Inclusiveness:

Planting, Cultivating, and Harvesting the Insights of a Multi-national Team

International Congress of Entomology 30 September 2016

Scott Hutchins

Global R&D Director Dow AgroSciences



Inclusiveness: ...

- Outline of topics:
 - Inclusiveness across the generations: WHY it Matters ...
 - Minimize the hierarchy with WHAT roles are included in key processes
 - HOW to respect differences in international style for effectiveness ...
 - Closing thoughts

Cognitive Diversity ... Driven by Generational Values

- Cognitive Diversity blending of different backgrounds, experiences, and perspectives within a team
- Per a study by Deloitte and the Billie Jean King Leadership Initiative:
 - For millennials, inclusion is the support for a collaborative environment that values open participation from individuals with different ideas and perspectives that has a positive impact on business. Leadership at such an organization is transparent, communicative, and engaging.
 - For boomers and gen-Xers, inclusion is the business environment that integrates individuals of all of the above demographics into one workplace. It's a moral and legal imperative, in other words: the right thing to do to achieve compliance and equality, regardless of whether it benefits the business.

Cognitive Diversity ... Driven by Generational Values

- "The disconnect between the traditional definitions of diversity and inclusion, and the millennial definitions, is already causing business hardship." That hardship comes in the form of clashes with managers and upper-level executives who don't allow millennials to express themselves freely.
- "Millennials yearn for acceptance of their thoughts and opinions, but compared to older generations, they feel it's unnecessary to downplay their differences in order to get ahead"
- The survey cites that 71% of millennials don't always follow their organization's social media policies ... authority is tolerated, not embraced



Cognitive Diversity ... Driven by Generational Values





Cognitive Diversity ... Why it Matters

- Engagement ... 83% of millennials are actively engaged when they
 believe their organization fosters an inclusive culture, compared to only
 60% of millennials who are actively engaged when their organization
 does not foster an inclusive culture.
- Perspective ... without engagement, the ideas, insights, and knowledge of the full team will not be considered when designing solutions or making decisions.
- Workforce Continuity ... finding loyalty and longevity as a key attribute
 of new hires is more difficult. People join companies, but they leave
 supervisors ... often the generation gap value system is the root
 cause.

