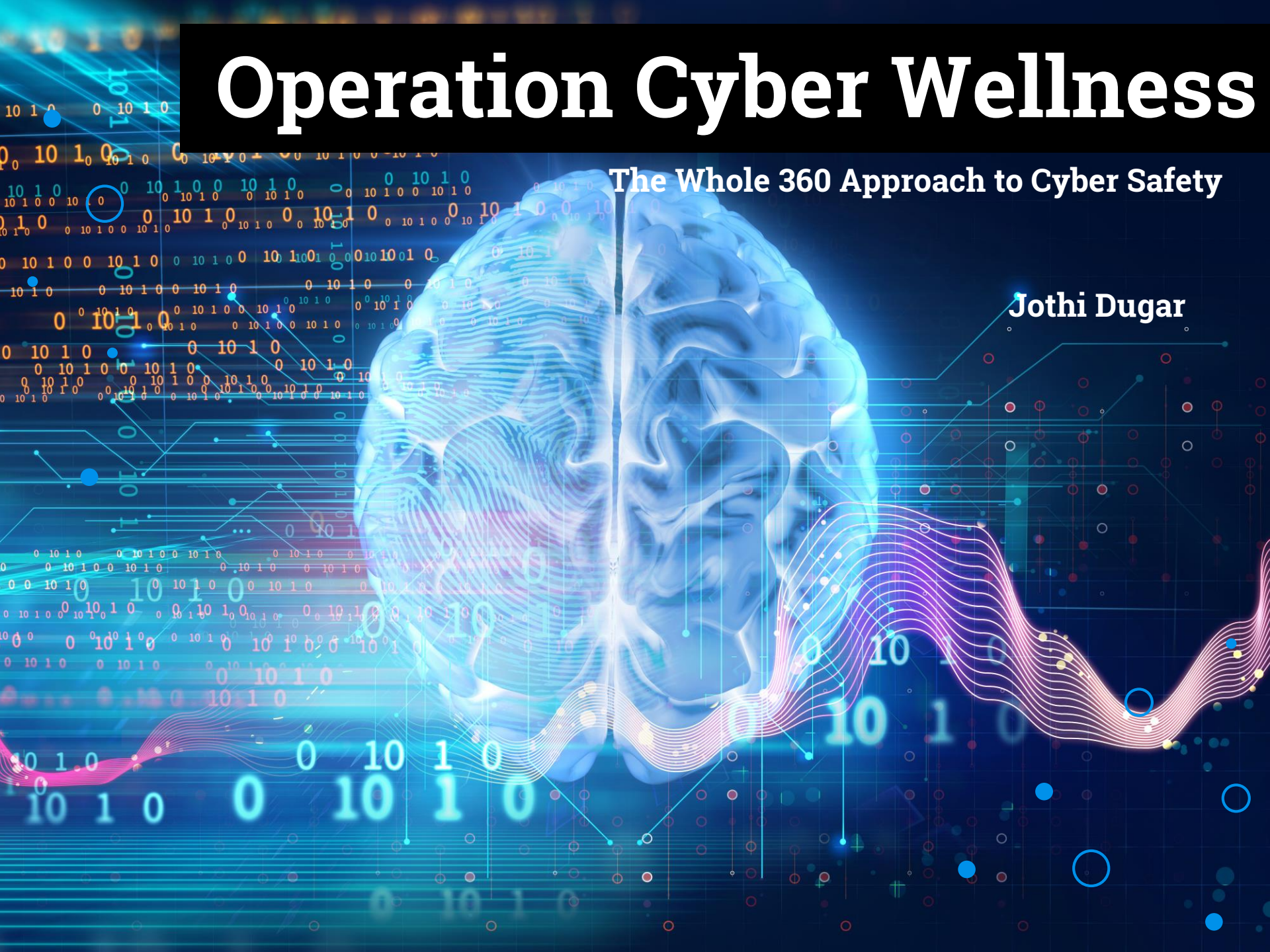# Operation Cyber Wellness

The Whole 360 Approach to Cyber Safety

Jothi Dugar

Hello!

