



Seirbhís Phríosúin
na hÉireann
Irish Prison Service

Supporting data-driven decision-making across the Irish Prison Service: The introduction of operational dashboards

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EuroPris ICT in Prisons Online Workshop

Presentation Overview



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- Context and Objectives
- Process
- Sample dashboards: Live and Screenshots
- Challenges and benefits

Context



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- Ernst & Young (EY) commissioned in Sept 2019 to build operational dashboards for use by management across the Irish prison service
- Current status: reaching the end of this project
- Previous practice: multiple spreadsheet reports at various intervals for management across the service
- Difficulty in trend analysis, risk identification and data discovery
- Potential of data not realised

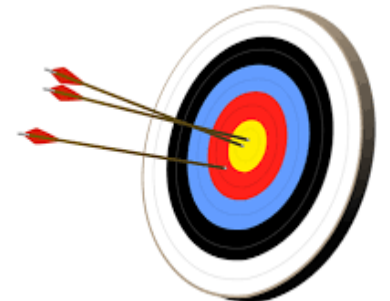


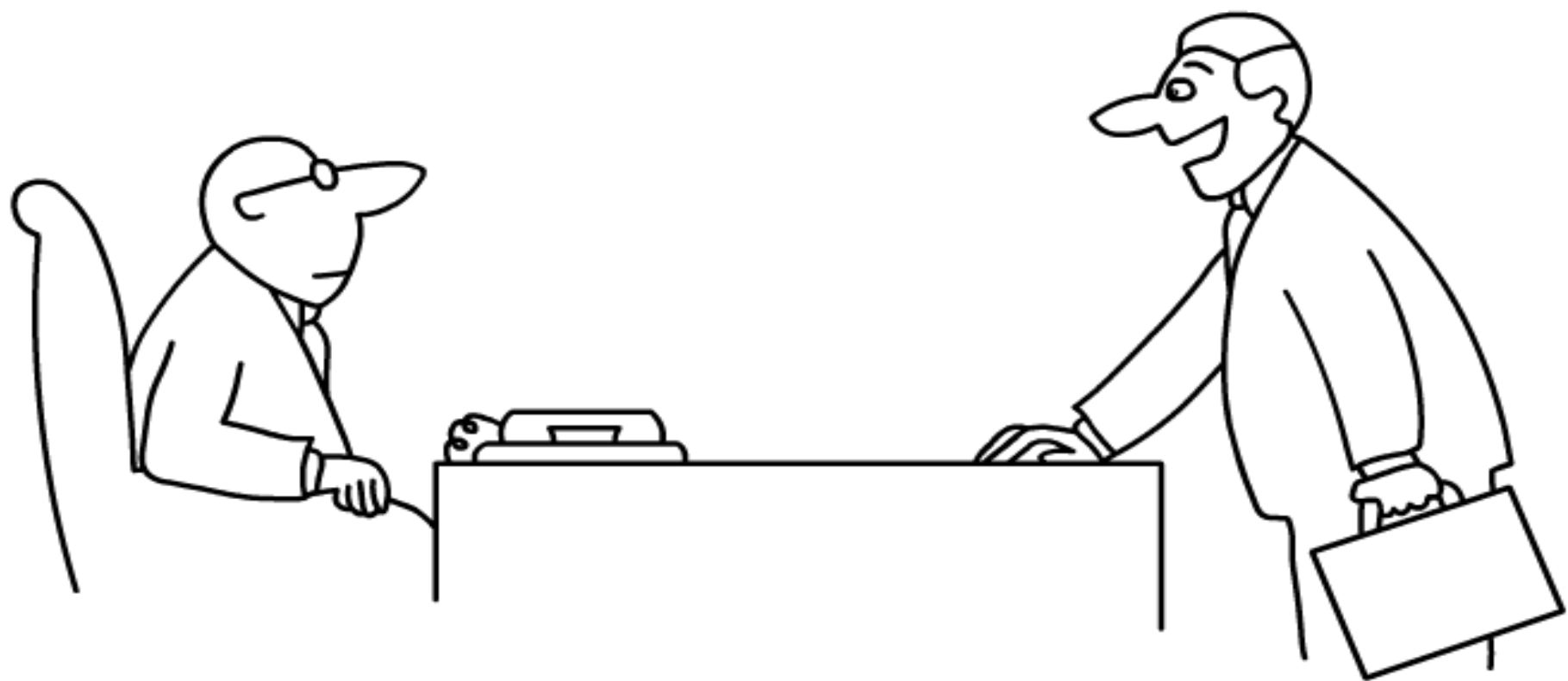
Objectives



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- Initiated under Corporate Governance Framework with a view to:
 - Enhancing performance through implementation and monitoring of KPI's
