

# Privacy by (Architectural) Design

**Odia Kagan**Fox Rothschild

**Doug Miller**Doug Miller Strategies, LLC

Justin B. Weiss Crowell & Moring



#### **Speakers**





Odia
Kagan
Partner, Privacy
For Rothschild LLP



Doug
Miller
Executive Coach
Doug Miller
Strategies, LLC



Justin B.
Weiss
Senior Counsel
Crowell & Moring

Privacy by (Architectural) Design: A Story in Pictures

Applying ideas from architecture to privacy practice, governance, and operations



#### What are we talking about?

- Applying key ideas, principles, and metaphors from architecture to spur fresh thinking about privacy:
- Interpreting Privacy by Design and FIPPS
- Structuring privacy and compliance programs and workflows
- Effective privacy leadership: Getting budgets, working with stakeholders, creating new decision-making mechanisms, managing office politics
- Structuring privacy work and careers

### PbD Principles Mirrored in Architecture

#### Foundation in the FIPPs:

- Transparency
- Data Minimization
- PbD Sustainability
- Respect the user in UX design
- Context Matters

# **Privacy by Design**

- Do it right from the beginning and maintain.
- Don't retrofit
- Ensure flow (of data)

# **Architecture by Design: Sustainable**



## **Architecture by Design: Sustainable**

- Large glass-window walls to merge indoor/outdoor and harvest daylight
- House R-128, Stuttgart, Germany
  - modular, recyclable design, triple- glazed walls, passive solar architecture, and zero-emission
  - Deck/outdoor space that connects with nature.



# **Architecture by Design: Feng Shui**



# **Architecture by Design: Feng Shui**



# **Architecture by Design: Don't retrofit**





# Architecture by Design: Don't retrofit



#### **Data Minimization**

Only as much /little as needed













#### **Data Transparency**

- What is going on is clear
- Obfuscation through detail
- User friendly flow

#### **Architectural Transparency**

- Those who live in glass houses…
- From Colonial Design to open floor plan
- User friendly flow

The Farnsworth House in Plano, Illinois. - Designed by Mies van der Rohe,



https://happyhome.clinic/barcelona-pavilion Designed by

Designed by Ludwig Mies van der Rohe and Lilly Reich



https://happyhome.clinic/barcelona-pavilion Designed by

Designed by Ludwig Mies van der Rohe and Lilly Reich







#### **Dark Patterns in Data**

- Focus on user experience
- The Amazon Prime Iliad
- User friendly not confusing

#### **Dark Patterns in Design**

- Ornate vs user friendly and accessible
- Intuitive rather than sterile

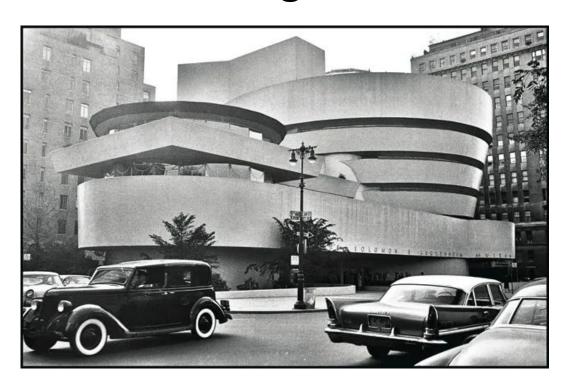
# Dark Patterns in Design: Ornate vs. accessible



# Dark Patterns in Design: Ornate vs. accessible



### Dark Patterns in Design: Intuitive vs. Sterile



#### **Context Matters in Data**

 One use of data may be acceptable in one setting but not another

#### **Context Matters in Architectural Design**

- Adaptation to climate
- Adaptation to culture
- City planning

# **Context Matters in Architectural Design: Climate and Culture**



Context Matters in Architectural Design: Great Mosque of Djenne (Mali)

