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From   Kathryn Cook   9 April 1999

HORIZON TRAINING: COMPETENCY

1. When we spoke last week I promised to let you have a progress report on the Horizon competency work which you commissioned in January. As you know I've had a small group working to understand three things:

    - the extent to which individual competency now (i.e. pre Horizon) affects the ability of that individual to successfully undertake Horizon training and operate successfully in live state;
    - the extent and nature of any gaps in competency;
    - our ability as a business to fill any gaps identified and the impact of doing so (and of not doing so).

2. To understand these issues we've had the advantage of a fairly large amount of data that has been collected already by various people across the business (including the Horizon team and BSM) looking at a range of issues (including feedback from those offices which already have a form of Horizon). We have also commissioned some additional work from Research Services to fill in some of our remaining data gaps.

3. The attached report is structured to address three main areas:

    - the background issues; why competency is important etc.;
    - what the various pieces of research that have been carried out are telling us about front line competency now and in an automated environment;
    - what we think we need to do prior to the commencement of live trial; what needs to be measured as part of the trial and, finally, issues that we'll need to track/measure/address further downstream.

4.   Let me know if you've any queries and if you're content that we proceed as recommended (section three of the report): there are of course budgetary considerations which we'll need to clear and it'd be helpful to bottom these with you ASAP.

KF Cook
HO Network Resourcing Team
GRO

HORIZON COMPETENCY REPORT

Section One: Background issues

1. The business' current focus of allocating training resource in the retail line to new entrants has been under review for some time. Concerns have centred primarily around the limited numbers of levers that are currently available to support on going development of peoples skills once they have joined the business (either as a member of staff or as a subpostmaster). The recent review of TK and its reallocation of training time towards improving the performance of 'poor' offices has gone some way to enabling us positively to affect competence after recruitment but there is still some way to go (and this is something that the Network Team will be looking at in 1999/2000. Clearly its important that we get better at understanding and managing ongoing individual competence in order to support the introduction of new products and services and to deploy developing service standards in an increasingly competitive environment. The introduction of Horizon (and the ongoing work to develop a conforming culture within the business) has made the need to address this more pressing. This report addresses some practical competency support mechanisms and also covers steady state training issues.

2. The business has never had a detailed definition - other than the recently introduced one for new entrant counter clerks which is applied at the end of their trial - of what we mean by 'competency' for all of those who are customer facing in post offices (employees, agents and assistants). Nor do we have any specific mechanisms to 'audit' or assess competency levels of those serving our customers either individually or collectively (this is particularly true of agents and their assistants). Our first task as a group has therefore been to try to define what we mean by competency. Attached as annex A is the competency statement we, and those who have seen it (including HoRNS, several members of the HO Network Team and the People Programme Board) feel is a credible first draft of what we require now and how it will change when Horizon is in operation: it deliberately highlights <u>areas</u> of competence, not absolute competency levels although, when we understand this issue better in an automated environment, this may be something that the business wants us to address at a later stage.

   Why do we need to bother about competency?

3. We know already that there are varying degrees of individual competency in the network and RNMs know only too well which are their 'problem' offices. The benefits though from us developing a better understanding and managing competency exist on a number of levels and will include:

- <u>Horizon contract</u>: although there are no provisions in the contract for POCL to pay remedies for a lack of competency by those using the system, the business does have an obligation to ensure that only competent people use the system and Keith Baines has confirmed that we would be liable - in the event that they , or we, could measure it - to compensate Pathway for their costs of rectifying any damage which resulted from us failing to meet that obligation or if lack of competency of those using the system was a contributory factor to any service shortfall e.g. if transaction times exceeded contractual limits and inadequate competency levels were one reason for this. (In roll out ICL are carrying out the training and are measuring competency so the penalty risk to the business is clearly lower but in steady state training (where the subpostmaster will play a major role in ensuring competency) the risk of ICL claiming compensation from POCL is clearly higher;

- <u>the individual</u>: we know already that some prospective system users are nervous about the introduction of Horizon and indeed we've already had at least one (well publicised) pre-emptive resignation. A 'fear of failure' on the part of prospective users - particularly where they have already have had to transfer over to cash account could lead to adverse impacts both on the size and reach of the network but also on publicity and customer service. Similarly, in some parts of the rural network - particularly where volumes are low (and pay levels consequently modest) - the 'bother' factor of transferring over to the Horizon system could make things difficult. Whatever can be done to ease people through the training process should pay dividends;

