Embedded System Engineering
Networking for Newbies

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Introduction

Howdy,

I don't know much about embedded systems engineering and I don't work in the field. After speaking with a frustrated new grad who recently entered the field, I decided to collect my thoughts about how I would approach social networking and outreach as:

1) **A recent graduate entering the field**
2) **A junior employee wishing to move up at work**
3) **A mid-career professional wanting to stand out in the field**

Each of these individuals would benefit from the following three pillars: Creativity, Networking, and Massive amounts of hard work.

Creativity

Massive Amounts of Hard Work

Networking

As such, I present to you a comprehensive networking methodology.

The steps that follow are simple, straight-forward, and only require an internet connection, a phone, and perseverance.

Ambition guides your desire to work for a company you can add value to. A company that can give you a feeling of purpose.

This document can help you with this mission.

If nothing else, you will gain a clearer view and understanding of your current industry.

My promise to you is this:

     If you truly love embedded system engineering **AND** you put even 10% of this document's instructions into action you will move yourself forward and you will gain a system that allows you to continue to advance through the next decade.

This works for several fields, by the way. If you find errors or feel that some things have been left out, please feel free to reach me at slowkaizen.com.

Basically, it comes down to this:

- It is likely that you have yet to establish a recognizable brand in your field.

- If you want to build brand and relevance, you must create content that others can consume and recall.

- Writing a book is a nice idea but is not necessary as a first step. This takes time and can be carried out later this year or next.

- Also, if you want to promote the book you write, you will still need to create and distribute plenty of content about the book topic and yourself.

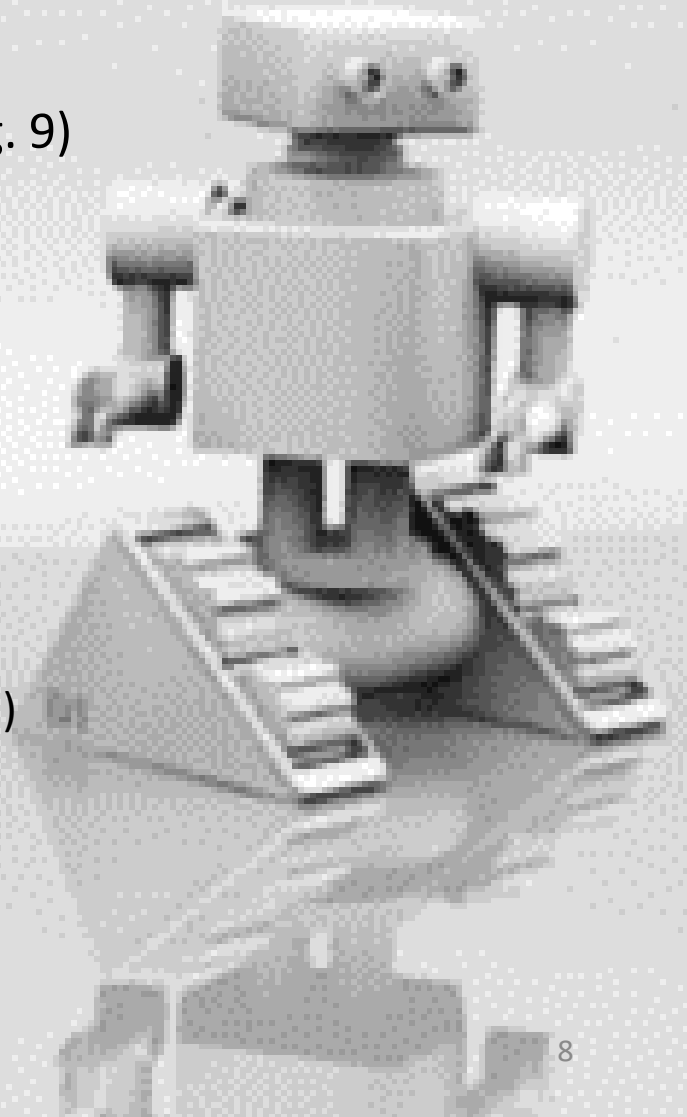- Considering all the above, you might as well start promoting yourself today.

I operate under a very simple paradigm: Anything interesting or useful that I read or come across today would also be interesting and useful to the version of me from 10 years ago.

Right now, there is a version of you 10 years younger who would love to peak over your shoulder, see what you are seeing, and hear what you are hearing.

It is not super difficult to document the things you learn each week and post it to the world for others to gain from.

Chapters:

Chapter **1.** Embedded Systems Swipe Sheet

While I've done some of this work for you already, it's better if I teach you to fish rather than give you the fish.

The basic steps involve finding resources around the topic of "embedded system engineering" (I also included some resources for "distributed computing" and "ubiquitous computing").

These will include blogs, forums, podcasts, events, etc.

The following are just a few items I was able to find with some quick google searches (google: "embedded systems blog" or "embedded systems event").

Of course, don't forget to search:
- YouTube
- Twitter
- Instagram
- Quora
- Facebook
- TikTok
- LinkedIn

Search general to specific and use hashtags (here's a hint...start with "#embeddedsystems").

