



Welcome to Our Spring Education Series

RESILIENCE

PREPARING FOR THE NEXT DOWNTURN

*Helping you and your clients confront risk
and optimize business performance!*

While you wait for the presentation to begin, use the chat button at the bottom of your screen and share your name, location, weather, or anything else.

Thursday, April 30, 2020

Recession Tune-Up (Overhaul)



Presenter

Guy Marcozzi, P.E., AP LEED BD+C, F.ASCE
President
Duffield Associates, Inc.



Moderator

Joel G. Carson
Executive Director
Geoprofessional Business Association

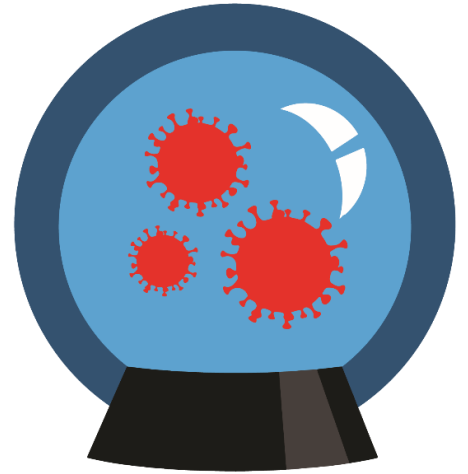
RECESSION

Guy Marcozzi
Duffield Associates, Inc.



OMG – Who saw this coming?

- Where are we heading?
- Recession is here, how long will it continue?
- Whatever happens –
We benefit from best practices of a tune-up



Plan not to learn anything new today!

Wait. What? Why are we here again?

- Why do HVAC, cars, and airplanes need scheduled tune-ups?
- Why don't we do regular tune ups on our businesses?
- How does human nature hold us back?



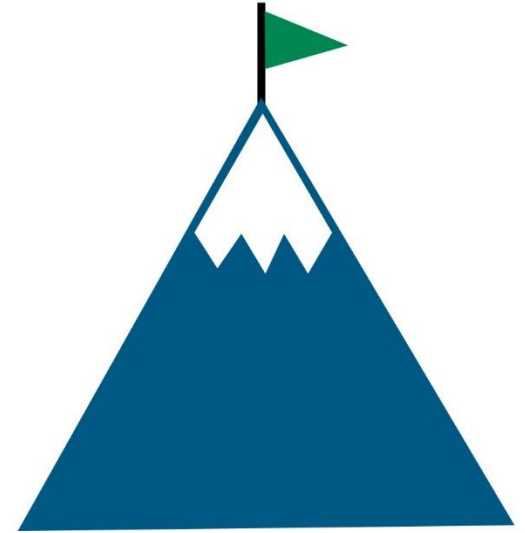
Our Goal: Peak Performance

- For a few years now, everybody was talking about
.....not having enough staff

We did it! – We solved that “problem!”

That was THE GOAL!!!

- Sales were not limiting
- WE controlled
 - WHO we worked for
 - WHAT we did AND
 - HOW MUCH we could charge



We were living - BEST CASE SCENERIO

Goals for this session

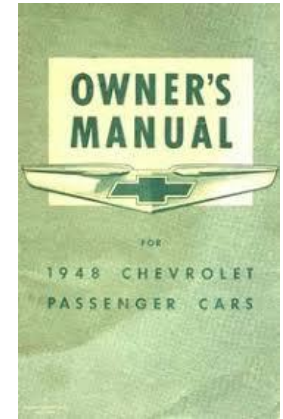
- Jog our memories
- Acknowledge that change is constant
- Confront counterproductive human characteristics
- We lead, but we need help
- Sustained success is systemic
- Best practices result in better outcomes



TODAY is the nudge for Best Practices

Part 1: Let's Check the Manual

- Get our Nostradamus on!
- Tight labor market will be interesting
- Proactivity and good luck helps mitigate impacts
- Quick recognition and adaptation creates opportunities
- We're down, but it's a cycle
- Base actions on what is going to happen



The Maintenance Cycle

Not just the Economy...