 - Facilitating trend analysis and the identification and management of risks
 - Supporting a key strategic objective of becoming a data-driven organisation
 - Supporting broader policy objectives of the CJS through provision of quality data and metrics that inform and support policy decision-making





timoelliott.com

"Our dashboards are so advanced, they automatically filter out any bad news"

Databases in Irish Prison Service



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- Prisoner Information Management System (PIMS)
- Prisoner Education Management System (PEMS)
- National Incident Management System (NIMS)
- Prisoner Healthcare Management System (PHMS)
- Prisoner Account Management System (PAMS)
- Psychologist Case Tracking System (PCTS)
- Human Resources Management System (HRMS)
- Clockwise System
- CoreHR



Process

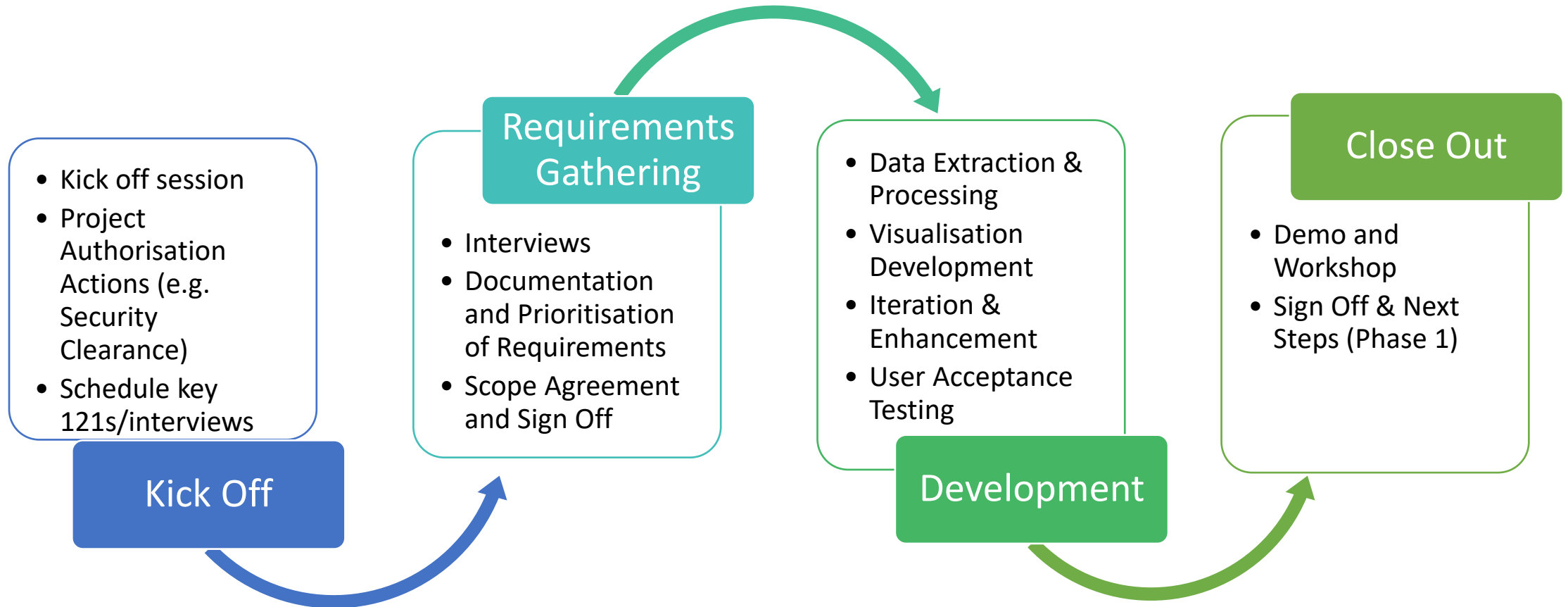


Tableau Live Examples



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[http://ipstableau.prisons.ie/#/views/PIMS_15972699966760/1 Population?iid=1](http://ipstableau.prisons.ie/#/views/PIMS_15972699966760/1_Population?iid=1)

