

Advantages of Being an Azure Cloud Generalist

David Cobb

Hi, I'm David!

School Background

Here's Dave graduating from
Clarence Central High School in NY.

Then went to UF 1998-1994
Switched from Engineering to Business
School, CIS major.



My first tech job

- No idea what to do after graduation.
- While still in Gainesville around 1994, Got my first I.T. job from a temp agency.
- **After a weekend of reading, I was the Novell Netware admin.**
- The **network went down** the 2nd week. I scrambled, leveraged *sneakernet* and a lot of troubleshooting, and kept them working.
- My last day I received a **standing ovation** from the leadership team.
- That day I realized my worth, I could **help others with computers** and earn money & approval. **Found my career**



Dave's Work Background

- Career path: helpdesk, web developer, dba, system administrator, cloud engineer
- Mid career in 2002, as a web developer, I got my MCDBA.
- That opened the door to train & become a Microsoft Certified Trainer (MCT)

Learning and Teaching as an MCT

Between 2002 and 2013 I passed 22 exams, focused primarily on **Microsoft SQL**, but also Windows Server, Active Directory, Networking, and .Net development.

I'm good at tests.

I was certified & taught SQL 2000, 2005, 2008 & 2012

'You teach, you must be an expert'

Being a SQL teacher made me a 'SQL Expert' that **opened doors** to consulting, training & job opportunities.

Learn, Do, Teach

Transferable Skills - Learning new tech **quickly, keeping up** with tech changes, teaching tech **hands-on**, providing **tech support** for learners, finding **teachable moments** when things break.

Career since becoming an MCT

I taught SQL Server, Querying, Administration, Reporting, Analytics

Kept up with SQL Server certification thru 2012, then *fell in love with PowerShell*

Kept up with training as a side income stream during my career, in both consulting and full time job roles.

Comfortable job thru 2019, then...

My mid-life, mid-career crisis

- In September, 2019, I got the call
- 3 months to lose most of my income
- I have a mortgage & a family
- Do I get another job at 49?

Today

- Working from home
- Working on my own business
- Teaching Azure as freelance Microsoft Certified Trainer
- Combine teaching Azure 2-3 weeks a month with consulting on Azure & SQL
- I get to learn cool technologies, following my curiosities, helping people work and learn in the Azure cloud.

I'd like to share what I learned along the way.

I hope these ideas **help you do work you love** in the Azure cloud on your own terms.

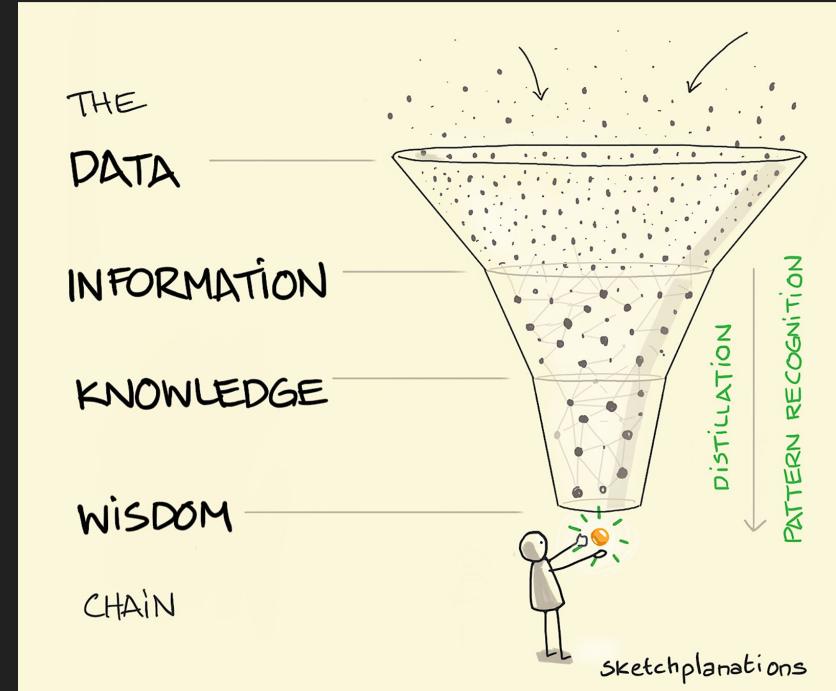
My goals for you in this talk

See learning cloud from a new perspective.

