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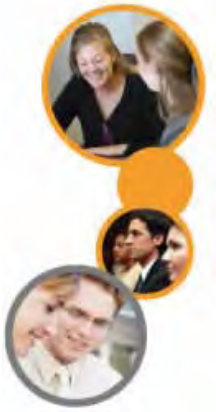
Service Transformation

Maximising Resources to Service Delivery Need

3rd February 2010



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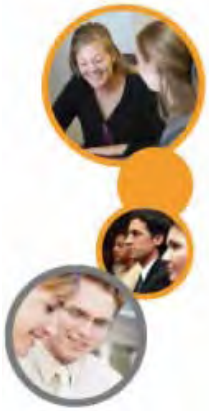
Agenda

1. Coping with fluctuating & volatile working time demand
2. Welsh Authority case study
3. Further issues / examples / discussion



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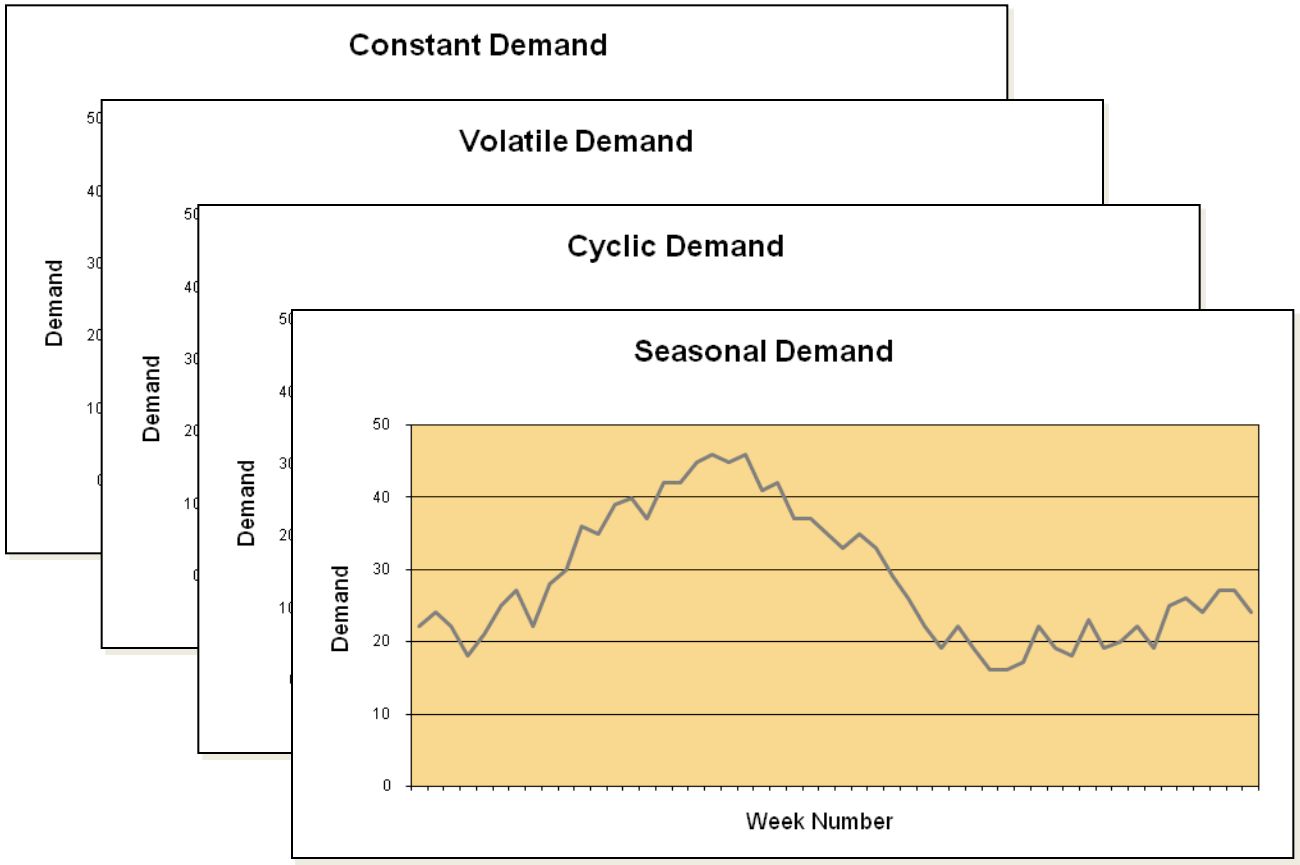
Understanding the Business Need

Establish and understand the underlying business demand



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Understanding How We Buy Labour

Traditionally:

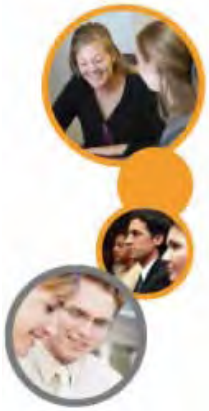
39 hours per week contract, 25 days annual leave, 8 days public holiday

Gross Hours:

52.18 weeks x 39 hours per week	=	2,035	hours

Net Hours:

Annual holiday allowance (25 days ÷ 5)	=	5.00	weeks
Public holiday allowance (8 days ÷ 5)	=	1.60	weeks
	=	6.60	weeks
45.58 weeks (52.18 – 6.60) x 39 hours	=	1,778	hours



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Matching the Business Need

"…we must have one presence 24 hours a day, 7 days a week in the Control Room, so how many people do we need?"

Traditionally:

Business will be working 365 days x 24 hrs,	= 8,766 hrs
Contracts based on 39 hours and 1 on rest	= 1,778 hrs
Labour structure based on (8,766 ÷ 1,778)	= 4.93

"…we actually need the hours equivalent of 4.93 people, which realistically means 5 people working 1753 hours each, with 25 hours held in reserve".

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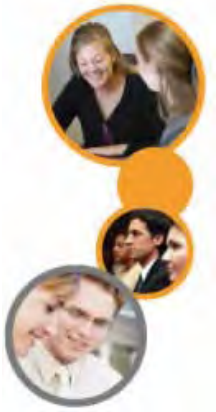
Building a Rota Pattern with Rostered Time Off

5 Team Continuous System for Control Room Staff

Mon	Tue	Wed	Thu	Fri	Sat	Sun	Hours
M	M	M	M	M	M	M	56
A	A	A	A	A	A	A	56
N	N	N	N	N	N	N	56
-	-	-	-	-	-	-	0
-	-	-	-	-	-	-	0

Total hours= 168 Average hours = 33.6 Total weeks = 52.18
Average Annual hours = 1753 Reserve hours = 25



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Continuous.wsp - WORK Scheduling

File Edit Rotas Shifts Tools Help

New Project | Open Project | Save Project | Show Shift Library

Shortcuts

- Project Settings
- Shut Days
- Business Demand
- Find Shifts
- Rota Design
- Rota Calendars

Explorer | Calendars

Core

Rota Design

Period duration (weeks): 52.18

Shift formatting: Display Shift Codes i.e. 'M 8.00'

Selected Rota design: 12 Hour

Number of Teams/Cycles: 5

Rota Designer

Week/Team	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Totals
1	N 12.0	N 12.0				D 12.0	D 12.0	48
2			N 12.0	N 12.0	N 12.0			36
3	D 12.0	D 12.0				N 12.0	N 12.0	48
4			D 12.0	D 12.0	D 12.0			36
5								0
Totals	24	24	24	24	24	24	24	**168**

Provisional Statistics

This Period

Total hours per cycle:	168
Average hours per cycle:	33.6
Period hours per Team:	1,753
Target hours per Team:	1,755
Hours variance:	2

All Periods

Average hours per cycle:	33.6
Total duration of Periods:	52.18
Target hours per Team:	1,755
Project hours per Team:	1,753
Traditional equivalent:	38.47
Total hours variance:	2

Project Settings

Target hours (net):	1,755
Traditional equivalent:	38.5

Shift Code	Colour	Start Time	End Time	Break Length	Paid Break	Duration (on Site)	Duration (Net of breaks)
M 8.00		06:00	14:00	30	Yes	8 hrs, 0 mins	8 hrs, 0 mins
A 8.00		14:00	22:00	30	Yes	8 hrs, 0 mins	8 hrs, 0 mins
N 8.00		22:00	06:00	30	Yes	8 hrs, 0 mins	8 hrs, 0 mins
D 12.0		06:00	18:00	45	Yes	12 hrs, 0 mins	12 hrs, 0 mins
N 12.0		18:00	06:00	45	Yes	12 hrs, 0 mins	12 hrs, 0 mins

