

The DBA and the Long Game

Seeing (and moving) into the Future

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Database Architect/ CTO
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Ziaul Mannan

- Database Architect at Yale New Haven Health Services
- 18+ yrs. as DBA, 15 yrs. in HIT
- Database Administration, Research/Innovation, Analytics, Big Data, Internet of Things
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Volunteer:

- Actively involved in charities: Education, Healthcare for underprivileged Children in developing countries.
- Board member at CT STEM Foundation Inc.
- Member of IEEE since 2002....

Mike Donovan

- CTO for Dbvisit Software
- @dbvisitmike
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Makers of Oracle replication technologies:

Dbvisit Standby (physical)

Dbvisit Replicate (logical)



Past Experience:

- Programmer
- Technical Support Analyst
- Oracle DBA



Why DBA? Why Now?

Cloud

PRoM

IoT

Analytics

Big Data

We are talking DBA, but will
apply across all IT Discipline

Innovation

Types of
Innovation

- Product Innovation
- Process Innovation
- Service Innovation

Two
additional
types of
innovation

- Business Model
Innovation
- Organizational
Innovation

Session Plan



Who Is A DBA

DBA

Database Administrator

Create a new schema.

Create these tables.

Add these columns.

Add these indexes.

Why is it so slow?



Is it backed up?

Is it replicating to the DR site?

Do we have enough disk space?

Make another copy.

Why is it so slow?

Produce a data model.

Follow naming standards.

Maintain a master data catalog.

Enhance data quality.

Evolution of The DBA

Evolution of the DBA



Kind of DBA	Timeline	
CLI DBA	Early 90's DBAs	"It is not the strongest or the most intelligent who will survive but those who can best manage [adapt to] change."
GUI DBA	Late 90's and Dot Com	
Google DBA	Dot Com and 2000's	
iDBA	Dot Com, IOUG iDBA Master Curriculum	
RAC DBAs	2000+ after 9.2 (but major spike with 10.2)	
DMA	2010+ Database Machine Administrator	
vDBA / vRAC DBA	2010+ Evolving role of a DBA in the virtual world	
Cloud DBA	2011+ Database Consolidation with Private Database Cloud Oracle Database 12c Launches June 2013	
Public Cloud DBA	2015+ Oracle Public Cloud with Database Cloud Service, Database Backup Cloud Service, Storage Cloud Service, IaaS Cloud Service	
PDBAs	2017+ Multi-Tenant with Oracle Database 12c Release 2 GA – March 15, 2017	

Ref: Charles Kim, Viscosity North America, Oracle ACE Director, IOUG – April 2017

The DBA over time

May come to feel:

- Totally complacent
- No need for a change in work patterns or skill sets
- Peculiar about the career as they get older
- The need to move up to the next level of responsibility



Roles to which a DBA can switch

IT Disciplines:

- Data Governance
- Office of Information Security (OIS)
- Big Data: Data science, Process Analytics
- Internet of Things (IOT)

Roles to which a DBA can switch *Contd.*

IT Disciplines:

- Project Management Office (PMO)
- Business Process Management (BPM): **Process mining**
- Independent Consulting
- Start Your Own
- Jump the Ship..

DBAs are Natural Leaders

Laws of Leadership

Results of Timing

Wrong action /
wrong time =
Disaster

Right action /
wrong time =
Resistance

Wrong action /
right time =
Mistake

Right action /
right time =
Success

“One of the
costs of
leadership
are your own
rights.

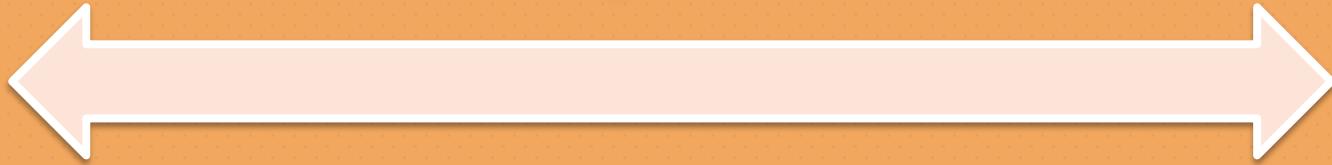
As
responsibility
grows, you
lose the right
to think
about
yourself.”

DBAs are Natural Leaders



Who is the Boss?