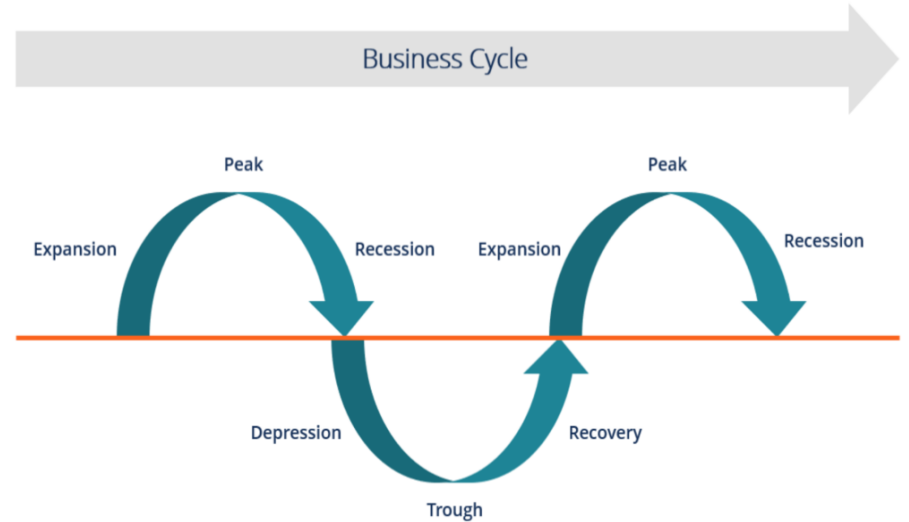
- Societal Norms
- Demographics
- Politics
- Technology
- Local/National/International/Galactic change
- Many others!

When cycles converge - watch out!



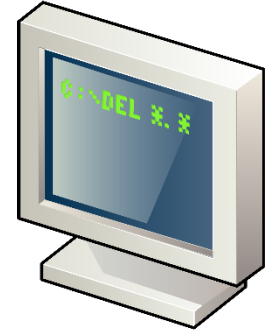
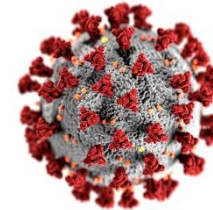
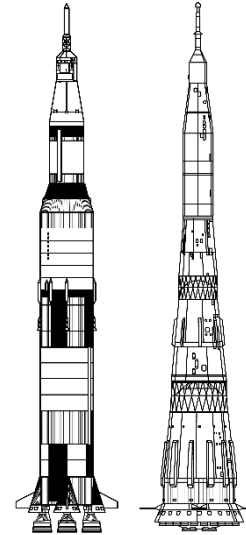
Economic Cycles

- Change requires new approach
- Downturns clear out waste
- Top performers see and prepare for what's ahead
- Leading requires changing behaviors of current cycle



Shifts in Societal Norms in 100 years

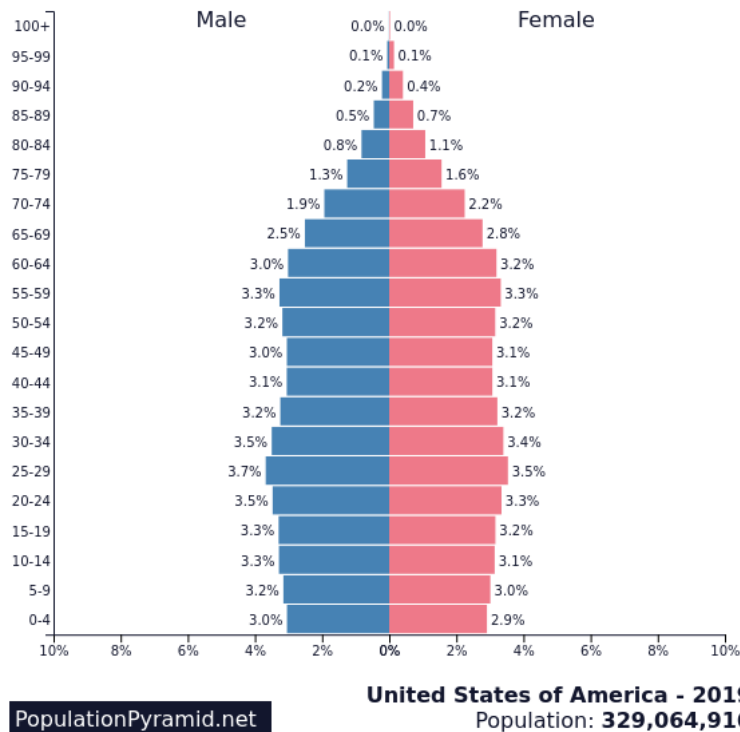
- Women's Suffrage
- Great Depression
- World War II
- Cold War
- Man on the Moon
- Vietnam
- The PC
- 9/11
- Great Recession
- Covid19 Pandemic



Demographic Cycles

Population by Age

- Boomers
- Gen X (35-55)
- Many NextGen (20-34)
- Less babies (future employees and clients)