Leverage your **strengths** to grow your cloud career.

Decide mindfully **where to focus**, and *what to filter out*.

Be inspired to share what you know about cloud computing to grow more capable with both computers and people.



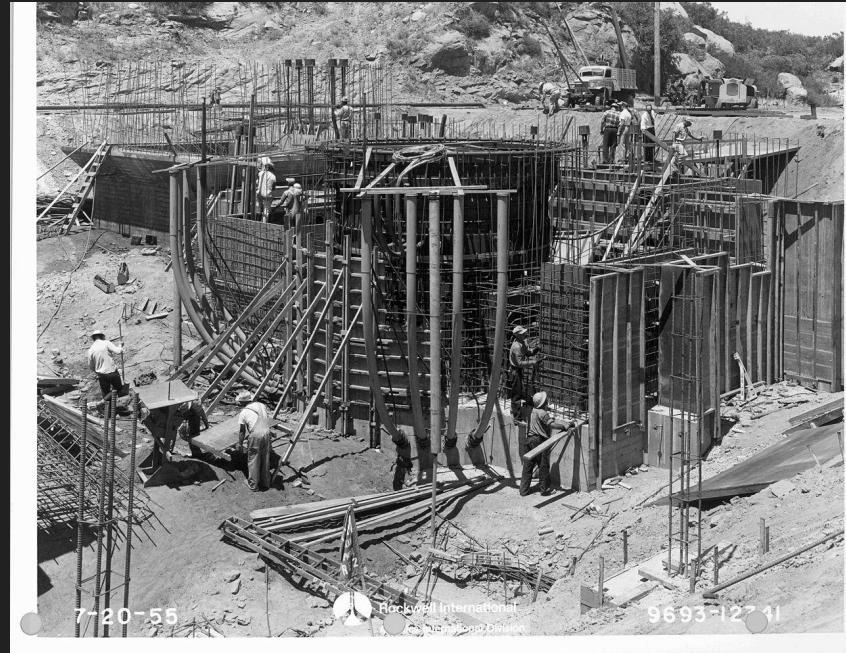
Under Construction!

This talk is an experiment.

This is an **attempt to distill what I've learned** in order to **help you in your Azure cloud career**.

I crave your feedback, fill out this form or email
david@davidcobb.net

- What was the most confusing idea?
- What was the most useful idea?
- What was the biggest waste of time?
- What would you like to hear more about?



Why an Azure Cloud Generalist?

Actually, I'm a specialized generalist



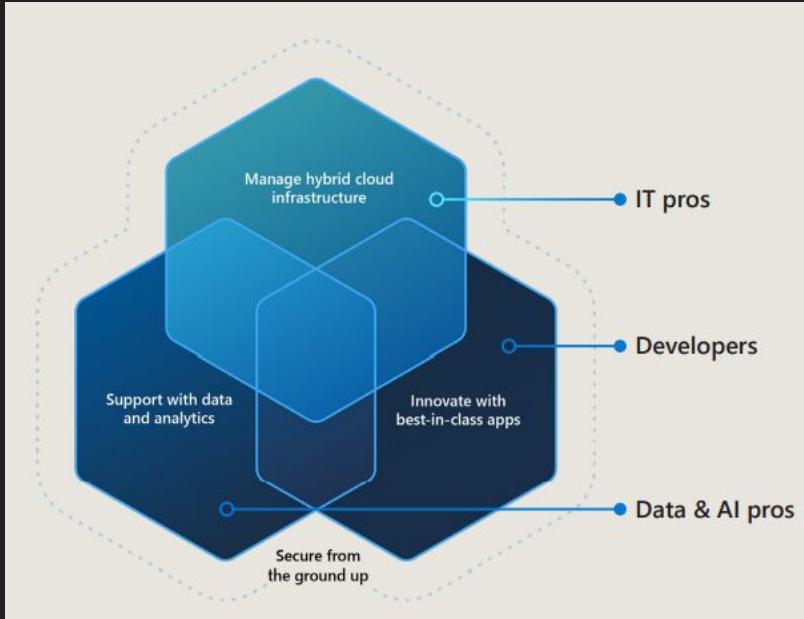
Specialized Generalist

[Should You Specialize or Be a Generalist? | Tim Ferriss - YouTube](#)