[http://ipstableau.prisons.ie/#/views/PIMS_15972699966760/2 Demographics-General?iid=2](http://ipstableau.prisons.ie/#/views/PIMS_15972699966760/2_Demographics-General?iid=2)

[http://ipstableau.prisons.ie/#/views/PIMS_15972699966760/6 AdmissionsOverTime?iid=2](http://ipstableau.prisons.ie/#/views/PIMS_15972699966760/6_AdmissionsOverTime?iid=2)



PIMS: 5. Prisoner Journey

Please select a Prisoner ID

Times in Custody

4

Prisons Spent Time In

6

Total Days in Custody

2,138

Times Committed

4

Avg Length of Stay (Days)

534.50

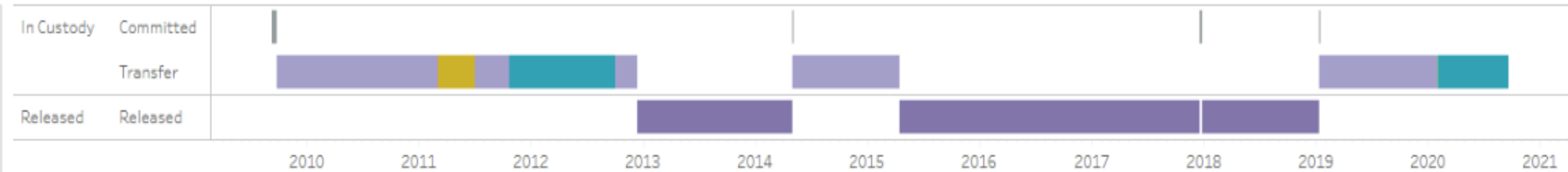
Select a Prisoner

Note: The prisoner journey dashboard includes all movements post PIMs go-live. If a prisoner was in system during PIMs go-live the journey will include their last PRIS custodial term.

Prisoner Details

Ethnicity: Caucasian
Gender: Male
Nationality: Irish
Religion: Roman Catholic
Occupation Status: Unemployed
Occupation: Unemployed
Age Group: 40 to < 50
Age Left School: 0
County: Dublin County
Sex Offender?: No

Prisoner Journey



Prisoner Journey - Detail

PrisonerID	Prison Term	Custody Status	Movement Start TimeSt.	Next Movement Start Ti.	Previous Establishment	Current Establishment	Movement..	
[Redacted]	1	In Custody	9/8/2009 7:16:00 PM	9/23/2009 4:57:59 PM	[Redacted]	[Redacted]	Committed	14.9
		In Custody	9/23/2009 4:58:00 PM	3/1/2011 5:19:59 PM	[Redacted]	[Redacted]	Transfer	524.0
		In Custody	3/1/2011 5:20:00 PM	6/30/2011 6:11:59 PM	[Redacted]	[Redacted]	Transfer	121.0
		In Custody	6/30/2011 6:12:00 PM	7/13/2011 5:40:59 PM	[Redacted]	[Redacted]	Transfer	13.0
		In Custody	7/13/2011 5:41:00 PM	8/24/2011 2:44:59 PM	[Redacted]	[Redacted]	Transfer	41.9
		In Custody	8/24/2011 2:45:00 PM	10/23/2011 1:04:59 PM	[Redacted]	[Redacted]	Transfer	59.9
		In Custody	10/23/2011 1:05:00 PM	10/1/2012 10:04:59 PM	[Redacted]	[Redacted]	Transfer	344.4
		In Custody	10/1/2012 10:05:00 PM	12/11/2012 12:24:11 AM	[Redacted]	[Redacted]	Transfer	70.1
		Released	12/11/2012 12:24:12 AM	4/28/2014 6:21:59 PM	[Redacted]	[Redacted]	Released	503.7
		2	In Custody	4/28/2014 6:22:00 PM	5/1/2014 6:27:59 PM	[Redacted]	[Redacted]	Committed
[Redacted]	3	In Custody	5/1/2014 6:28:00 PM	4/16/2015 12:10:51 AM	[Redacted]	[Redacted]	Transfer	349.2
		Released	4/16/2015 12:10:52 AM	12/18/2017 5:16:59 PM	[Redacted]	[Redacted]	Released	977.7
[Redacted]	3	In Custody	12/18/2017 5:17:00 PM	12/23/2017 4:47:18 PM	[Redacted]	[Redacted]	Committed	5.0
		Released	12/23/2017 4:47:19 PM	1/8/2019 6:12:59 PM	[Redacted]	[Redacted]	Released	381.1
[Redacted]	4	In Custody	1/8/2019 6:13:00 PM	1/11/2019 6:06:59 PM	[Redacted]	[Redacted]	Committed	3.0
		In Custody	1/11/2019 6:07:00 PM	1/30/2020 12:16:45 PM	[Redacted]	[Redacted]	Transfer	383.8