- Stress
- Burnout
- Crisis Management
- Putting out Fires



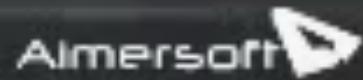
DBAs are Natural Leaders



- Honesty
- Ability to Delegate
- Communication
- Humility
- Confidence
- Commitment
- Positive Attitude
- Creativity
- Intuition
- Inspire/Set Vision

Forbes Top 10 Qualities of a leader

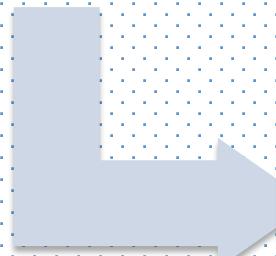
The Asch Conformity Experiment



elRellano.com

Linchpin Qualities- DBA as a Linchpin

Linchpin Qualities:



Linchpins are the essential building blocks of great organizations. Like the small piece of hardware that keeps a wheel from falling off its axle, they may not be famous but they're indispensable." (Seth Godin – Linchpin)

www.sethgodin.com

measuring value, valuing contribution

Linchpin Qualities

Exert emotional labor to produce interactions that organizations and people care deeply about

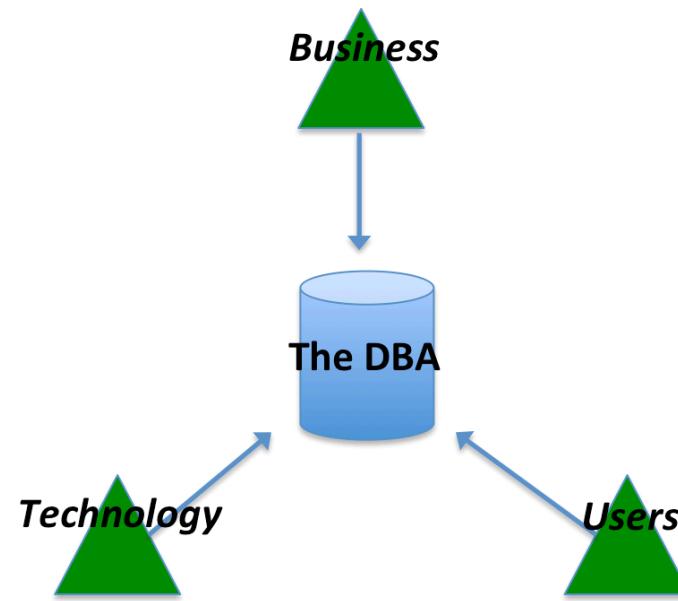
invent, lead (regardless of title), connect others, make things happen, and create order out of chaos

Figure out what to do when there's no rule book

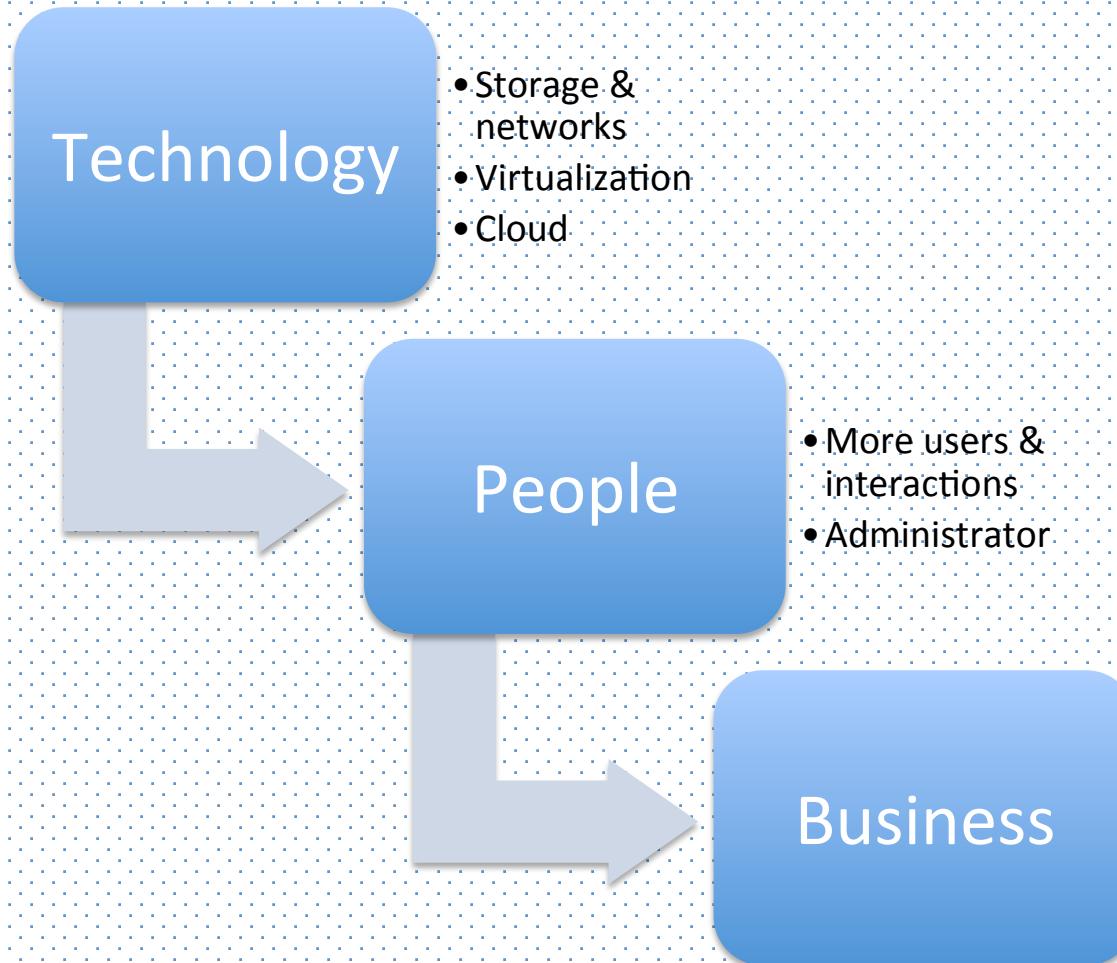
Delight and challenge their customers and peers