Blogs:

- https://www.embeddedrelated.com/blogs.php
- https://www.edn.com/about-us/
- http://www.ganssle.com/
- https://embeddedgurus.com/embedded-systems-bloggers/
- https://bootlin.com/
- https://www.embedded.com/
- http://doafco.com/
- http://www.esacademy.com/blog/
- https://blog.feabhas.com/
- http://yosefk.com/blog/
- https://hackaday.com/
- https://embedsysweekly.com/
- https://www.drdobbs.com/blogs/embedded-systems/archives
- https://www.embedded-computing.com/guest-blogs/expert-predictions-for-2020-part-5-evolution-of-engineering
- https://www.embeddedadvisor.com/

Events:

- https://www.embedded-world.de/en
- https://www.mwclosangeles.com/
- https://amdsummit.com/
- https://designcon.com/
- https://www.embeddedtechconf.com/
- https://embeddedvisionsummit.com/
- http://fit.uet.vnu.edu.vn/atva2020/
- http://iswc.net/iswc20/
- http://voyager.ce.fit.ac.jp/conf/cisis/2020/
- http://ubiquitousrobots.org/2020/index.php
- https://isorc.github.io/2020/html/index.html
- https://www.ruhrsec.de/2020/

Podcasts:

- https://embedded.fm/
- https://www.embedded-computing.com/embedded-insiders
- https://player.fm/series/embedded-system-podcast
- https://podcasts.apple.com/us/podcast/advantech-embedded-podcast-center/id1326252579
- https://www.stitcher.com/podcast/georg-lohrer/mastering-embedded-systems
- https://player.fm/series/software-engineering-radio

This is already too much information!

This is not a weekend project. This is an **EVERY-weekend** project.

Start simple. Check out one blog.

If the only thing you gain from this document is to start following one new blog and one new podcast you will almost certainly learn more than you would watching Netflix for two hours a night.

Also, you will have some fun information to contribute to others at work and at networking events.

Build yourself. No need to rush.

If, however, you are still hungry for more, then feel free to search Amazon.com for books, courses, etc.

If it's out there, go ahead and consume it.

"But how will reading random blogs and stories help me get ahead??"

Please see chapter 2.

For a swipe sheet unique to your own industry or niche, get in touch with me at slowkaizen.com.

You can also make your own with this template:

Bo's Networking-From-Your-Couch Template

Take one and pass it along.

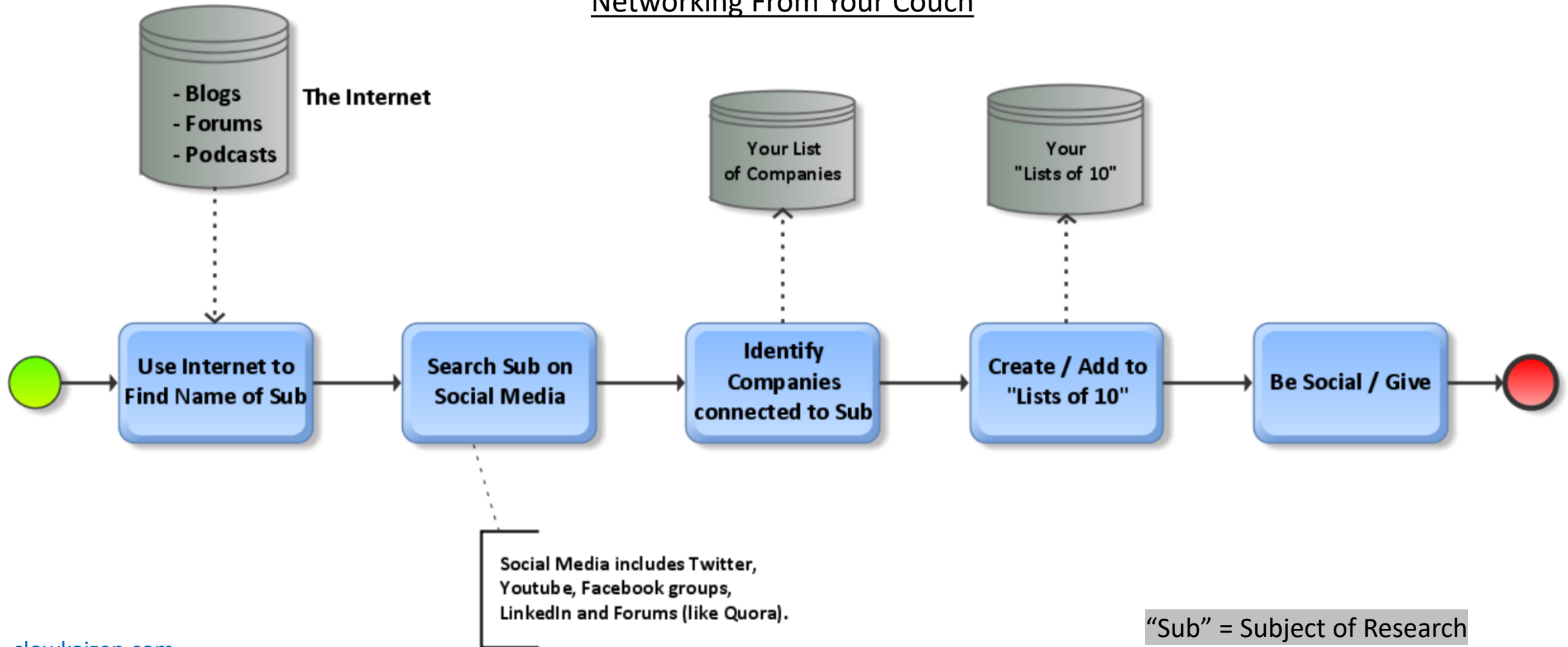# Chapter **2.**   Networking from your Couch: The Game Plan

Companies are made of people. Almost certainly, there is a <u>type of person</u> you want to become in your industry.