I am Jothi Dugar.

The million little parts that make up me

- ○ Happily married and mom of three wonderful kids (2, 5, 8)
- ○ Dance Director of a children's dance school
- ○ Owner of a holistic wellness practice
- ○ CISO at the NIH Center for Information Technology

Why does this matter?

Short Personal Story

Complication after my third child due to an incompetent OB/GYN

○ Double hernias
○ 12" C-section incision
○ Massive scar tissue damage and build up
○ Large diastasis recti (abdominal separation)

Took almost two years to recover naturally without additional surgeries and invasive procedures

What does this have to do with anything?

Physician Burnout Epidemic vs. Cyber Professionals Burnout

According to a recent medical and IT surveys:

- Too many bureaucratic tasks

- Too many hours at work

- Lack of respect from comrades, patients, and others in the work environment

- Increased computerized technology (e.g., EHRs)

- Never Ending Work; Problems keep coming

- Feeling like a cog in the wheel, compensation, government regulations, maintenance of certifications, etc.

- High adversity: mistakes are costly, every task is mission critical, hyper vigilance is default state

- "Doctors feel overwhelmed, tired, don't see the value of what they do, and want to just get through their day – not invested in the patient"

- High pressure = high stakes = high risk of depression and mental or physical illness

Medical errors is the 3rd leading cause of death (250,000 deaths per year).

Cultures that foster burnout costs companies 10x more than absenteeism, which already costs $150B per year.

More than half of physicians AND Cyber professionals globally feel burned out.

What Is the Answer to This Epidemic of Burnout?

CJ BURTON

Workforce Well-being: "The Whole Person Comes to Work"

Financial Well-being

- Managing your economic life to reduce stress and increase security

Physical Well-being

- Good health and enough energy to get things done daily

Social Well-being

- Relationships in your life

Community Well-being

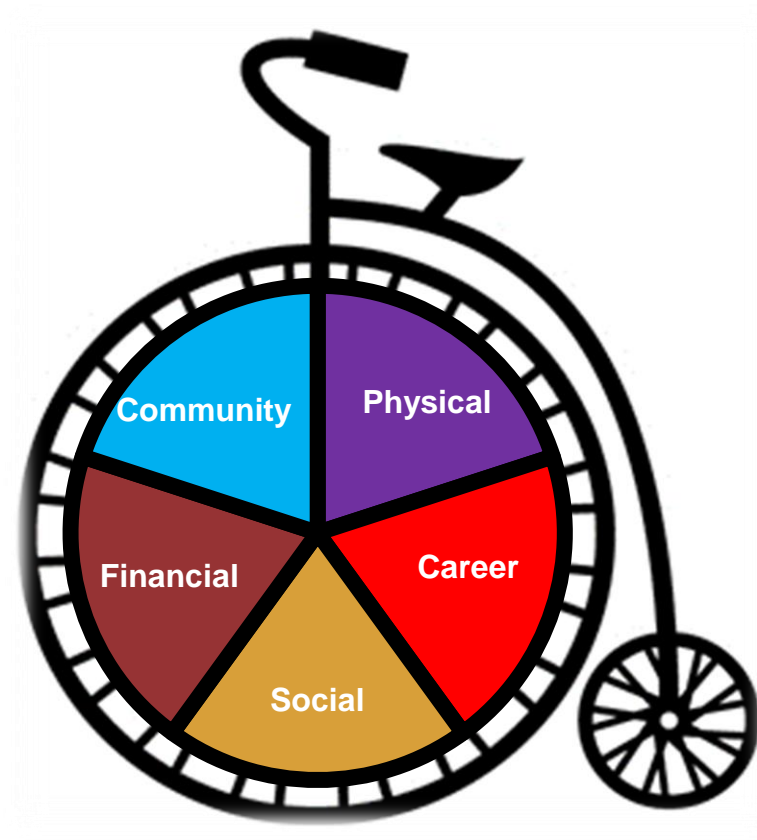- Engagement and involvement in the area where you live

Purpose/Career Well-being

- How you occupy your time/liking what you do every day

Workforce Well-being

The five essential elements of workforce well-being are interconnected and interrelated.

