STRATA – JOINT SCRUTINY COMMITTEE (JSC)

DATE: **23 July 2015**

REPORT OF: **Chris Powell, Chief operating Officer, Strata.**

SUBJECT: **Strata Performance Indicators - June**

1. PURPOSE of the Report

The report identifies the initial suite of performance indicators that Strata will use to manage its business and to show stakeholders how Strata is performing. This is the June report showing the figures to the end of May.

It also includes definitions of the service desk categories and a definition of the graphs involved.

2. RECOMMENDATION

That the JSC note the content of the report.

3. Is this a Key Decision?

No

4. Is this an Executive/Cabinet or Council Function?

No

5. What are the resource implications including non financial resources?

All included within the Strata business case.

6. What are the legal aspects?

None

Strata Indicators – June Report

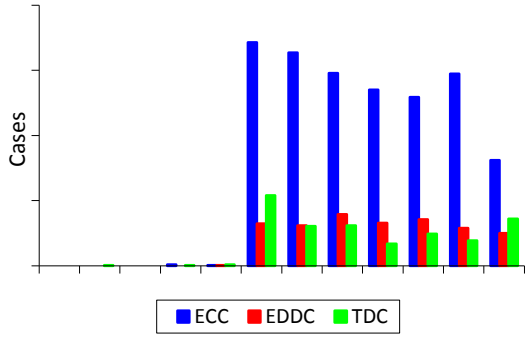
Month Ending 31st May 2015

STRATA
Solutions for government

Section

1. Number of Incidents occurring in a month

Incidents are a waste and need to be analysed to find out the root cause of their occurrence so they can be eliminated if possible. Note: password resets are treated as an incident.



Series Name	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015
ECC	0	0	0	2	1	343	327	296	270	259	295	162
EDDC	0	0	0	0	1	65	62	79	66	71	58	50
TDC	0	1	0	1	2	108	61	62	34	49	39	72

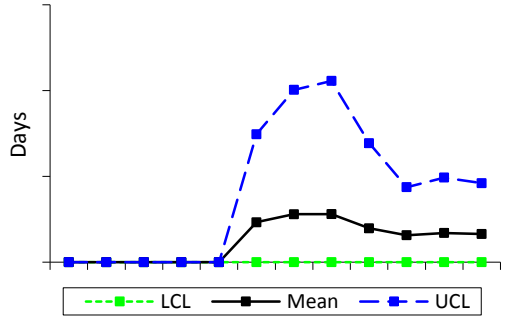
May wks 1 and 2 were peaks for Incidents at ECC (48 + 59). After further analysis of these weeks the incidents were mainly down to Business Systems issues and unstable Desktop Software platform. No major outages.

Otherwise the figures are fairly level across the sites, apart from those areas which need improved consistency on logging to the correct category eg typically incident vs service request.

2. Incident end-to-end time

Incidents stop or disrupt work if there is no suitable workaround available, so we need to resolve incidents as a priority.

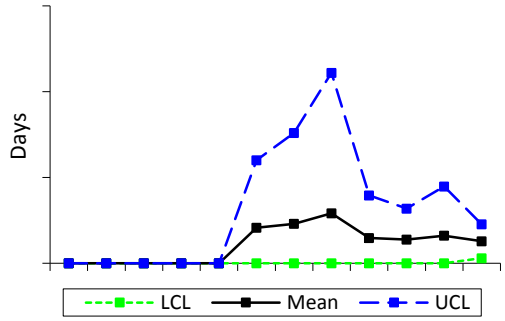
All Sites Combined



Series Name	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015
LCL	0	0	0	0	0	0	0	0	0	0	0	0
Mean	0	0	0	0	0	2.32	2.79	2.8	1.97	1.57	1.7	1.64
UCL	0	0	0	0	0	7.45	10.04	10.56	6.93	4.37	4.93	4.6

Monthly run chart: Capability – see Definitions

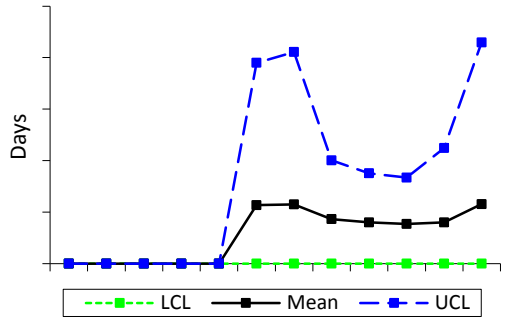
ECC (Exeter)