The general networking mantra goes: **if you want to hold a new position then you should surround yourself with people who already hold that position**.

You're the average of the five people you spend the most time with. - Jim Rohn

The model below outlines the general procedure:

Networking From Your Couch

The Internet
- Blogs
- Forums
- Podcasts

Your List of Companies

Your "Lists of 10"

Use Internet to Find Name of Sub → Search Sub on Social Media → Identify Companies connected to Sub → Create / Add to "Lists of 10" → Be Social / Give

Social Media includes Twitter, Youtube, Facebook groups, LinkedIn and Forums (like Quora).

"Sub" = Subject of Research

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So, whether it's Project Manager, Partner, VP, CTO....does not really matter.

Whatever the position, title, or level of responsibility you seek, I'm going to refer to it as "Sub" (short for "Subject of Research").

While checking out some blogs and podcasts on a regular basis is super informative and fun, the real value of the Embedded Systems Swipe Sheet goes much deeper.
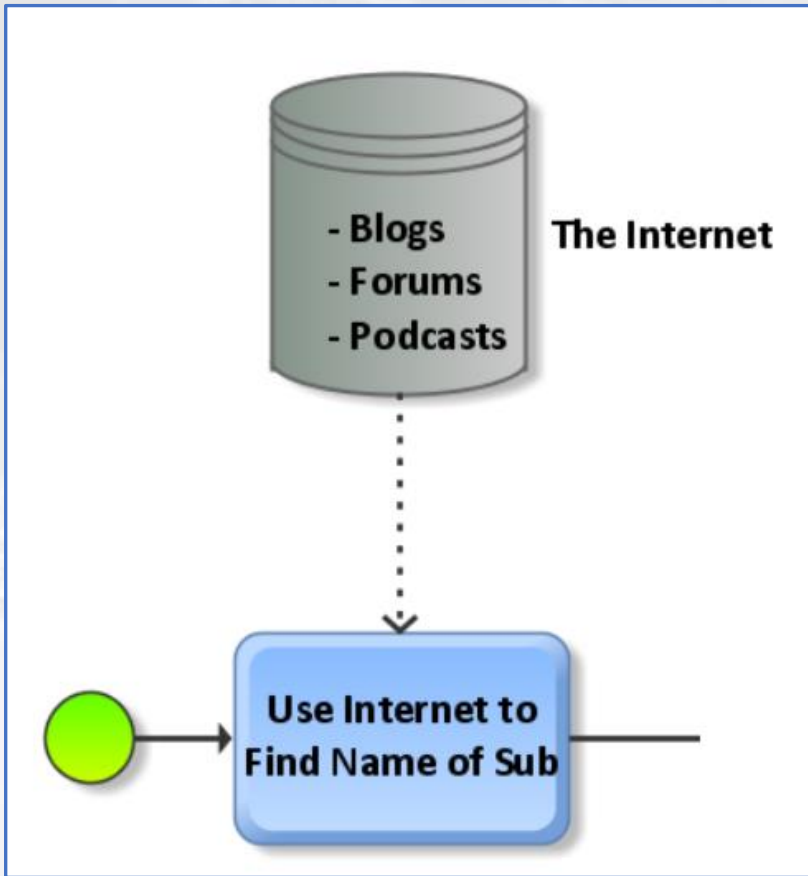
Every article, podcast episode, and blog will be written by, produced by, hosted by, and/or refer to specific people.
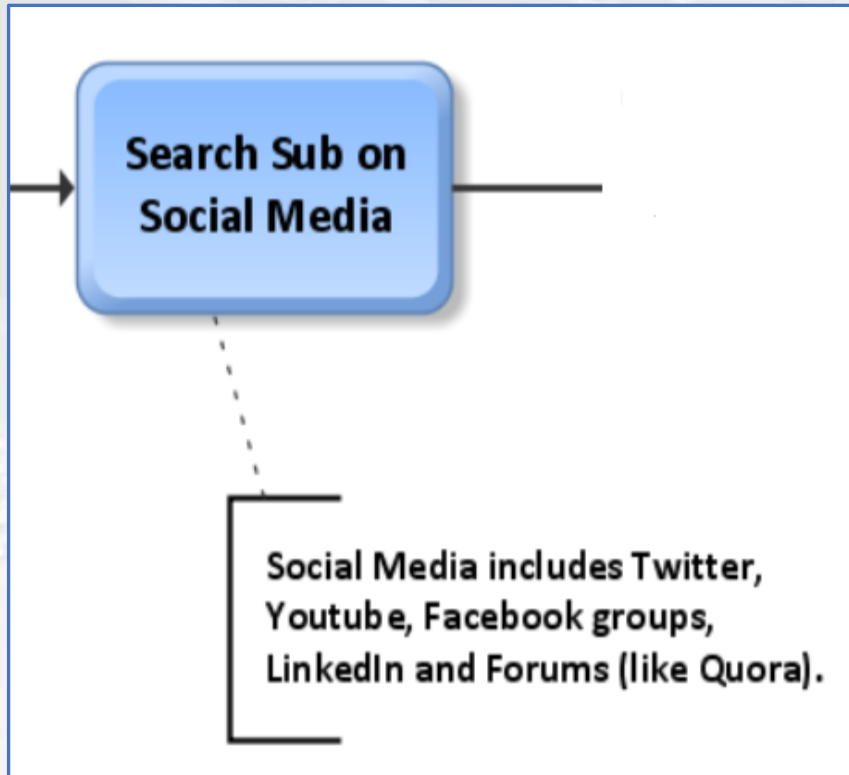
Your task is to learn about those people – these are your Subs.