Prisons Spent Time In

Prison Term Current Establishment

Prison Term	Current Establishment
1	[Redacted]
2	[Redacted]
3	[Redacted]
4	[Redacted]



PIMS: 6. Admissions Over Time

Total # of Prisoners

4,570

Selected # of Prisoners

3,118

Number of Prisons

12

Capacity

4,375

Occupancy Rate

72.98%

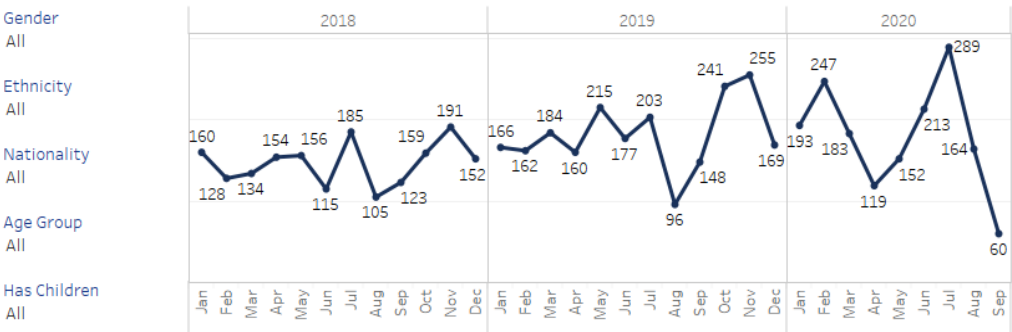
Admissions (6 Months)