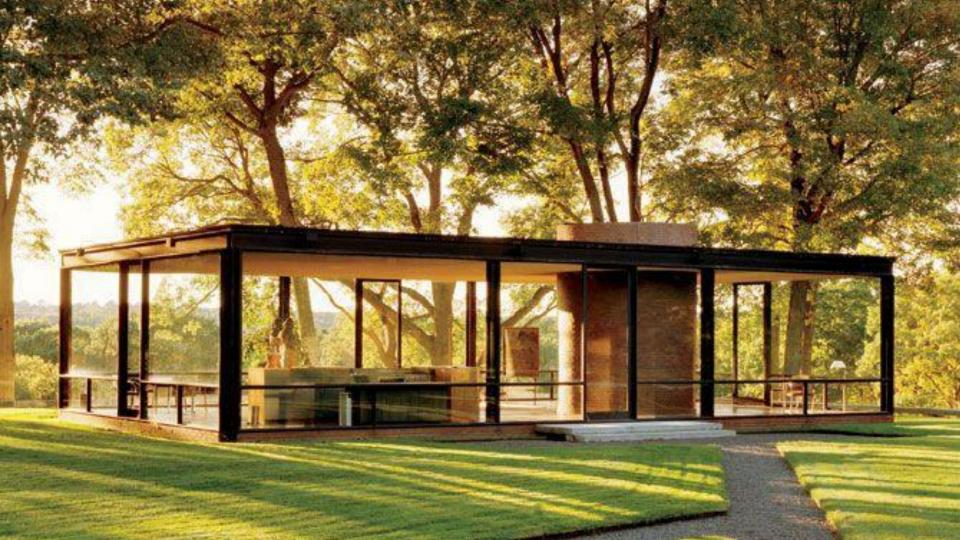


## **Context Matters in Architectural Design:**



## **Context Matters in Architectural Design:**









- •Opened May 1, 1931
- •Built in 410 days
- •20 months from sketches to completion
- •Function drives form: Designed to fit the small lot, heavily limited by zoning requirements, setbacks
- •Changed the law to allow steel tensile strength that speeded construction, and faster elevators
- •Choreographed workflow with cement or steel deliveries continuous every minute, 8 hours a day, for months





		DATE FEBR UARY 5"1930										
	TRADES	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	1			
1	GENERAL CONDITIONS CONTRACT	24011			State of the last	1772-1173						
2	POUNDATIONS (4) WERKING	0.000	10000000					201				
	(N) ENGANATION			5. 3000	100000			20110111	Cit			
15	ы ноотно	200						PARTY SE	8			
3	PILING OR CAISSON				2000	1000		E 33				

STARRETT BR OTHERS BUILDERS ---

STRUCTURAL STEEL STRUCTURAL CONCRETE ARCHES MASONEY IN BETTEROS WALLS SCHOOL NATIONS B EXT. STONE IN GRANTE (b) UHERTONE OR MARKE NO CARVENO & MODELS ARCHIT TERRA COTTA 0 ROOFING SHEET METAL 12 METAL WINDOWS 13 BOUGH CARPENTRY 14 LATHING & PLASTERING 15 FLOOR FILL & FINISH 16 PIN CARP & MILLWORK SI HILLWORK NI PIN RA 17 MET ORS & TELM (N) NUCKS (A) DOORS & TRIM 18 BLEVATOR ENGLOSURES 19 GLASS & GLAZING 20 HARDWARE 21 ORN IRON & BRONZE IN FINES EXTERIOR IN ORN BON 14 MONET

22 MISCELLANEOUS IRON 23 MAS CHUTE 24 INTERIOR MARRIE 25 THE 26 THRRAZZO 27 SLATE & COMPOSITION FLOOR 18 MAINTING & DECORATING 29 ELEVAZORS IN OUDER IN MACHINE & PLATFORMS IN CASE & PRICE! 14 DOMESTICS 30 PUMBING by southers SA PRITARIS & PITTHOS SA PUMPE & SAVES 31 HEAT & VENTL MI MINO (A) BOUARS NO PUMPS & MACH SE RADE & PRICE! 32 ELECTRICAL WORK IN CONSUM GI MINELE & WIEND

