

(Inte) (Testing Here handles)

Proving the TIP Interface

(and Implications for Horizon testing)

Draft Report

Terms of reference

1. review testing plans and procedures
2. assess issues and problems
3. remedial action, taken and required
4. reporting and control arrangements
5. further actions to ensure success
6. identify risks which need management to achieve successful outcome

Meetings

TIP

- David Parnell
- Peter Jones

Pathway

- Steve Doyle
- Roy Smethurst
- Nikki O'Sullivan

Horizon

- Simon Rilot
- Chris Young

Model Office

- James Brett

French Thornton

- Andrew Simpkins
- Naresh Mohindra
- Tim O'Leary

Structure of Report

1. Perceptions from the main parties.
2. Assessment and technical actions
3. Reporting, communications and control actions
4. Summary

The Chesterfield View

- DIT was problematic for TP; DIT 1 and the first DIT 2 reducing confidence (but the second run of DIT was reported as 'successful')
- TP believe that 33 days is needed to be certain of migration; MOT is only 21 days, E2E has been extended to 33 days, but is deficient in other areas
- The weekly testing meeting is "very politically driven...issues don't get aired"
- Concern that serious problems get watered down at each transmission stage e.g. "Is everyone clear that we have not yet done a cash account"
- Concern that some problems from MOR 1 were never addressed, e.g. 22 files outstanding for delivery to TIP

NB need 33 days.

Suppression?

TIP Concerns

- Cash accounts do not balance
- Mismatch between Reference data at TIP and at Pathway
- Files rejected by TIP
- Script errors at Model office
- Operator errors at Model office
- Problems with environment causing tests to be run out of sequence

} How issues!

“Cannot take risks on this ...it’s a showstopper” - Dave P

The Feltham View

- The Interface Specification concentrated on the syntax not semantics.
(i.e. it specified the layout, but not the meaning of particular fields)
- Horizon take too long to sign off AIS revisions (5.3) - why?
- TIP rejects whole files too readily
 - the scales example
 - the timestamp
- Concerned POCL do not understand scale of business issues in reference data
 - controlling which non core products in which offices
- the menu hierarchy is important to Pathway commercially

Validated.
but we could
have expected
P'ing to have
looked more.

Still an underlying issue.


itm

Pathway haven't implemented the agreed design.

Model Office Environment

- Simulating 7 offices gives sufficient range and volume
- Inspection of the scripts shows them to be thorough and well specified
- The control of the office environment is good
- The rate of script and operator errors is no worse than should be expected, and does not detract from the primary purpose of MOT Ng
- The timespan of 21 days is adequate for the primary purpose

*The Model Office Environment is well planned and executed; fit for purpose and to best industry practice
(so long as it sticks to its purpose)*



Model Office Progress

- Environmental issues cause severe problems, e.g.
 - on 21/10 the wrong date was entered, losing one day
 - on 22/10 a BA file failed, losing a further 1/2 day
 - no interface files sent to TIP so far due to dates synchronisation problem)