Love their work, pour their best selves into it, and turn each day into a kind of art

Latent Leadership Potential of the DBA



Challenge: the demands on a DBA



Leading out - a better response from the DBA

The solution –
seeing the role in a
different light:

Database
Administration an
art, its practitioners,
Artisans.

The DBA role as a
craft

Core skills +
communicativeness
+ creativity +
resourcefulness



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A Mentor's Influence

Influence a child - influence a life

Influence a parent -
influence a family



Influence an
employee –
influence a
company

Influence a leader - influence all that they lead

A Mentor's Influence: IQ, EQ or CQ

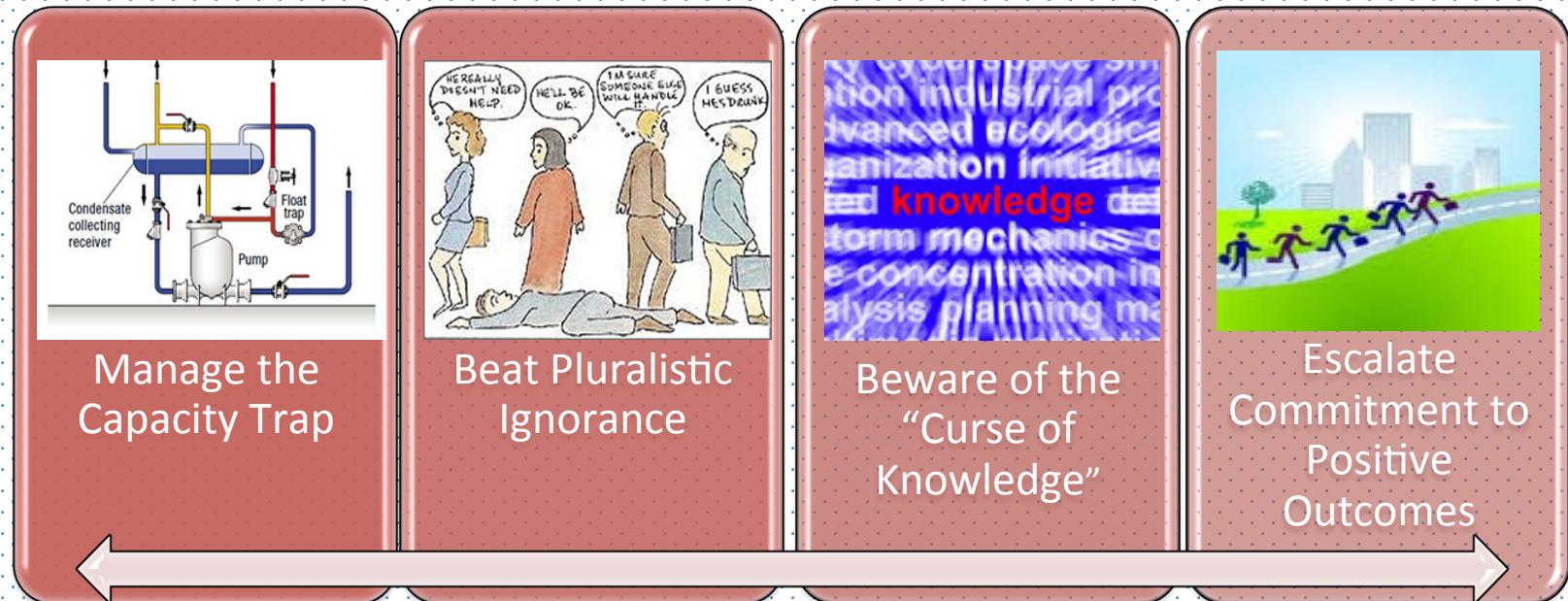


IQ (intelligence quotient): IQ helps us handle facts and analyze problems. But it does not help to manage people.