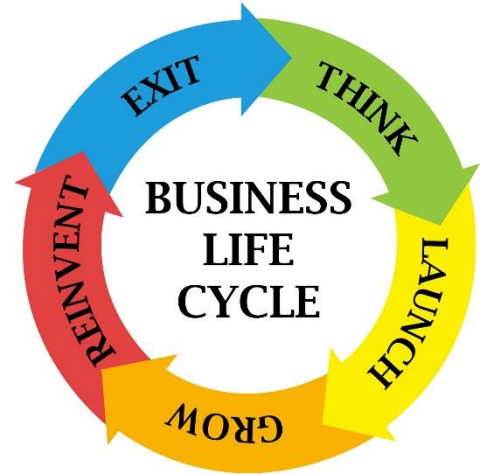


Demographic Behaviors with Age

Age	Behavior	Business Consideration
<21	School	STEM Interest
21-25	Finding a job/spouse/apartment/tech	Recruit/Training/Comm. Style
25-30	Marriage/buying a house	Compensation/Benefits/Attrition
30-45	Raising a family	Flexibility/Benefits
45-60	Security/Parents Health/Travel	Security/Dignity/Benefits
>60	Heath/Stay Relevant/Retirement	Loss of experience/Top Heavy

Summary: Current Cycles

- Extended economic expansion has abruptly ended
- Behavioral changes from the Pandemic
- Expanding (or contracting?) Globalization
- Political election year
- Technology – Zoom, e-commerce, data, SM, etc.
- Demographic evolution
 - Boomer cohort (were) at retirement age
 - Smallest working cohort follows
 - NextGens are the largest working cohort
 - A new smaller cohort follows



Part 2: The Best Practice Tune Up

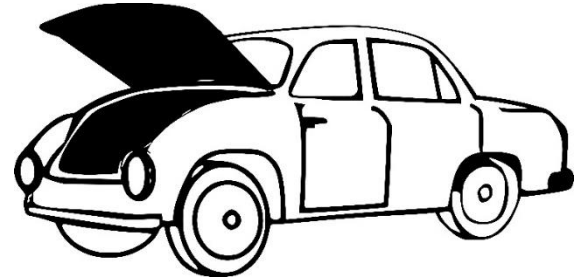
1. Look Under the Hood
2. Run Diagnostics
3. Check Spark Plug
4. Calibrate Timing Belt
5. Throttle Back
6. Inspect Drivetrain
7. Refill Fuel Tank
8. Lubricate
9. Preventative Maintenance
10. Enjoy the Ride



Look Under the Hood

Human nature can hold us back

- Procrastinating
- Reacting instead of leading
- Finding blame instead of solutions
- Not seeing the full picture
- Being Autocratic
- Many others!



How can we get beyond of these counterproductive behaviors?

Your Hood (Support Team)

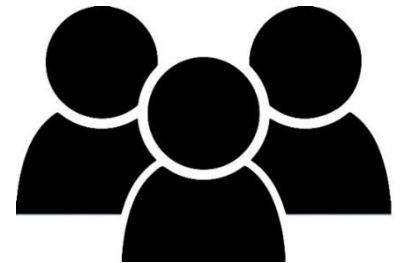
- Assess Ourselves and Key Reports
 - Where we excel
 - Where we can get by
 - This area is not a strength
- Hard to be objective without tools:
 - DISC
 - Meyers Briggs
 - Timespan
- Right people in the right seats on the bus



The Hood – Your Support Team

Profiling offers insights into complimentary skill sets (DISC)

- Boldness of action (Driver)
- Data compiler (Supporter)
- Short term impact (Pragmatic)
- Long term ramifications (Theoretical)
- Cultural lines not to be crossed (Traditional)
- People skills (Low and High Social)



The Hood – Timespan

- Timespan Concept (Elliott Jaques)
- Time elapsed to carry out longest running assignment
 - Stratum 1- Task worker – 1 hour or 1 day
 - Stratum 2 - Line manager- 1 week to 1 month
 - Stratum 6 - CEO – time horizon 5 to 10 years
 - Stratum 9 - Generational Visionaries - 100 years
- Innate abilities, enhanced only over many years



Some people are better in the moment and others into the future

Tune Up Best Practice #1

Seek understanding to openly and nonjudgmentally navigate the strengths and weaknesses of ourselves and our team.



Run Diagnostics

- No one KPI tells the whole story
- Too many KPIs increases ambiguity and inaction
- Technical people discredit inconvenient numbers
- Rely on a small basket of KPIs
- Use others for deeper understanding only

Define, Track and Act based on our trusted KPIs



Diagnostics: What Can We Track?