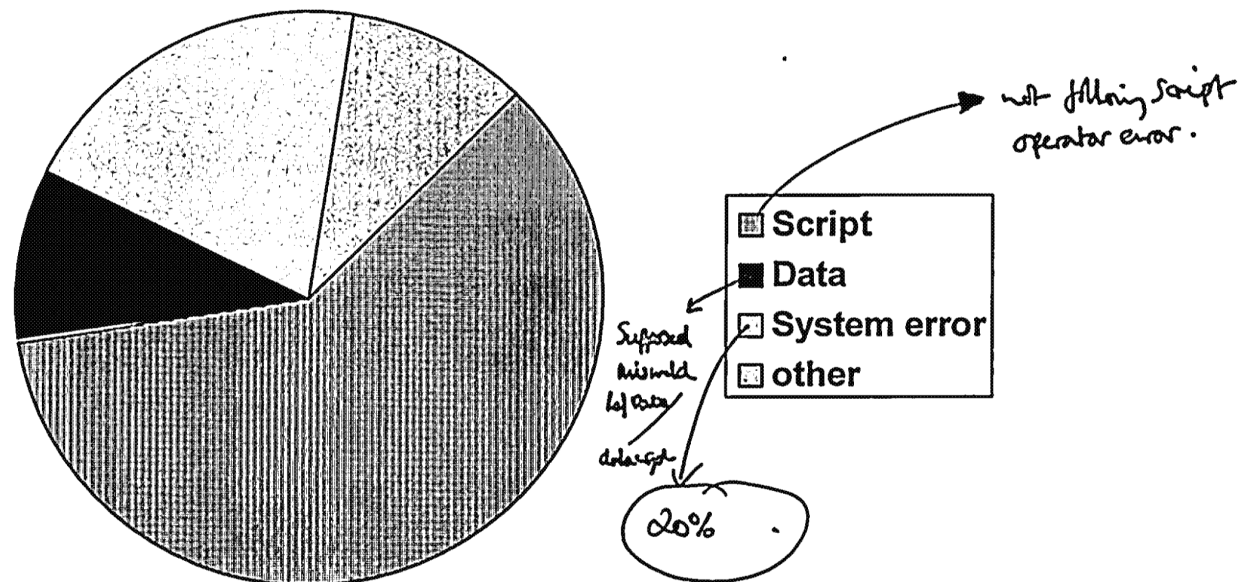
what found / evidence

- 2nd pass of E2E shows as many errors as first, yet we should see significant reduction
- at least 150 repairs to go into final MOT
- at least further 30 outstanding problems
- At this rate, we will have at least 40 problems (many more incidents) ~~not~~ ^{not} in the final MOT /E2E

the likely number of problems outstanding at the end of testing is higher than the business may accept; or worse, live trial is so bad that rollout delayed

Get 2 errors to be longer to get fixed.

Incidents Analysis of Errors



Problems associated with running tests overwhelming real errors

Assessment of TIP Concerns

Cash accounts do not balance	Must be fixed and proven
Mismatch between Reference data at TIP and at Pathway	Causes 10% of all errors, but number of differences unknown. Should be analysed
Files rejected by TIP	having stripped out reference data problems, resolve any underlying errors
Script errors at Model office	60% of all errors
Operator errors at Model office	Need to understand whether have realistic aims here
Problems with environment causing tests to be run out of sequence	Note back that the level of operator error is average in Steve's experience.

Assessment of Pathway Concerns

Interface specification concentrates on syntax	Inspection of document shows concern justified, but this is not a unique issue for a design team
AIS revisions	There is a local agreement, but Horizon should quickly accept or reject
Whole files rejected for 1 error	Not accepted; can understand reason for rigour at TP interface (though it may be expedient to take some risk)
Scale of reference data issues	Experience suggests concern probably valid, but nevertheless, it has to be made to work technically
Menu hierarchy	The design should separate this and reference data; fix on fail unattractive

✓ agreed but so what! -- ask questions

Should be quicker..

(NB)

need to resolve properly.

(NB)

Reference Data

Reference Data is Central to many of the issues

- the current design of 3 independent feeds is messy
- No evidence of cash account data mapping
 - TP believe this was agreed by all parties (*and is now planned to be done*)
- how can we verify that each time fresh data is dropped, the reference data is correctly replicated
- balancing accounts could be due to a double error

Experience at other sites suggests there will be considerable operational problems with reference data; vital to be confident that IT part is reliable (to get through testing, ... and beyond...)

Bruce
Talmadge

Working Together - TIP, Testing and Pathway

Issues are not getting resolved

- correspondence evidences problems in working together
 - useful to state issues once in writing
 - not useful to have stream of correspondence
- partial answers given in meetings with Pathway
 - e.g. “All Cash Accounts Balance”, but this is not the full story, • economical with they only balance in a special Pathway environment
 - Pathway may feel under significant contractual pressure
- documents and letters all ‘on message’
 - a test report stating “all cash accounts have been produced” would have been clearer if it stated “but we have still to get them to balance”

*Points to an underlying problem of confidence . . . or fear of creating
a lack of confidence*

Diagnosis

- TP are (largely) justified in their concerns *Peter Jones is largely correct.*
- the test strategy ~~has become too complicated~~ *is about right but its execution has increased the complexity.*
- objectives for each test are unclear
- lack of transparency, leading to suspicion that all is not well *o ✓*
- premature integration, hope triumphs over realism (I.e. integration was started before components were proven leading to more complicated debugging) *Have tried to integrate Go earlier.*
- inappropriate testing methods chosen, leading to more work (in particular, MO and E2E are wrong for financial validation)

↓
forcing that transactions in one and balances/proves with what comes out.