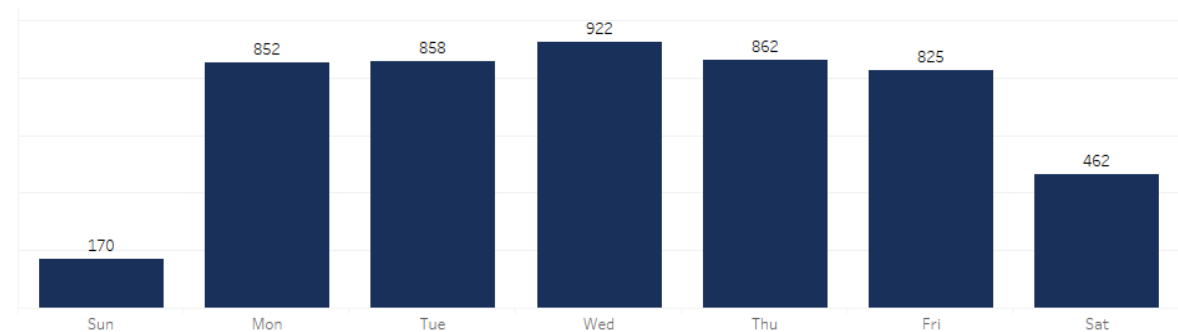
Committal Calendar

Year ..	Week..	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
All	0	6 2 6 5 4	8 7	2	1 2 8 2 4 2 4 4	2 8 7 5 4	8 3 2 8 12 10 4 5 3	4 8 5 2	3	14 4 8 3 4 4	10 4 5	5	
Custodial Period	1	2 7 6 3 7 8 6 1 3 4 4 1 7 1 1 5 7 6 2 8 3 2 7 6 10 7 10 2 4 4 5 9 11 6 4 4 2 3 6 4 3 2 8 8 8 4 5 6 1 1 4 6 3 5 2	10 9 10 5	10 7 7 6 10	2 10 7 8 12 4 2 1 10 9 8 5 8 4	5 6 9 2 6 6 1 1 1 4 3 4 1 1 9 4 12 7 3 4 2 2 2 6 2 6 4	10 6 3 9 9 3 3	4 3 4 11 11 5	8 6 17 8 5 5	1 8 5 5 1	8 5 9 5 5	1 8 5 9 5 5	
Establishment	2	4 8 6 2 3 5 1 7 5 9 4 5 2 2 1 6 10 6 7 2 1 7 9 5 4 3 2	5 6 4 7 5 2	7 5 9 5 3 2 3 10 12 8 9 8	1 3 3 8 2 5 3	5 3 1 5 8 1	4 9 5	2 6 4 10 8 7	1 4	2 4 3 4			
All	3	2 11 6 7	4 2 11 4	2 5 4 4 2 4 2 6	1 7 6 3 10	5 4 10 8 7 2 1 6 8	1 1 4 4 5 2	5 3 1 5 8 1	4 9 5	2 6 4 10 8 7	1 4	2 4 3 4	
Prisoner ID	4	3 3 3 7 6	6	12 5	12 7 5 8 9 5	8 5 8 8	6	6 7 8 7 10 3	6 3 4 3 3	7 5 10 3 3	7 7 3 6 6	10 4 3 2 11 7 12 8 3	
All	5	1 10 6 5 9 5 4 1 6 9 7 13 10 3	12 8 5 5 5 2 1 8 11 14 6 8 5	1 5 11 9 9 9 3 2 7 9 10 13 5 8 3 5 9 3 5 7 5 1 6 2 3 5 4 3 1 6 6 5 8 6 3	8 10 16 15 8 4 2 14 11 19 13 7 4	9 9 8 11 11 3	9 9 8 11 11 3						
Committal Status	6	1 8 11 8 6 9 2 1 3 3 11 10 6 4	9 6 3 6 4 5 1 4 8 8 5 2 2 1 8 12 9 4 16 2	7 5 4 4 4 2 11 7 16 5 6 5 1 4 2 3 5 4 2 3 4 6 3 6 2 4 1 12 8 11 14 15 5	9 16 14 10 5 5 1 8 11 10 5 5 1 8 11 10 5 5 1 8 11 10 7 9 5								
All	7	1 8 5 9 5 8 1 1 9 8 11 5 6 5 1 5 10 6 11 12 8 1 1 5 4 4 3 3	10 12 4 10 6 3 5 3 9 8 20 6 5	3 7 10 22 4 2 1 3 6 5 3 3 1 1 6 5 15 7 7 4 1 10 16 7 5 8 3 1 10 9 9 12 14 2 2 6 4	2 1								
Life Sentence	8	3 5 2 2	5 4 14 10 12 9 18 3	3 1 6 3	3 7	2 4 10 10 6 1	13 10 8 2	7	9 13 9 14 7				
All	9	3 9 3 3 5 9 3 1 13 12 11 13 7 5 1 15 11 14 9 6 3 2 6 4 7 3 4 5 3 2 2 11 7 4 5	4 11 12 6 7 5 2 12 9 17 20 6 5 4 8 6 2 9 3 8 8										
Sex Offender	10	1 7 7 8 13 11 3	9 7 11 6 13 10	4 2 3 3 2 4 2 1 3 4 3 2 7 4 11 7 4 5 3 2 1 6 3 6 9 12 7 2 20 11 10 14 11 3	7 5 10 5 4 1								
All	11	1 18 12 4 7 11 3 2 13 12 9 7 15 3 1 1 3 5 4 9 5 3 3 3 4 5 7 2 2 5 6 7 3 8 1 2 13 16 11 12 16 4 2 12 11 11 11 9 3 3 10 10 7 4 8 6											
Drug Offender	12	1 10 8 7 9 7	2 9 13 13 15 9 5 2 4 6	1 4 5 8 8	1 10 4 8 3 12 5 13 6	14 17 11 11 8	1 10 4 9 7 4 4						
All	13												