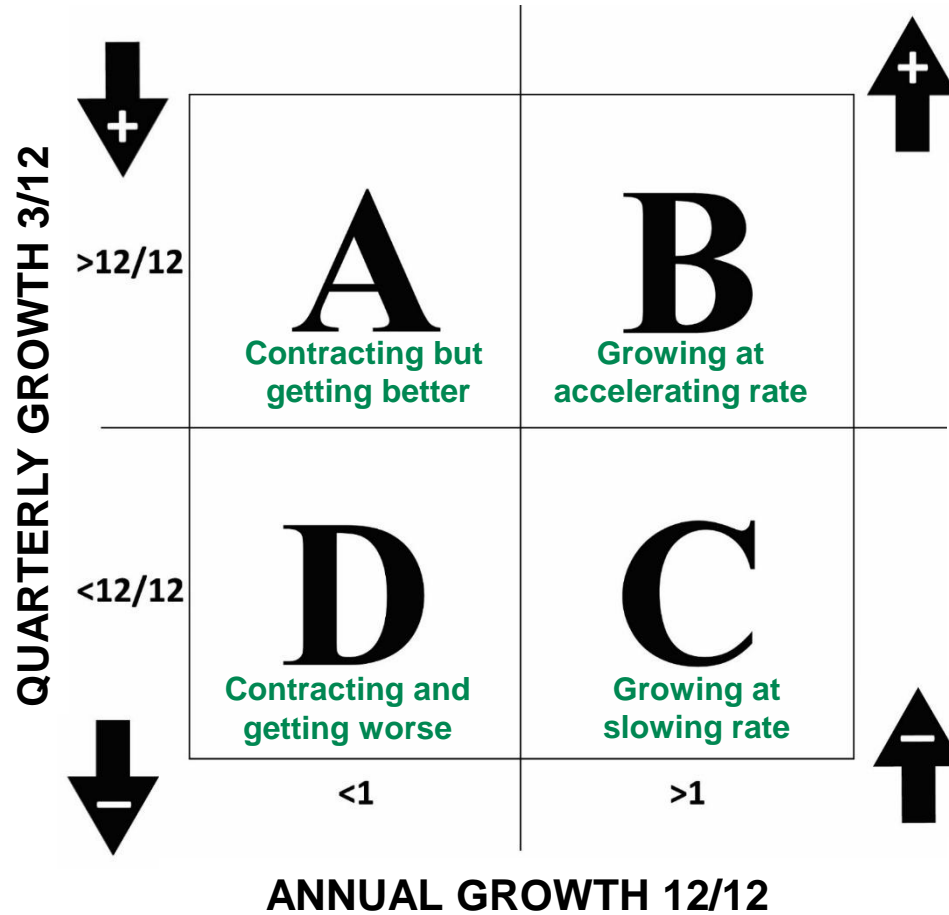
Revenue | Billable Hours | Backlog | Proposals | Opportunities | External Indices

(Already Happened)

(Might Happen)

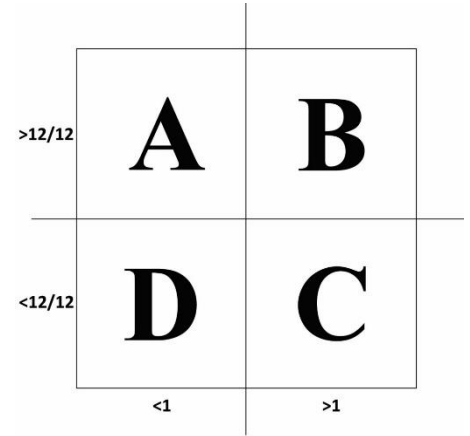
Our “Go To” basket should include a mix trailing and leading KPIs

Trend KPIs for insight into what is coming



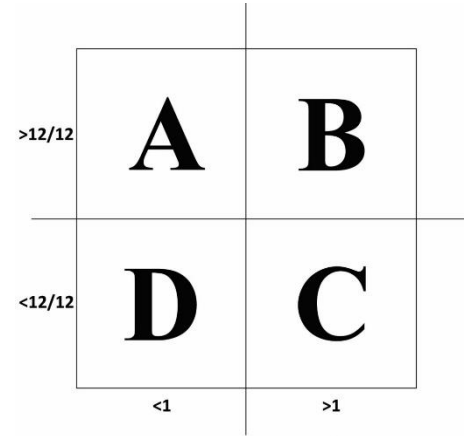
Diagnostics – Best Practices for Quadrant D

- Maintain selectivity (don't be desperate)
- Push button early on contingency plans
- Don't use assets to avoid hard decisions
- Be proactive to resolve claims
- Opportunity for “wood pile” improvements
- Renegotiate leases and long-term commitments
- Consolidate management



Diagnostics - Best Practices for Quadrant A

- Overcome fears not founded in data
- Act decisively and take some risk
- Hire the best talent while it's available
- Opportunity for acquisition and expansion
- Growth puts pressure on cash flow
- Appropriate time for use of credit lines
- Invest in training/technology and production
- Push sales



Tune Up Best Practice #2

Track and trend a small, trusted basket of KPIs and take action based on the business cycle we are entering.