EQ (emotional intelligence): Helps understand people. But often only people who like me.

CQ (Cultural Intelligence): Helps to work with and understand people from different background, sectors, geographies and generation. Good leaders need all three to lead effectively.

The Change Recipe: Four Ideas



Innovation

Levels of Innovation

- Incremental Innovation
- Radical Innovation
- Disruptive Innovation

Sample Model - DBA Career Ladder

Position	IT Background (Suggested)	Usual Background Career Trend
DBA Intern	Studying in any IT discipline or completed Tertiary Education in an IT discipline	N/A
DBA-Tech	2 yrs. as DBA Intern or worked in any branch of IT. Completed Tertiary Education in an IT discipline	Help Desk, Desktop Support, Network/Storage/Server Tech
Database Administrator I	3-5 yrs. as Programmer, Analyst, min. 2 yrs. As DBA-Tech	DBA-Tech, DSS Developer, SQL Programmer.
Database Administrator II	2-4 yrs. as DBA I or 4-6 yrs. as DBA Tech	DBAs
Senior Database Administrator	4 yrs. as DBA II or 6-8 yrs. as DBA Tech.	DBAs
Database Architect	10+ yrs. as DBA	DBAs
Principal Database Architect	10+ yrs. as DBA, 2 yrs. as Database Architect.	DBAs
Manager of Database Administration and Infrastructure Services	10+ yrs. as DBA, 2 yrs. as Database Architect. Completed Post- Graduate studies in an IT discipline. Community involvement in Science and Technology. Affiliation with leading Technical/Engineering Organization(s).	DBA
Director, Database Administration and Infrastructure Services	<p>15 yrs. as DBA, 2 yrs. as Manager of Database/2 yrs. as Principal Database Architect. Completed Graduate studies in an IT discipline. Community involvement in Science and Technology.</p> <p>OR</p> <p>15 yrs. as DBA, 2 yrs. as Database Architect. Graduate studies in an IT discipline. Executive Education in Management, Technology and Leadership discipline. Community involvement in Science and Technology. Affiliation with leading Technical/Engineering/Project Management Organization(s).</p>	DBA

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DBA-Tech	2 yrs. as DBA Intern or worked in any branch of IT. Completed Tertiary Education in an IT discipline	Help Desk, Desktop Support, Network/Storage/Server Tech
Database Administrator I	3-5 yrs. as Programmer, Analyst, min. 2 yrs. As DBA-Tech	DBA-Tech, DSS Developer, SQL Programmer.
Database Administrator II	2-4 yrs. as DBA I or 4-6 yrs. as DBA Tech	DBAs

Sample Model - DBA Career Ladder

Position	IT Background (Suggested)	Usual Background/ Career Trend
Senior Database Administrator	4 yrs. as DBA II or 6-8 yrs. as DBA I.	DBAs
Database Architect	10+ yrs. as DBA	DBAs
Principal Database Architect	10+ yrs. as DBA, 2 yrs. as Database Architect.	DBAs

Sample Model - DBA Career Ladder

Position	IT Background (Suggested)	Usual Background/ Career Trend
Manager of Database Administration and Infrastructure Services	<p>10+ yrs. as DBA, 2 yrs. as Database Architect. Completed Post- Graduate studies in an IT discipline.</p> <p>Community involvement in Science and Technology. Affiliation with leading Technical/Engineering Organization(s).</p>	DBA
Director, Database Administration and Infrastructure Services	<p>15 yrs. as DBA, 2 yrs. as Manager of Database/2 yrs. as Principal Database Architect. Completed Graduate studies in an IT discipline.</p> <p>Community involvement in Science and Technology.</p> <p>OR</p> <p>15 yrs. as DBA, 2 yrs. as Database Architect. Graduate studies in an IT discipline. Executive Education in Management, Technology and Leadership discipline. Community involvement in Science and Technology. Affiliation with leading Technical/Engineering/Project Management Organization(s).</p>	DBA