My Specialties

- Specialized in **SQL** since 2002
- Specialized in **PowerShell** since 2012
- Both these skills grant **high leverage**, and let me **generalize** my skills into other technology areas.
 - Web design, DBA, Sysadmin
- **Teaching taught me how to learn tech rapidly**
- These skills were my **lever** into Azure

My Azure training journey



IT Pro	
Administration	AZ-104
Security Technologies	AZ-500
Architect	AZ-305
Data & AI	
DBA	DP-300
Data Engineer	DP-203
Machine Learning	DP-100
PowerBI	DA-100
Developer	
Developer	AZ-204
DevOps	AZ-400
AI	AI-102

<http://aka.ms/azuretrainingjourney>

Tech Levers

What's a technology lever?

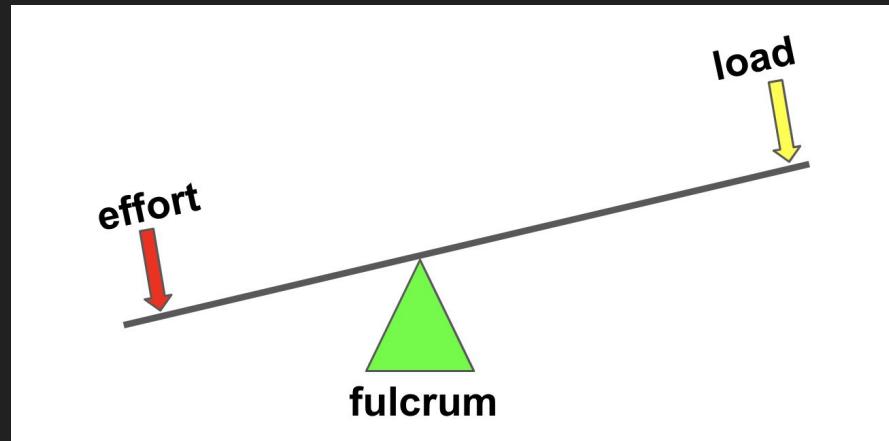
Tools that multiply output from a given amount of input.

As learners of any technology tool, we can apply the following inputs:

- Time
- Effort
- Money

The more leverage the tool gives us, the more it increases our:

- Ability
- Learning Speed
- Confidence

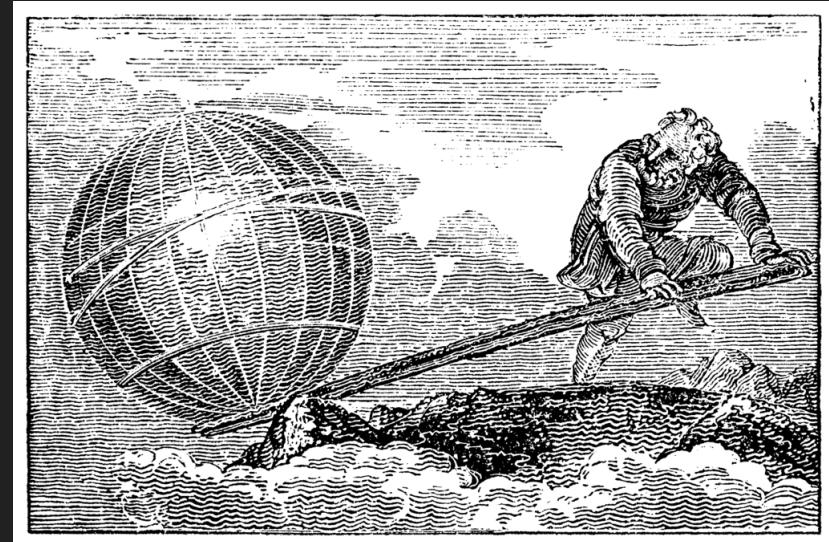


How do I achieve more leverage in my cloud career?