Is this your well-being "life bike?"

Or is your "life bike" like this?
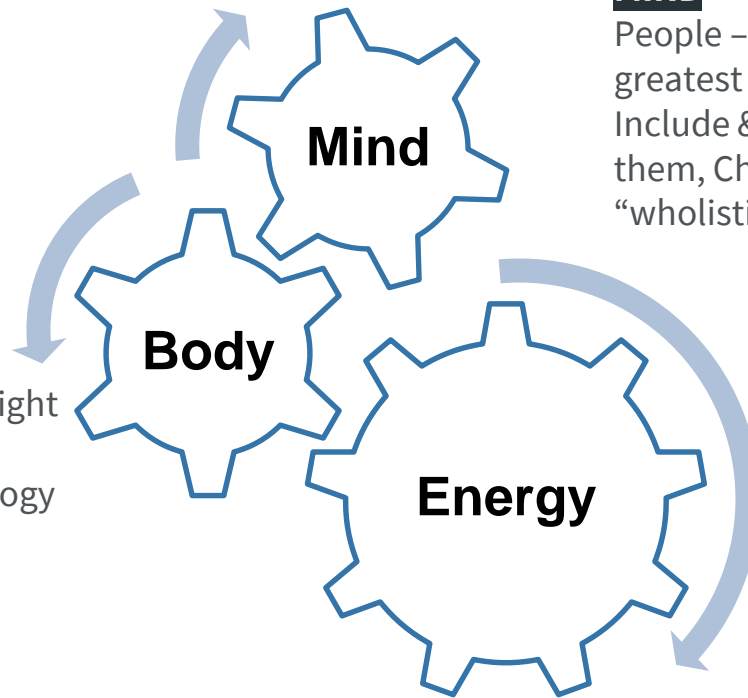
Question: How far will this bike take you?

The Integrated Approach to Cyber Wellness

It's all connected!

Exploring a MIND-BODY-ENERGY connection to Cyber

MIND
People – YOUR most important & greatest assets (TAKE CARE OF THEM); Include & Engage all roles, Empower them, Change the Mindset/attitude to "wholistic" thinking

Mind

Body

Energy

BODY
Technology – integrate the right tools for the right purpose – think holistic; avoid Technology overload; Use technology to automate admin/repetitive tasks

ENERGY
Energy/culture of the organization (MUST start w/ Leadership):
- Diversity
- Social/emotional maturity
- Freedom to innovate and create
- Empowerment of staff

You cannot affect one part without it affecting the other parts

Wellness Exercise – Let's try this together!

Mind-Body-Energy Audience Exercise

Exploring Your Own Mind-Body-Energy Connection:

- ○ Sit comfortably with your back straight
- ○ Keep your left hand palm facing up on your left thigh loosely under your stomach
- ○ Take your right hand – bend the pointer & middle fingers down
- ○ Press your thumb on your right nostril to close it – take a deep breath (inhale and exhale) only using your left nostril
- ○ Press your ring finger on your left nostril to close – take a deep breath (in and out) only using the right nostril
- ○ Continue for few minutes
- ○ Think of a time where you felt truly grateful and overloaded with joy and happiness; how did you feel; bring those emotions back into you

Mind

Body

Energy
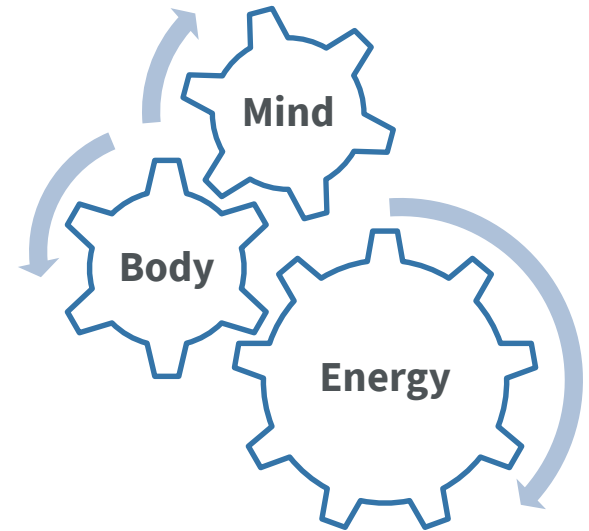
It Takes a Village – The Integrated Community Approach

Alone we can only do so much, but Together we can change the world

We must use an integrated, holistic, and community approach at ALL levels and engage all types of organizations and people to get ahead on Cyber.