Series Name	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015
LCL	0	0	0	0	0	0	0	0	0	0	0	0.29
Mean	0	0	0	0	0	2.07	2.3	2.91	1.47	1.38	1.61	1.28
UCL	0	0	0	0	0	6	7.59	11.09	3.95	3.18	4.47	2.27

Monthly run chart: Capability – see Definitions

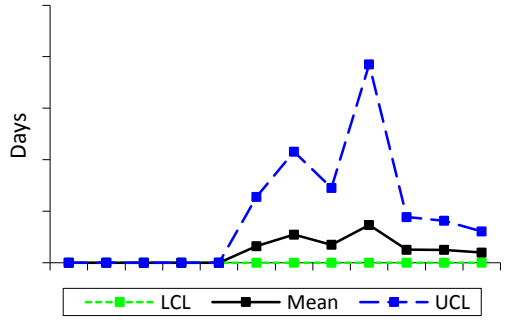
EDDC (East Devon)



Series Name	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015
LCL	0	0	0	0	0	0	0	0	0	0	0	0
Mean	0	0	0	0	0	2.27	2.3	1.73	1.6	1.54	1.6	2.31
UCL	0	0	0	0	0	7.8	8.22	4.01	3.51	3.34	4.49	8.59

Monthly run chart: Capability – see Definitions

TDC (Teignbridge)

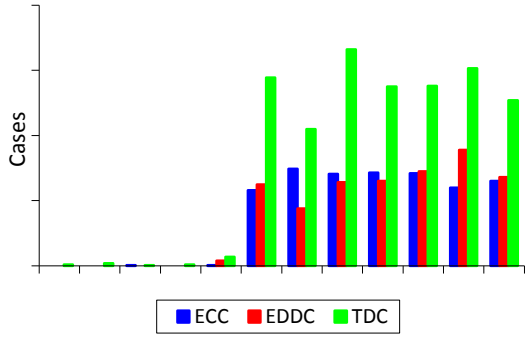


Series Name	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015
LCL	0	0	0	0	0	0	0	0	0	0	0	0
Mean	0	0	0	0	0	3.21	5.45	3.49	7.33	2.51	2.5	1.97
UCL	0	0	0	0	0	12.78	21.56	14.52	38.52	8.86	8.16	6.08

Monthly run chart: Capability – see Definitions

3. Number of Service Requests in a month

These tend to be a cost of doing business but are worth tracking to manage capacity and to see if there is a burst of unusual activity anywhere.



Series Name	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015
ECC	0	0	1	0	1	116	149	141	143	142	120	130
EDDC	0	0	0	0	8	125	88	128	130	145	178	136
TDC	2	4	1	2	14	289	210	332	275	276	303	254

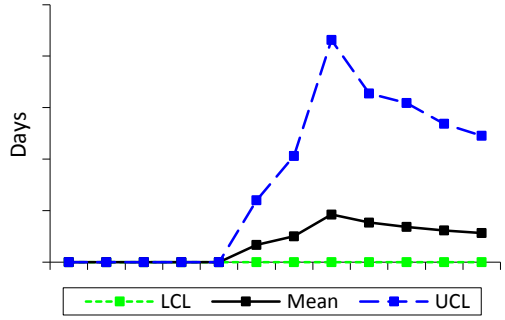
Again very consistent apart from a couple of areas:

May figures are fairly stable across two sites ECC and EDDC. TDC have higher figures for wks 1 – 3. After further analysis these are mainly due to high demand of changes and general assistance type calls to Service Desk.

4. Service Request end-to-end time

We need to be able to provide customers with a reliable estimate of time to deliver on the various service requests and also to deliver it within a reasonable time.