The whole point of this is to network and bring value to others.

So, let's say there is an article you found interesting and you are searching the author on social media. Maybe they are in search of some type of professional consultant for their firm.

Or maybe they asked an open-ended question about leaf blowers. Take 15 minutes to find an answer to their question and post it to their page. It can be this simple.

Often, they will not state a specific need. A simple comment about what they post works as well. Your goal will be to learn and engage (a.k.a. – be social).

Search Sub on Social Media

Social Media includes Twitter, Youtube, Facebook groups, LinkedIn and Forums (like Quora).

For example, let's say you land on the page of a VP who works at a tech company.

You really don't have to wonder what they want. They want sales.

So better questions to ask yourself are:

- "Who are their current clients?"
- "Who are their potential future clients?"
- "What are the needs/concerns/desires of those clients?"

Why does this matter??

You are not solving the world's problems. But you are becoming much more aware of them.

Also, you will start to notice trends.

If you want to be a Director of Client Solutions and you notice that many of the Directors of Client Solutions are discussing the same technology or a recently released working paper, then you benefit from finding out about it now (rather than waiting until a conference later this year when people ask if you've read it).

You are finding information. Get out there and become informed.

Next you want to begin building your **List of Companies**.

Create a document or spreadsheet and start adding company names. Include:

- Companies your Sub worked for or associated with.
- Companies they recently started working for or previously left.

This should open your world to some of the different companies out there....many of which you may have never heard of.
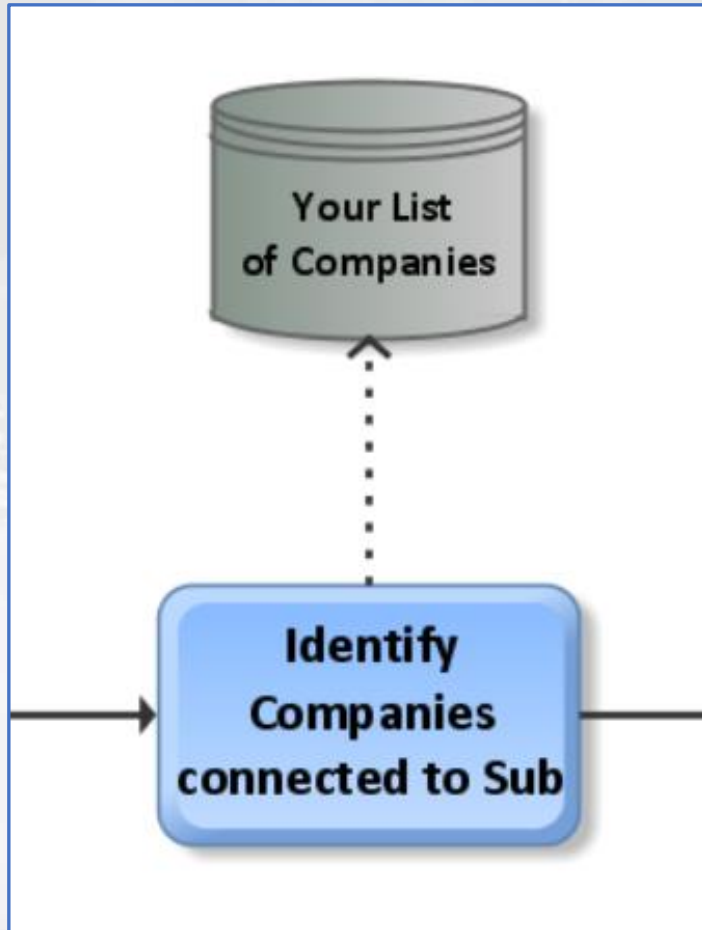
Why does this matter??

Can you name 20 companies you'd love to work for? Can you name 10?

Seems like something we should all be able to do, right?