- <u>the business</u>: the business will bear the cost of putting things right both because it is obliged by the Pathway contract and because it obviously anyway has to provide extra resource e.g. fix errors retrospectively or to offer additional help which is required by the individual such as additional training, RNM or field support or helpline assistance. Individual support needs are likely to vary considerably and meeting this variation will be one of the key challenges for the business;

- <u>the customer</u>: the effects on customer service of a lack of competency using the Horizon system will range from elongated transaction times and QofS problems as users try to navigate their way through the system or call a helpline, to loss of business as customers lose confidence in our ability to provide effective service. Its important that we understand the competency 'learning curve' and hence the likely duration of impacted customer service so that the effects on customers can be minimised.

4. When starting this work the key issue we were asked to address was the extent to which a lack of competency on the part of the individual prior to attending Horizon training would prejudice their ability to make the most of that training and to operate successfully in a live environment. The report addresses this issue but also has to tackle the concern that is clearly present in the business about the effectiveness of the ICL Pathway's training solution as a mechanism for delivering competence in using the system in a live environment.

Section two - Research findings:

5. We have had the advantage of accessing quite substantial amounts of research that has been commissioned by various people since Horizon kit first appeared in NE and SWSW. Many of these reports make reference to competency issues albeit that none of them has specifically addressed the issue of pre entry level competence and its effect on post Horizon training competency. We therefore commissioned additional research to start to address this using as our target audience the 100 people (a mixture of subpostmasters, counter clerks and assistants) who were trained on the newly baselined Horizon courses in March. This research looked at a number of aspects:

   •attitude/expectation to the training;
   •previous exposure to and use of computers;
   •individual learning styles;
   •performance pre training (i.e. a measure of their competency now) and performance using the Horizon competency test at the end of training.

   In addition Research Services was also able to carry out a literature search on competency issues addressed/encountered in other major (external) automation programmes.

7. A summary of the findings from the detailed competency research is at Annex B. The key issues to note are:

   Pre course competency:

   • pre course competency measures indicated an overall competency level of 79% (those tested were given the option of looking the answer up before answering the questions which were based on them demonstrating their transactional knowledge) but there were no 'patterns' of failure (e.g. by age, status etc.);
   • individual competency scores ranged from 33% to 100%;
   • a competency score range of between 24% and 100% was achieved for specific questions;

- scores for attendees from sub post offices were lower than those from branch offices (77% compared to 84%);

Pre course attitudes/experience:

- 65% had used a computer before; 83% said that they were familiar with using a computer key board;
- 98% were looking forward to using Horizon but 13% were worried that it would be difficult to learn and only 49% thought that it would be easy to change from current methods to using Horizon;
- 95% felt that Horizon was essential for their office to succeed;

Post course competency assessment/views:

- 3 delegates would have failed the training provided by ICL - 2.37% of the total (i.e. well within the contractual target. Regrettably we don't have any detailed data to get underneath this e.g. whether they were assistants or their demographic considerations and this data needs to be collected so that we are in a position to understand the detailed links to pre course competency);
- 97.6% rated the course as 'satisfactory' or better;
- improvements requested centred around the need for more training time; more training time spent balancing and practice on using the system.

Research results from other major automation programmes re competency:

- older people are less likely to 'problem solve' using a computer ie they will ask for help from a helpline (as opposed to colleagues) earlier on and will request help 2-3 times more often than younger staff;
- older people take twice as long to learn but reach equal performance;
- previous computing experience is not strongly related to learning performance.