CAPS NUM Ready... 01/03/2005

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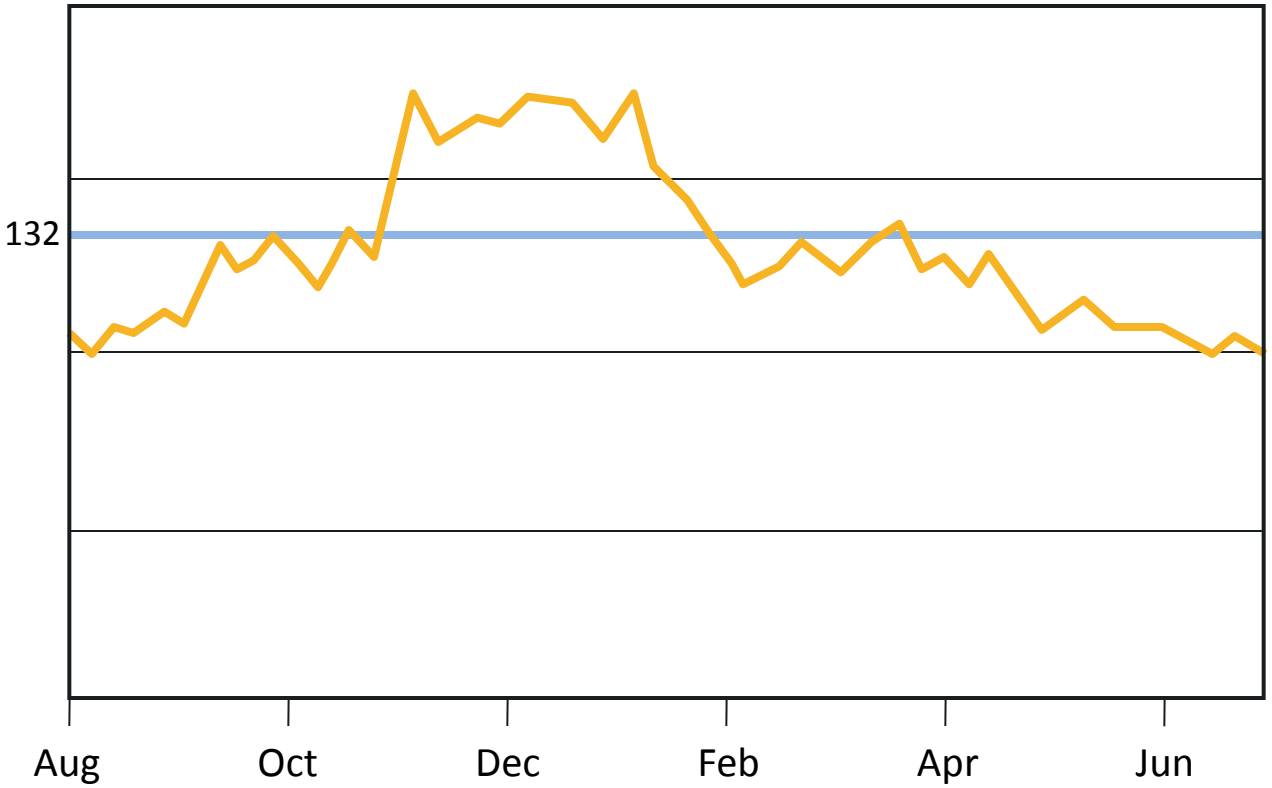
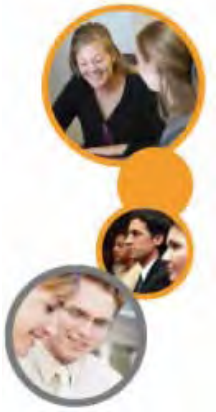
Seasonal Demand Profile

Service Engineering Hours Per Week





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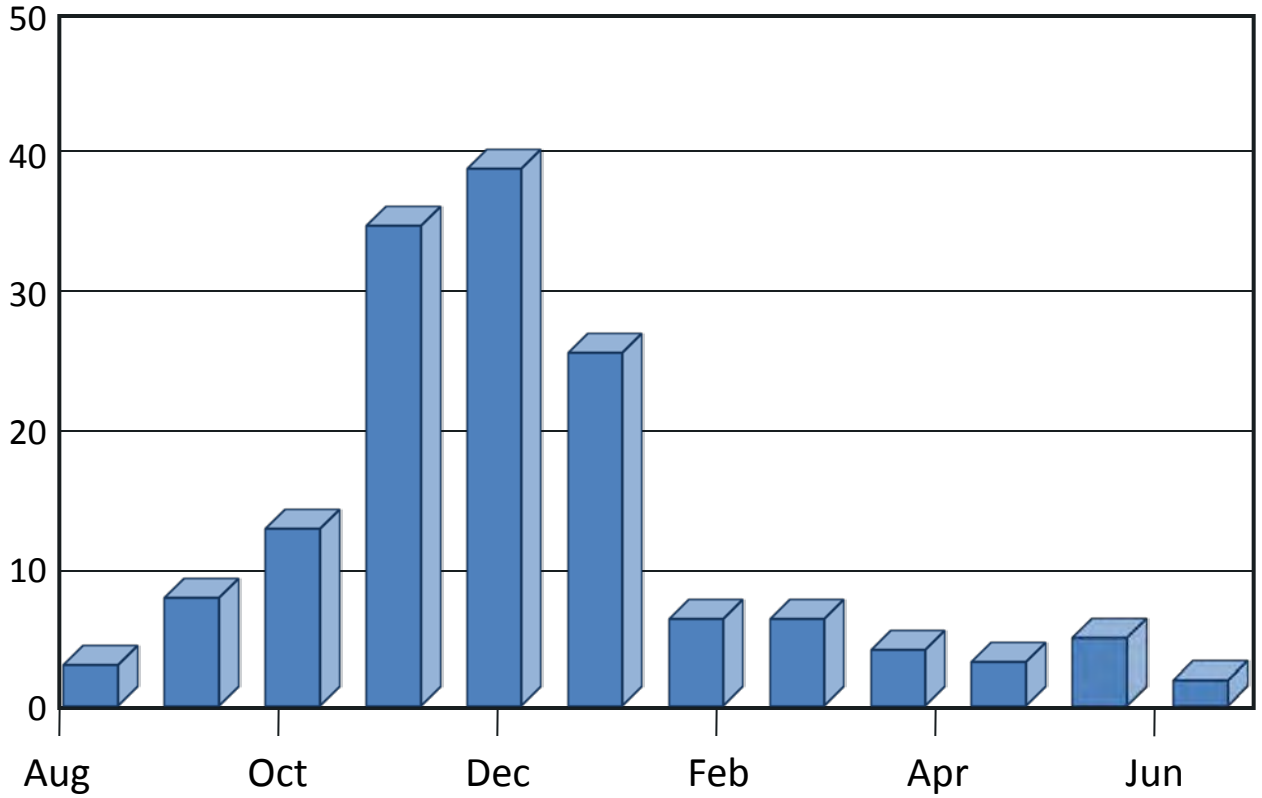
Annual Overtime Profile (%)