33 ELECTRIC FOOTURES 34 SPRINKLER SYSTEM 35 REPRIGERATION 34 VACUUM CLEANING SYSTEM 37 PHEUMATIC SERVICE 38 STL SHITES & DES 14 NOUSHS SOORS Di PERLE DP METAL CHUTES

40 VAULTS & VAULT DOORS 41 REVOCUING DOORS 42 PRISMATIC DONTS 43 CHMNEY 44 FURNITURE & FITTINGS 45 DAMPROOFING 45 WINDOW CAULONG 47 WEATHER STEPS

-6-

DDOCDESS SCHEDILLE

PROGRESS SCHEDULE EMPIRE ST ATE BUILDING						LOCATION (337,34" STREET S				SHREVE, LAMB & HARMON ARCHITEC T			
ĺ	JULY	AUG.	SEPT.	ост.	NOV.	DEC.	JAN.	_	MAR.	_	MAY	JUNE	JULY
						020		-	10000			-	7,021
					-		-	-	-	-		-	
į	100000	No.						-		-			-
į													
		-						-					
		-			Total I								
			100		Name of Street				-	Salara and	-	-	
			SOLD STATE	Table 1						3000	723	10000	
										250		-	
									1000	8330			
				-		-	4						
	-			10000	-				-				
									111111				-
											-	1	-
		-				Contract of			1000				
					1000				-			-	
							Name of Street	-	_		1		
	-		-										
						RESERVE					10000		200
	Name of Street,	-	Page 1	8 5 3			70000				6000		
		-										-	-
		-		-	-								
ĺ													
				G and a									
	-				-		Name and Address of	-			-		-
		No. of Concession, Name of Street, or other party of the Concession, Name of Street, or other pa		-									
	-												
		ALC: N	THE SHAPE						_		100		
		10000										-	
	-								-				1 10
	-	-	-	-									
		-	57.000	-	10000	10000	-	To find			THE OWNER.		-
	-	-		-	10000	1000		133					
							-			-	100000	-	-
										15000			
					1			-		-			
				-	-	-	-	-				A CHILD	
				-									
				100000	10000	100	Pale		1000	10000	1		
	200						100						-
	1000					-				-			-
					1	2011	-	-	-	2011			
		-	-			-						-	-
		15000	10000		Sec.	1000000		2000			BERES		
					2000	200			-		-	-	-
		No.			-	TEST I	2000		1000		10000		1000
	100000000000000000000000000000000000000		1	The second second	1	1		100000000	The second			1	1

EMPIRE ST AT E INC.



The Wharf, Washington DC

#### The Wharf: Built for Inundation

- Built to accommodate high water rising
- Buildings set back six feet, raised 18 inches from previous structures
- 30%+ increase in permeable surfaces that absorb water, e.g. trees, parks, grass, rooftop gardens, etc.
- Absorbed water is rechanneled to a 600,000 gallon cistern beneath the structures for non-potable uses such as flushing toilets or watering plants

#### **Show Your Work**

- •Proper documentation of privacy and compliance measures is a key means of assuaging regulator/enforcer concerns and reducing enforcement action and fines.
- •These structures employ structural expressionism to reveal to viewers the basic structures that make the building stand up and function
- •Lloyds Building Richard Rogers



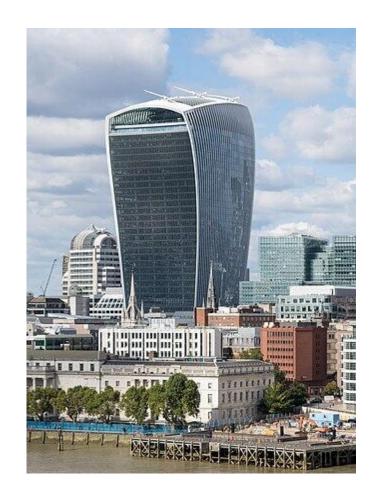
#### Show Your Work

- Centre Pompidou, Paris (Renzo Piano, Richard Rogers)
- Hong Kong Bank (Norman Foster