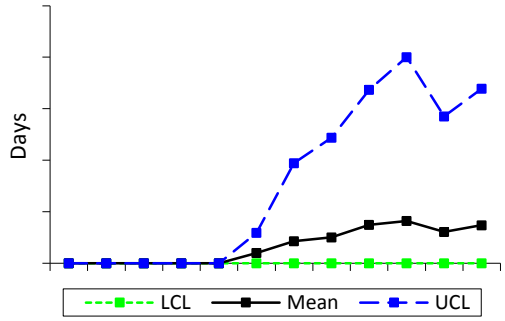
All Sites Combined



Series Name	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015
LCL	0	0	0	0	0	0	0	0	0	0	0	0
Mean	0	0	0	0	0	3.34	5.01	9.23	7.67	6.84	6.16	5.65
UCL	0	0	0	0	0	12.02	20.61	43.15	32.75	30.9	26.87	24.54

Monthly run chart: Capability – see Definitions

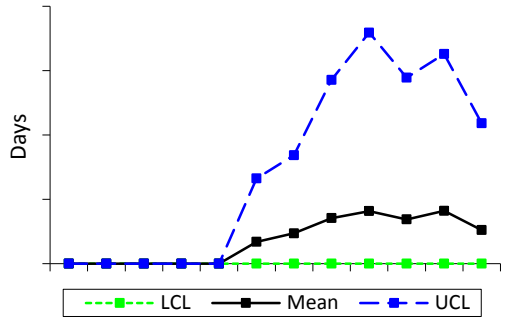
ECC (Exeter)



Series Name	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015
LCL	0	0	0	0	0	0	0	0	0	0	0	0
Mean	0	0	0	0	0	2	4.28	5.02	7.46	8.22	6.08	7.37
UCL	0	0	0	0	0	5.91	19.43	24.38	33.68	40.02	28.51	33.9

Monthly run chart: Capability – see Definitions

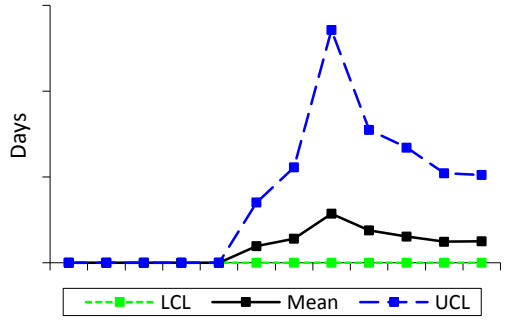
EDDC (East Devon)



Series Name	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015
LCL	0	0	0	0	0	0	0	0	0	0	0	0
Mean	0	0	0	0	0	3.39	4.7	7.08	8.17	6.88	8.2	5.22
UCL	0	0	0	0	0	13.24	16.84	28.54	35.88	28.89	32.57	21.81

Monthly run chart: Capability – see Definitions

TDC (Teignbridge)



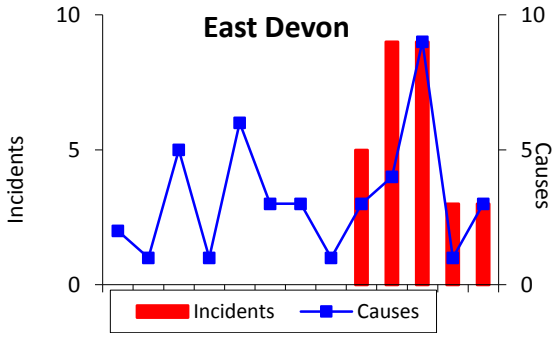
Series Name	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015
LCL	0	0	0	0	0	0	0	0	0	0	0	0
Mean	0	0	0	0	0	3.87	5.6	11.44	7.54	6.09	4.88	5
UCL	0	0	0	0	0	14.05	22.23	54.24	30.95	26.81	20.85	20.46

Monthly run chart: Capability – see Definitions

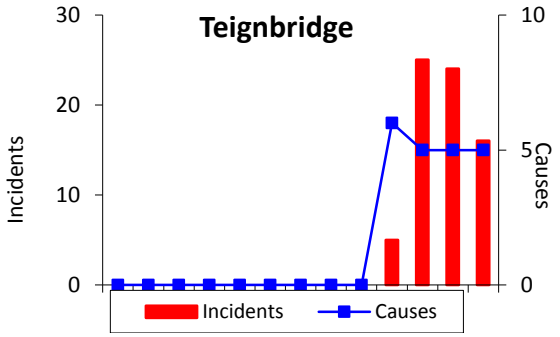
5. Number of system outages in a month

With the dependence on the IT systems to support the council functions it is imperative that the systems are available during the agreed times. It is therefore imperative that unplanned outages are minimised, and that proactive monitoring and maintenance, along with thorough analysis of all root causes of actual outages are undertaken to drive towards a level of zero defects.

