

CAREERS IN SQL SERVER

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A Little About Me

Who the heck is this guy anyway?

- Robert C. Cain
- Southern Nuclear since 2005
- 10 years as a consultant in the B'ham Market
- Wide range of .Net applications
- SQL Server 2005 Data Warehouse
- <http://arcancode.com>
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- <http://altechevents.com>



Today's Agenda

- ⦿ Three career paths in SQL Server
 - ⦿ DBA
 - ⦿ Database Developer
 - ⦿ Business Intelligence Developer
- ⦿ Making yourself marketable

THE DBA

DBA –Like Crazy Uncle Eddie

- ◉ Uncle Eddie
- ◉ Less heard from the better
- ◉ Best kept in closet under the stairs
- ◉ Great in a bar fight – has your back
- ◉ Knows some cool tricks to keep you out of jail
- ◉ DBA
- ◉ No word means all is well
- ◉ Best hidden in the server room
- ◉ Great when server crashes
- ◉ Knows cool tricks to keep you out of trouble

Tasks of a DBA

What to do after the first cup of coffee

- ⦿ Guardians of the data
- ⦿ Backups
- ⦿ Control security
- ⦿ Setup new SQL Servers
- ⦿ Deploy new databases, or changes to existing databases
- ⦿ Maintain the health of existing servers
- ⦿ Tune servers for maximum performance

Traits of a DBA

Does this sound like you?

- Detail Oriented
- Protective
- Firm
- Maintains Boundaries
- Paranoid

THE DATABASE DEVELOPER

Where did they come from?

The genesis of the DB Dev

- ⦿ At one time the role of the DBA and DB Dev were similar, if not identical
- ⦿ Increasing technology and Sarbanes – Oxley drove toward a separation of duties
- ⦿ Production DBA
- ⦿ Development DBA (same as DB Dev)

The Database Developer

Who is a DB Dev?

- Responsible for the development and modification of databases, stored procedures, views, and objects
- Not concerned with the day to day operation of the database

Tasks of a DB Dev

A DB Dev's To-Do List

- ⦿ Design tables, indexes, and relationships
- ⦿ Create stored procedures
- ⦿ Create database objects (CLR)
- ⦿ Create an access plan (security)
- ⦿ Unit tests
- ⦿ Create deployment plan
- ⦿ Performance optimization

Traits of a DB Dev

Know someone like this?

- Detail oriented
- Creative
- Process oriented
- Disciplined
- Devious

THE BI DEVELOPER

Business Intelligence

What the heck is it?

- ⦿ As a concept in existence since the 1970s
- ⦿ Only recently have the tools been available to do BI in an affordable manner
- ⦿ BI is a way to look for 3 major things:
 - ⦿ Aggregations
 - ⦿ Trends
 - ⦿ Correlations (Data mining)

BI Implementation

Step 1 – Data Warehousing

- ⦿ Data is pulled from the transactional systems using an ETL tool.
- ⦿ Extract
- ⦿ Transform
- ⦿ Load
- ⦿ Data warehouse optimized for analysis and reporting
- ⦿ SQL Server Integration Services

BI Implementation









Step 2 - Analysis

- Cubes are built to pre-aggregate the data
- This allows for “what-if” and drill down analysis
- SQL Server Analysis Services

BI Implementation

Step 3 - Reporting

- Delivering information in useful formats
- Textual Reports
- Graphs
- Charts
- KPI
- Sharepoint
- Excel
- SQL Server Reporting Services

Region	Sales (USD)	Trending	Status
US	482m		
Europe	399m		
Asia	123m		
South America	225m		

Business Intelligence

It's all about the data

- Using the existing data you already have to make better decisions about the business

Tasks of a BI Dev

Getting the job done

- ⦿ Interview the business
- ⦿ Design a warehousing database
- ⦿ Implement ETL to load the warehouse
- ⦿ Design and create cubes
- ⦿ Make the data accessible
 - ⦿ Reporting Services
 - ⦿ Sharepoint
 - ⦿ Excel

Traits of a BI Dev

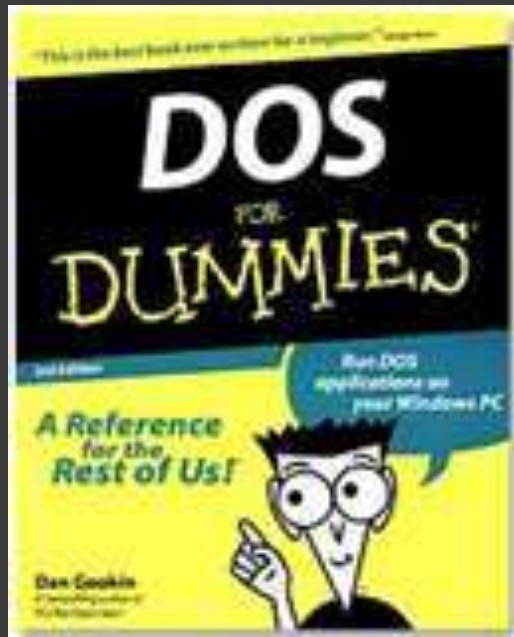
Does this sound like anyone you know?