Fitting Test Styles to Need

	HCI & 'Soft' Issues	Data/ Financial Integrity
Data Input	Real Operators	100% Consistent
Data Volumes	Medium	Low
No Offices	Range of Types (7)	1 or 2
Coverage	All transactions with input permutations	All transactions with data permutations
Timing	1 day / day	many simulated days per actual day
Equipment	Identical	Same functions
Frequency	Once per build	Repeatable, until correct
Timespan	21 days	33 days

Ann. E2E should address this.

→ Is there a real E2E integrity check?

The Model Office is ideal for first column, and poor for second

4:1 days in a day
for financial integrity test.

Bringing Testing to a Successful Conclusion

- Because this is a PFI initiative, it was decided there was no place for conventional UAT, ...

BUT - the service must be acceptable to POCL

We must find a way of addressing the issues on the TIP Interface

- Recommended actions need to take account of where we are, ...

BUT - The present course has a high risk of failure

(I.e. the current process is wrong for the type of testing proof we need for TIP)

An extra run of MOR does not focus on areas of uncertainty

Actions to Reduce Risk

1. Confirm the primary purpose of MOR/T is about office working and procedural issues. In discussion with the parties, allow the Model Office team to drop tasks concerned with financial integrity IF necessary to secure primary purpose.
2. Construct a different test to demonstrate financial integrity (possibly based on DIT). The cost of this would be significantly less than another MOR run, and could proceed in parallel. *run for 1 month elapsed time*
3. Review with Pathway whether they are getting value from current run of E2E. A quicker route to the end goal might be to stop, give Pathway time to rebuild the system and then restart.

But have we got time?

*What to do!
How to do it!*

current run of E2E

Components not ready for E2E.

Contingency Actions

[ultimate default option.]

4. Drop automatic interfacing of Cash accounts (TIP), but any underlying problems would remain.
5. Offer only one migration option (either manual or 1c) to reduce the complexity of testing. } X not likely.
6. Reduce the number of offices in live trial so that the anomalies can be coped with }

These actions are all unattractive in that they descope the programme.

Reporting

- All anomalies found in MOT noted on an incident report
- After removing incidents which are not product defects, PinICLs are raised for rest.
- Daily reports are written by the MOT, showing Incidents and PinICLs raised

good.

BUT

- PinICLs are closed once Pathway believe they have solved the problem
- It is believed that errors may reappear in later releases, but there is no system for tracking

The data collected does not give Horizon a view on system stability

FOU needs to have an assessment of errors.

Needs for Test Reporting

- The daily reports demand much effort yet cast little light on trends and stability
- Pathway needs to own an independent view of system stability
- This can be achieved using Incident Reports
- **Reports should not be closed until Horizon have verified the solution**
- A weekly testing report should show,
 - Outstanding brought forward, raised, solved, Outstanding carried forward,
 - This should be analysed by business impact, and occasionally by area affected (e.g. TIP) and product area
 - The graph of outstanding each week is the most useful indicator of stability.
- Pathways view will often be different; occasionally the two views should be reconciled.

Where is
weekly report?

Some Detailed Actions to Improve Reporting and Control

NB

- Horizon maintains its own log of defects
- This log is analysed weekly to meet the specified needs (outstanding, trend, etc.)
- Reduce daily reporting to a simpler content
- Institute weekly reporting giving the information specified above

Communications within the programme

- ⦿ “Our views are sought, but appear to be ignored if not on message”
- ⦿ “Don’t get feedback on PinICLs”, *but this may be changing*

These concerns, together with the previously mentioned problems of working together, draw us to consider the extent to which the roles and responsibilities of the Testing Group are serving the Programme.

Roles and Responsibilities

(Which side is Horizon Testing on?)

- TP worry they have to be the 'conscience' of POCL, isn't that Test Manager's job?
- SR thinks testing "in the middle" Tip | Rel Data | . right
- TP worried that the Test Manager doesn't have the perspective / business front.
- What is the mechanism for recommending acceptance? - whose side is he on.
- On current evidence, would TP feel the system was acceptable? NB

It may be better to position Horizon Testing as independent of Pathway