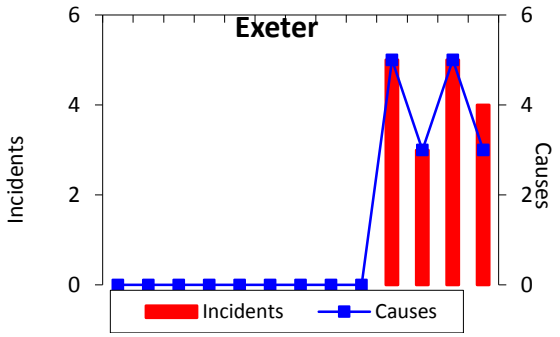
The charts below show both the number of outage incidents and the number of root causes behind these.



Period	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015
Causes	1	5	1	6	3	3	1	3	4	9	1	3
Incidents								5	9	9	3	3



Period	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015
Causes									6	5	5	5
Incidents									6	25	24	16

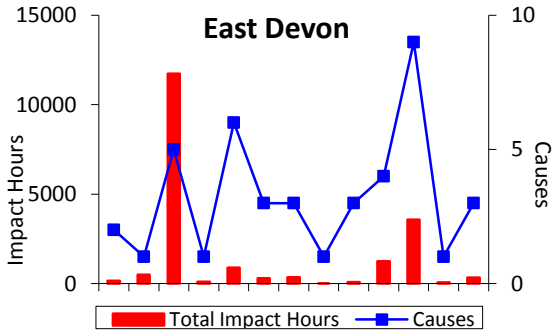


Period	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015
Causes									5	3	5	3
Incidents									5	3	5	4

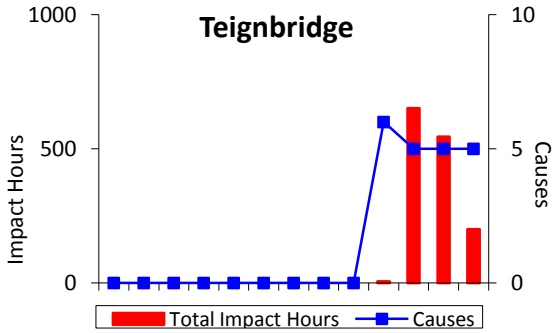
The level of outage incidents is consistent with the complexity of the current systems. None of the incidents in Teignbridge were a result of the Backup systems which demonstrated that the actions taken to replace that system was a success. The Teignbidge storage systems did however cause 12 incidents, however this has been resolved with the addition of more storage capacity. Exeter had a number of phone intermittent outages that the suppliers have investigated. The incidents in East Devon had no common factors.

6. User hours affected by system outages

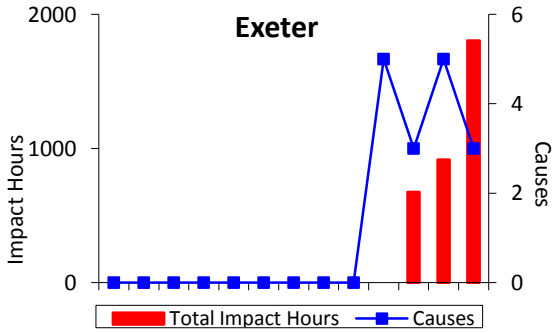
This measure attempts to quantify the impact of system outages. It is a calculated measure based on the time a system is down, the notional number of users, and its criticality. It is designed to help focus scarce resources on the most important problems and the identification of solutions to the root causes.



Period	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015
Causes	1	5	1	6	3	3	1	3	4	9	1	3
Hours	491	11732	83	873	282	333	18	70	1239	3568	55	324



Period	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015
Causes									6	5	5	5
Hours									6	651	545	201



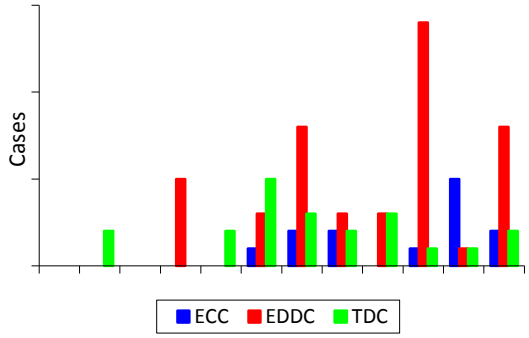
Period	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015
Causes									5	3	5	3
Hours										675	917	1804

The loss of internet access over the weekend of the 16th May resulted in a significant impact hours assessment for Exeter, impacting some customer services and the remote access to the site for staff and councillors. This was the result of a network component that will be replaced as part of the Strata migration, and therefore for now will be monitored. The major impact to Teignbridge was hardware and storage capacity, both now resolved. The issues at East Devon had occurred before, with mitigations in place to limit the occurrence of these, which will remain in place.

