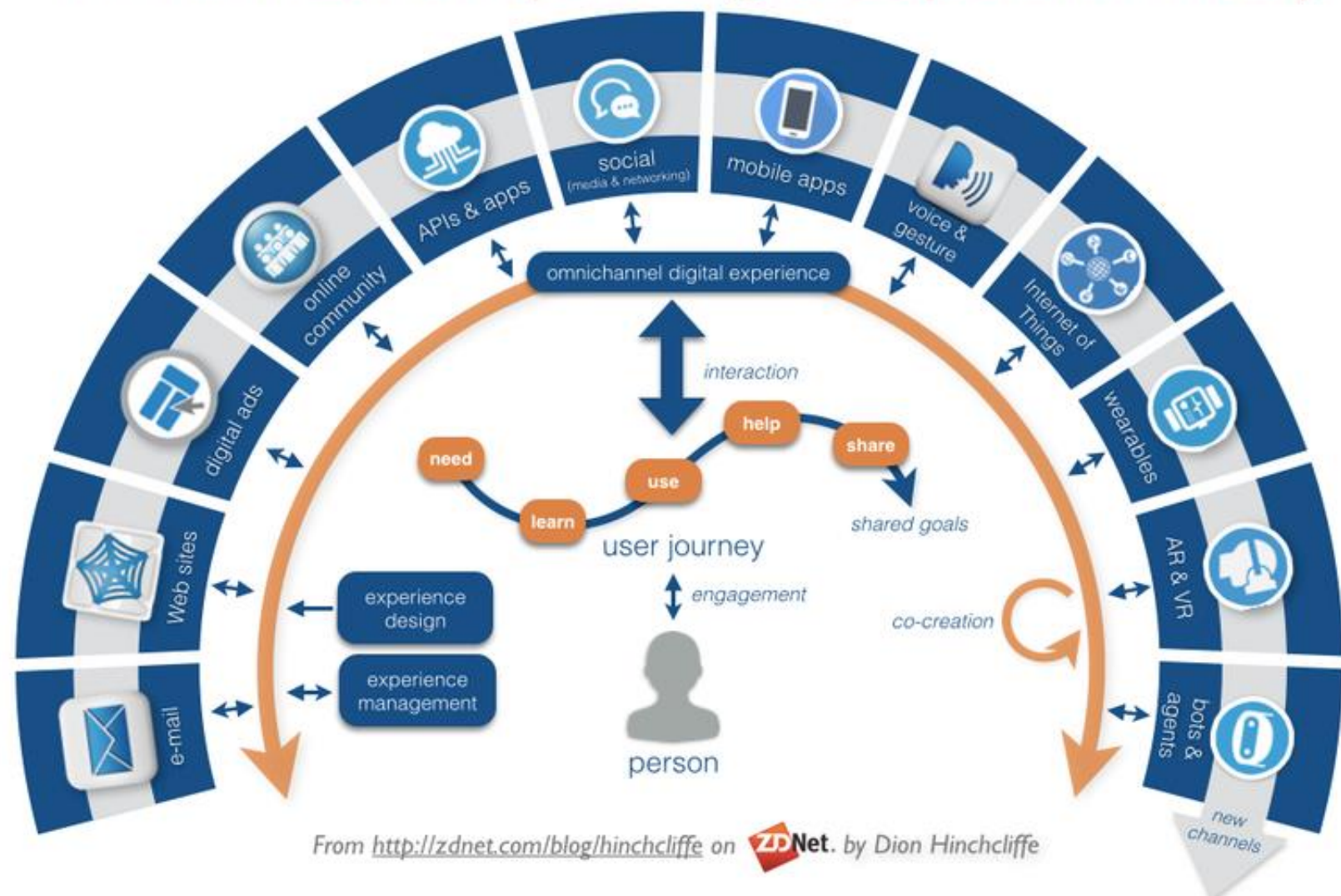
Today's continued deconstruction of the enterprise value stream into functional silos (marketing, sales, operations, delivery, customer care), and innovation/R&D is no longer effective in a world where seamless customer integration is the most important discriminating factor for how a business will perform [...] the imperative is clear that getting the customer experience house in order will be absolutely required to thrive and grow, now and even more so in the future.