What cloud **technologies** can you invest your focus in that are *useable in many scenarios* that you want to be in?

What **tools** can you invest in that are *useful over the long term*?

What **skills** can you learn once and *use in many places*?



What are the high leverage technologies in Azure?

My favorite high leverage cloud tool?

Cloud Command Line

- **PowerShell**
- Azure CLI
- Azure Cloud Shell

Other high leverage cloud tools with Azure:

SQL (Relational DBs, KQL(?))

Infrastructure as Code
(Terraform, Bicep, ARM)

Containers (Docker, Kubernetes)

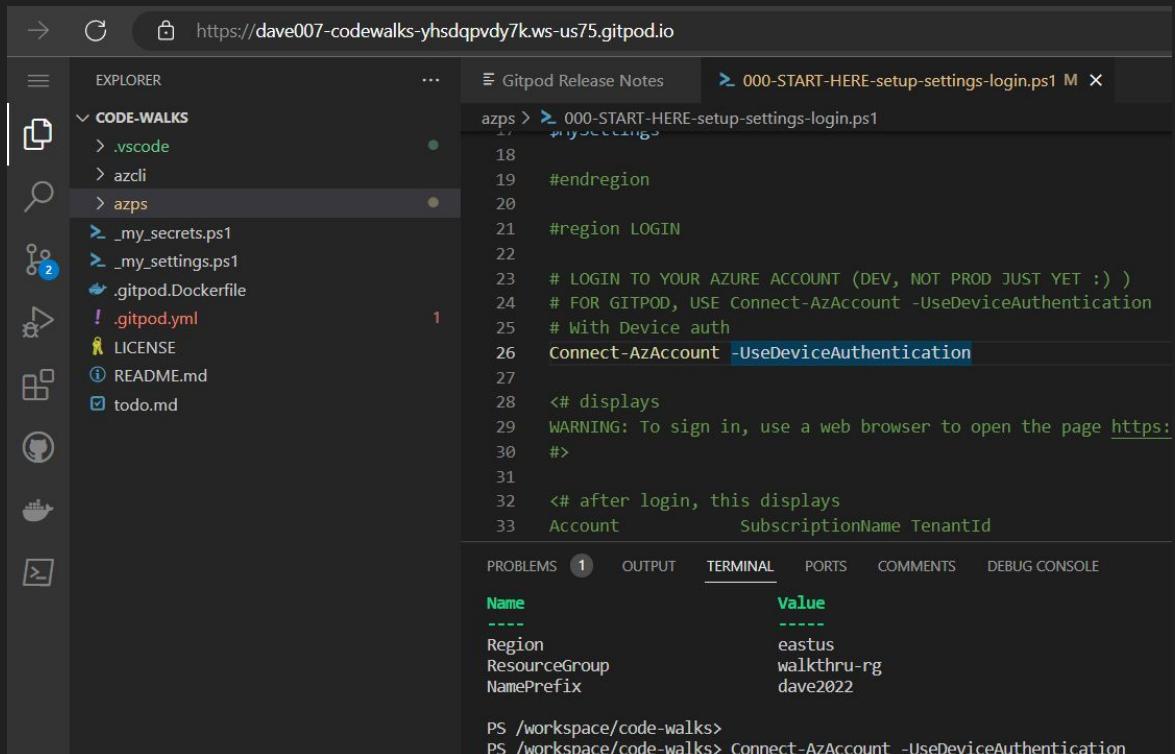
Azure SDKs (programming)

Can you think of others?

- *What are your best tech levers now?*
- *Which would you like to master?*

Learn Azure With PowerShell

Demo!