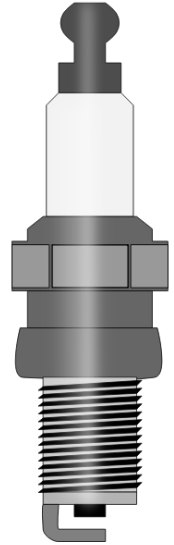


Check Spark Plug

KPIs alone don't fix structural problems

Leaders spark the team into action

- Articulate our vision
- Align the right team
- Stay (fix) the culture course
- Fortify financials
- Manage client base
- Curate businesses



You are the Spark Plug

Easy to rationalize (honest assessment of facts)

- Objective -> lack nuance
- Empathetic -> equivocate
- Objective + Empathic = More Effective Outcomes

Our job is to see the whole picture and initiate change



Tune Up Best Practice #3

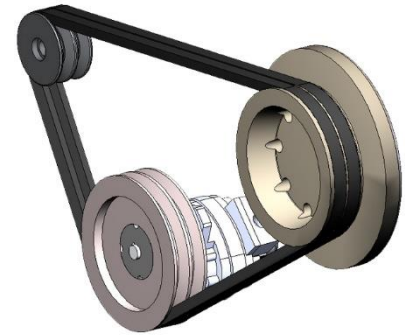
Changing from yesterday's world to tomorrow's world requires data, broad perspective and leadership.



Calibrate Timing Belt

Crisis requires timely action!

- Educate our companies – profitability is necessary
- Change our staff's perspectives and behaviors
- Clean out underperforming staff and business lines
- Optimize work efficiencies
- Redefine overhead processes and costs
- Fortify our financial base and liquidity



Tune Up Best Practice #4

Timing can be just as important as specific actions in getting results.



Throttle Back

For today – Survive!

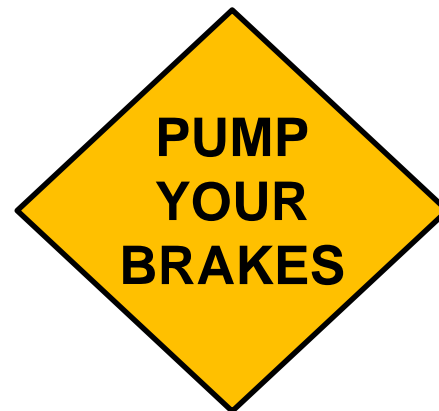
- **Get to financial equilibrium ASAP**
- Deal with problems (offices, people, service lines)
- Earlier and deeper improves optionality and staying power
- Financial fortitude may require staff reduction
- Cut for both show and dough
- Laser focus on sales, delivering product and cash flow



Throttle Back

Less painful precursors to layoffs:

- Stabilize backlog
- Build backlog through scope expansion
- Relationships more important than ever
- Focus on clients with financial resiliency
- OK to flex margins for long term health
- Reduced margin does not mean burn capital
- Extend payment terms in right circumstances
- Lean up administrative burdens



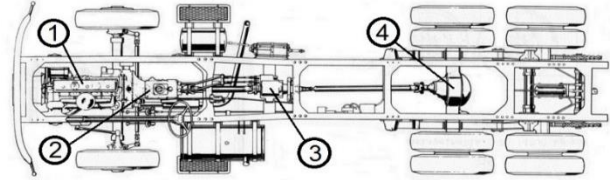
Tune Up Best Practice #5

You need to be financially stable to weather uncertain times. Don't skip this step.



Inspect Drivetrain - Your Staff

Cash flow and profitability may mandate cuts



- Metrics and culture overcome emotional interference
- Recent hires are easy but not necessarily good targets
- Cull from mid to low performers with limited upside
- Explore if former high performers have “retired” on the job
- No one person is irreplaceable
- Tie security to production and results
- Be honest about how we have rationalized the suboptimal
- Regular course correction easier than wholesale change

Tune Up Best Practice #6

Establish a culture of performance and adhere to it in good times and bad.



Refill Fuel Tank

Tomorrow will be different from yesterday

- Preserve and carefully manage existing workload
- Target backlog which could be quick to recover
- Large, multi-year contracts with financially viable entities, regulated businesses and non-local government
- Flush the low pay/high maintenance and late pay clients
- Adapt to new normal of efficiencies and expectations
- Consider tradeoffs between margin and stability
- Choose wisely



Future Fuel for Backlog?

- Retail
- Commercial
- Industrial
- Institutional
- Distribution/Logistics
- Housing
- Energy
- Transportation
- Utilities
- Metropolitan vs rural
- Government spending



Tune Up Best Practice #7

Be deliberate in positioning to serve the needs of future clients.