- People skills
- Good with numbers
- Visualization skills
- DB Dev skills

**MAKE YOUR SELF
MARKETABLE AS A
SQL SERVER PRO**

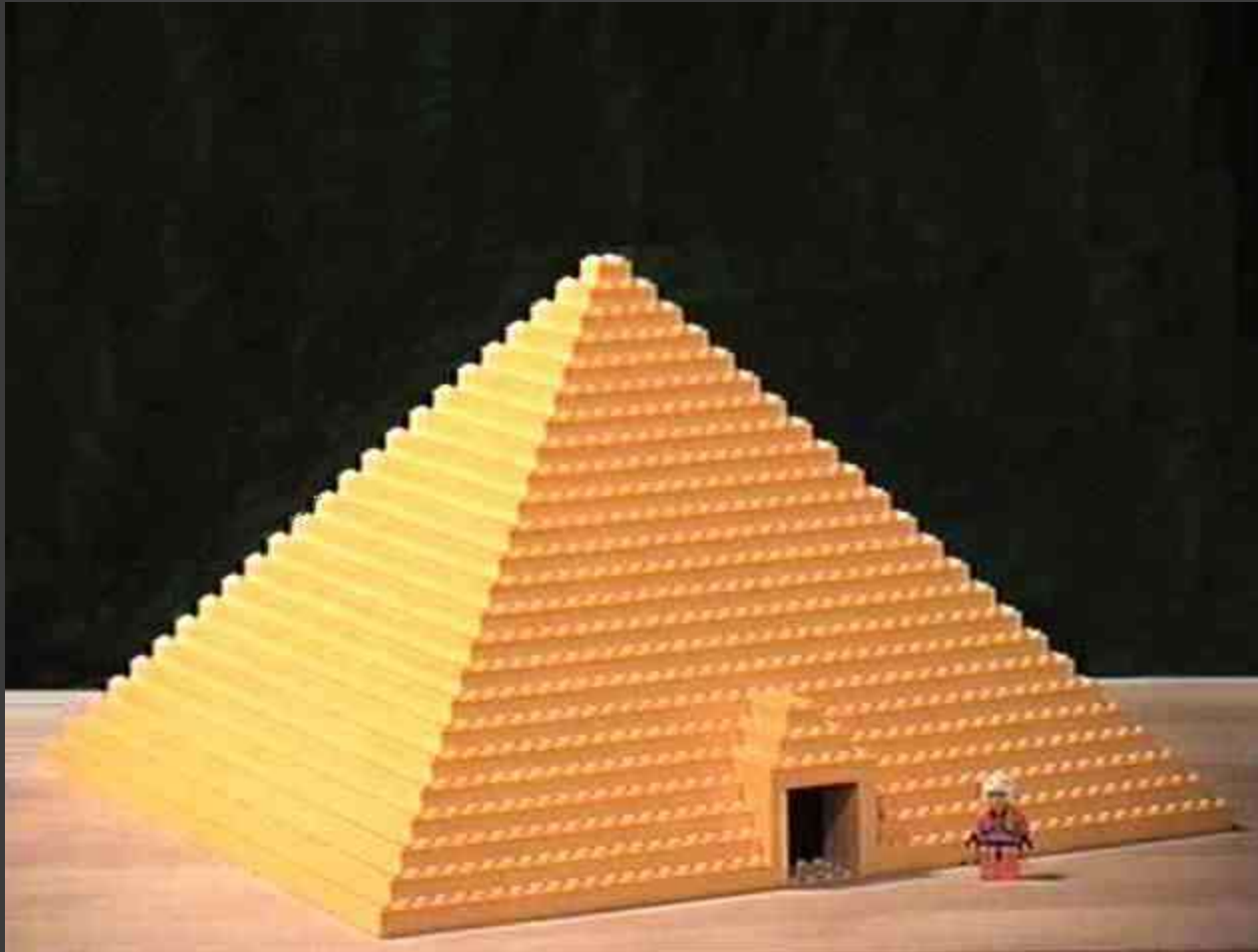
Step #1 – Become an expert!