Monthly Percentage



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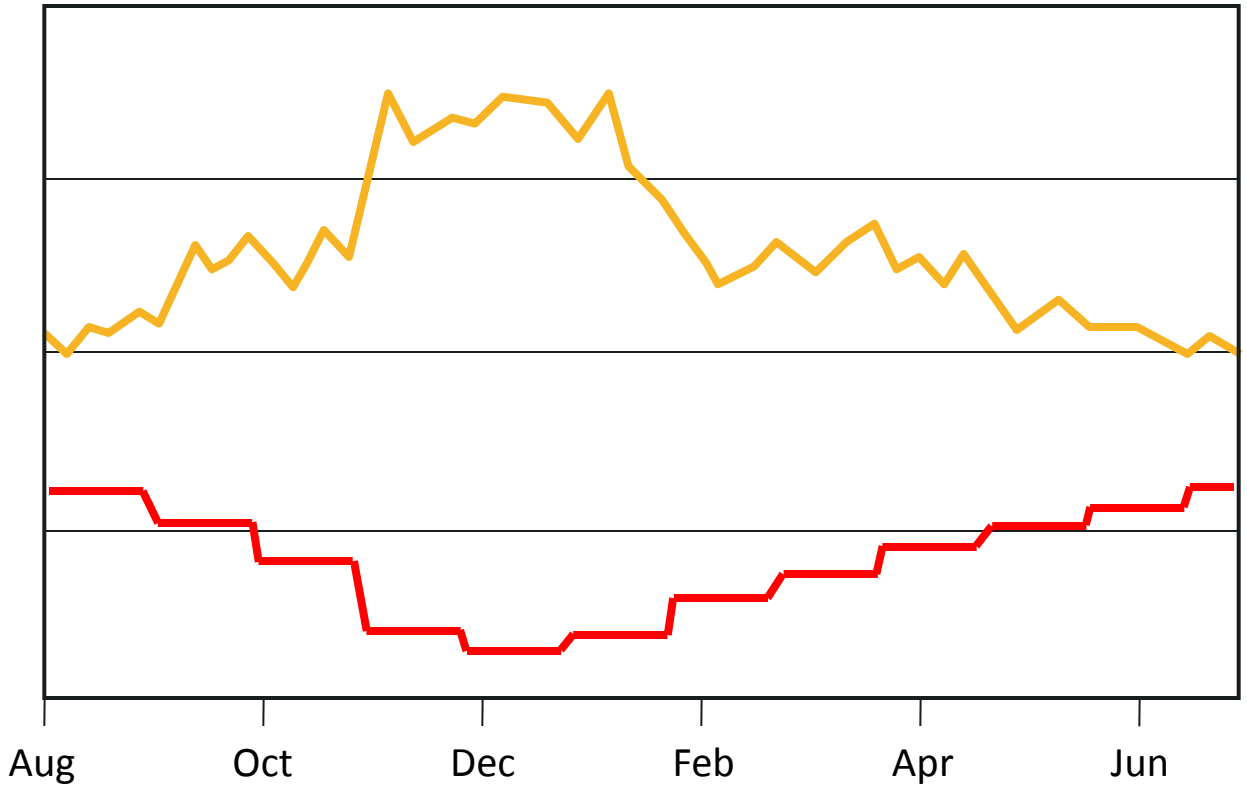
Labour Cost Per Unit



‘Worst’ cost is 48% greater than ‘best’ cost

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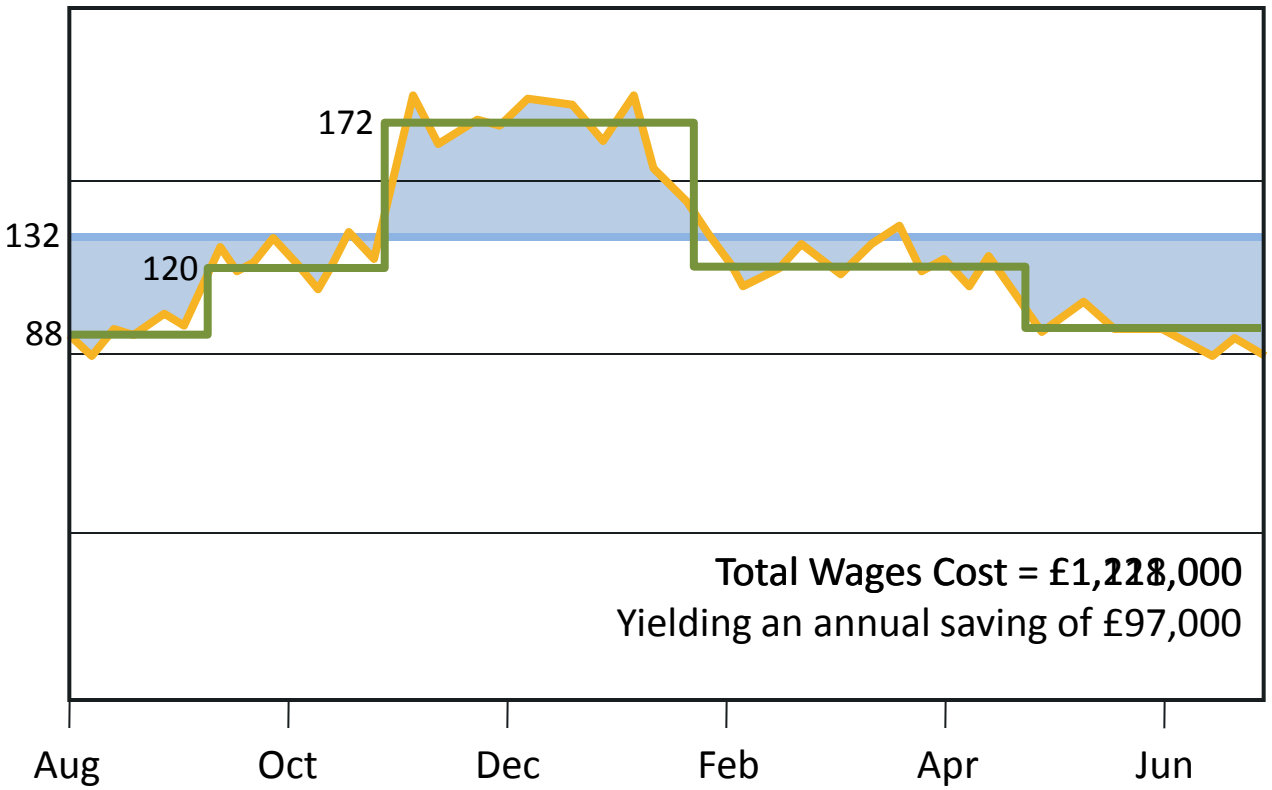
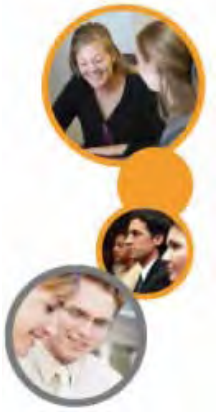
Seasonal Demand Profile Modular Solution

Service Engineering Hours Per Week





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4 Team Seasonal Rota Progression

Low Season
10 Weeks

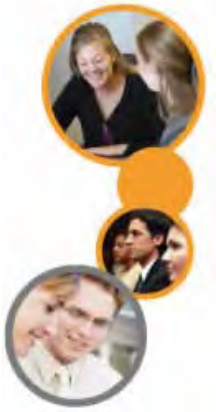
Week/Team	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Totals
1		Day 8	Day 8	Day 8	Day 8			32
2	Day 8	Day 8		Day 8	Day 8			32
3	Day 8	Day 8	Day 8					24
4								0
Totals	16	24	16	16	16	0	0	**88**

Core Season
26 Weeks

Week/Team	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Totals
1	Day 8	Day 8	Day 8	Day 8	Day 8			40
2	Day 8	Day 8	Day 8	Day 8	Day 8			40
3	Day 8	Day 8	Day 8	Day 8	Day 8			40
4								0
Totals	24	24	24	24	24	0	0	**120**

High Season
16 Weeks

Week/Team	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Totals
1	Day 10	Day 10	Day 8	Day 8	Day 8			44
2	Day 8	Day 8	Day 8	Day 8	Day 8	Day 8		48
3	Day 8	Day 10	Day 10	Day 8	Day 8			44
4	Day 8	Day 8	Day 10	Day 10				36
Totals	34	36	36	34	24	8	0	**172**



Average of 1696 hours, with 36 hours unrostered reserve

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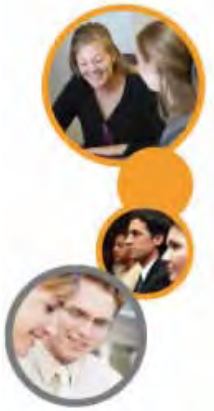
Welsh Authority Case Study

CCTV Monitoring



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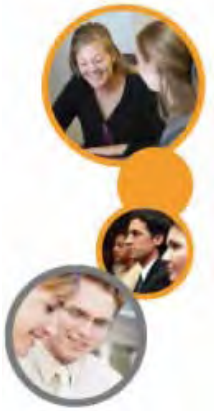
Our Brief

- To review the shift rota for nine staff employed within the CCTV monitoring suite
- The council operates a 24 hour / 7 day continuous service throughout the year
- All staff are contracted to work an average 37 hour week
- Shift patterns are dictated by incident rates
- Equality of shifts are required over an acceptable period of time.