For both Teignbridge and Exeter the assessment of the impact needs further refinement, which will be implemented through the rollout of the IMPACT process.

7. Number of Security Incidents in a month

His provides a measure of the level of threats that cause an impact to the Councils, and can focus the available resources to mitigate these.

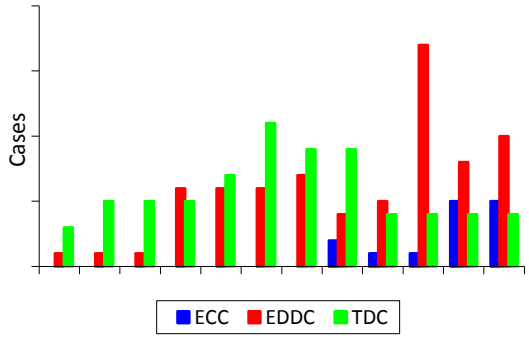


Series Name	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015
ECC	0	0	0	0	0	1	2	2	0	1	5	2
EDDC	0	0	0	5	0	3	8	3	3	14	1	8
TDC	0	2	0	0	2	5	3	2	3	1	1	2

The high number of incidents recorded in East Devon was the result of a security assessment, however these were vulnerabilities that could be exploited only by highly skilled individuals rather than actual incidents. The approach to the recording of these will be reviewed in future months as this information may obscure the heartbeat measure of true incidents.

8. Number of open Security change requests

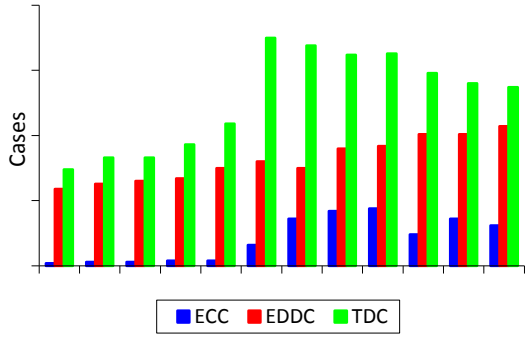
We run scans on our entire infrastructure using security systems that are updated frequently by external security companies to find the latest vulnerabilities. This is a relatively crude measure of how safe our systems are and how well we are reacting to security alerts.



Series Name	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015
ECC	0	0	0	0	0	0	0	2	1	1	5	5
EDDC	1	1	1	6	6	6	7	4	5	17	8	10
TDC	3	5	5	5	7	11	9	9	4	4	4	4

9. Number of customer Business Change Requests (BCR) open

This is a measure of the level of change capacity that customers have requested. It can also be shown by an estimate of the total capacity required in this queue of work.



Series Name	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015
ECC	2	3	3	4	4	16	36	42	44	24	36	31
EDDC	59	63	65	67	75	80	75	90	92	101	101	107
TDC	74	83	83	93	109	175	169	162	163	148	140	137

Business change Requests are items of work requested by our customers which result in a non standard change to a business system.

Teignbridge continue to see a reduction in the number of BCRs open despite a drop in the number of BCR closed in May (See below.)

East Devon have a slight upward trend in the number of open BCRs. This is as a result of an increase in the number of BCRs received as the number completed each month remains consistent. This is a reflection of a slight increase in demand from EDDC.

Analysis of Teignbridge BCRs show that these are genuine requests but are primarily focussed on the in-house finance and HR systems. The nature of these changes varies, but can be collated into 3 main groups:

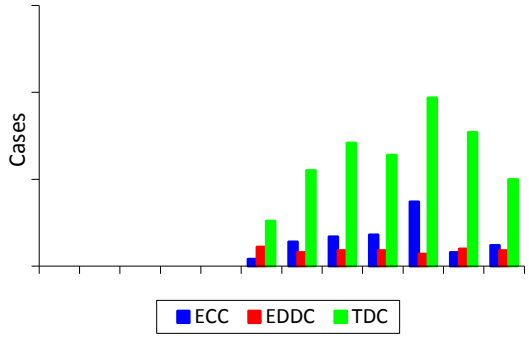
- Administrative changes that end users are unable to perform themselves due to restrictions in the system
- Legislative changes
- Reports on data.