7. As mentioned earlier a number of existing studies of Horizon and conformance have commented on competency issues: the key ones are summarised at Annex C - the main issues that need to be noted from these studies are:

- Horizon training isn't comprehensive i.e. it's designed to teach people how to use the system, not to fill in any competency gaps or to deliver conformance per se;
- post training support has been defined as a period of time rather than with specific learning goals; [however a training evaluation

questionnaire <u>will</u> be completed for each individual and used by the HFSO);

- outlets will be provided with excessive information in the user guides and will need to search for information that is relevant to them;
- most problems in subpostoffices are to do with the preparation of the cash account rather than with customer facing activities;
- the cost of non conformance is already high and may increase with automation;
- current arrangements whereby subpostmasters are responsible for training their assistants may be a significant area of risk under an automated environment;
- POCL helpline staffing assumptions are based on 5 calls per office per week in the first month and one per office per month thereafter;
- both the End to End Testing Evaluation report and the Model Office testing Report for Nile 2.0 raise their concerns about the adequacy of the time allowed for the basic face to face training Horizon training. (Provision ranges from one day for subpostmasters assistants to a day and a half for those who prepare the office balance e.g. subpostmasters). (Note: additional support provisions e.g. remedial training provision and training mode will shortly be available and were not factored into these assessments but it is still true to say that the training is not in itself flexible enough to recognise individual training needs).

Section three: What's all this telling us about competency and what should we do about it?

8. That there is evidence of competency gaps isn't surprising: many of our current systems and processes are dedicated to handling errors and we know already that we do not have a conformance culture. It could be thought that one of the things that the data collected is telling us is that although there was a pre course competency of only 79%, the fact that only 3 people would have failed the Horizon training (2.37%) could be taken as an encouraging sign that a lack of competency currently would not be an inhibitor to using the Horizon system. There may however be other explanations e.g. that the Horizon competency test is 'too easy' or that it isn't predictive of live operation (e.g. that its measuring the wrong things).

9. We know a lot about competency but does the data collected thus far allow us to answer two key questions?:

   1. does a lack of competency in current operational procedures prejudice an individual's ability to make the most of Horizon training?
   2. will Horizon training deliver competence in live operation?

Although we have a lot of data we can't conclusively answer either until we have data which tracks people before during and after training <u>and</u> measures their competency at each stage. We propose that this work is commissioned from Research Services ASAP to allow the offices (and the people in them) receiving kit for the first time in live trial to be tracked over time and competency assessments made. If we were able to do this then we would have data available by the end of May which would confirm the definitive answer to question one. We also propose that we track competency over time in live operation to enable us to answer the second question (and indeed to assess the effect in steady state of varying approaches to turn over training).

10. <u>Actions to be addressed now</u>: The data collected already <u>will</u> allow us however to start to develop our responses to known areas of concern (this is however a 'best judgement' issue and some areas of concern may not be borne out during live trial) and to measure their effectiveness as supports to improving competency as part of live trial. The areas we recommend that we concentrate on are all ones which directly link to supporting competency and which are largely 'free' or low cost to develop. (See paragraph 11 for our recommendations for more resource intensive competency support). We recommend that we develop enablers to address the following issues:

- <u>Pre training competency support</u> - expectations about Horizon are high and people expect it to be easy to use but only 49% felt that it would be easy to change their current methods. One option for the business is to consider clarifying in a more direct way for those about to undergo Horizon training what will change and what won't and (as a way of starting to plug current competency gaps) we could help people to think about their current competency gaps in the run up to training (e.g. by offering some form of self score sheet to remind them of what signs there may be already that would indicate a current competency failure) There are already vehicles which we could use for this such as the Horizon Implementation Guide or the 'Countdown to Go-live' documents which have already been produced. We could also back this up by ensuring easy access to distance learning and other training opportunities (e.g. access to their Transactional Knowledge Manager).

- <u>additional balancing/accounting support</u> - concerns about balancing appear to be pretty universal (both in an automated and non automated context). One key activity is to better equip people before they attend training to understand what changes there will be to the balancing process and to expose

them to the new terminology e.g. 'individual/shared balancing and stock unit balancing

- <u>structuring of post training support</u> - post training support (via HFSOs etc.) can be tightly structured to meet the learning needs of the individual and this should be developed along with their existing materials. In some instances, the level of HFSO support may need to be flexed to meet individual needs and resource might be available from within existing templates e.g. through using TKMs to support this project;

- <u>providing support materials</u> - materials to support in office preparation sessions prior to attending training could be developed to reinforce the disciplines necessary to both use the system and to use reference materials;

- <u>increasing kit access</u> - opening up the option of visiting offices which have already gone live or to open up counter training schools to offer access to kit should also be explored;