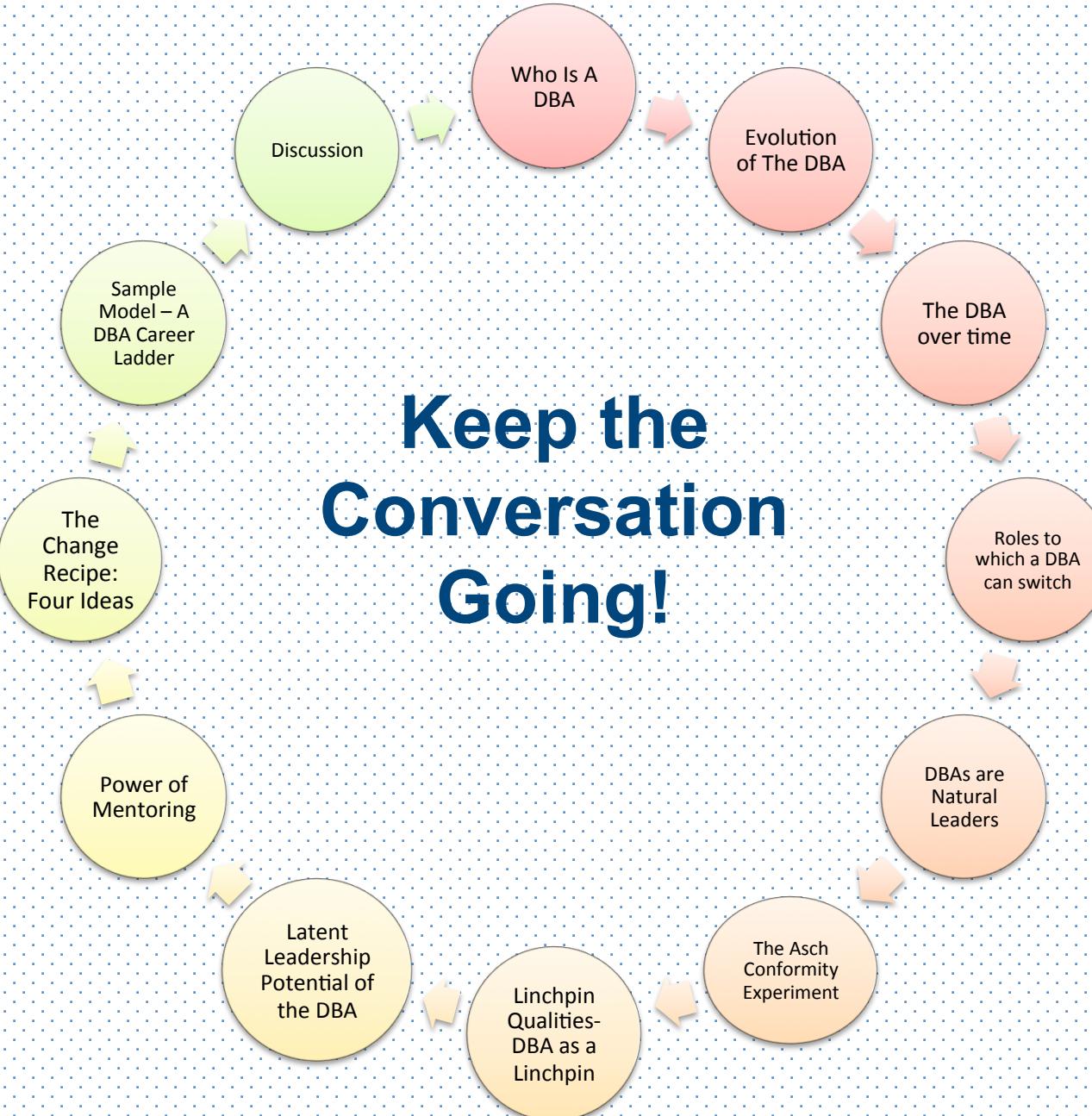
Where to From Here?



WE WANT YOU!



Keep the Conversation Going!



References

- The invisible gorilla – Christopher Chabris and Daniel Simons
- Asch conformity experiments - Solomon Asch 1962
- How You show up: Making and Propagating Change – Nelson P Repenning, Associate Professor, MIT Sloan
- Exceptional Leadership- Be the Uncommon Leader!
- Rich Niemiec, ROLTA TUSC
- Identifying and Developing Leaders - Lions Clubs International, Oak Brook, IL 60523-8842
- The Laws of Leadership - John Maxwell
- Mentoring - Bobb Biehl
- The making of a leader - Frank Damazio
- [Linchpin Manifesto from Seth Godin](#)
- <http://www.sethgodin.com/sg/>
- Future Learn, Open University, UK
- Dr Richard Chambers, Monash University – “Mindfulness for Wellbeing and Peak Performance”