Multi-national Companies Evolve with Generations Too

1950	1960	1970	1980	1990	2000	2010
BASF	BASF	BASF	BASF	BASF	BASF	BASF
BAYER	BAYER	BAYER	BAYER	BAYER	BAYER	BAYER
DOW	DOW	DOW	DOW	DOW	DOW	DOW
DUPONT	DUPONT	DUPONT	DUPONT	DUPONT	DUPONT	DUPONT
Allied Chem.	Allied Chem.	Allied Chem.	Abbott	Abbott	Aventis	Isagro
AmCy	AmCy	AmCy	AmCy	AmCy	AmCy	Syngenta
BF Goodrich	American Oil	Boehinger	BFC	Ciba-Geigy	Crompton (Uniroyal)	, ,
Boots	Boehinger	Boots	Celamerck	FMC	FMC	(
Calif Spray Chem Co.	Boots	Chevron	Chevron	Hoechst		$\overline{}$
Chemagro	Chevron	Chevron	Ciba-Geigy	ICI	Isagro	
Chemisches Forsch Indust	Chemagro	Ciba-Geigy	Diamond	Merck & Co.	Novartis	
Ciba	Ciba	Diamond	Duphar	Merck & Co.	Rohm Haas	
Eastman Kodak	Diamond	Merck & Co	Elanco		Zeneca	
	E. Merck	Elanco	FMC	NOR-AM (Schering)		
Geigy	Eastman Kodak	ESSO	Gulf	Rhone Poulanc		
Gen Aniline & Film	ESSO	Fisons	Hoechst	Rohm & Haas		
Gulf	Fisons	FMC	Hoffman LaRoche	Roussel UCLAF		
Hercules	FMC	Gulf	Hooker	Sandoz		
Hooker	Geigy	Hoechst	Hercules	Shell Internat.		
ICI	Gen Aniline & Film	Hoffman LaRoche	ICI			
Monsanto	Gulf	Hooker	Maag			
Mortin Salt	Hercules	ICI	Merck & Co.			
Nuodex Prod	Hoechst	Mobile	Mobile			
Phillips Petro.	Hoffman LaRoche	Monsanto	Monsanto			
Rohm & Haas	Hooker	Mortin Norwich	Murphy Chem			
G.D Searle Co.	ICI	Murphy Oil	NOR-AM (Schering)	- Number d	of R&D-Bas	sed
Schering	Merck	NV Phillips	Olin Corp.			
Shell Internat	MGK	Olin Corp	Occidential	Agrachar	nical Comp	aniae
Socony-Vacuum Oil Co.	Monsanto	Pennsalt	Rhone Poulanc	Agrociiei	ilicai Collip	Jailles
Solvay & Co.	Morton Salt	Phillips Petro.	Rohm & Haas	! 41		_
Standard Oil	Murphy Oil	Rhone Poulanc	Roussel UCLAF	In the US	and Europ	e
USDA	NV Phillips	Rohm & Haas	Sandoz			_
US Industrial Chem	Olin Math.	Ruhrchemie	Stauffer	•		
US Rubber	Pennsalt	Roussel UCLAF	Shell Internat.			
	Phillips Petro. Rhone Poulanc	Sandoz	Shell US			
Velsicol		Stauffer	Union Carbide			
	Rohm & Haas Ruhrchemie	Schering	Uniroyal			
		Shell Internat.	Upjohn			
	Sandoz	Tenneco	Velsicol			
	Stauffer	Thompspn-Hayward	Zoecon			
	Schering	Union Carbide				
	Shell Internat. Shell US	Universal Oil				
		Uniroyal				
	Spencer Chem.	Upjohn				
	Sterling Union Contide	USDA				
	Union Carbide	Velsicol				
	Universal Oil US Rubber					
	USDA USDBER					
	Velsicol					

Multi-national Companies Evolve with Generations Too



Began in the 1950s as the agricultural unit of The Dow Chemical Company.

Entered joint venture to form DowElanco in 1989.

Today, a wholly owned subsidiary of The Dow Chemical Company.

1955

Begins as the agricultural unit of The Dow Chemical Company.

1989

Enters a joint venture with the Elanco Plant Sciences business of Eli Lilly and Company to form DowElanco.

1997

The Dow Chemical Company acquires 100 percent ownership of the joint venture and renames it Dow AgroSciences. 2013

We are a wholly owned subsidiary of The Dow Chemical Company and one of the world's leading agricultural companies.

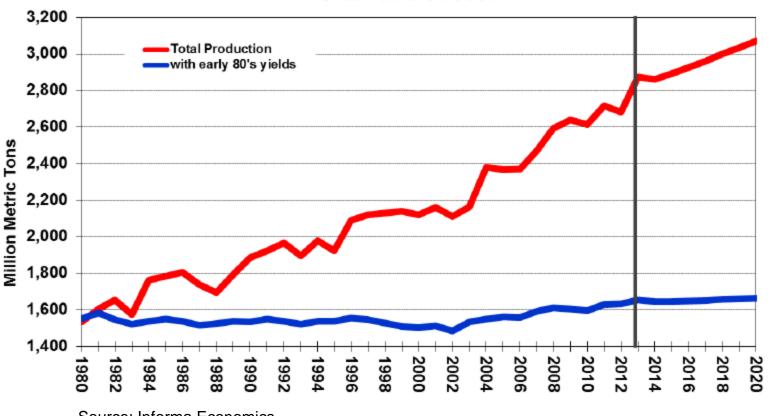
Cognitive Diversity ... Beyond Generational Reasons

- Education ... Avoid the Ivory Tower or Education Bias
 - It's not the degree you have, it's the what you do with it!
- Regional Experiences ... Focus on the Ability, not on Application
- Seek Talent more than Experience ... Talent is Forever
- Outside Experiences ... Focus on problems solved and organizational success across multiple roles
 - Special attention is required to integrate experienced hires
- Value Systems Must Align ... the "why" must be aligned in what we believe



Ag Multi-Nationals believe Technology is a Tool in Ag ...