○ Move away from fear based decisions and "bandaid" solutions

○ Cultivate a culture of "togetherness" and no judgements (finger pointing) within your organizations and between them to form a holistic community bond

○ Incorporate Diversity [gender, cognitive, culture, race, age, skills, etc.]

○ Raise the Social and emotional maturity of organizations and people

○ Learn & teach the Art of communicating: understand the OTHER person and speak the right language to the right person

○ Understand the Psychology behind People (e.g. understanding the wiring/dynamics behind men and women)

○ Finding the root of the symptoms and solving the root cause – not the superficial symptoms

Science of Diversity

Thinking Style

Language

Ethnicity

Religion

Perspectives

Experiences

Nationality

Geography

Race*

Culture

Skills

Gender*

Physical Abilities

Sexual Orientation

Disability

Age

Socioeconomic Status

Cognitive Diversity – Diversity of Thought

Increases:

○ Creativity

○ Search for novel perspectives/information

○ Decision making skills

○ Problem solving skills

○ Financial decision making

○ Friction that enhances deliberation and upends conformity

Recognize and mitigate Implicit Bias – Barrier to Diversity & Inclusion (can be mitigated)

Levine, S. S., Apfelbaum, E. P., Bernard, M., Bartelt, V. L., Zajac, E. J., & Stark, D. (2014). Ethnic diversity deflates price bubbles. *Proceedings of the National Academy of Sciences, 111*(52), 18524-18529

Sommers, S. R. (2006); ** Levine, S. S. (2014 PNAS)

Gender Diversity in Cybersecurity: Where Are Our Leading Ladies?

Pure Facts for Women:

○ Women make up 57% of the U.S. workforce in 2018

○ Out of the Computing Workforce:
   ○ 3% African American women
   ○ 6% Asian women
   ○ 2% Latina

○ Predicted Gap in all Cyber Jobs Globally – more than 2.5M by the year 2020

Pure FACTS for Young Girls/Students

○ In Elementary School, girls lose interest in STEM by 4th grade

○ 30% of female students worldwide chose STEM related fields of study

○ 1/3 of students' social media posts of girls in STEM were sexist; most were shared by girls themselves!

Why Not STEM Jobs?

What is stopping women from moving into tech fields – especially Cyber?

- **#1 Lack of Confidence & Fear of Failure**
- **#2 Lack of Advocates/Mentors to Look Up To**
- Unconscious Bias, Gender Bias, Stereotypical Notions, Gender Inequality in STEM Jobs
- Harassment at all levels and ages (Even Executive levels) – broken/non-existing safeguards preventing harassment
- Rigid work schedules in tech/Cyber jobs
- Lack of Immersion Education type opportunities; Few colleges that have Cyber as a major teach book theory
- Girls/Women's own perceptions of their abilities (Imposter Syndrome)
- Starts at the Grade School Level: Gender bias in the school system, teachers, family, social, culture – It's Everywhere

Source: Women in CyberSecurity (WiCyS)

Cracking the Women vs Men Code

Exploring the innate blueprint

Male/Masculine Psyche

- Feel confident when they meet 60% of the Expectations/criteria
- Don't look for "permission"; don't need connection in groups
- Fix It Mentality – Get to the end result
- Confident in themselves naturally: Don't need anyone's permission
- De-personalize and externalize issues/problems – gives them time to think of solutions often in solitude
- Have a larger amygdala – more processing power for threats (less than women for processing details)
- Built for crisis mode – constantly scan for potential threats then solutions