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Constraints

- “Hotspot” times (Friday to Sunday) require extra cover
- Bank holidays to be considered in equality of shifts
- No long-term pairing of staff
- Shift pattern to accommodate a small handover
- Working time regulations

- To consider: -
  - >Extended hours
  - >“Holidays included” rotas
  - >Dealing with sickness absence.

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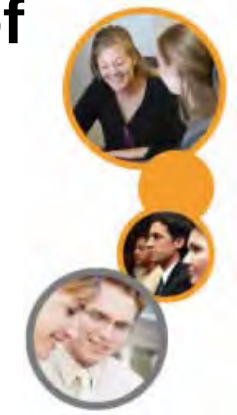
Health & Safety

From Health & Safety Executive guide to "Shift Work and Fatigue"

- **Employers have a duty of care in law for their employees**
- **This duty includes removing or controlling the risks of fatigue by properly organising and planning shift-working arrangements**
- **The Working Time Regulations are also relevant to the planning and organisation of shifts, especially night shifts.**



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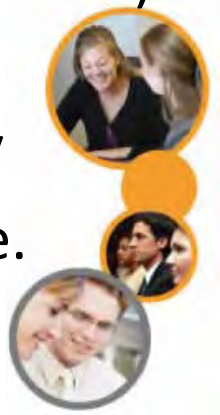
Holidays – Gross .v. Net Rosters

- **Gross**
- Plan all the hours that a person is paid
- Holidays on request
- Conflicts where more than one want the same time off
- Typically increased absence
- High management / administration time

- **Net**
- Plan only the hours that someone is going to work (paid hrs – their holiday entitlement)
- Build in time off to match preferred holiday curve (e.g. 2 weeks in Summer)
- Allow shift swaps
- Low management / administration time.



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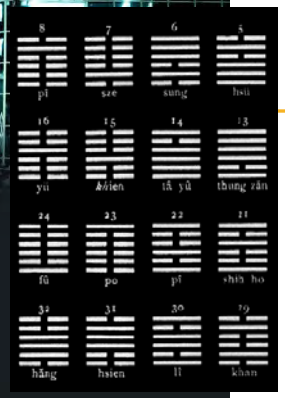

Mathematics

- There are 21 different ways to allocate 5 shifts per week
- If you wanted to schedule for 2 staff, the 21 ways are squared = 441
- For 9 staff, 21 to the power of 9

(21x21x21x21x21x21x21x21x21) =

794 billion !!

	MON	TUE	WED	THU	FRI	SAT	SUN
WEEK 1	D	D	D	D	D		
WEEK 2	D	D	D	D		D	
WEEK 3	D	D	D	D			D
WEEK 4	D	D	D		D	D	
WEEK 5	D	D	D		D		D
WEEK 6	D	D	D			D	D
WEEK 7	D	D		D	D	D	
WEEK 8	D	D		D	D		D
WEEK 9	D	D		D		D	D
WEEK 10	D	D			D	D	D
WEEK 11	D		D	D	D	D	
WEEK 12	D		D	D	D		D
WEEK 13	D		D	D		D	D
WEEK 14	D		D		D	D	D
WEEK 15	D			D	D	D	D
WEEK 16		D	D	D	D	D	
WEEK 17		D	D	D	D		D
WEEK 18		D	D	D		D	D
WEEK 19		D	D		D	D	D
WEEK 20		D		D	D	D	D
WEEK 21			D	D	D	D	D

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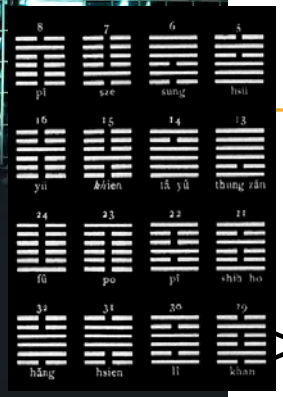

Mathematics

- Add in the constraining factors and it definitely requires a computer !!
- Spreadsheets are useful to a degree but still require manual input
- Bespoke software exists for generating shift patterns
- *Working Time Solutions Ltd* provide consultancy and software solutions
- "… a powerful and flexible tool which can be used to solve all manner of labour planning problems and to explore variables on a 'What if ?' Basis".

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WORK Scheduling™

> **Example: 8 and 7 hour "Hotspot" shifts**

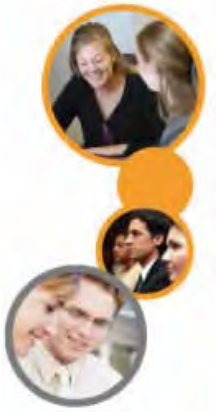
WORK Scheduling™ Core, Rota '8s V1'

Week/Team	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Totals
1	D 0600-1410	D 0600-1410	D 0600-1410		A 1800-0100	A 1800-0100	A 1800-0100	45.51
2	A 1400-2210	A 1400-2210	A 1400-2210			D 0600-1410	D 0600-1410	40.85
3	D 0600-1410	D 0600-1410		A 1400-2210	A 1400-2210	A 1400-2210	A 1400-2210	49.02
4	A 1400-2210			D 0600-1410	D 0600-1410	N 2200-0610	N 2200-0610	40.85
5								0
6			D 0600-1410	D 0600-1410	D 0600-1410	A 1400-2210	A 1400-2210	40.85
7		A 1400-2210	A 1400-2210	A 1400-2210	A 1400-2210			32.68
8	N 2200-0610	N 2200-0610	N 2200-0610	N 2200-0610	N 2200-0610			40.85
9								0
Totals	40.85	40.85	40.85	40.85	47.85	39.68	39.68	**290.61**

> **Map out the required shifts over the week, as above**

> **Ensure the correct cover on each day**

> **10 minute overlap for changeover.**



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Alternative Rotas

> **Example: Mix of 6, 8 and 10 hour shifts.**

WORK Scheduling™ Core, Rota '6-10s V1'

Week/Team	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Totals
1	D 0600-1410	D 0600-1410	D 0600-1410		A 1800-0100	A 1800-0100	A 1800-0100	45.51
2	A 1400-2210	A 1400-2210	A 1400-2210			D 0600-1410	D 0600-1410	40.85
3	D 0600-1410	D 0600-1410		A 1400-2210	A 1400-2210	A 1400-2210	A 1400-2210	49.02
4	A6 1400-2010			D 0600-1410	D 0600-1410	N10 2000-0610	N10 2000-0610	42.85
5								0
6			D 0600-1410	D 0600-1410	D 0600-1410	A6 1400-2010	A6 1400-2010	36.85
7		A6 1400-2010	A6 1400-2010	A6 1400-2010	A6 1400-2010			24.68
8	N10 2000-0610	N10 2000-0610	N10 2000-0610	N10 2000-0610	N10 2000-0610			50.85
9								0
Totals	40.85	40.85	40.85	40.85	47.85	39.68	39.68	**290.61**

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Alternative Rotas

> **Example: Mix of 8 & 12 hour shifts**

> **12 hour day shift reduces manpower required.**

WORK Scheduling™ Core, Rota '8 _12s V1'

Week/Team	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Totals
1	D 0600-1410	D 0600-1410	D 0600-1410		A 1800-0100	A 1800-0100	A 1800-0100	45.51
2	N 12 2000-0800	N 12 2000-0800				D12 0800-2000	D12 0800-2000	48.68
3	D12 0800-2000	D12 0800-2000	D12 0800-2000					36.51
4								0
5			A 1400-2210	A 1400-2210	A 1400-2210	N 12 2000-0800	N 12 2000-0800	48.85
6				D12 0800-2000	D12 0800-2000			24.34
7								0
8				D 0600-1410	D 0600-1410	A 1400-2210	A 1400-2210	32.68
9	A 1400-2210	A 1400-2210	N 12 2000-0800	N 12 2000-0800	N 12 2000-0800			52.85
Totals	40.68	40.68	40.68	40.68	47.68	39.51	39.51	**289.42**