World Crop Production, Grain and Oilseed



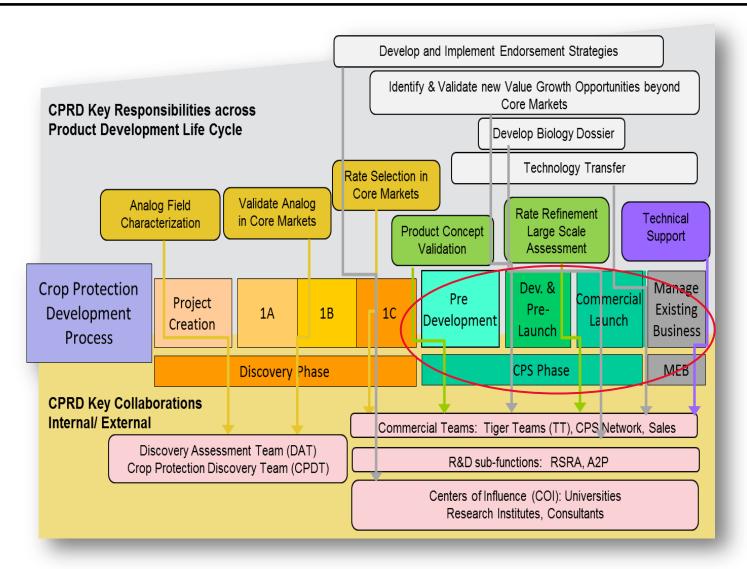
Source: Informa Economics

Overcoming Hierarchy...Design with Inclusion Intention

- Multi-National Companies are not Democracies ...
 - Officers are legally accountable for the conduct of the firm
 - Officers are accountable to shareholders for results
- Authoritative Hierarchy is a Legal Necessity ... But ...
 - Successful leaders are never "directive" or "authoritative" as a style
 - Effective work process takes hierarchy out of the day-to-day activities
- Our product development process defines "who does what by when" to manage a 8 yr long, \$200MM project across dozens of work groups
 - This is the opportunity to build an inclusive culture!
 - Management can "Challenge but not Change"

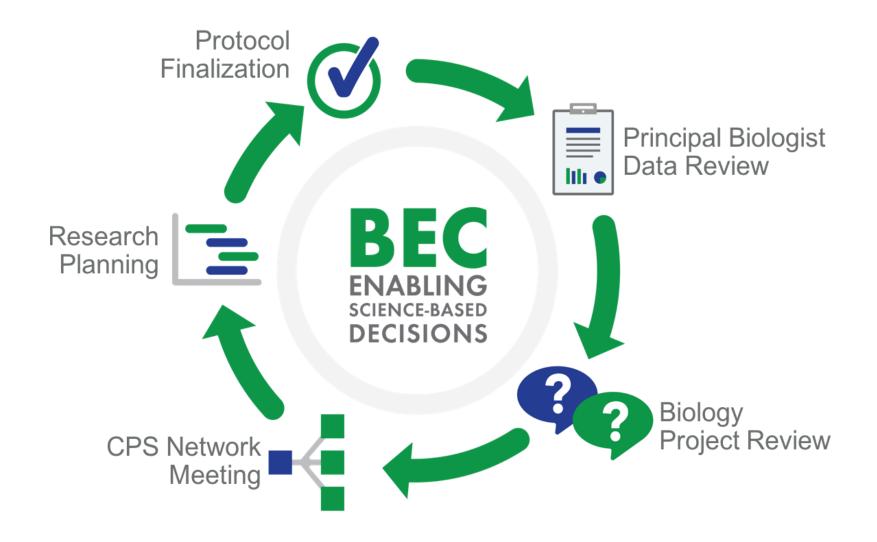


Product Development is VERY Complex!