A commercial system will remove the need for most of these changes and free up considerable capacity within the team.

Open BCRs in Exeter remain low, with a slight reduction in May as a result of a increase in the number completed during May.

10. Number of BCRs completed per month

To show how Strata is delivering them alongside the projects.



Series Name	Jun 2014	Jul 2014	Aug 2014	Sep 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015
ECC	0	0	0	0	0	4	14	17	18	37	8	12
EDDC	0	0	0	0	0	11	8	9	9	7	10	9
TDC	0	0	0	0	0	26	55	71	64	97	77	50

The general trend in completed BCRs reflects that of the Open BCRs with Teignbridge completing significantly more than EDDC or ECC. Further analysis once again shows that of the 50 completed in Teignbridge over half can be attributed to in house systems. Again a commercial system will remove the need for many of these BCRs and free up resource to work on more value added projects.

The number of completed BCRs within East Devon and Exeter remains consistent.

11. Quality of Completed Projects

This will take some discussion to agree a final format but at each project end we can carry out a check against budget, time, and achievement.

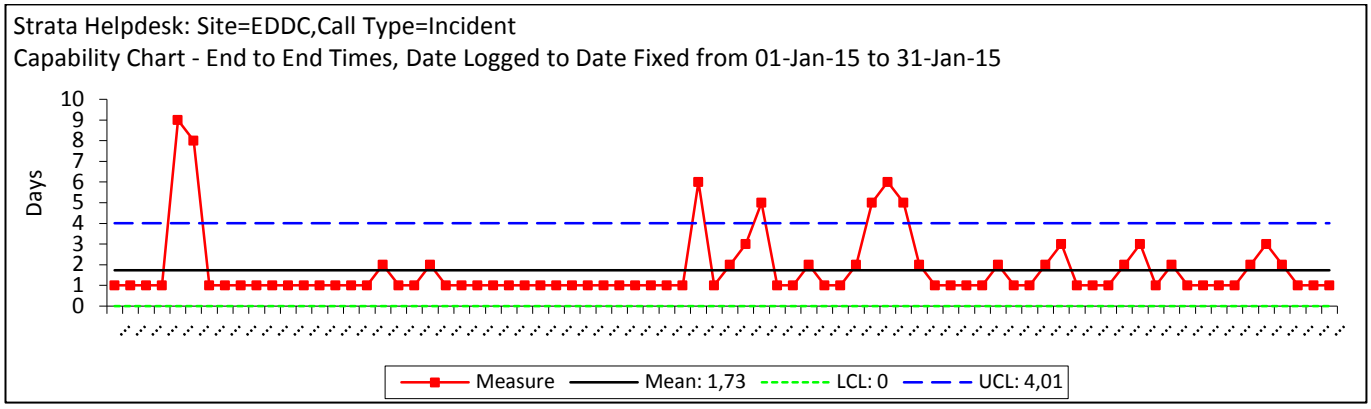
12. Customer Satisfaction

There is no active measure in please at any of the councils at present and so we will need to create a method that is not onerous on customers and is meaningful. It should be fairly simple to carry out and regular and result in action plans to improve.

Definitions

Monthly Run Chart: Capability

End to end times achieved by a way (or system) of working are an indication of that systems capability. Capability charts are used to represent the end to end times achieved on a series of tasks and show the mathematical average (mean) time taken and an indication of the “predictability” within the system.



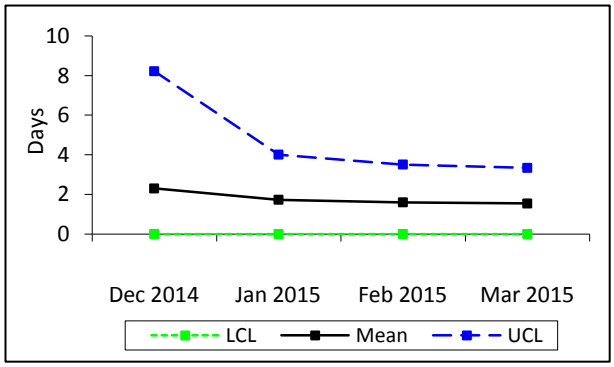
The above example is a capability chart of end to end times of all cases classified as an Incident that were resolved during the month of January. It can be seen the end to end time of each case (the red line) varies and ranges from within 1 day up to 9 days on one of the cases.