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WORK Scheduling™

WORK Scheduling™ — Rota Calendar - 8s V1

Date	Day	Team 1	Team 2	Team 3	Team 4	Team 5	Team 6	Team 7	Team 8	Team 9
01/09/2009	Tue	D 0600-1410	A 1400-2210	D 0600-1410				A 1400-2210	N 2200-0610	
02/09/2009	Wed	D 0600-1410	A 1400-2210				D 0600-1410	A 1400-2210	N 2200-0610	
03/09/2009	Thu			A 1400-2210	D 0600-1410		D 0600-1410	A 1400-2210	N 2200-0610	
04/09/2009	Fri	A 1800-0100		A 1400-2210	D 0600-1410		D 0600-1410	A 1400-2210	N 2200-0610	
05/09/2009	Sat	A 1800-0100	D 0600-1410	A 1400-2210	N 2200-0610		A 1400-2210			
06/09/2009	Sun	A 1800-0100	D 0600-1410	A 1400-2210	N 2200-0610		A 1400-2210			
07/09/2009	Mon	A 1400-2210	D 0600-1410	A 1400-2210				N 2200-0610		D 0600-1410
08/09/2009	Tue	A 1400-2210	D 0600-1410				A 1400-2210	N 2200-0610		D 0600-1410
09/09/2009	Wed	A 1400-2210				D 0600-1410	A 1400-2210	N 2200-0610		D 0600-1410
10/09/2009	Thu		A 1400-2210	D 0600-1410		D 0600-1410	A 1400-2210	N 2200-0610		
11/09/2009	Fri		A 1400-2210	D 0600-1410		D 0600-1410	A 1400-2210	N 2200-0610		A 1800-0100
12/09/2009	Sat	D 0600-1410	A 1400-2210	N 2200-0610		A 1400-2210				A 1800-0100
13/09/2009	Sun	D 0600-1410	A 1400-2210	N 2200-0610		A 1400-2210				A 1800-0100
14/09/2009	Mon	D 0600-1410	A 1400-2210				N 2200-0610		D 0600-1410	A 1400-2210
15/09/2009	Tue	D 0600-1410				A 1400-2210	N 2200-0610		D 0600-1410	A 1400-2210
16/09/2009	Wed				D 0600-1410	A 1400-2210	N 2200-0610		D 0600-1410	A 1400-2210
17/09/2009	Thu	A 1400-2210	D 0600-1410		D 0600-1410	A 1400-2210	N 2200-0610			
18/09/2009	Fri	A 1400-2210	D 0600-1410		D 0600-1410	A 1400-2210	N 2200-0610		A 1800-0100	
19/09/2009	Sat	A 1400-2210	N 2200-0610		A 1400-2210				A 1800-0100	D 0600-1410
20/09/2009	Sun	A 1400-2210	N 2200-0610		A 1400-2210				A 1800-0100	D 0600-1410
21/09/2009	Mon	A 1400-2210				N 2200-0610		D 0600-1410	A 1400-2210	D 0600-1410
22/09/2009	Tue				A 1400-2210	N 2200-0610		D 0600-1410	A 1400-2210	D 0600-1410
23/09/2009	Wed			D 0600-1410	A 1400-2210	N 2200-0610		D 0600-1410	A 1400-2210	
24/09/2009	Thu	D 0600-1410		D 0600-1410	A 1400-2210	N 2200-0610				A 1400-2210
25/09/2009	Fri	D 0600-1410		D 0600-1410	A 1400-2210	N 2200-0610		A 1800-0100		A 1400-2210
26/09/2009	Sat	N 2200-0610		A 1400-2210				A 1800-0100	D 0600-1410	A 1400-2210
27/09/2009	Sun	N 2200-0610		A 1400-2210				A 1800-0100	D 0600-1410	A 1400-2210
28/09/2009	Mon				N 2200-0610		D 0600-1410	A 1400-2210	D 0600-1410	A 1400-2210

- **Rota calendar gives the whole year's shifts for every staff member**
- **Prints on to just 6 pages.**

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WORK Scheduling™

WORK Scheduling Rota Calendar

Schedule Statistics	Avg	Team 1	Team 2	Team 3	Team 4	Team 5	Team 6	Team 7	Team 8	Team 9
Total hours scheduled	1,682.97	1,710.3	1,689.3	1,664.6	1,661.3	1,669.5	1,710.3	1,702.2	1,661.3	1,677.7
Variance from Target Hours (1664)	18.97	46.3	25.3	0.8	2.70	5.5	46.3	38.2	2.70	13.7
This Calendar variance	19.89	47	26	2	2	7	47	39	2	15
Total Saturdays worked	28.89	30	29	28	28	28	29	29	29	30
Total Sundays worked	28.89	30	29	28	28	28	29	29	29	30
Public Holidays worked	4.78	4	2	5	6	7	4	4	5	6
Total days off scheduled	156.44	153	156	155	159	158	153	154	159	157
Complete scheduled weekends off	23.11	22	23	24	24	24	23	23	23	22
Total shifts scheduled	208.56	212	209	206	206	207	212	211	206	208
Total 'D 0600-1410' shifts scheduled	69.56	71	69	68	68	70	70	69	69	72
Total 'D12 0800-2000' shifts schedu...	0.00	0	0	0	0	0	0	0	0	0
Total 'A 1400-2210' shifts scheduled	81.11	84	83	81	78	79	84	82	78	81
Total 'N 12 2000-0800' shifts sched...	0.00	0	0	0	0	0	0	0	0	0
Total 'N 2200-0610' shifts scheduled	40.56	39	42	42	42	40	40	42	41	37
Total 'A 1800-0100' shifts scheduled	17.33	18	15	15	18	18	18	18	18	18

> **Statistics provide a mass of information (e.g. hours and shifts scheduled over the year, numbers of weekends and bank holidays worked and total days off).**

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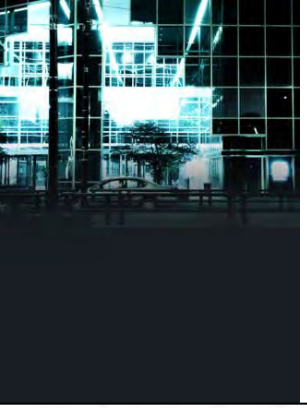

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Individual / Team Calendars

8 hr & “Hotspot” shifts.