Biology Excellence Cycle (BEC) Process



Principal Biologist Data Review

ACTIVITIES

During Meeting

DB and PB

- Determine reliability of trial data and ensures completeness
- Review data analysis and individual trial conclusions
- Identify and propose explanations for data outliers or unexpected outcomes

PB

- Ensures cross trial by protocol and cross year data summaries
- Ensures all data outliers are fully reviewed and included in KAF

After Meeting

- PB
 - Consults with BTL to complete cross trial by protocol and cross year analyses and summaries
 - Proposes answers to key questions
 - Completes KAF presentation for Biology Project Review (BPR)
 - Proposes Star Chart and Biology TAI document revisions in the KAF
 - Proposes key questions for future research



Biology Project Review

ACTIVITIES

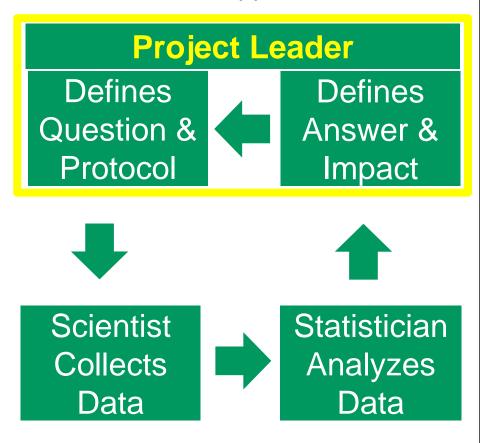
After Meeting

- PB
 - Conducts frequency analysis and completes Star Chart update
 - Completes Biology TAI update
 - Updates KAF based on outcomes of Biology Project Review peer review
 - Submits final KAF to DSP and/or SAGE
 - Refines list of future key questions
- BTL
 - Reviews and critiques all key questions recommended for future research
 - Keeps PDL/RDL informed about future resource needs
 - Provides PB and DB responsible for regulatory document preparation with clear direction and timelines for document completion, and communicate these needs to BP to whom PB and DB report

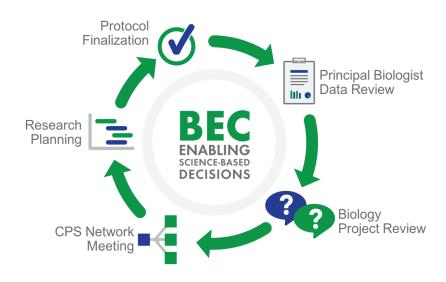


Designing Work Processes with Inclusivity in Mind

Hierarchical Approach

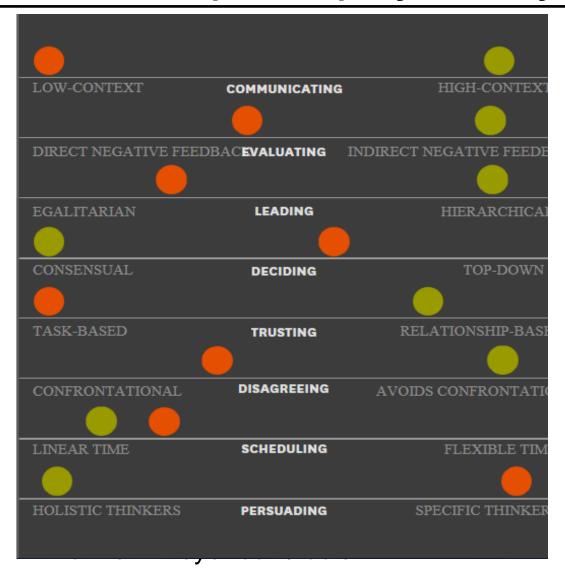


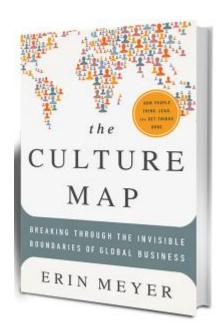
Inclusive Approach



- Framework for Peer Review and Inclusiveness
- Validation for Product Concept Performance
- Comprehensive Research Design
- Uniform Research Communication

The Culture Map Concept by Erin Meyer ... "The How"





- Communicating (US vs. Japan)
 - Low Context: Good communication is simple, precise, and clear.
 Messages are expressed and understood at face value. Repetition is appreciated if it helps clarify the communication.
 - High Context: Good communication is sophisticated, nuanced, and layered.
 Messages are both spoken and read between the lines. Messages are often implied but not plainly expressed.