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# UNDERSTANDING THE MEDIUMS OF CONSUMER EXPERIENCE

## The Rich Landscape of Digital Experience Today





## Collaborative Spirit

The last area we highlight is that of a collaborative spirit, which boils down to two things: emotional intelligence, and collaborative problem solving.

### **Emotional intelligence**

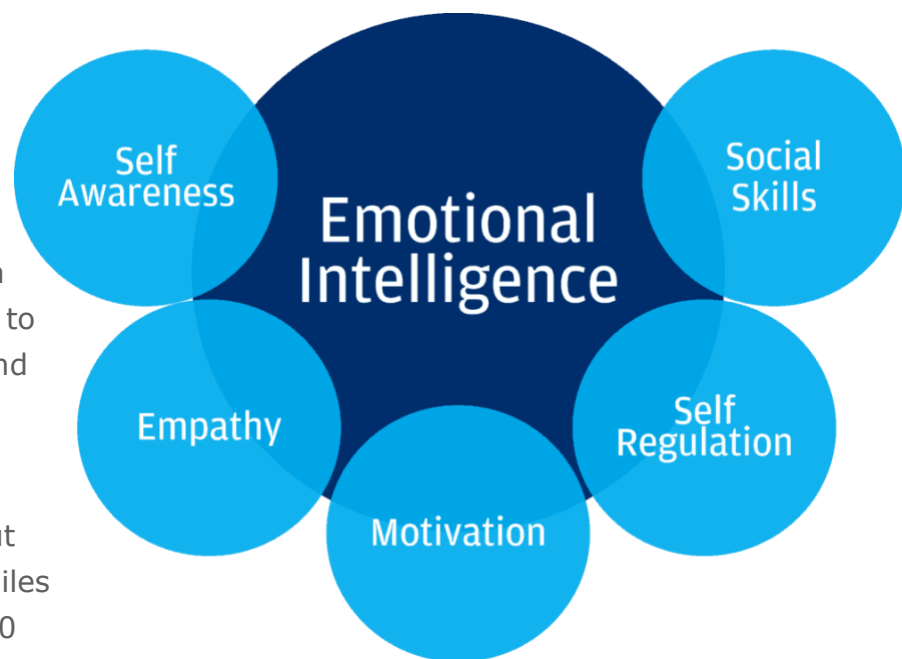
Emotional intelligence is not easy. Put simply, it is the ability to walk 500 miles in your own shoes, and then walk 500 miles in another's shoes. Put technically, it is the ability to understand and manage your own and the surrounding people's emotions. High degrees of emotional intelligence are represented by people who know what they're feeling, what it means, and how these emotions can impact those around them. Daniel Goleman, a leading expert on emotional intelligence, says there are five key stepping stones.

#### **Self-awareness**

Before we can understand others, we must be able to understand ourselves. To do this, keep a journal to record your emotions. Be sure to slow down and examine why you are feeling the way you are. Being able to understand your emotions and reason why you are experiencing them is the first stepping stone to improving emotional intelligence. Meditation and reflection are excellent options here.

#### **Self-regulation**

Once we can understand our emotions, we can move towards controlling our responses to them.



Practice being calm, holding yourself accountable, and knowing your values.