Well, if you collect a list of 400 companies and you spend 15 minutes every other day going through a different one of those 400, you will most certainly develop a list of at least 10 that do some work you find truly amazing.
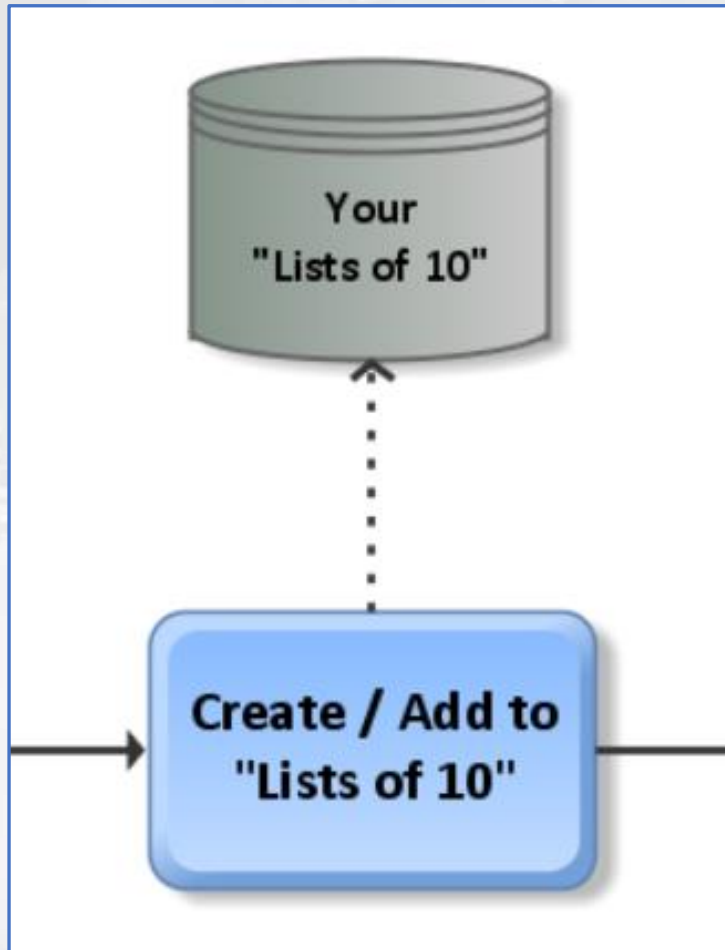
This yields a major networking opportunity (discussed later).
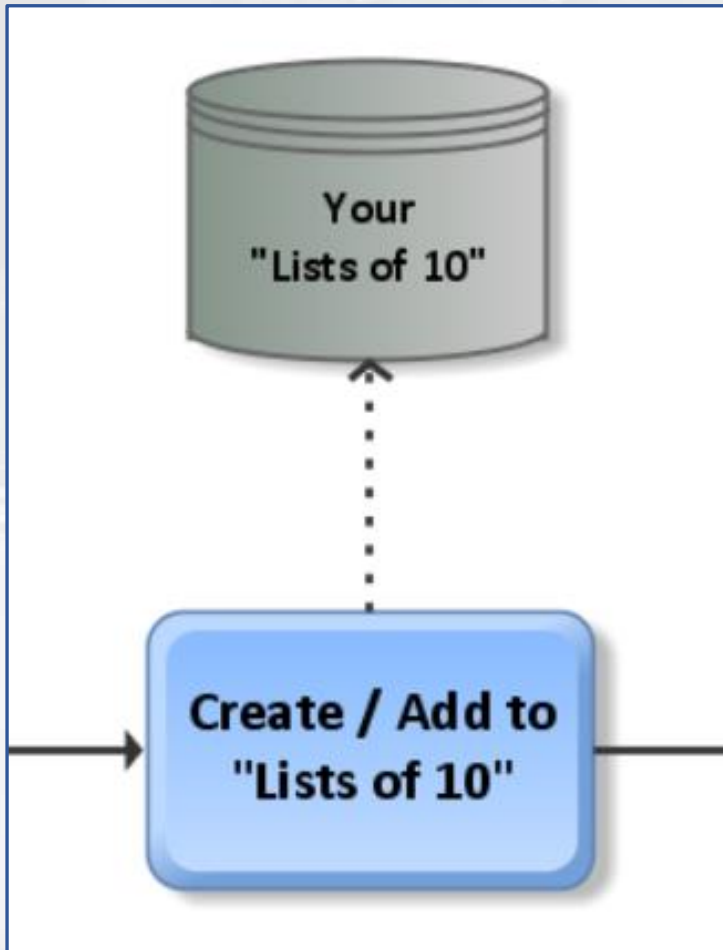
Next you will begin to create your **Lists of 10.**

This is an on-going set of lists that you keep and continue to add to as you see fit.

When I say "the company" I mean your company, the Sub's company, or any related company being discussed.

They can include:

- 10 security issues facing the company's current/future product

- 10 opportunities to upsell clients on current/future products or services

- 10 skills or attributes that would improve newly recruited members of the company

- 10 alumni groups connected to the Sub or company
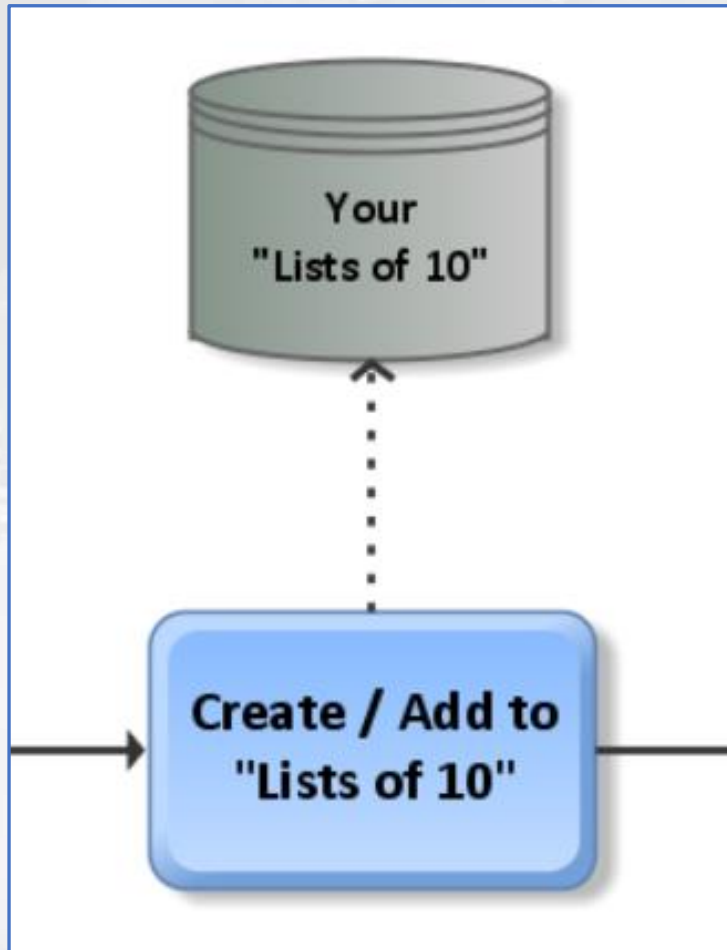
- 10 legal issues facing the company's current/future product or service