The screenshot shows a Gitpod session in a web browser window, with the URL <https://dave007-codewalks-yhsdqpvdy7k.ws-us75.gitpod.io>. The session is titled "Gitpod Release Notes" and contains a PowerShell script named "000-START-HERE-setup-settings-login.ps1". The script is as follows:

```
azps > 000-START-HERE-setup-settings-login.ps1
18
19 #endregion
20
21 #region LOGIN
22
23 # LOGIN TO YOUR AZURE ACCOUNT (DEV, NOT PROD JUST YET :))
24 # FOR GITPOD, USE Connect-AzAccount -UseDeviceAuthentication
25 # With Device auth
26 Connect-AzAccount -UseDeviceAuthentication
27
28 <# displays
29 WARNING: To sign in, use a web browser to open the page https:
30 #>
31
32 <# after login, this displays
33 Account SubscriptionName TenantId
```

The "TERMINAL" tab is selected, showing the PowerShell command `Connect-AzAccount -UseDeviceAuthentication`. The "OUTPUT" tab shows the following environment variables:

Name	Value
Region	eastus
ResourceGroup	walkthru-rg
NamePrefix	dave2022

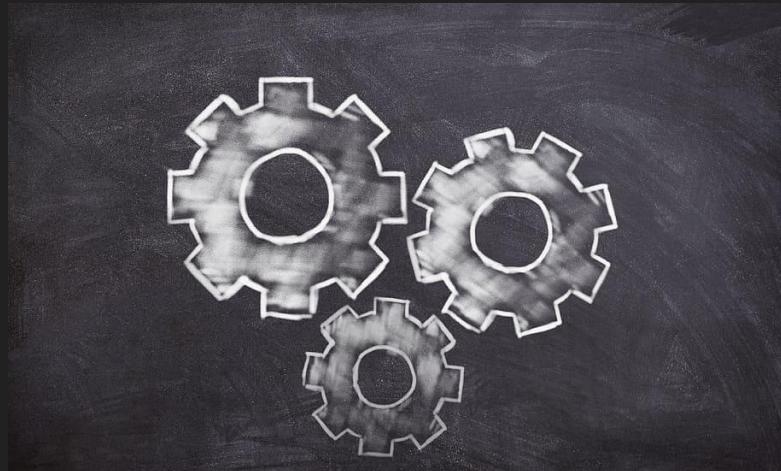
Action-Forcing Mechanisms (Forcing Factors)

What can you commit to that FORCES you to ACT, LEARN and GROW?

- Join an Azure meetup
- Join a study group
- Find a study buddy
- **Schedule that exam!**
- Write a tech article?
- Blog Post?
- YouTube Video?
- Lunch & Learn?
- Teach a coworker?
- Teach a class?
- ***Give a user group talk? :)***

General process for each Azure certification

- Review the materials available (**Theory**):
 - Microsoft Learn!
 - YouTube
 - MCT resources
- Do the Labs (**Hands-On**)
 - GitHub (free)
 - Lab Providers (\$)
- Do Practice Tests (**Test-Prep**)
(find and fill my knowledge gaps)
 - Whizlabs (\$) or
 - MeasureUp (\$\$\$)



Multiple exam bonus points from Microsoft

- What if I told you Microsoft gives you 10% bonus points for each exam you have already passed?
- The more tests you pass, the easier the next one is!
- While there are no bonus points from Microsoft 😢, the tests do get easier each time, as the content overlaps.
- So many concepts you learn are applicable in future exams.

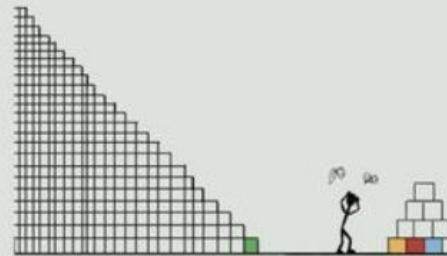
What if I fail?

- It happens!
- Make a notes dump of everything you were unsure of after the test.
- Reschedule that exam!
- It's only failure if you give up. Try, try again!