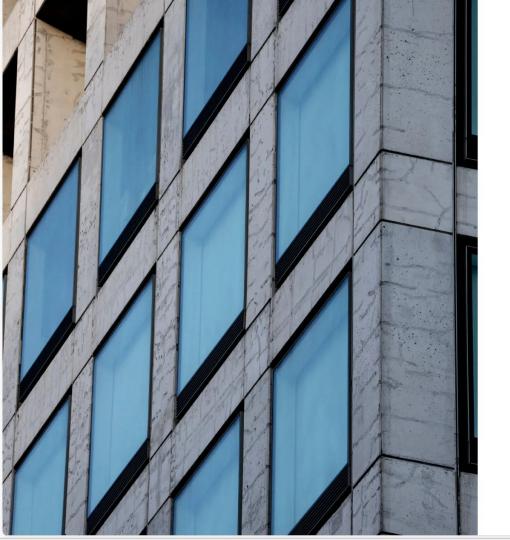




### **Avoiding Unintended Consequences**

- 20 Fenchurch, Rafael Vinoly
- "Walkie-Talkie" building has concave façade
- In certain sunlight, the concave façade concentrated sunlight to the extent of damaging cars
- Initial wind assessment wrong; building caused dramatic street level winds
- Rooftop garden fell far short of expectations





# A Tower on Billionaires' Row Is Full of Cracks. Who's to Blame?

A superstar team of architects and developers insisted on an allwhite concrete facade. It could explain some of the building's problems.

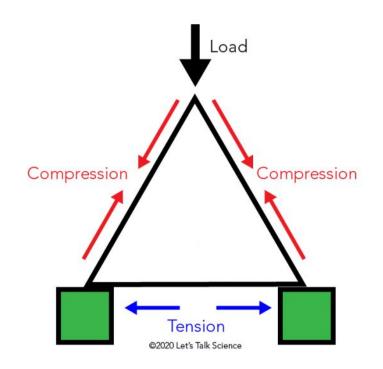


#### "We Told You So" – 432 Park Ave

- During construction, developers insisted on white concrete facing
- Developers were told by builders and architects that the mixture of white concrete would bubble and crack. Developers would not tolerate safer gray blend
- Building sway is not adequately mitigated by top floor pendulum.
   Plumbing, electrical, and elevator systems at risk of twisting.
   Residents become nauseated.
- Residents resist high remediation costs. Lawsuits ensue.

#### Reward and Recognition:

Remember that "Uncles and Aunties" strengthen your position





#### Finance: be proportionate and link to values



Total expenditures on the Great
Mosque of Mecca in Saudi Arabia
are projected to reach \$120 billion by
2030, making it the most expensive
building in the world by a wide
margin.

#### Finance: be proportionate and link to values





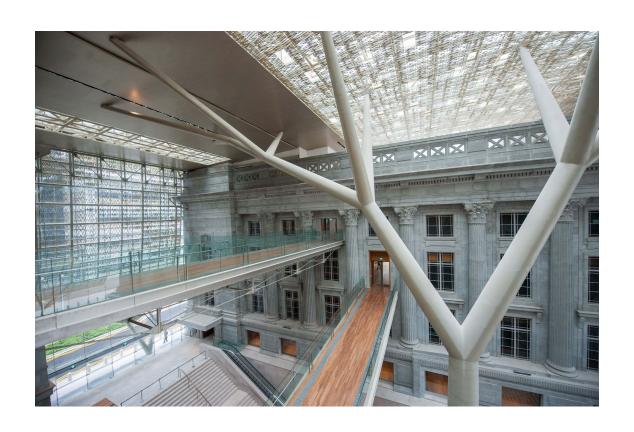


In contrast, this award winning Mosque in Dhaka, Bangladesh cost Sh 15 million (under 200k USD) and took five years to construct using community funds. Construction finished in 2012.