- 10 questions that clients have had or will have (and the responses as well, if possible)

- 10 associations connected to the Sub or your industry or both (and the officers in those associations)

- 10 schools the Sub is connected to or recently recruited from (I will discuss this later as well)

- 10 certifications that the Sub (and/or other Subs) have acquired or is pursuing

Why does this matter??

This information may seem trivial but what I have found is that it can be super useful.

From the random industry happy-hour, to the short-notice phone interview with a future employer, to the impromptu client briefing.

These **Lists of 10** expand your view of the industry landscape and the major players in it.
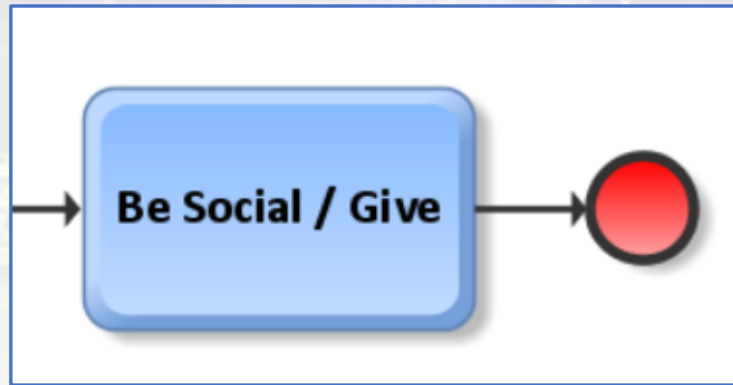
Finally, you want to begin giving value and being social.

This involves commenting on things you find interesting and answering questions when and where you can.

Helping people and being social without asking anything of them.

Think of it like a conversation at a party. You are just being part of the conversation.

If you would like to know more, google "GaryVee 1.80 Strategy".

If you were to stop here, you would have more than enough to keep you busy for the next few months.

If you stopped here, one or more of the following would be true and you would have found:

- A new favorite podcast to listen to
- One or more YouTube channels to follow
- A website that discusses something you have done or are about to do at work
- Companies you never knew existed
- Events that may be worthwhile to attend – and maybe even speak at

Before I go into the next chapter, here's a brain dump of more networking tips.

These steps are especially directed to those of you looking for a new job.

A. Let's say you collected the names of 100 companies. Maybe you are fascinated by 10 out of those 100. Now you can dig deep into those 10.

- What is it that you like and respect about them?

- Do they do what you care about?

- What can you find out about the work they say they do vs. the work they actually do?

- What can you find out about what they say it is like to work there vs. what their current and previous employees say it is like to work there?

Using LinkedIn, find out who else besides the Sub works there.

- Any alumni from your alma mater?
  - Consider reaching out for informational interviews

- Do they have open positions?

- Who recruits for them (via LinkedIn)?
  - Consider reaching out to these recruiters for informational interviews

- Do they provide internships?

  This is a cool bit of information. A list of companies offering internships may not interest you, but it may be incredibly useful as:

  - A resource for folks you graduated with
  - A resource for soon-to-be grads at your alma mater
  - Random content to give out to the world and to future Subs.

  Consider passing this on to previous professors (who, by the way, you should probably stay in touch with).

B. Use Twitter (or a similar social app) to search for insights.

Try searching the following terms in Google and on Twitter Search (enter different company names and states):

- [company name] "twitter"
- [company name] "university recruitment"
- [company name] "university" [state]

This can provide direct insight into recruiting events that have taken place.

Keep an eye out for retweets. Often, the company officers who have been directly involved in recruiting events will share and retweet. They may be more approachable than those who have not.

Always remember, if you reach out and someone suggests contacting the HR department **you can always reply:**

"Certainly. Would you please provide an introduction to the individual in HR with whom I should connect?"

Don't forget to search different hashtags e.g. –

- [hashtag] + [school]
- [school] + [hashtag]
- [hashtag] + [state]
- [country] + [hashtag]

Also, schools may appear under different names. "Rochester Institute of Technology" may appear under "RIT".

C. I mentioned collecting a list of 10 Associations your Sub is connected to.

- Do any of these associations publish a list of award-winning companies?

    - If they're winning awards, it's probably because they're growing. If they're growing, they are probably hiring.
    - Again....