Committed by Month



Committed by Day of the Week





Education Centre
(All)

Number of Education Centres

13

Number of Unique Timetabled Prisoners

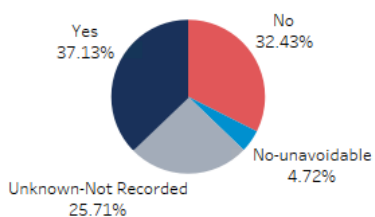
6,052

Number of Subjects

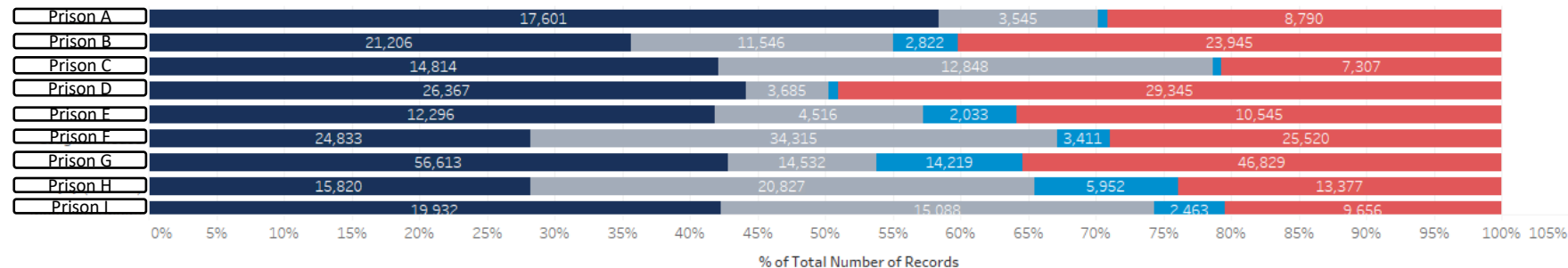
511

Attendance Date
1/1/2019 6/29/2020

Attended Summary



Attendance by Prison



Class Type
(All)

Prisoner ID
(All)

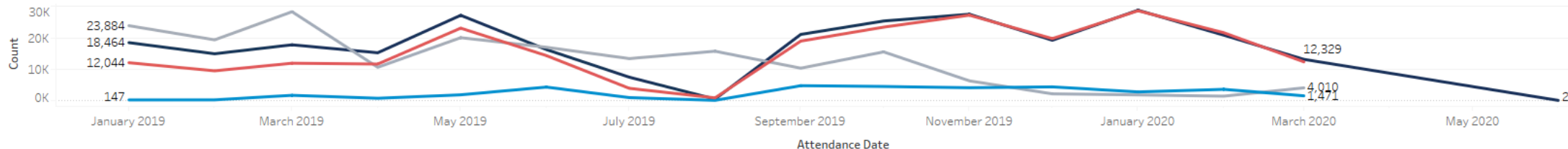
Subject
(All)

Gender
(All)

Nationality
(All)

Ethnicity
(All)

Trend by Class Date



Attended?
 No
 No-unavoidable
 Unknown-Not Recorded
 Yes

Prisoner Details

PrisonerID	Education Unit	Read or Write?	Nationality	Religion	Level of Education	Subject	Attendance Date	Attended?
[Redacted]	Cloverhill	Both	Irish	Roman Catholic	Secondary - no certificate	Joan for Interview	1/22/2019 12:00:00 AM	Unknown-Not Recorded
[Redacted]	Cloverhill	Both	Irish	Roman Catholic	Secondary - no certificate	Joan for Interview	2/12/2019 12:00:00 AM	Unknown-Not Recorded
[Redacted]	Mountjoy (Male)	Both	Irish	Roman Catholic	Primary Certificate	Art	5/7/2019 12:00:00 AM	Yes
[Redacted]	Mountjoy (Male)	Both	Irish	Roman Catholic	Primary Certificate	Art	5/14/2019 12:00:00 AM	Yes
[Redacted]	Mountjoy (Male)	Both	Irish	Roman Catholic	Primary Certificate	Art	5/21/2019 12:00:00 AM	Unknown-Not Recorded
[Redacted]	Mountjoy (Male)	Both	Irish	Roman Catholic	Primary Certificate	Art	5/28/2019 12:00:00 AM	No
[Redacted]	Mountjoy (Male)	Both	Irish	Roman Catholic	Primary Certificate	Art	6/4/2019 12:00:00 AM	No
[Redacted]	Mountjoy (Male)	Both	Irish	Roman Catholic	Primary Certificate	Art	6/11/2019 12:00:00 AM	No