# M&A: Let them be beautiful together

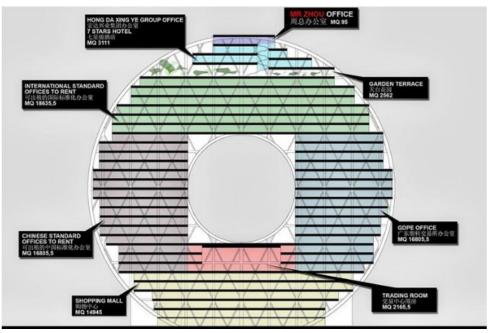


# M&A: Let them be beautiful together



# Accountability: the relevance of the Wheel





### Accountability: the relevance of the Wheel



CIPL Accountability Framework – Universal Elements of Accountability

## UX: Where is the door?

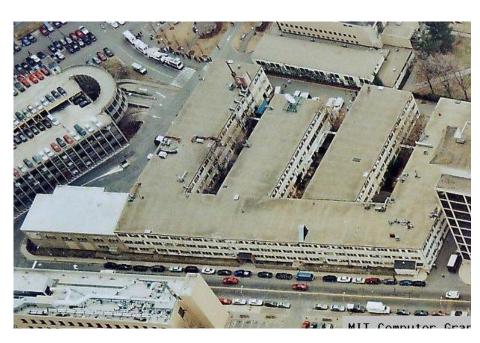




#### UX/UI – Getting into Robie House

- Frank Lloyd Wright house, Chicago, 1910. Prairie Style
- Issues of user experience and user interface: How do you get in?
- This may not have been a "dark pattern" in which the architect seeks to discourage visitors.
- Wright's design encouraged visitors to have to view much of the exterior in search of the entryway.
- Avoiding dark patterns is an issue not just of design, but objective and intent.

# Building 20 at MIT





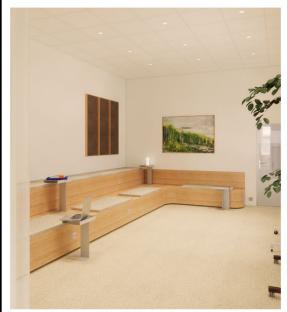


EIDRA OSLO © SPACON

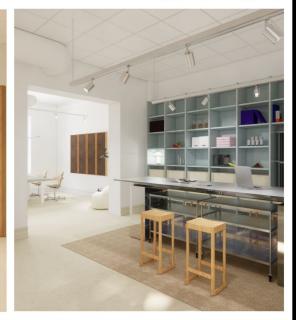
An activity-based workplace environment with different zones that are ever changing will encourage flexible working. Employees will feel encouraged to switch desks and walk around the space, constantly on the lookout for opportunities to be increasingly innovative.

The one Coffee station on each floor will act as a meeting hub: A place to spark casual conversation or to share ideas. The spatial design aims to create a safe space, a sense of belonging, and a feeling of home. The historical details in the building are preserved and integrated with modern layers. Each zone has its own identity, characterized by a play of color tones on selected surfaces.

TYPE / WORKSPACES LOCATION / DENMARK STATUS / UNDER CONSTRUCTION







11 / 57









#### The Work Never Ends

- Monticello, Thomas Jefferson
- Jefferson never finished it, endlessly modifying and tweaking
- At the end of his life, the building was in disrepair owing to inadequate funds and new projects, e.g. UVA
- Privacy work the programs we build, the projects we launch, the processes we establish, the networks we create – need ongoing funding, attention, renewal, and reinvention.

#### **Speakers**





Odia
Kagan
Partner, Privacy
For Rothschild LLP



Doug
Miller
Executive Coach
Doug Miller
Strategies, LLC



Justin B.
Weiss
Senior Counsel
Crowell & Moring