WORK Scheduling Rota Calendar - Team1

	Sep 09	Oct 09	Nov 09	Dec 09	Jan 10	Feb 10	Mar 10	Apr 10	May 10	Jun 10	Jul 10	Aug 10	
Sun			1									1 A 1400-2210	Sun
Mon			2 D 0600-1410			1	1					2 A 1400-2210	Mon
Tue	1 D 0600-1410		3 D 0600-1410	1		2	2			1		3	Tue
Wed	2 D 0600-1410		4 D 0600-1410	2		3	3			2		4	Wed
Thu	3	1	5	3		4	4	1 D 0600-1410		3 D 0600-1410	1 N 2200-0610	5 D 0600-1410	Thu
Fri	4 A 1800-0100	2	6 A 1800-0100	4	1	5	5	2 D 0600-1410		4 D 0600-1410	2 N 2200-0610	6 D 0600-1410	Fri
Sat	**5 A 1800-0100**	**3**	**7 A 1800-0100**	**5**	**2**	**6**	**6**	**3 N 2200-0610**	**1**	**5 N 2200-0610**	**3**	**7 N 2200-0610**	**Sat**
Sun	**6 A 1800-0100**	**4**	**8 A 1800-0100**	**6**	**3**	**7**	**7**	**4 N 2200-0610**	**2**	**6 N 2200-0610**	**4**	**8 N 2200-0610**	**Sun**
Mon	7 A 1400-2210	5	9 A 1400-2210	7	4 D 0600-1410	8	8 D 0600-1410	5	3	7	5	9	Mon
Tue	8 A 1400-2210	6	10 A 1400-2210	8	5 D 0600-1410	9	9 D 0600-1410	6	4	8	6	10	Tue
Wed	9 A 1400-2210	7 D 0600-1410	11 A 1400-2210	9 D 0600-1410	6 D 0600-1410	10 D 0600-1410	10 D 0600-1410	7	5	9	7	11	Wed
Thu	10	8 D 0600-1410	12	10 D 0600-1410	7	11 D 0600-1410	11	8	6	10	8	12	Thu
Fri	11	9 D 0600-1410	13	11 D 0600-1410	8 A 1800-0100	12 D 0600-1410	12 A 1800-0100	9	7	11	9	13	Fri
Sat	**12 D 0600-1410**	**10 A 1400-2210**	**14 D 0600-1410**	**12 A 1400-2210**	**9 A 1800-0100**	**13 A 1400-2210**	**13 A 1800-0100**	**10**	**8**	**12**	**10**	**14**	**Sat**
Sun	**13 D 0600-1410**	**11 A 1400-2210**	**15 D 0600-1410**	**13 A 1400-2210**	**10 A 1800-0100**	**14 A 1400-2210**	**14 A 1800-0100**	**11**	**9**	**13**	**11**	**15**	**Sun**
Mon	14 D 0600-1410	12	16 D 0600-1410	14	11 A 1400-2210	15	15 A 1400-2210	12	10 D 0600-1410	14	12 D 0600-1410	16	Mon
Tue	15 D 0600-1410	13 A 1400-2210	17 D 0600-1410	15 A 1400-2210	12 A 1400-2210	16 A 1400-2210	16 A 1400-2210	13	11 D 0600-1410	15	13 D 0600-1410	17	Tue
Wed	16	14 A 1400-2210	18	16 A 1400-2210	13 A 1400-2210	17 A 1400-2210	17 A 1400-2210	14 D 0600-1410	12 D 0600-1410	16 D 0600-1410	14 D 0600-1410	18 D 0600-1410	Wed
Thu	17 A 1400-2210	15 A 1400-2210	19 A 1400-2210	17 A 1400-2210	14	18 A 1400-2210	18	15 D 0600-1410	13	17 D 0600-1410	15	19 D 0600-1410	Thu
Fri	18 A 1400-2210	16 A 1400-2210	20 A 1400-2210	18 A 1400-2210	15	19 A 1400-2210	19	16 D 0600-1410	14 A 1800-0100	18 D 0600-1410	16 A 1800-0100	20 D 0600-1410	Fri
Sat	**19 A 1400-2210**	**17**	**21 A 1400-2210**	**19**	**16 D 0600-1410**	**20**	**20 D 0600-1410**	**17 A 1400-2210**	**15 A 1800-0100**	**19 A 1400-2210**	**17 A 1800-0100**	**21 A 1400-2210**	**Sat**
Sun	**20 A 1400-2210**	**18**	**22 A 1400-2210**	**20**	**17 D 0600-1410**	**21**	**21 D 0600-1410**	**18 A 1400-2210**	**16 A 1800-0100**	**20 A 1400-2210**	**18 A 1800-0100**	**22 A 1400-2210**	**Sun**
Mon	21 A 1400-2210	19 N 2200-0610	23 A 1400-2210	21 N 2200-0610	18 D 0600-1410	22 N 2200-0610	22 D 0600-1410	19	17 A 1400-2210	21	19 A 1400-2210	23	Mon
Tue	22	20 N 2200-0610	24	22 N 2200-0610	19 D 0600-1410	23 N 2200-0610	23 D 0600-1410	20 A 1400-2210	18 A 1400-2210	22 A 1400-2210	20 A 1400-2210	24 A 1400-2210	Tue
Wed	23	21 N 2200-0610	25	23 N 2200-0610	20	24 N 2200-0610	24	21 A 1400-2210	19 A 1400-2210	23 A 1400-2210	21 A 1400-2210	25 A 1400-2210	Wed
Thu	24 D 0600-1410	22 N 2200-0610	26 D 0600-1410	24 N 2200-0610	21 A 1400-2210	25 N 2200-0610	25 A 1400-2210	22 A 1400-2210	20	24 A 1400-2210	22	26 A 1400-2210	Thu
Fri	25 D 0600-1410	23 N 2200-0610	27 D 0600-1410	25 N 2200-0610	22 A 1400-2210	26 N 2200-0610	26 A 1400-2210	23 A 1400-2210	21	25 A 1400-2210	23	27 A 1400-2210	Fri
Sat	**26 N 2200-0610**	**24**	**28 N 2200-0610**	**26**	**23 A 1400-2210**	**27**	**27 A 1400-2210**	**24**	**22 D 0600-1410**	**26**	**24 D 0600-1410**	**28**	**Sat**
Sun	**27 N 2200-0610**	**25**	**29 N 2200-0610**	**27**	**24 A 1400-2210**	**28**	**28 A 1400-2210**	**25**	**23 D 0600-1410**	**27**	**25 D 0600-1410**	**29**	**Sun**
Mon	28	26	30	28	25 A 1400-2210		29 A 1400-2210	26 N 2200-0610	24 D 0600-1410	28 N 2200-0610	26 D 0600-1410	30 N 2200-0610	Mon
Tue	29	27		29	26		30	27 N 2200-0610	25 D 0600-1410	29 N 2200-0610	27 D 0600-1410	31 N 2200-0610	Tue
Wed	30	28		30	27		31	28 N 2200-0610	26	30 N 2200-0610	28		Wed
Thu		29		31	28 D 0600-1410			29 N 2200-0610	27 A 1400-2210		29 A 1400-2210		Thu
Fri		30			29 D 0600-1410			30 N 2200-0610	28 A 1400-2210		30 A 1400-2210		Fri
Sat		**31**			**30 N 2200-0610**				**29 A 1400-2210**		**31 A 1400-2210**		**Sat**
Sun					**31 N 2200-0610**				**30 A 1400-2210**				**Sun**
Mon									31 A 1400-2210				Mon

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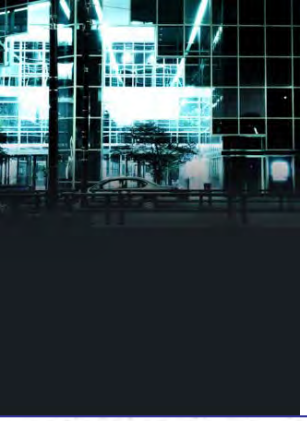

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Individual / Team Calendars

Introduced 12 hour shifts to demo greater white space.