A.K.A. – Learn everything about a topic



Step #1 – Become an expert!

Don't forget about the basics



Step #2 – Learn iteratively

A.K.A. – Learn something new every day

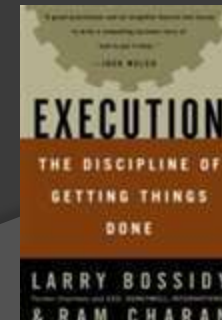
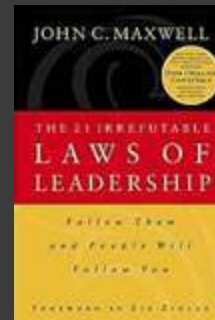
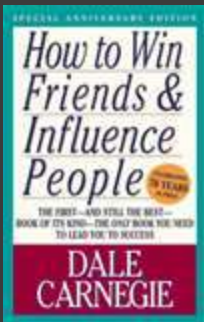
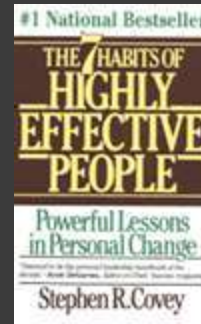
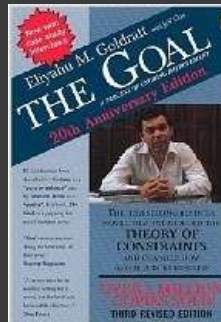
- Avoid Cramming
- Create a plan
 - Decide your goal
 - Get a book/article/manual
 - Study 20 minutes a day
 - Read/Listen to something, then try it out
- Find the patterns and practices

Step #2 – Learn iteratively

- ◎ How people learn
 - Attend a presentation/live webcast
 - More for interest and overview
 - Not a source of deep learning
 - On-demand webcast/video
 - Chance to pause/repeat content
 - Chance to try it out
 - Online reading
 - Targeted single-subject learning
 - Following some guru's blog
 - Books
 - Topical mastery

Step #3 – Understand the business

A.K.A. – The buck stops here



Step #3 – Understand the business

- Career-building additions
 - Coding perspective AND System perspective
 - Technical value AND Business value
 - Understood AND Understanding others
- Learn a business strategy each quarter
 - Read a leadership/business/strategy book
 - Attend a seminar/presentation
 - <http://www.getabstract.com>
- Surround yourself with the right people

Step #4 – Show up in the community

A.K.A. – Speak or write what you know



Step #4 – Show up in the community

⦿ Speaking

- Learn something, and then show people how to do it
- Code camps, conferences, webcasts, geekSpeaks
- Don't show features. Tell the story
- If you're nervous, do it as a group

⦿ Attending a user group

- Learning and networking

Step #4 – Show up in the community

- ⦿ Blogging
 - Consumable technical blurbs
 - Regular intervals
- ⦿ Forum answers
 - Find a question online, research it, and post a solution
- ⦿ Articles
 - Complete story around one topic
- ⦿ Books
 - Complete technology story
- ⦿ Samples
 - Build something and put it out there

Step #5 – Guard your credibility

A.K.A: Maintain control



Step #5 – Guard your credibility

- ⦿ Not every thought needs to be uttered
 - Venting is risky
- ⦿ Blogging your rant is even riskier
 - Unlimited audience
- ⦿ One bad outburst in public is all it takes
- ⦿ Don't be *that guy*
- ⦿ Don't embellish your resume
- ⦿ Learn how to interview
- ⦿ Learn how to take a verbal punch
 - Don't sacrifice the war to win a battle

What happens on the web
doesn't always stay on the web



Passion!

No matter what you choose let passion be your guide

- ⦿ What fascinates you?
- ⦿ What makes you want to go home and read about it on your own time?
- ⦿ What makes you want to talk about it with others?
- ⦿ What inspires or interests you enough to make you want to buy books on it?

Summary

What'd he say?

- ◎ DBA
- ◎ DB Dev
- ◎ BI Dev
- ◎ Five practical steps can help you be successful
 - ◎ 1) Find an appropriate topic
 - ◎ 2) Learn it the right way, for long term retention
 - ◎ 3) Develop business skills
 - ◎ 4) Form community relationships that will allow people to discover your technical & business skills
 - ◎ 5) Protect your credibility
- ◎ Passion!

Thanks!

- ⦿ Any questions?
- ⦿ All materials available at <http://arcancode.com>
- ⦿ arcancode@gmail.com