



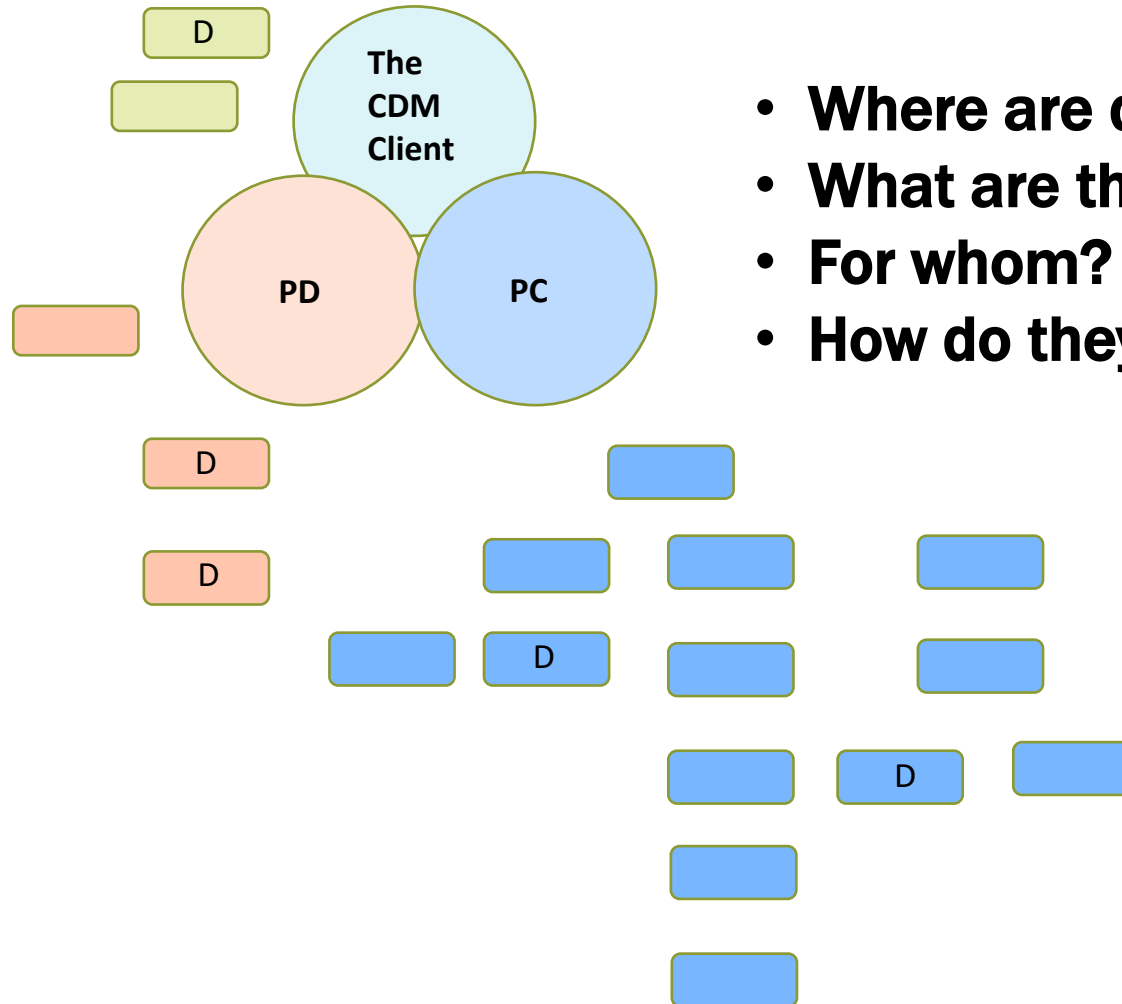
Revisiting Design Risk Management

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My place in the team



- Where are designers working?
- What are they required to do?
- For whom?
- How do they relate to others?

Regulation 9: Duties of designers

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- **Client relationship [Reg 9(1)]**

A difficult challenge or of little consequence?

Regulation 9: Duties of designers

- **Client relationship [Reg 9(1)]**

A difficult challenge or of little consequence?

- **Doing design [Reg 9(2)(a),(b) and (c) and Reg 9(3)(a)]**

What you are doing anyway

Regulation 9: Duties of designers

- **Client relationship [Reg 9(1)]**
A difficult challenge or of little consequence?
- **Doing design [Reg 9(2)(a),(b) and (c) and Reg 9(3)(a)]**
What you are doing anyway
- **Informing others [Reg 9(3)(b) and (c) and Reg (4)]**
“Show all your good work”

Design Risk Assessment?

Or, how safe is safe enough?

“Successful risk management is not about ticking boxes or calculating numbers. And it is not about doing things to avoid sanctions. The primary goal is not to avoid a fine or a criminal record, but to stop people being made unwell or being hurt or killed by their work...”

...Managing risk means managing people and every one of them is different. That's not easy to factor into the numerical system-driven approach to risk management."

Judith Hackitt, HSE Chair

In response to a question about how unlikely an accident had to be before the questioner could stop worrying about ending up in court (Aug. '22)

Probability range

- The value of probability when something is impossible is...
- The value of probability when something is certain is...

Risk Assessment?

Prob Sev	1	2	3	4
1	1	2	3	4
2	2	4	6	8
3	3	6	9	12
4	4	8	12	16

Risk Assessment?

Prob Sev	1/5	2/5	3/5	4/5
1	1/5	2/5	3/5	4/5
2	2/5	4/5	6/5	8/5
3	3/5	6/5	9/5	12/5
4	4/5	8/5	12/5	16/5

DRA Matrices

Issue	P	S	RR	Action	P'	S'	RRR	Action
MH Blocks	4	2	8	Offsite	2	1	2	Use offsite

John's story



Newport Southern distributor road



Newport Southern distributor road

- **Additional site investigation £70k**
- **Additional design and management £50k**

Newport Southern distributor road

- Additional site investigation £70k
- Additional design and management £50k
- Savings identified during design £500k

Heathrow T5 during construction



Heathrow T5 Consolidation Centre

COSTS

- **Set-up £20m**
- **Running £20m**

SAVINGS

- **Material waste reduction £40m**
- **Labour lost-time reduction £80m**

Colchester Garrison unit manufacture



Colchester Garrison

- **Base cost (phase 1) £91m**
 - **Site set-up reliable**
 - **Late delivery? No**
 - **Quality risk? No**
 - **Weather risk? Low**
- **Base cost (phase 1) £82m**
 - **Site set-up extras £3m**
 - **6 month over-run £10m**
 - **Quality risk cost? £?m**
 - **Weather risk? High**

Doing design, being a designer

- **CIRIA C755 (HSE-funded industry guide)**

Like it? Stress test it. Copy it. Develop your own

- ***CDM 2015: A Guide for Architects and Designers***

by Paul Bussey (RIBA Books)

- **DIOHAS**

www.diohas.org

Summary pt. 1

- **Technical design capability**

... most needed for compliance

- **Regulation 8 behaviours!**

Cooperate

Report concerns about potential harm

Provide comprehensive and timely information

Summary pt. 2

- **Eliminate, Reduce, Control...**
by further design
- **... Inform**
- **Be inspired to be a great designer**
- **What would you do differently if CDM didn't exist?**

Last word

From SID director, Richard Voke



- **Don't harm people**
- **Know your duties**
- **Perform your duties**
- **Have systems to help you**
- **Talk about what you do**





Thank you

For more information about our courses and what we do,
get in touch or visit www.safetyindesign.org.uk