WORK Scheduling Rota Calendar - Team1

	Sep 09	Oct 09	Nov 09	Dec 09	Jan 10	Feb 10	Mar 10	Apr 10	May 10	Jun 10	Jul 10	Aug 10	
Sun			1									1	Sun
Mon			2 D 0600-1410			1	1 A 1400-2210					2	Mon
Tue	1 D 0600-1410		3 D 0600-1410	1		2	2 A 1400-2210			1		3	Tue
Wed	2 D 0600-1410		4 D 0600-1410	2 A 1400-2210		3 A 1400-2210	3 N 12 2000-0800			2		4	Wed
Thu	3	1 A 1400-2210	5	3 A 1400-2210		4 A 1400-2210	4 N 12 2000-0800	1		3	1 D 0600-1410	5	Thu
Fri	4 A 1800-0100	2 A 1400-2210	6 A 1800-0100	4 A 1400-2210	1 N 12 2000-0800	5 A 1400-2210	5 N 12 2000-0800	2		4	2 D 0600-1410	6	Fri
Sat	**5 A 1800-0100**	**3 N 12 2000-0...**	**7 A 1800-0100**	**5 N 12 2000-0...**	**2**	**6 N 12 2000-0...**	**6**	**3**	**1 A 1400-2210**	**5**	**3 A 1400-2210**	**7**	**Sat**
Sun	**6 A 1800-0100**	**4 N 12 2000-0...**	**8 A 1800-0100**	**6 N 12 2000-0...**	**3**	**7 N 12 2000-0...**	**7**	**4**	**2 A 1400-2210**	**6**	**4 A 1400-2210**	**8**	**Sun**
Mon	7 N 12 2000-0800	5	9 N 12 2000-0800	7	4 D 0600-1410	8	8 D 0600-1410	5	3 A 1400-2210	7	5 A 1400-2210	9	Mon
Tue	8 N 12 2000-0800	6	10 N 12 2000-0800	8	5 D 0600-1410	9	9 D 0600-1410	6	4 A 1400-2210	8	6 A 1400-2210	10	Tue
Wed	9	7	11	9	6 D 0600-1410	10	10 D 0600-1410	7 A 1400-2210	5 N 12 2000-0800	9 A 1400-2210	7 N 12 2000-0800	11 A 1400-2210	Wed
Thu	10	8 D12 0800-2000	12	10 D12 0800-2000	7	11 D12 0800-2000	11	8 A 1400-2210	6 N 12 2000-0800	10 A 1400-2210	8 N 12 2000-0800	12 A 1400-2210	Thu
Fri	11	9 D12 0800-2000	13	11 D12 0800-2000	8 A 1800-0100	12 D12 0800-2000	12 A 1800-0100	9 A 1400-2210	7 N 12 2000-0800	11 A 1400-2210	9 N 12 2000-0800	13 A 1400-2210	Fri
Sat	**12 D12 0800-2...**	**10**	**14 D12 0800-2...**	**12**	**9 A 1800-0100**	**13**	**13 A 1800-0100**	**10 N 12 2000-0...**	**8**	**12 N 12 2000-0...**	**10**	**14 N 12 2000-0...**	**Sat**
Sun	**13 D12 0800-2...**	**11**	**15 D12 0800-2...**	**13**	**10 A 1800-0100**	**14**	**14 A 1800-0100**	**11 N 12 2000-0...**	**9**	**13 N 12 2000-0...**	**11**	**15 N 12 2000-0...**	**Sun**
Mon	14 D12 0800-2000	12	16 D12 0800-2000	14	11 N 12 2000-0800	15	15 N 12 2000-0800	12	10 D 0600-1410	14	12 D 0600-1410	16	Mon
Tue	15 D12 0800-2000	13	17 D12 0800-2000	15	12 N 12 2000-0800	16	16 N 12 2000-0800	13	11 D 0600-1410	15	13 D 0600-1410	17	Tue
Wed	16 D12 0800-2000	14	18 D12 0800-2000	16	13	17	17	14	12 D 0600-1410	16	14 D 0600-1410	18	Wed
Thu	17	15	19	17	14	18	18	15 D12 0800-2000	13	17 D12 0800-2000	15	19 D12 0800-2000	Thu
Fri	18	16	20	18	15	19	19	16 D12 0800-2000	14 A 1800-0100	18 D12 0800-2000	16 A 1800-0100	20 D12 0800-2000	Fri
Sat	**19**	**17**	**21**	**19**	**16 D12 0800-2...**	**20**	**20 D12 0800-2...**	**17**	**15 A 1800-0100**	**19**	**17 A 1800-0100**	**21**	**Sat**
Sun	**20**	**18**	**22**	**20**	**17 D12 0800-2...**	**21**	**21 D12 0800-2...**	**18**	**16 A 1800-0100**	**20**	**18 A 1800-0100**	**22**	**Sun**
Mon	21	19	23	21	18 D12 0800-2000	22	22 D12 0800-2000	19	17 N 12 2000-0800	21	19 N 12 2000-0800	23	Mon
Tue	22	20	24	22	19 D12 0800-2000	23	23 D12 0800-2000	20	18 N 12 2000-0800	22	20 N 12 2000-0800	24	Tue
Wed	23	21	25	23	20 D12 0800-2000	24	24 D12 0800-2000	21	19	23	21	25	Wed
Thu	24	22 D 0600-1410	26	24 D 0600-1410	21	25 D 0600-1410	25	22	20	24	22	26	Thu
Fri	25	23 D 0600-1410	27	25 D 0600-1410	22	26 D 0600-1410	26	23	21	25	23	27	Fri
Sat	**26**	**24 A 1400-2210**	**28**	**26 A 1400-2210**	**23**	**27 A 1400-2210**	**27**	**24**	**22 D12 0800-2...**	**26**	**24 D12 0800-2...**	**28**	**Sat**
Sun	**27**	**25 A 1400-2210**	**29**	**27 A 1400-2210**	**24**	**28 A 1400-2210**	**28**	**25**	**23 D12 0800-2...**	**27**	**25 D12 0800-2...**	**29**	**Sun**
Mon	28	26 A 1400-2210	30	28 A 1400-2210	25		29	26	24 D12 0800-2000	28	26 D12 0800-2000	30	Mon
Tue	29	27 A 1400-2210		29 A 1400-2210	26		30	27	25 D12 0800-2000	29	27 D12 0800-2000	31	Tue
Wed	30 A 1400-2210	28 N 12 2000-0800		30 N 12 2000-0800	27		31	28	26 D12 0800-2000	30	28 D12 0800-2000		Wed
Thu		29 N 12 2000-0800		31 N 12 2000-0800	28			29 D 0600-1410	27		29		Thu
Fri		30 N 12 2000-0800			29			30 D 0600-1410	28		30		Fri
Sat		**31**			**30**				**29**		**31**		**Sat**
Sun					**31**				**30**				**Sun**
Mon									31				

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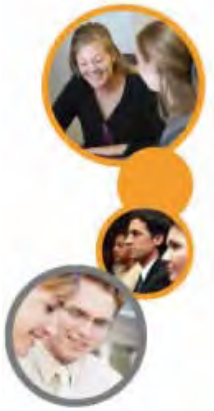
In Summary
& Brief WTS Overview



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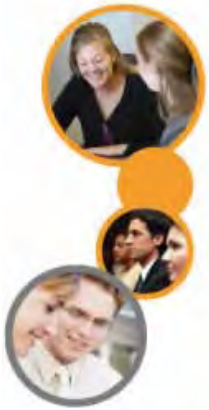
Lean-ER™

Implementing Lean Employee Resourcing systems that:

Meet Demand	Meet employee aspirations
Are Manageable	Meet External Factors



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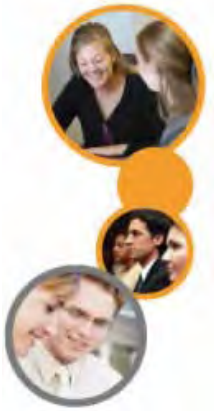
Lean-ER™

Applies the principles of “Lean” to Employee Resourcing and builds upon the concepts of Annualisation and Demand-led Rostering to drive out the wastes of: -

- Labour underutilisation
- Premium-based overtime payments
- Inefficient temporary or agency labour
- Absence from work
- Poor holiday administration
- Inappropriate shift patterns
- Long hours working
- Reactive labour management



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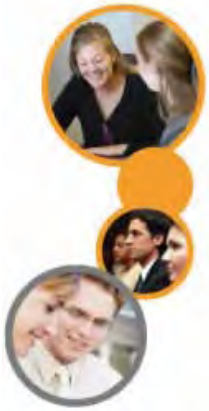
Lean-ER™ Services

- Working Time Change
- Process Mapping
- Activity Sampling
- Audit and Review
- Demand and Risk Analysis
- Shift pattern design
- IR / HR Strategy and support
- Terms and Conditions
- Operating procedures
- Change Management
- Expert legal advice
- Employee engagement
- Implementation
- Staff Surveys
- Focus Groups
- Project Management
- Bespoke Development
- Systems Integration
- Training
- Software Support - SLA