#### **Motivation**

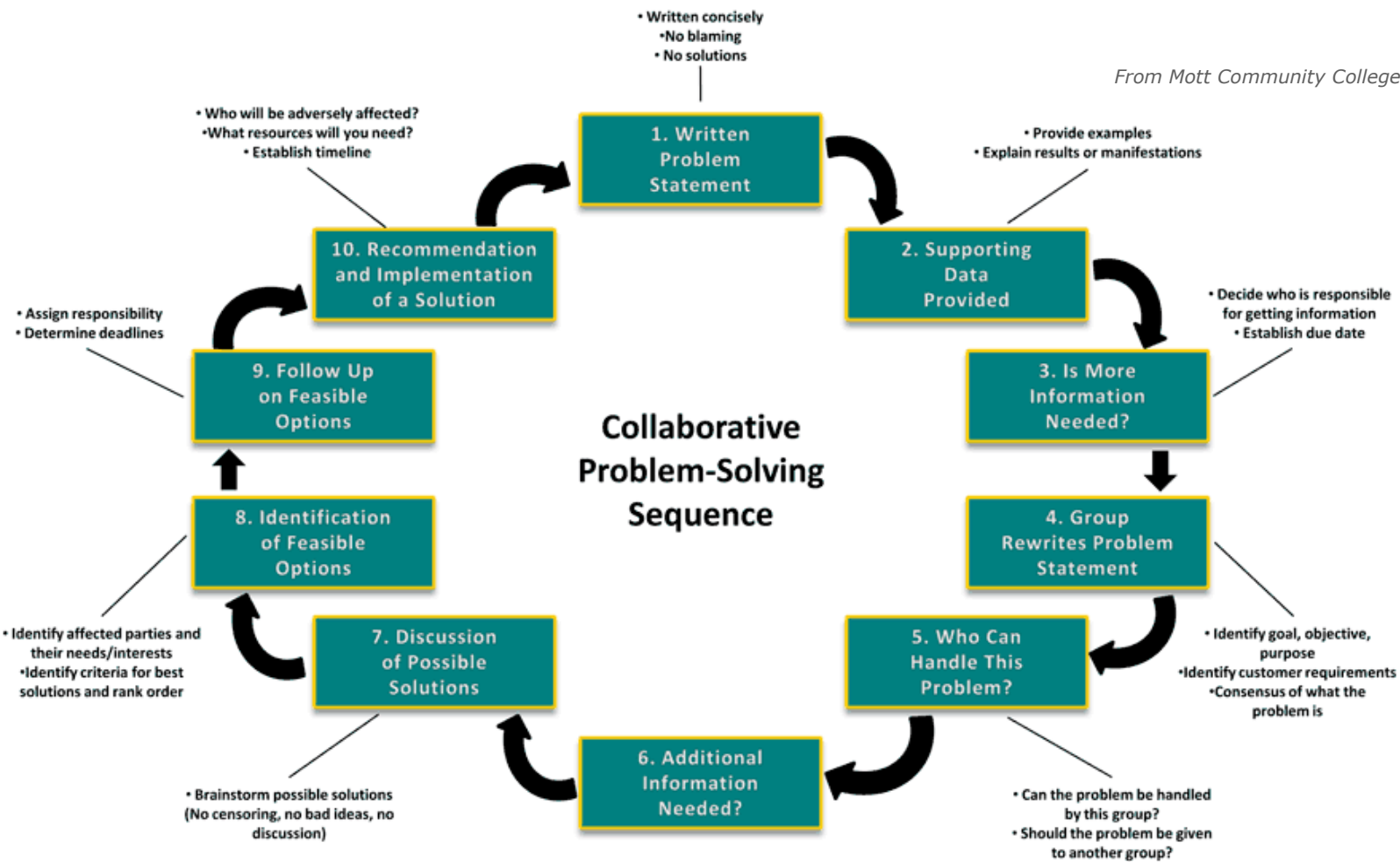
After being able to control our responses, we can move towards motivating ourselves and others. Re-examine why you are where you are constantly, and make sure you are on track with goals you have previously set.

#### **Empathy**

Finally, we can understand others. Constantly put yourself in others' positions, evaluating their tone and body language in comparison to how you would feel when faced with the same situation.

#### **Social Skills**

As a leader or a co-worker, it is important to be able to communicate with your colleagues. Using the four aforementioned skills, practice interacting with others to understand them better. View conflict as an opportunity to grow closer, and be aware of your nonverbals and how they can impact others.