Lubricate

Balance Performance and Fairness

- Profitability is essential to a healthy business
- Communicate performance as an expectation
- Fairness is also an important human expectation
- Free-riders undermine fairness
 - Free-riders take advantage of human characteristics to hide in the crevices
 - You need to look hard to find them
- Reassure everyone else



Lubricate - Build your Emotional Bank

- We are always messaging
- Fairness and consistency facilitate loyalty
- We make the hard decisions and absolve staff
- High performers need unambiguous reassurance
- NextGens have more limited exposure to crisis thinking
- NextGens also require regular and genuine feedback
- Encouragement doesn't come as naturally to Boomers
- Draw from complimentary skills of our teams

Don't overdraw on our emotional bank



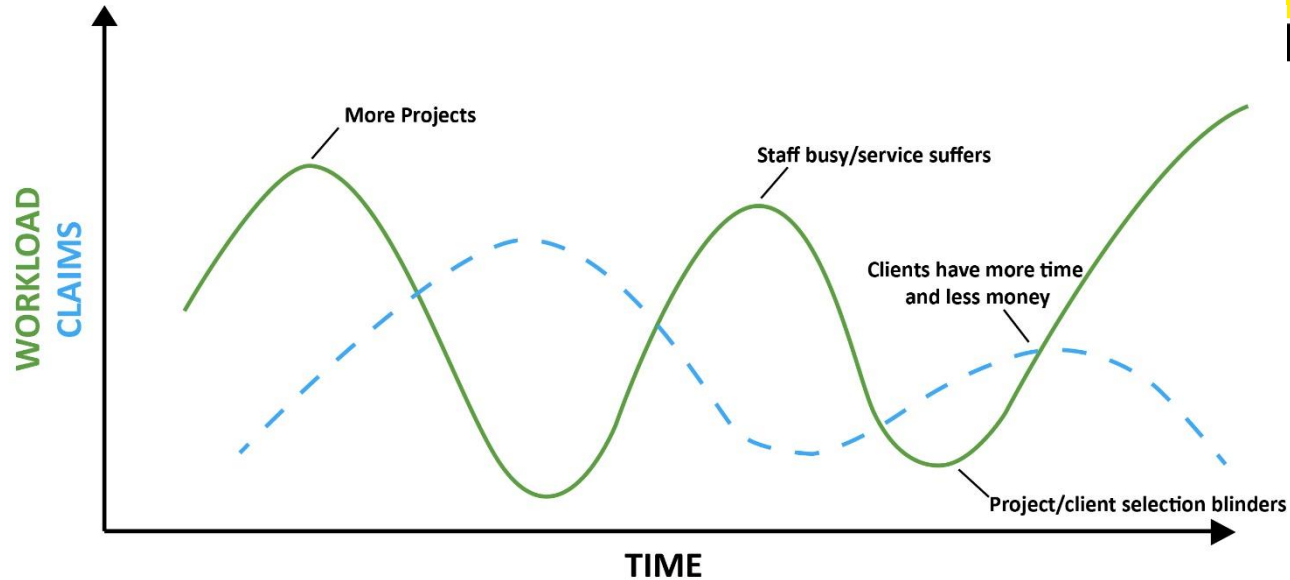
Tune Up Best Practice #8

Consciously build and don't overdraw on our credibility as leaders.



Preventative Maintenance

Guy's theory on correlation of Claims to Market Downturns



Tune Up Best Practice #9

Expect and actively manage claims, especially in a downturn.



Enjoy the Ride

- A career is a long time with smooth rides and potholes
- We're going somewhere new
- It's not about you
- Keep the big picture in mind
- In 2 years, what would we wish we had done now?
- Perfection is not needed
- We service basic human needs & won't go away



Tune Up Best Practice #10

If we commit to do the right things...
for the right reasons...
and at the right time,

we will be able to live with the results.



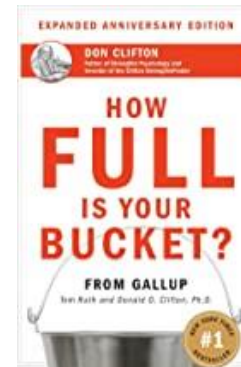
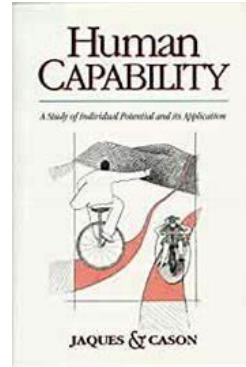
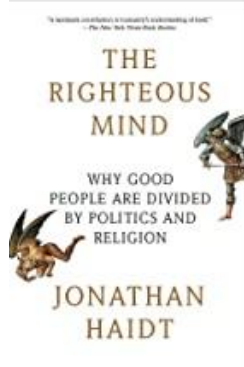
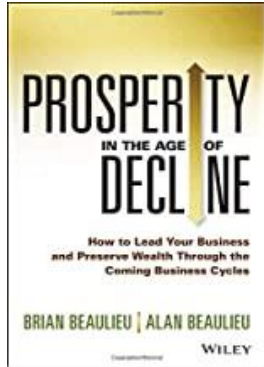
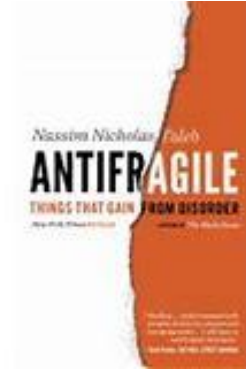
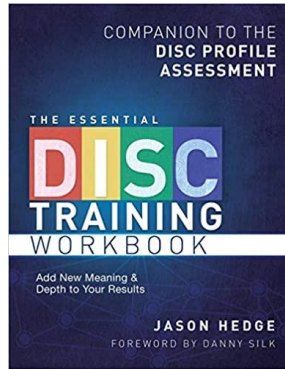
Wrap Up