Female/Feminine Psyche

- **Feel confident when they meet 100% of the Expectations/criteria**
- Have a need to "connect" with people, and collaborate on solutions/ideas
- Enjoy the "process"/path to reaching a goal
- **Suffer from the Imposter Syndrome - Self Worth**
- Tend to Personalize and feel the emotions/reactions from others internally – like to talk through issues, process, and explore
- Develop their PFC (decision center of brain) earlier – reason why they take less risks from a young age
- Have need/ability to think through the details, verbalize them and explain their rationale

Enhancing Diversity in Organizations

Offer and empower women to take on challenging roles and offer support

Offer Implicit Bias, Diversity and Harassment training to HR and all employees and enforce

Ensure advancement and training opportunities

Ensure equal salary and competitive pay scales

Offer remote, telecommuting, flexible schedule options

Offer Wellness Programs to All Employees

For Women already in Technical/Cyber Leadership roles:

o Speak at conferences, be visible, empower and encourage other women
o Join the growing circle of Women Leader groups/events (e.g. WiCys, Girl Boss Networking, Wonder Women in Tech, etc.)
o Start Young! Mentor younger girls in colleges, grade schools, and academia to feel confident in themselves and not be afraid to take risks

Offer cross team training opportunities, Detail/Temp positions in other parts of an organization, and engage people with artistic/creative capabilities in technical fields to engage in the Technical fields

Cyber Safety vs Cybersecurity

Changing the Conversation on Cyber

What role do YOU play in Cyber?

Is it only the IT & Cyber professional's responsibility to protect YOUR data, YOUR privacy, and most importantly, YOUR safety?

We MUST change the conversation to Cyber Safety and include:

○ Diversity of all roles, all industries, and ALL of our people

○ EMPOWER people with knowledge/information, toolkits (for different roles), specific actions to take

○ ENABLE people to make an emotional connection to Cyber Safety to see how it can affect their health, well being, their safety, and most importantly, their whole LIFE

Cyber Safety and YOU

What Can YOU do Today?

What is YOUR emotional connection to Cyber?

You are the accumulation of multiple roles that you play in your life – where does Cyber fall into each of your roles?

○ Are you a parent? Are you concerned about your children's safety?

○ Are you a student? Are you concerned about your online homework/grades/personal information being tampered with? How much of your personal information do you post on social media?

○ Are you a healthcare professional? Are you concerned with patient safety?

○ Are you Joe Schmoe wearing or being near electronic gadgets all day long? Ever wonder if your gadgets are hearing or seeing you?

Thought Question: Is Cyber For You?

Cyber is for any and all types of people, skills, and mindsets

Conquering the Myths about Cyber

○ It is not just a technical field: we need creative, artistic, organization/project management, strategic, communications, and other a diverse array of mindsets and skills

○ Cyber Galaxy: vast array of fields within Cyber and a variety of roles (high potential for growth and opportunities)

○ It may seem scary, but some simple, effective practices can go a long way to protect you and your information/assets

○ It is never too late to get involved in the Cyber field: there is not clearly defined path as of today

○ Cyber Professionals know how to have fun too – don't be afraid to reach out for guidance, mentoring, questions, or sharing!

What Can Organizations & Leaders Do Today?

Think Outside the Box

- Offer Employee Wellness & Engagement programs for all staff & promote it!
- What kind of talents, mindset, personalities, skills, and qualities in staff do we really need? Can we train from within?
- Explore and integrate a good mix of diverse backgrounds, ages, races, genders, different points of views, and skills on teams
- Look beyond the typical technical fields – think artistic, creative, visionaries, nursing, etc.
- Implement Immersion Education in Schools and in the Workforce – allow students to learn on the job, get a taste of reality (hire as interns/volunteers)
- What does it take to attract, excite, and retain people in any job?
  - Money isn't everything ; Morale is EVERYTHING
  - Keep your employees happy & Empowered
  - Walk Your Talk
  - Have high standards for Yourself – Be a Leader, not a Boss
  - Keep an eye on employee burnout

Thanks!

Send any questions or feedback to:

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Check out www.jothidugar.com for more information!

Message of the Day:
Be the change you wish to see in the world!