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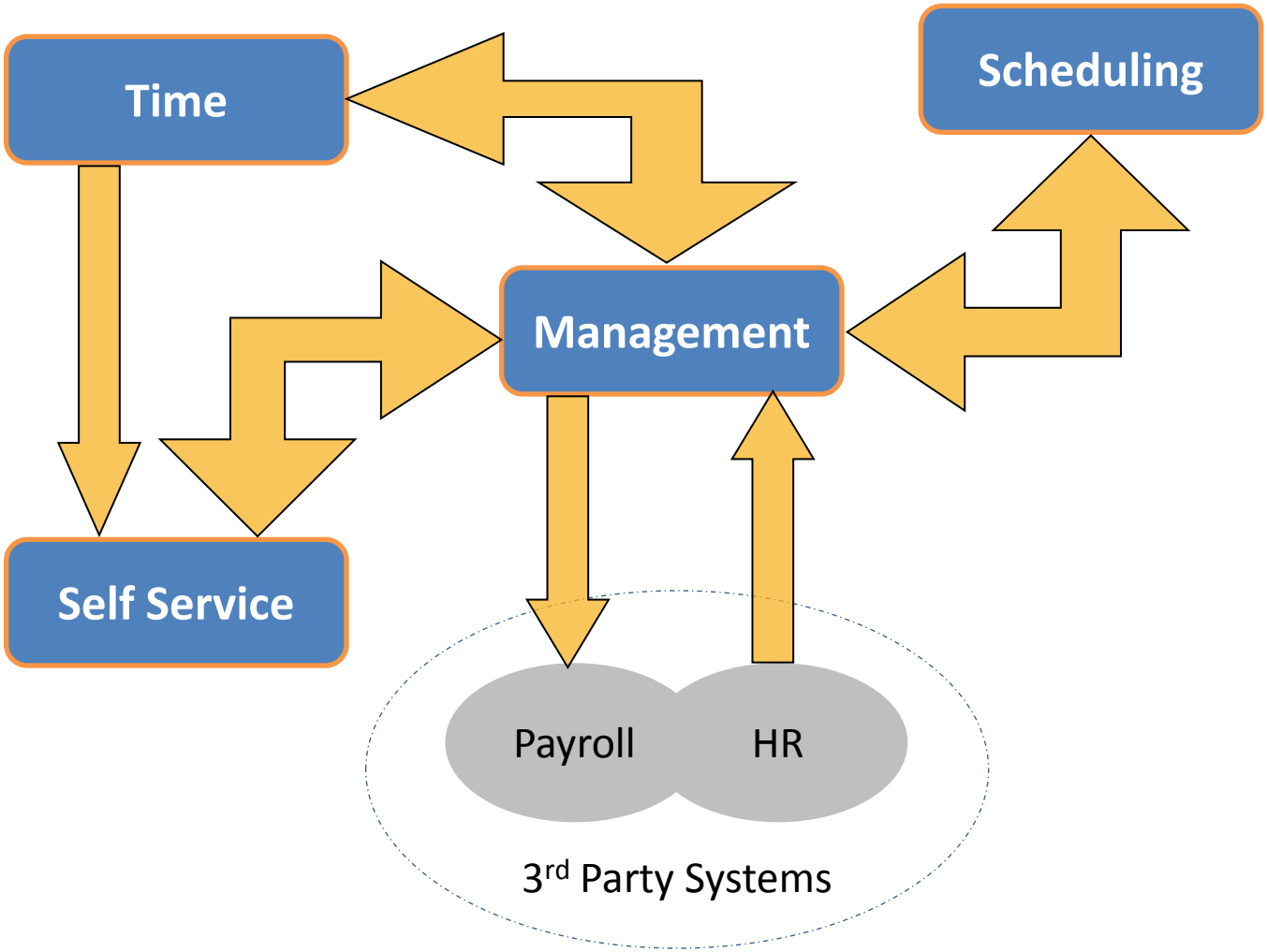
Lean-ER™ System Schematic



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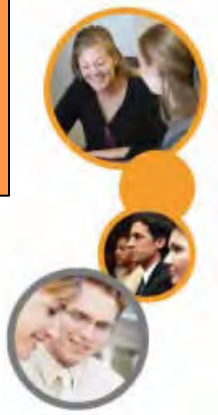
Project Structure

Project Initiation
- Scope
- Objectives
- Strategy
- Responsibilities
- Timescales

Business Evaluation
- Data Collation
- Software Training
- Benchmarking
- Opportunity
- Parameters

Design/ Development
- Ways of Working
- Modelling
- Flexibility
- Work Life Balance
- Cost Implications

Implementation
- Negotiations
- Contractual change
- Systems/policies
- Resource
- Plan



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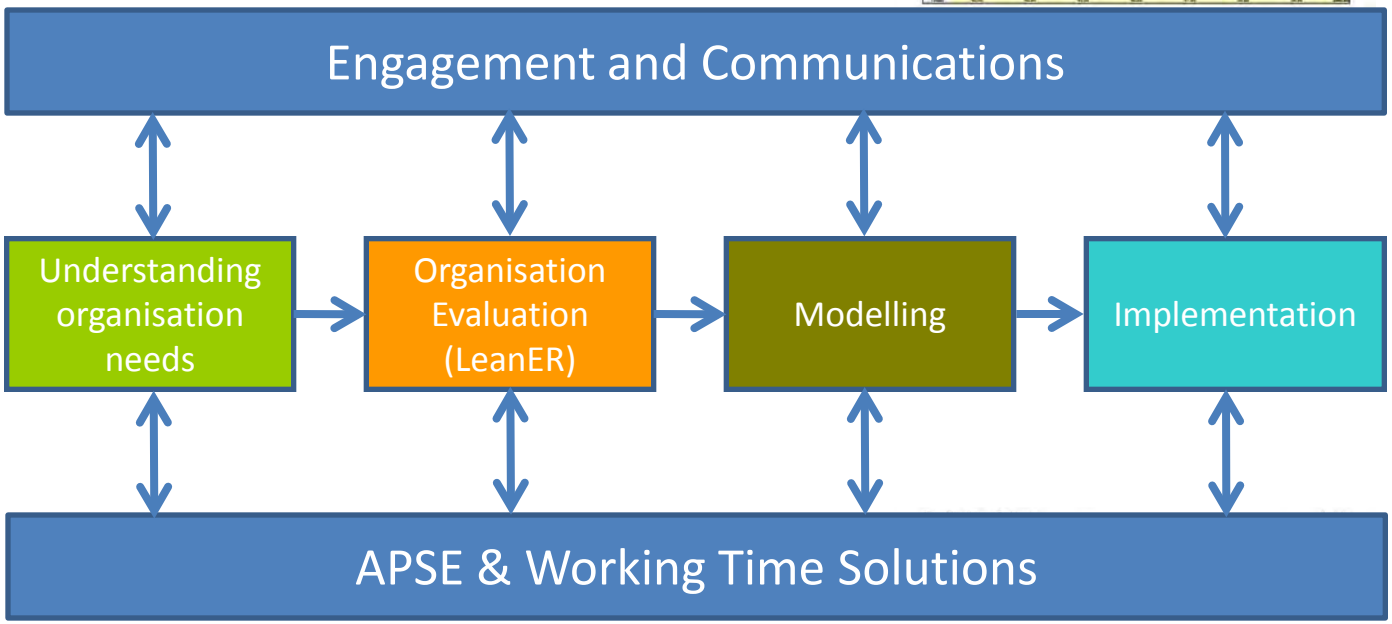
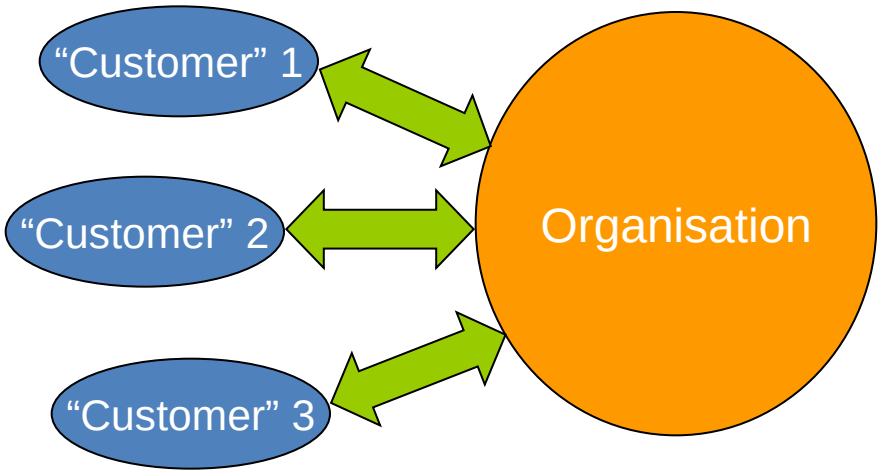
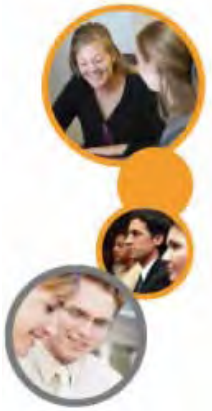
Project Structure Cont.







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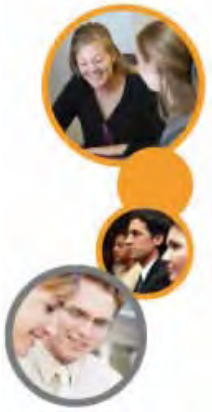
Further issues / examples / discussion

Open Forum



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