### Collaborative problem solving

Collaborative problem solving is a complicated sequence of events as depicted in the flowchart above, but it involves working with others to make a final product, while taking the necessary steps to ensure success along the way. In a world filling with more people and more ideas, it is unlikely one will ever work alone, so understanding the collaborative problem solving sequence is essential to being an integral part of a company's work. To work on collaborative problem solving there are a few tools one can use:

- Establish rules of engagement and bring them up every few weeks
- Allow project teams to focus on team identity
- Create projects that require interdisciplinary experience
- Explore different types of communication styles
- Journal to reflect on team experiences

## WORKS USED

- Idea Report from NeuroLeadership Institute

[https://cdn2.hubspot.net/hubfs/1927708/Idea%20Report\\_Growth%20Mindset\\_US\\_Digital.pdf?\\_hssc=80578952.1.1550449222689&\\_hstc=80578952.f66860bba1a4c9c7a2150c5f75a05bff.1550449222689.1550449222689.1550449222689.1&\\_hsfp=1924489145&hsCtaTracking=432feb7a-5d47-472c-990f-8d5243351994%7C738a6baf-e759-45ba-8970-6151fc1531be](https://cdn2.hubspot.net/hubfs/1927708/Idea%20Report_Growth%20Mindset_US_Digital.pdf?_hssc=80578952.1.1550449222689&_hstc=80578952.f66860bba1a4c9c7a2150c5f75a05bff.1550449222689.1550449222689.1550449222689.1&_hsfp=1924489145&hsCtaTracking=432feb7a-5d47-472c-990f-8d5243351994%7C738a6baf-e759-45ba-8970-6151fc1531be)

- American University | 5 Ways Technology Has Changed the Communications Field

<https://programs.online.american.edu/msc/resource/5-ways-technology-has-changed-the-communication-field>

- Freakonomics | Why Is This Man Running for President?

<http://freakonomics.com/podcast/andrew-yang/>

- The Enterprisers Project | What is Digital Transformation

<https://enterpriseproject.com/what-is-digital-transformation>

Ultimately the question gets asked...

## HOW do we change?

Everyone can identify the need to change. Many can even identify what change is required. What few – if any – can identify is **how** to change. What we have has been working on is exactly that – identifying the best practices and action steps needed to be best prepared to embrace Digital Transformation. Through the course of our work, we assembled the following list on how to change.

1. The first step to success is **awareness**. Reading this report is certainly a great start, but it's just one drop of water in the sea of information. We need to know what the key issues are in order to meet them head on. Check out our website to start browsing additional resources.



2. Once a certain level of awareness is reached, the next step to change is **identifying a personal stake in the issue**. This is by far and away the greatest hurdle. The scale of Digital Transformation rivals the Industrial Revolution – so people need to know it'll affect them. For students, collegiate or high school, that means tailoring their choices about education to get exposure to digital options. Prioritizing project based learning, client interactions, and rapidly changing teams can help develop a personal connection to change.

3. **Start planning proactively**. Don't use Digital Transformation as an excuse or justification for the pet project that needs to get approval at work, or when deciding what to do next. Digital Transformation needs to be at the forefront of the decision making process. Deliberate action needs to be taken when evaluating future options. Consider the technological foundation. Consider the impact of AI, IOT, and other major innovations.

4. In order to stay ahead of a very reactive and ever-changing market and climate, **creatively envisioning the future** is what will propel future leaders to the forefront. That means challenging the status quo. Can you provide creative value to the company you work for? How will you contribute when efficiency is left to the machines?

## Here are some of our other recommendations for next steps...

- Start practicing your adaptability and flexibility. Learn something new, and then immediately relearn it a different way. Find your habits and practicing breaking them – become a friend with the discomfort of change.
- Challenge your imagination. There are a crazy amount of exercises and games made specifically to stimulate your creative brain. Maintaining and strengthening this kind of thinking is what can be most important to the Digital Era. If you need a place to start, try crossword puzzles.
- Work in teams whenever you can. Don't split the responsibility of projects so that individuals remain alone. Find ways to promote, encourage, and require interaction among teams to foster a hyper-collaborative spirit. The best business practices of the future will rely on hyper-collaboration, so you should too.