- *What have you accomplished already?*
- *What commitments can you make to improve your career?*
- *What commitments are you putting off because they're hard?*



THINGS I
HAVE TO
DO



THINGS I HAVE
SUCCESSFULLY
DONE

Filters

HOMEWORK:

Divide everything you pay attention to this week into two categories:

Inputs that help me,
inspire me, inform me,
and motivate me.

Inputs that anger me,
scare me, discourage
me, distract me.

Filters that worked for me

Community!

- ***CloudSkills.io***

I connected with Mike Pfeiffer's CloudSkills.io community in Feb 2020 and it made a career in Azure seem possible for me.

- ***User Groups!***

Shout out to the awesome South Florida user groups:

- Fladotnet, GCUG, MCSFUG, SFSSUG, Data & AI

- ***Podcasts & Audio Books!***

I used commute and in-between time to listen to people with ideas and achievements I admire.

- ***Azure videos on YouTube & elsewhere***

Watched & learned from people who had mastered some aspect of Azure and shared their knowledge.

Stuff I filtered out

- *News*
- *Politics*
- *Complaining*
- *Blaming*
- *Things out of my control*

Every non-ideal thing you remove from your life makes room for something better!

- *What inputs are in your left column you should filter out?*
- *What inputs are in your right column you should tune into?*

What is a cloud expert, really?

An expert is someone just like you,
further along the path,
sharing what they know.

- *Who has shared their Azure knowledge with you and **guided or inspired** you?*
- *How can you **share what you've learned** about Azure in some small way?*

My Ikigai

**LEARNING
COMPUTER
TECHNOLOGY
QUICKLY**

**HELPING
LEARners
SUCCEED**

**CLOUD
BUILDERS &
TEACHERS**



**TEACHING
CLOUD**

TODO

What's my vision?

Where am I leading people, where do I want them to go?

How does LAWP fit in?

How does team training fit in?

How does custom courses fit in?

How does 'community harness' fit in?

How does Alongside.cc fit in?

Where's being a cloud generalist?

Take Action

- Share your feedback with me with this form, or email me
david@davidcobb.net
- What is your next action step in your Azure cloud journey?
- How can I help?

Q & A

The



References

- [Action-Forcing Mechanisms | Beyond Intractability](#)
- David's videos on cloud
 - [The Azure Cloud Journey of the DBA - YouTube](#)
 - [MCSFUG 104: Azure Fundamentals / Azure PowerShell - YouTube](#)
 - [Exploring Azure via Azure CLI - YouTube](#)
 - [Get Started with AWS Command Line Interface \(CLI\)](#)
 - [David Cobb on Learning & Teaching Azure and AWS | CloudSkills.fm Episode 114](#)

Being an MCT and keeping up with certifications

Between 2002 and 2013 I passed 22 exams, focused primarily on Microsoft SQL, but also Windows Server, Active Directory, Networking, and .Net development.

I was certified and able to teach SQL 2000, 2005, 2008 & 2012

Being a SQL teacher made me a 'SQL Expert' that opened doors to consulting, training & job opportunities.

Mostly I taught SQL administration, the basic DBA tasks, and SQL querying for new learners.

Learn, Do, Teach

FORCING FACTOR - Teaching drives learning

Starting with the basic exams, I studied & passed the exam, then seek opportunities to train that class.

I might get an opportunity to train and get a month or less to prepare.

The motivation to give a good class focuses my efforts.

My Process / The Gauntlet

- Dove into Azure, got certifications
- Once certified sought opportunities to teach
- Prepared intensely for each class the first time I delivered
 - Hands-On - Demos & Labs
 - Theory - Videos & Reading
- Give 100% during class, make happy students
- Choose the next certification goal

Forcing Factors that worked in my life

- MAKING THESE CHOICES...
- Commitment to becoming MCDBA
- Getting MCDBA **Certified** in SQL
- **Teaching & Speaking** about SQL Server
- Commiting to teach each new Azure topic
- Supporting students during Azure labs
- ...FORCED or ENABLED THESE OUTCOMES
- Studied, learned, gained confidence
- Getting opportunity to teach as MCT
- Opened career doors, gained confidence
- Accelerated learning of that topic
- Azure troubleshooting skills, confidence when things go sideways