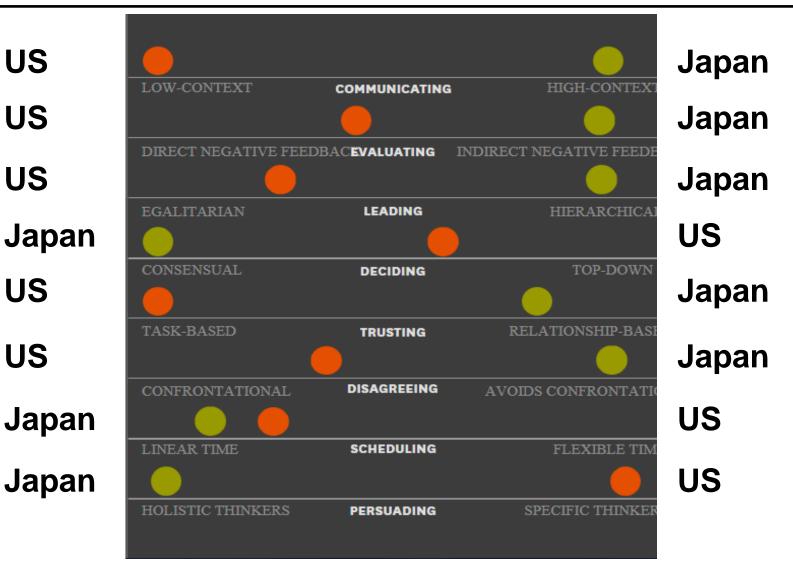


- Evaluating (US vs. Japan)
 - Direct negative feedback: Negative feedback to a colleague is provided frankly, bluntly, honestly. Negative messages stand alone, not softened by positive ones. Absolute descriptors are often used (totally inappropriate, completely unprofessional) when critisizing. Criticism may be given to an individual in front of a group.
 - Indirect negative feedback: Negative feedback to a colleague is provided softly, subtly, diplomatically. Positive messages are used to wrap negative ones. Qualifying descriptors are often used (sort of inappropriate, slightly unprofessional) when criticizing. Criticism is given only in private.

US Japan

DIRECT NEGATIVE FEEDBACEVALUATING INDIRECT NEGATIVE FEEDE







Common Ground between US and Japan

Both value step-by-step planning and punctuality. Hard work and long work hours are viewed as plusses.

Differences between US and Japan

Japanese decision making is more deliberate, consensual, and hierarchical than American decision making. Also, Americans will hash out disagreements in team meetings while the Japanese invest in *nemawashi*— multiple one-on-one discussions that help them arrive at decisions before the meeting, which is then used to formally adopt the decision.



- Advice for working with Japanese Colleagues
 - Work toward combining the two styles. Hold nemawashi-like discussions before meetings to work through disagreements in private. Start meetings on time. Brainstorm and share opinions in the
- meetings, but prep Japanese colleagues with meeting specifics beforehand so they are prepared for debate. Structure the meeting dialogue by giving each person space to speak one at a time rather than let a free-for-all take place.



Policy and Public Perception ...

PARADIGM: The way we see, understand, and interpret the world; our mental map.

Steven Covey



Dimensions of Diversity (per Dr. Elizabeth Salib of Catalyst, Inc.)

- Visible Dimensions
 - Gender
 - Age
 - Disability
 - Skin color
 - Accent
 - Language
 - Sexual Orientation / Identity
 - Others ...

See: catalyst.org

- Invisible Dimensions
 - Home-grown vs. Lateral Hire
 - Religion
 - Place/Region of Origin
 - Class Background (family of origin)
 - Prior Work Experiences
 - Introvert / Extrovert
 - Social Style (Amiable vs. Driver)
 - Others ...

Summary ... Harvesting Results with Inclusiveness

- The WHY ... age-based generations are different, traditional firms and schools cannot attract talent if they do not commit to <u>Versatility!</u>
- The WHAT ... how work is designed can either encourage engagement and inclusivity or it can discourage it – be <u>Intentional!</u>
- The HOW ... international cultures are quite different and it takes a <u>Conscious Effort</u> to understand and respect differences to achieve effective collaborations



Thank You ...