        - Who works in these companies?
        - Where did they previously work?
        - What recruiting events were they recently involved in

- Do these associations offer opportunities for leadership roles.

  - This may be an amazing opportunity to jump into a resume boosting, network growing role

- Who are the officers within these associations?

- Are these officers or the associations themselves putting out any information or content online?

These officers and other association agents should be added to your Sub list for future searches.

Don't be surprised if you find out that some of these officers are also speakers at events, and producers of online content, and directly involved in recruiting events.

This is when you will really start to see the lay of the land.

Come back to this section in the future when you find yourself sitting at home saying, *"I'm not sure who I should be networking with."*

The only reason I put this slide in was so that your eyes could adjust to the increase in brightness.

I hate when presentations go from dark to super bright with no warning.

Tell your retinas I said they are welcome.

Chapter **3.**   Getting Help and Following Up

This is a short section. The title says it all.

A network is not created when you reach out to someone for something. A network is created when **you** connect **other people** with each other.

The point of socializing with different people is to create a comfort with strangers. As time goes by (usually not long), someone will reach out to you with an ask.

How nice it would be if you were able to connect them with someone else in your network in a way that was mutually beneficial to them both.

"Dig the well before you get thirsty."
- Jordan Harbinger

Connect with many people – not because you need something.

Connect with many people because you never know how, where, or why you may end up helping someone.

You don't have to do this alone.

If you have a colleague in your field that you are close with, this is a wonderful task to share with them. You could maintain a Google doc that you both contribute to that revolves around your specific areas of expertise.

If you really want to go next-level, you could hire virtual assistants to help you with some of these tasks.

Personally, I'd say to avoid that route, at least at the beginning. There is so much to be gained by you doing this research yourself and not farming it out to others.

There are plenty of techniques out there for follow-up. I would suggest looking into a personal CRM if you don't already have a method that works for you.

Whatever you decide, **prioritize follow-up**. Keep them on your mind and keep you on their mind.

"Hey, it's been a while. Just wanted to drop a line and see how things are going with you? No need to reply. Loved your latest blog post. Keep up the great work and hope to see you at the big conference in October."

KISS - Keep It Super Simple.

Chapter **4.**   Frequently Attributed Concerns (FACs)

What's in it for you and why would you take the time to create this?

One of my gifts has always been to brainstorm on behalf of others.

One thing that has become clear to me from the short time I've spent on social media is how much all of you who aren't on there are missing out.

And also, I like to create content.

Why would you write about a field you have no involvement in?

Because as so often happens, the field itself is less interesting than the personalities of workers within the field.

We all get busy. It's so easy for us to go to work and come home. We know we should practice some outreach. Instead, we wait for the next conference.

Suddenly, 3 years has passed and we never followed up with any of the folks we met. A few business cards is all we have to show for the tiny effort we put in.

Whatever field you are in, this stuff works.

Do you even do this yourself?

Yes. In fact, most of my excitement to produce this comes from years of working to convince clients and colleagues of the benefits.

I realized that many people are interested in performing more outreach, networking, and industry research. Often, they just don't know what steps to take.

Why are you so sure this works?

The only thing I am sure of is that new information about your industry will show up on your phone or computer screen before it shows up on your desk.

Which professional would you rather be?

- The professional that waits for your boss/client to inform you about updates in the field?

- Or the professional that keeps your boss/client informed about updates in the field?

I don't have time for all of this, I already have a lot on my plate?

I believe it. We all do.

Spoiler: you are only going to get busier.

That's the beauty of networking through social media. You get more information sooner and you learn to consume it faster.

But if you are too busy, no worries. Pass this on to one of your colleagues.

Maybe they will benefit from it.

Honestly, I just don't want to do any of this.

You should not have to do something you do not want to do.

This is not for everybody. This is for those who have the desire, motivation, and fortitude to see major changes in their work life.

Thanks for taking the time to read this.

Please pass this on to one of your colleagues.

Maybe they will benefit from it.

All this social media is unnecessary. My best bet is to work hard and be good at my job.

Who would you prefer as a co-worker?

- You?
- Or a more informed and connected version of you?

This does not replace hard work and forward momentum. This is in addition to it.

Keep in mind that some day your job and future employment may require such efforts as I have outlined in this document.

I tried this for a month. No one has replied to my contacts and no one has gotten back to me.

Have you learned anything?

Have your actions moved you forward in your understanding of your field and your work?

If the answer to both these questions is "Yes", then I'd say you're winning.

As far as specific outreach, I would be curious about how many people you have contacted or how you are contacting them.

Contact me at slowkaizen.com if you want to discuss more.

How exactly do I monetize all of this?

By not trying to.

The opportunities arise when you create a strong network of real friends throughout your industry.

Keep pace with changes in your field and become a trusted resource to as many people as you can.

I already go to conferences. Nothing can replace face-to-face contact.

I'm creating this during Covid-19.

Conferences all over the world have been cancelled. Most people are sitting at home watching tv.

Who would you rather hire?

- The version of you that sat at home and watched TV waiting for conferences to open back up?

- Or the version of you that took an hour each week to build and grow…and **STILL** planned on attending the conferences?

I don't like social media.

I never used social media until recently.

I am still not the biggest fan.

But honestly, I am too busy to NOT use it.