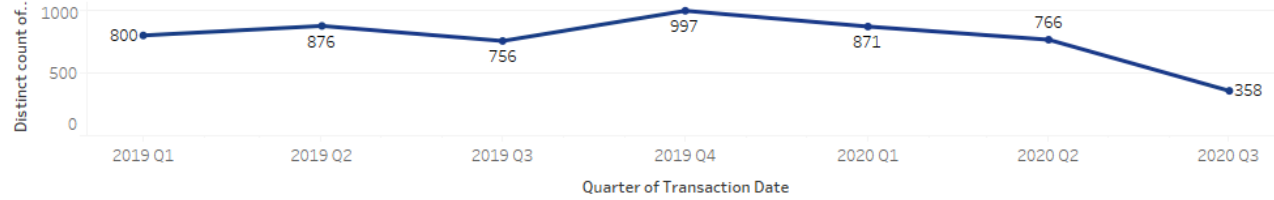
PAMS: Bails

Establishment
(All)

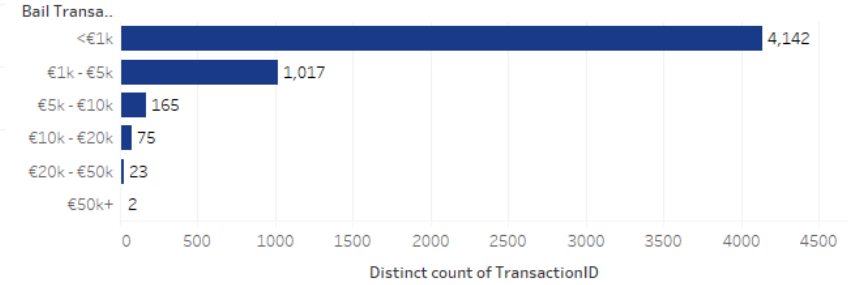
Transaction Date
1/1/2019 8/31/2020

Transaction Category
(All)