“It will all be OK in the end. If its not OK, its not the end.”
- John Lennon

- Resolve to persevere until better times
- Act as this crisis will define our careers
- Best practices are a roadmap through change
- Be brutally honest in assessing facts
- It's up to us to lead (but not by ourselves)
- Build our case and good will and get moving
- Don't sacrifice the future by recreating the past
- Embrace the change and strive to emerge stronger



References



Questions

The Tune Up Best Practices



1. Seek understanding to openly and nonjudgmentally navigate the strengths and weaknesses of ourselves and our team.
2. Track and trend a small, trusted basket of KPIs and take action based on the business cycle we are entering.
3. Changing from yesterday to tomorrow requires data, broad perspective and leadership.
4. Timing is as important as action.
5. We need to be financially stable to weather uncertain times.
6. Establish a performance culture and adhere to it in good times and bad.
7. Be deliberate in positioning to serve for the needs of our future clients.
8. Consciously build and don't overdraw on our credibility as leaders.
9. Expect and actively manage claims, especially in a downturn.
10. Right things for right reasons at right time yield peace of mind.

Surveys & PDHs

- After the webinar, registered participants for this “live” presentation will receive an e-mail with a short survey to complete and a certificate for Professional Development Hours (PDHs).
- This presentation will be placed on GBA’s website for on-demand viewing.
** PDHs are not available for on-demand viewing.*

Upcoming Webinars

- **Friday, May 1st 12:00PM - 1:30PM Eastern**
Gripped by COVID-19 - An Economic and Geopolitical Outlook
Past the Media Headlines
Bernard Baumohl

www.geoprofessional.org/event/gba-2020-virtual-spring-conference-and-education-series/

October 2019

Preparing for the Next Recession Now

U.S. economic history is punctuated by recessions. The 2008-2009 recession was the United States' worst economic downturn since the 1930s and is now remembered as "the Great Recession." Nonetheless, some geoprofessional firms avoided major loss of profit; a few even thrived. But those that were not prepared - those that simply hoped for the best - experienced extremely negative impacts.

No one knows when the next recession will arrive, but most economists agree that another recession is certain. Most also agree that we're closer to the next recession than the last one. What does that mean for geoprofessionals?

History suggests that a recession affects the general economy by six to twelve months before the consulting-engineering industry is affected. Accordingly, if history repeats - as it often does - consulting-engineering firms leaders would have little excuse for not seeing a recession on the way and failing to take appropriate, proactive measures.

Are you preparing to prepare, or just hoping for the best?

PREPARE FOR THE NEXT RECESSION NOW
Be ready for the next recession by preparing now, while you still have the luxury of time. Consider implementing some of the following measures.

Create or Update Your Strategic Plan
If you already have a strategic plan in place, when was the last time you reviewed, challenged, and updated it? Now is the time to analyze the plan, ensure the conditions you considered when you established or last updated it still apply, integrate new ideas linked to present conditions and possible future conditions, and prepare your financials and your culture for any needed changes.

Ask yourself if your market mix is viable in a declining/recessionary economy. If you are not appropriately diversified in markets, services, and geography, begin making the needed

Those that were not prepared experienced extremely negative impacts.

Ask yourself if your market mix is viable in a declining/recessionary economy.

GEOPROFESSIONAL BUSINESS ASSOCIATION
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GBA NEWS

GBA Director Spotlight — Ken Johnston (GZA GeoEnvironmental)

Volunteers that serve on the GBA Board of Directors dedicate significant time and energy providing leadership to our Association. Not all our Board Members take the same path to leadership. In this spotlight, read about Ken Johnston's path to leadership as he took a road less traveled.