- <u>spread best practice</u> - we already have experience of what can go wrong (and how to put it right) in live operation, this information should be available to those who are newly trained to reinforce their learning (via HFSOs and from encouraging networking amongst subpostmasters)

11. In order to assess the effectiveness of these measures we propose that half of the offices receiving Horizon kit for the first time (c52 offices) in live trial are offered these solutions (and their take up monitored) and half not. Tracking of HFSO support and measures of help required e.g. of helpline calls to support first balance will allow us to understand very quickly the need to support first and subsequent balances (e.g. with HFSOs). Measures similar to those detailed in paragraph 7 should also be measured for all of these offices (all 104) and, additionally, much more detailed competency data collected from the Horizon training so that we understand individual competency gaps better. Finally, to allow us to track the appropriateness of our competency tests and measures we should continue tracking performance every three months. Detailed research proposals are currently being drawn up and will be available shortly.

12. Solutions which involve the deployment of large scale resource (e.g. more in-office support post go live) and feel instinctively right (and supporting all first balances for example <u>feels</u> instinctively right) will need to be 'proved' by the measures outlined in paragraph 9 above. Such support could be very expensive for the business (e.g. it's costing c £6m for the current HFSO resource) and we need to understand the

cost to the business of <u>not</u> supporting offices will become clear from this research.

In conclusion it clear that there is an urgent need to better understand the operational effect of the introduction of Horizon on our front line capability, particularly on our ability to meet business KPIs. We also need to understand the effects for the individual (and consequential knock on effects back on the business e.g. demand for helplines. The proposals outlined above are designed to both collect the data we need to understand these impacts and to develop short term enablers to address those issues which can already be identified as areas for improvement.

Annex A

Competency statement

Now	Post Horizon?
Complete transactions accurately • Customer is 'happy' • no errors • transaction completed as fast as possible • keep client 'happy' • sell appropriately • in your own preferred style • complete documentation as necessary	• Yes • Yes: transactions will need to be completed in a specified way or there could be systems difficulties; • transaction may be longer at first and some transactions will require authorisation; • errors will be more transparent and to reduce these we will need to standardise how we do transactions • Yes • transactions will need to be completed in a more standard way • Yes Additional Horizon requirements: • use Human Computer Interface effectively with customer • reengineered transactions will need to be completed : some will require transactional procedures which are very different to now
Use reference materials • have all relevant (up to date materials in the office) and know where it is • Know how to use the documentation • actually use the relevant documentation (i.e. don't guess) • know how to get help if stuck and do so	• Yes • reference materials will be different and user will need to be able to use the new versions • Yes • Yes, but help facilities will be different and user will need to know which form of help to use when

Balance Stock Unit	
• declare cash and stock on hand	• Yes, need to use Horizon effectively as part of this
• feed into receipts and payments any vouchers on hand	• Yes, enter into Horizon correctly and adjust as necessary. System then produces report
• bring items to account e.g. error notices	• Yes, need to enter into Horizon correctly and adjust as necessary
• identify discrepancies	• Yes, system does this, based on what user has entered
	Additional Horizon requirements:
	• need t understand what a stock unit is and understand the whole process using Horizon e.g. including balancing periods
Office Balance	
• amalgamate all stock balances	• Yes, automatic with Horizon (need to know about inactive SU). Need to complete any corrections required to SU's using correct procedures
• Prepare office balance	• Yes, need to understand uncharged receipts and unclaimed payments and how suspense account works
Cash Account	
• take office balance and put into c/a. Know reporting requirements and retention periods	• Yes, Hit a key correctly! Send to Chesterfield, know what/how to retain
When it all goes wrong	
• Manual procedures (if ECCO) if equipment fails	• Yes, need to know what to do if equipment fails, how to recover transactions (fallback and recovery procedures); manually balance?; revert to manual transactions?
Using equipment	
• H&S/Cleaning/Security/Consumables	• Yes, but the new versions
	Additional Horizon requirements:
	• Key board skills
	• use of consumables

Annex B

Research findings: summary

Research parameters:

- target population: 100 attendees at baselined ICL training courses in March 1999
- pre course competency measures
- self assessment of previous exposure to computer systems;
- attitude/expectations measured;
- learning styles questionnaire;
- post ICL training competency test results;
- post ICL training comments/views.
- qualitative and quantitative data from other competency studies for major automation programmes.