- It is faster
- It is more targeted
- It gives me an opportunity to connect and learn in a way that I never could before.

This won't work for my position. I'm too low down / high up in the company to be doing this stuff?

Your current and future clients, bosses, hiring managers, division heads, employees, consultants, and colleagues are out there in the world.

The internet is easily the fastest way to reach them and learn what's on their minds.

If you believe there is no insight you can gain through social channels online, then no worries and thanks for reading this.

Still….I would bet you a taco dinner that at least one of your competitors is successfully leveraging one or more of the methods I've outlined here in a way that you are not. Just saying.

Ok, I did everything you said. I have a ton of information. Now what am I supposed to do with it all?

If you are growing as a connected individual and employee in your field, I would say you should celebrate and keep going.

This is designed for people that have love and ambition for their field of work….so you should be loving all the cool stuff you are learning.

If you have tons of info and you are not sure what to do with it, you can always give back to the field. Post online, pass it on to others, or sign up to speak at an upcoming conference.

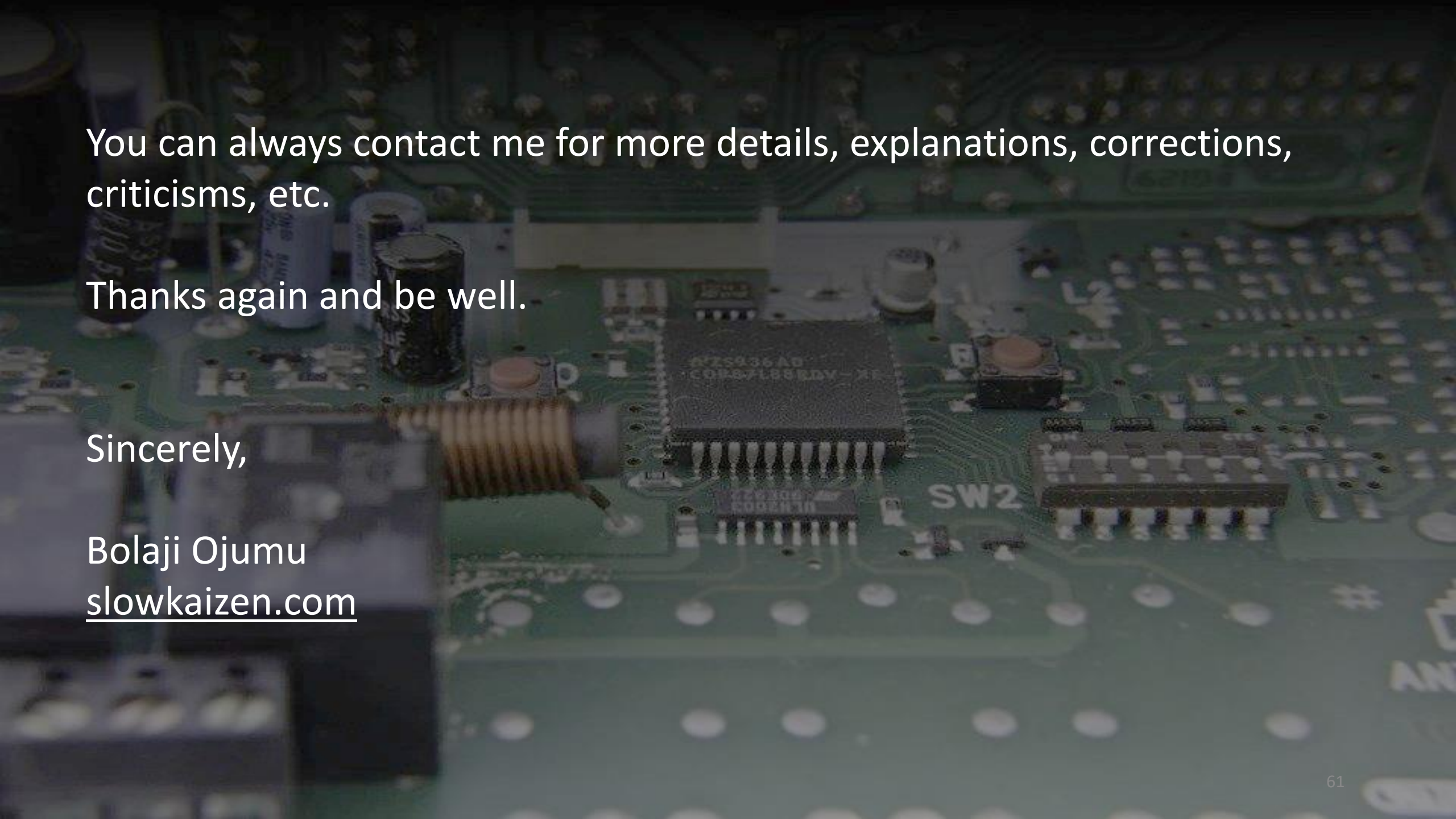If you want more ideas, contact me at slowkaizen.com.

Thanks for taking the time to read this.

I did not produce this because I was bored or because I had too much time on my hands.

I produced this because I have seen the power of giving to others and I remember being where you are.

Take some of these steps, learn, grow, and help others.

If you want to raise your game, raise the game of those around you.

You can always contact me for more details, explanations, corrections, criticisms, etc.

Thanks again and be well.

Sincerely,

Bolaji Ojumu
slowkaizen.com