Read about Ken Johnston's road less traveled:

[READ MORE](#)

2020 Virtual Spring Conference

Although we are not meeting in Florida for our 2020 Spring Conference, the show really did go on. We are ready to deliver, important elements of the Conference virtually including Committee Meetings, the Annual Business Meeting, and conference presentations by noted experts, authors, and leaders.

Business Meeting
GBA will host its annual Business Meeting during which our current President Arthur G. Hoffmann, P.E., D.G.E. and our President-Elect Kenneth R. Johnston will share their thoughts on GBA and its role in helping members manage risk and optimize performance during these challenging times. This is also the time where we officially elect and transition to our new Board of Directors.

Please plan on attending this important meeting on Friday, April 24, 2020 at 2:00 PM Eastern Time.

Register Now for this meeting: Annual Business Meeting

Peer Groups Provide Support in Troubled Times

GBA Peer Review Committee
GBA's Peer Review program has for decades provided member firms the business perspective they need in times of relative normality. In the fall of 2018, GBA's Peer Review Committee launched a related program (Peer Groups) designed to provide continuity and sustain a network for confidential peer perspective on business best practices among participants. The first Peer Group (5 executives from firms with little competitive overlap) was launched and remains engaged, especially

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APRIL 23-MAY 1, 2020
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GEOPROFESSIONAL BUSINESS ASSOCIATION

CASE HISTORY

NUMBER **67**

PROJECT MANAGEMENT

The Client
A contractor-in-charge

The Project
A one-story, light-manufacturing building

Assignment of the GBA-Member Firm
Perform a geotechnical-engineering study to evaluate subgrade soil conditions for floor slab support and perform soil/fill compaction testing during grading.

Background
A development company retained the GBA-Member Firm to perform a geotechnical-engineering study for a 100-acre site intended for use as an industrial park. As part of the study, the Member Firm advanced geotechnical borings at locations throughout the site and performed laboratory testing on soil samples from the borings. The firm

Testing indicated that some of the site soils were highly plastic, the Member Firm's project manager noted this condition in her report.

also advanced borings at specific building sites. Testing indicated that some of the site soils were highly plastic and so could exhibit significant shrink/swell characteristics in response to changes in their moisture content. The Member Firm's project manager noted this condition in her report and advised that special requirements would have to be met for building construction. Grading at the building sites required both excavation and fill placement.

Five months later, the development company retained the Member Firm again, this time to provide construction-materials engineering and testing (COMET) services: observe grading and perform concrete

Construction included the building shell only; the floor slab would be constructed later to meet the needs of the eventual occupant.

testing during construction of foundations for a speculative, one-story light-industrial building. Construction included the building shell only; the floor slab would be constructed later to meet the needs of the eventual occupant.

A manufacturer purchased the building shell about 3 years later and hired a con-

structor-in-charge to complete building construction. The manufacturer required a minimum modulus-of-subgrade reaction, k_v , of 200 pci for the building's floor slab. Noting that some of the subgrade soils exhibited significant tension cracks, some as deep as 15 feet, the contractor-in-charge contacted the Member Firm, seeking its opinion about the soil's suitability to achieve a k_v of 200 pci.

The Member Firm assigned a project manager who had not been involved with the services previously performed for the development company. The project manager

The Member Firm assigned a project manager who had not been involved with the services previously performed.

prepared a plate load test proposal whose general conditions included a provision limiting the Member Firm's professional-negligence liability to \$50,000 or the fee, whichever was higher. The contractor-in-charge signed the proposal and the Member Firm conducted the test.

Results of the plate load test indicated a k_v of 150 pci, requiring the floor slab's thickness to be increased to 10 inches in some areas. The Member Firm's project manager noted in his report that desiccation caused the tension cracks that contractor-in-charge personnel had observed. He recommended that the soils, to be acceptable, should be reworked and recompacted (no depth indicated) and that the contractor-in-charge should place a layer of crushed stone over the exposed subgrade soils to help reduce drying. The project manager also wrote that he had had the plate load test performed in areas where the soils had been scarified, moistened, and recompacted specifically for the test.

The contractor-in-charge accepted the Member Firm's report and then retained

Future GBA Conferences

GBA FALL CONFERENCE / OCTOBER 22-24, 2020

MINNEAPOLIS

HYATT REGENCY
MINNEAPOLIS HOTEL



GBA SPRING CONFERENCE / APRIL 22-25, 2021

SAN DIEGO

MARRIOTT MARQUIS / SAN DIEGO MARINA



GBA FALL CONFERENCE / OCTOBER 21-23, 2021

HENDERSON, NV

WESTIN LAKE LAS VEGAS RESORT & SPA / NEVADA



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Future Fuel for Backlog?

- Retail
- Commercial
- Industrial
- Institutional
- Distribution/Logistics
- Housing
- Energy
- Transportation
- Utilities
- Metropolitan vs rural
- Government spending