Research results (headline):

- Pre course competency measures:

  - overall competency score: 79%
  - range from 33% to 100% for individuals
  - range of 24% to 100% for specific questions
  - BO score: 84%; subs 77%
  - no gender, ethnic or language differences apparent (group too small to differentiate)
  - no significant correlation between previous computer use and competency (which would be expected)

- Previous exposure to automation:

  - 83% were familiar with using a computer key board;
  - 65% currently used a computer system at work;
  - 61% had previous experience of using a computer at work;
  - 87% said that they felt comfortable using a computer.

- Attitudes/ expectations:

  - 98% were looking forward to learning how to use Horizon
  - 13% were worried that they would find it difficult to learn to use the Horizon system
  - 49% expected that it would be easy to change from current methods to using Horizon
  - 95% felt that Horizon was essential for their office to succeed in the future

- 80% felt confident that Horizon would be easy to use
- 5% felt that there wouldn't be much for them to learn to use Horizon. (65% disagreed or tended to disagree with this statement)

- Learning styles:

  - the range of learning styles generally matched the population at large with no real preferences coming through. (this could have implications for Horizon training which as currently designed will appeal more to activists and pragmatists than to reflectors and theorists.

- Post ICL training competency test results:

  - 3 delegates would have failed the course i.e. 2.37% of the total (well within the contractual target)

- Post ICL training comments/views:

  - 97.6% of those trained rated the course as 'satisfactory' or better
  - several comments about the need for more time/too much compressed into the course
  - more time needed on balancing
  - much better than on site training
  - would have been useful to have had more practice time

- Qualitative and quantitative results from other companies:

  - older people less likely to problem solve with computers (i.e. will seek help earlier e.g. by calling helplines);
  - older people take twice as long to learn but reach equal performance;
  - older people request help 2-3 times more often than younger staff;
  - computer aptitude and prior level of achievement are most important in computer based learning;
  - computer anxiety is related to slower completion of simple computer tasks;
  - previous computing experience is not strongly related to learning performance;
  - computing experience in males is a greater predictor of performance than for females;

Annex C

Findings from other research

Report:	Key competency issues:
Before and After group	Horizon training isn't comprehensive (i.e. its not designed to do any more then teach people how to use the system) and it doesn't ensure that people are prepared for training. Post training support has been defined as a period of time rather than with specific learning objectives; it has no specific tools; Concerns about user documentation: particularly links to operations manuals; outlets will be provided with 'excessive' information much of which is irrelevant to them; Pathway user instructions only cover automated activities not manual ones which are required to support the 'whole' activity; Levels of conformance have three basic causes: - awareness of correct procedure; - ability of individual (and availability of correct aids); - process: does it build in compliance?
Horizon CSF workshop	ICL have expectations about our level of performance which will need to be met
HEB Study	Most problems in subpostoffices are to do with the preparation of the cash account rather than in customer serving activities Levels of errors in POCL is low already; fine tuning is of particular importance Low error offices have a structured way of completing back office procedures (e.g. tick lists)
CEC conformance paper (March 1999)	Cost of non conformance to outlet transaction and processing standards c£31m pa automation is not tolerant of non conformance transaction errors cost TP £4.5m now; an additional c£1m with Horizon? Regions spend £10m now handling errors Clients have penalty clauses in their contracts which are expensive for the business Under Horizon errors will be more visible to clients Not everyone gets trained (assistants)

Business case for conformance Strand 3	Horizon transaction time is slightly longer than the manual process but benchmark timings are achievable Steady state training arrangements for assistants need to be addressed c50% of offices didn't follow standard methodology and the number of non conformance incidents has increased since December (people finding ways around the system?) Helpline staffing has assumed that there will be 5 calls per office per week in the first month and one call per month subsequently. An additional call per office after the first month adds £3.9 m in cost
End to End testing Evaluation Report for Nile 2.0	'Unanimous view from the End to End team is that the training event will not be sufficient to equip 'real' end users in readiness for their offices receiving the Horizon system. The course was thought to be too short with too little time to reflect.' More time was felt to be needed on balancing and accounting.
Model Office testing Evaluation report for Nile Release 2.0	'A day and a half is not long enough to cover the Horizon system (particularly for PO staff not used to an automated working system'.