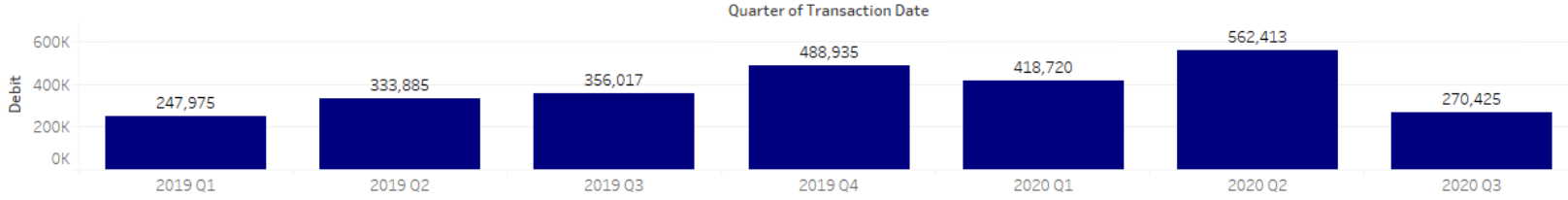
Bail Transactions



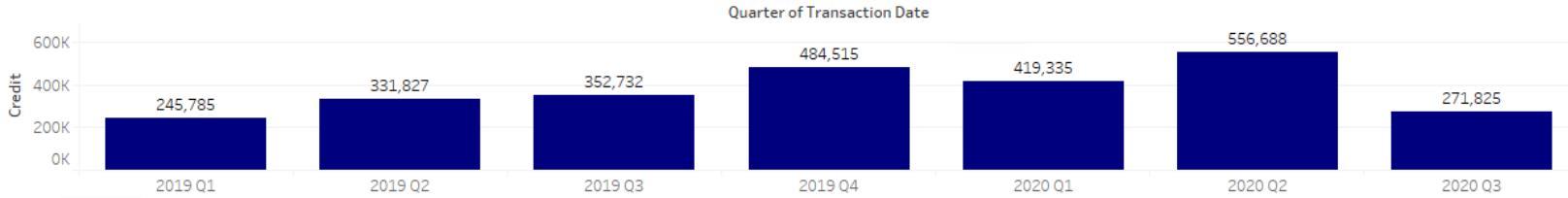
Bail Transaction Values



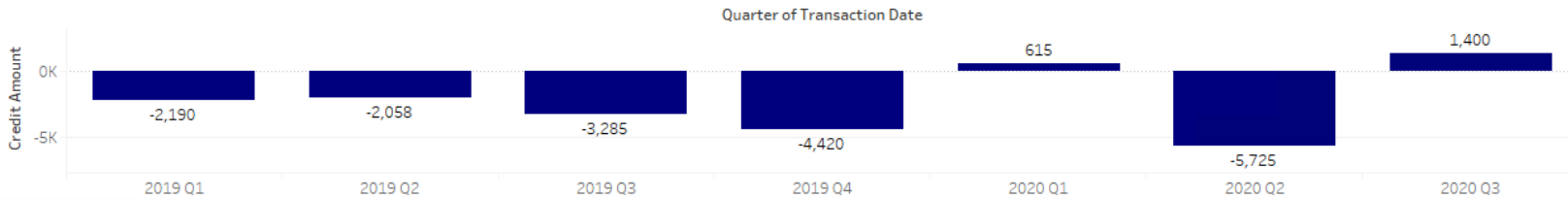
Bail Debit Transactions



Bail Credit Transactions



Bail Credit Analysis



Bail by Prison

Establishment	Year of..	# Transaction ID	Debit	Credit	Credit Amount
[Redacted]	2019	161	49,540	47,740	-1,800
[Redacted]	2020	151	82,833	86,573	3,740
[Redacted]	2019	68	18,575	19,640	1,065
[Redacted]	2020	44	29,700	29,900	200
[Redacted]	2019	220	145,300	144,500	-800
[Redacted]	2020	128	64,050	65,550	1,500
[Redacted]	2019	2		60	60
[Redacted]	2019	8	4,450	4,450	0
[Redacted]	2020	20	105,100	105,100	0
[Redacted]	2019	503	113,345	113,315	-30

Bail Transaction Details

PrisonerID	Transaction..	Day of Transacti..	Transaction Type	Credit	Debit
[Redacted]	5583258	10/07/2019	Bail		400
[Redacted]	5227547	28/01/2019	Bail	1,000	
[Redacted]	5227552	28/01/2019	Bail		1,000
[Redacted]	6255807	12/05/2020	Bail	500	
[Redacted]	6255808	12/05/2020	Bail		500
[Redacted]	6316373	11/06/2020	Bail	330	
[Redacted]	6316375	11/06/2020	Bail		330
[Redacted]	6316377	11/06/2020	Bail	170	
[Redacted]	6316378	11/06/2020	Bail		170
[Redacted]	5844134	09/11/2019	Bail	100	

Completion and Roll Out



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- To be completed and rolled out by mid-October
- Senior management in Headquarters and across the Prison Estate to have access to relevant dashboards

Challenges



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- Uncertainty from key stakeholders
- Real-time solutions
- Data Quality
- Covid-19!
- Additional Requirements
- ...

Benefits



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- Easily accessible data
- Data Discovery through drill down capability and data visualisation
- Timesaving efficiency
- Reduce the Cognos Reporting Burden on IT
- Easily monitor key KPIs
- Facilitate forecasting to assist resource management

Benefits



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“Quick analysis of data to respond to Audit queries, Senior Management queries – to get this information currently involves manipulation of data in excel which is time consuming”

“Easy to use for non PAMS users who can access understandable data without the need for a ‘middleman’ in Finance or IT, therefore, freeing up resources”

Finance Team Super User

Benefits

“Being able to respond to PQ’s, press queries, public accounts with quickly accessible data ; Being able to produce an annual infographics to improve transparency, to promote our work and improve recruitment; To review flow of referrals, waiting lists/waiting times and service delivery output of the psychology service to help the manage service”

Psychology Service Super User



“What we really need in IT
is someone who has super powers.”



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Thank you for your attention!

- Contact: cgfinn@irishprisons.ie