The average (or “mean” time) of this set of cases is 1.73 days; however it can clearly be seen that some cases have taken significantly longer to resolve than this mean time and therefore merely indicating the average time to a customer may not be a fair comment on what the customer should expect.

To provide the customer with a more likely timescale within which their case might be resolved, we need to assess the level of predictability within the results. By sorting the cases chronologically by their date of closure, we can perform a statistical measure of variance on the sample. This measure of variance is then added to, and subtracted from, the mean to provide the Upper Control Limit (UCL) and Lower Control Limit (LCL). So based on the above sample of cases, we can more realistically advise our customer that an Incident may take up to 4 days to resolve (4.01 is the precise UCL value).

Several of the measures within this document are presented as a Monthly Run Chart: Capability.

By calculating the mean, UCL and LCL for each month in turn, and then plotting these monthly figures in a Run Chart, we can then assess any trends in performance.



The run chart opposite shows a plot of the mean, UCL and LCL for the months of December, January, February and March.

Run charts help us to spot trends such as the effect of the traditional holiday season or the impact on performance of business events such as year-end or election duties.

The ideal trend is a lowering of the average time (the mean) and also a closing of the gap between the UCL and LCL indicating that performance is becoming more predictable.

Definitions of Categories on Service Desk

Incidents

If something is broken preventing or seriously impeding a customer from doing their job this is classed as an incident.

This is the highest priority of work in Strata and any member of Strata can be employed to remove the incident in a quick timeframe.

This is typically relating to a failed PC, lost access, system down or other direct failure.

Password resets are also included in this category as they totally prevent a user from accessing systems.

The Service Desk will do everything in their power to solve the incident or create a temporary workaround to get the customer working.

If the same type of incidents keep occurring, or more time is needed to solve an incident for which a workaround was created then a **Problem** is logged by the Service Desk.

Note: each site has a 9:45am gathering of all relevant staff to discuss all open incidents are discussed. This is to ensure best efforts are being made to deal with this failure demand.

Incidents relating to system downtime are recorded separately with further information to enable the "system owners" to investigate corrective action.

Typically there should be no more than 5-10 incidents per site before alarms bells start ringing.

Service Requests

These are typically for services that are repeatable and well known eg access to a system; new starter set up; loading approved software; buying approved equipment and the like.

It is NOT for one off special requests or something that needs deeper investigation.

The list of services that fit into this category will soon be showing on Council intranets so that eventually all Service Requests will come into Strata as written requests. This means that any purchases can also have an approval process built in.

Typically there should be no more than around 40 service requests per main site.

Problems

This is an internal Strata worklist. It holds all the issues that need solving to either remove the need for a workaround or to create solution to prevent a series of incidents or system downtime from occurring.

This worklist will typically be managed by Adrian although staff from any area of Strata may be involved in the solutions.

Security Issues

These are managed separately from other area of work due to the nature of the problems. Security issues are also managed by the Security and Compliance Team although the actual work could be carried out by any member of Strata.

Items in this list could come from any source – security breach by a user; item raised by an audit; internal or external security scan etc.

This is managed separately due to the nature of the issues and the requirement to meet particular standards of operation for PSN, PCI/DSS and ISO27001 compliance.

BCRs – Business Change Requests

These are generally requests to create or investigate something new or make changes to something that already exists. The work is a one-off rather than repeatable.

The level of work and the timeframe to deliver the requests is always a bit of a guess but the work can be scaled and estimates provided to the customer.

The BCR will soon be a "written –only" form, no more verbal requests as it can lead to confusion and disappointment. The BCR process will also soon incorporate a senior management approval.

Some BCRs will results in **projects** being created. This will occur if the solution to the BCR is at least one of the following:

- High cost
- High risk to reputation
- Significant change to processes or staff
- Change will result in significant cost savings or efficiencies
- Strategic importance of change

Projects will be shown and tracked separately from BCRs and have a greater level of administration associated with them including a PID and Post Implementation Review of quality, costs and schedule.

BCRs usually take second priority to projects (unless they are legislative or must-do and time critical). The level of BCR demand invariably outstrips the capacity of an IT department to deliver the requested change within a sensible timeframe. The BCR list will need to be reviewed regularly by SMT groups with Steve Gammon to ensure Strata is always working on the BCRs considered most important by Councils. In practice this means that some BCRs may actually be cancelled by the services