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New Platform Adoption

Programming and reporting platform adoption in TNS

Helsinki Metropolia University of Applied Sciences
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Master’s Thesis
In 2013 TNS a one of the largest Market Research companies in the world decided to replace their current country specific mixed assortment of data collection, data processing and reporting tools to a more powerful dual platform that would be used globally within the group. This would enable the group to use human and system resources more effectively and spend less time and money on managing various old platforms and servers. The change was targeted to the core function of the organisation and raised many challenges that could have a very serious impact to the stakeholders in form of delays, interruptions in service and even failure to deliver. To minimize these risks, the timing for the adoption was to commence when fewer critical projects in process. This limited the available time to be used for the adoption to a very short period as operations function throughout the year on a very tight schedule and with very limited resources. For the adoption to be successful the teaching and learning of the use of the new platform needed to be done efficiently. The purpose of this study was to make the adoption process more effective in TNS Finland by ensuring the survey process is fully described and applying pedagogical methods to the training and the material. This thesis focuses on how the adoption process was seen through in TNS Finland, motivating and inspiring a very heterogeneous group of trainees to embrace the change, introducing effective methods in teaching and learning, also including aspects on knowledge transfer and information sharing, that can be taken into use in a short time span and providing guidelines for future trainings and adoptions.

To measure the difference between the TNS group provided training and the new pedagogical approach qualitative discussions were held with the stakeholders in the beginning and the end of the adoption.

The discussions revealed that many issues had not been addressed in the TNS Group provided training, which needed to be documented and trained for the platform to be used. The use of a more pedagogical approach had a positive impact to the adoption process.

The author recommends using a pedagogical approach in future adoptions and the necessity of preparation to create the material and to provide support.

**Keywords**
- Master’s thesis; Arnkil; new platform adoption; pedagogics; knowledge transfer; marketing research; production platform change; new user training
5 Preparing for the local training

5.1 Expectations for the training
5.2 The trainees
5.3 Pre-requisites for the adoption
5.4 Acknowledged constraints for the training
5.5 Selecting a two way approach to training

6 Theory behind the new approach

6.1 Human memory and learning, psychological view
   6.1.1 Working memory
   6.1.2 Chunking and paths
   6.1.3 Multiple input methods
   6.1.4 Teaming, repetition and limiting distractions
   6.1.5 Incorporating psychological aspect into the teaching
6.2 Combining learning styles and methods, pedagogics
   6.2.1 Classroom participation, a cognitive approach to learning styles
   6.2.2 Action learning
   6.2.3 Learning styles, VARK model
   6.2.4 Andragogy
   6.2.5 Instrumental Enrichment
   6.2.6 Co-operative learning
   6.2.7 Accelerated learning cycle

7 The new approach for local training

7.1 The main structure for local training
7.2 Local training session structure
7.3 Communicating the change
7.4 The training material
7.5 Creating a stronger support

8 The local training

8.1 Qualitative output of local training
   8.1.1 Wave 1, TNS Group approach
   8.1.2 Wave 2, the new approach
8.2 Experience gained from both approaches

9 Proposal for future trainings

9.1 Training and adoption programme for the future
9.2 Feedback to proposal 54

10 Conclusions 54

10.1 Next steps 57
10.2 Evaluation 57

10.2.1 Outcome vs the Objective 57

References 59

Appendices
Appendix 1.1: Strategy for the adoption
Appendix 1.2: Local training agenda
Appendix 1.3: DimensionsNet login structure
Appendix 1.4: Process steps to create a questionnaire
Appendix 1.5: Survey process steps, detailed
Appendix 2.1: Interconnections, links to known information
Appendix 2.2: Dimensions platform survey programming and reporting
Appendix 2.3: Dimensions survey programming structure
Appendix 2.4: Dimensions survey programming metadata
Appendix 2.5: Dimensions survey programming metadata content
Appendix 2.6: Dimensions survey programming routing
Appendix 2.7: Dimensions survey programming routing content
Appendix 2.8: Dimensions and Confirmit translation table
1 Introduction

TNS also known as Taylor Nelson Sofres, a part of Kantar group and under the umbrella of WPP plc, is one of the worlds' largest global market research companies having offices in over 80 countries employing over 15 000 people around the world. TNS has grown to its current size by merging with other companies and buying its competitors. Though TNS is currently a large global organisation it can still many ways seen be seen as many different smaller companies in various different stages of integration to the group. The different stages can be perceived in strategy and vision, but also in methods and technology used in the TNS companies.

As market research reports and consultation bases its validity on data, the different technologies used in data collection, data analysis and survey programming cause issues in merging the data and making solution creation for the whole group next to impossible. There is also time wasted in managing and supporting the different software and hardware that is dedicated to a locally used system that is just not cost efficient.

For these obvious reasons TNS as a group decided to get rid of the myriad of different data collection and reporting platforms that have been used in the past and standardise the platform into one or two software that would be used globally. After evaluating many different possibilities TNS decided to take into use a combination of NIPO Software, which is owned by TNS, for telephone interviewing platform and IBM SPSS Data Collection to be used for everything else. The NIPO platform was chosen for cost efficiency reliability and experiences in telephone interviewing in various TNS countries. IBM platform was mainly chosen as it could converse with most types of data and databases. It also uses object oriented programming and databases therefore it provides a strong base for automation possibilities. The IBM platform had already been in production use for a few years in TNS US, UK and in Germany and was further customised by Kantar and IBM to make the platform more suitable for market research. The customised version of the platform is called Dimensions within the organisation and this name is also used for the platform throughout this thesis and the thesis will be concentrating on the Dimensions adoption.
Moving into using a new platform in an organisation, as large as TNS, is a daunting task. The change is targeted right at the heart of the business and while the change is ongoing, any possible negative effect to the customer experience must be minimized. It is an organisational change, which not only affects the people working in production programming with the language but also affecting the hardware and software, support, the ways of conducting research and in the end all of the employees of the company, directly or indirectly in the form of data and reports.

The group approach to take the platform into global use was to train two main users per country to use the platform in a window of two weeks training, one week of survey programming and one week of tabulation. The main users were then take the platform into use in their country and teach the platform use to all the local users. All surveys after this would be transferred to the new platform and the old platforms would be terminated in a matter of six months after the main user training.

This thesis is written from the aspect of the selected local Dimensions main user who is specialised in survey programming, the second local main user was changed during the local user training process with another tabulation expert. The whole adoption process can be viewed from many different angles including leadership, economics, change management, information transfer, processes, cultural change, IT structures and programming languages, documentation and even motivation just to name just a few. This thesis concentrates mainly on a pedagogical approach on teaching and learning to use the new platform Dimensions as efficiently as possible in TNS Finland operations, creating the material and providing guidelines for future trainings.
1.1 Case company background
TNS as a group decided in 2013 to change into using a dual data collection and reporting platform approach, using NIPO Software for telephone interviewing and IBM solutions for everything else. Dimensions was selected to replace a multitude of out of date programs which have been used for collecting and reporting data. The new platform was planned to take into use globally by mid-2014, discontinuing the support and use of old platforms at the same time. Training for the new platform was to be planned to commence at the end of 2013 having all users actively using the system at the beginning of 2014.

1.2 Business Issue
Users need to be trained to use the new platform and all of the surveys need to be moved to the new platform before the end of 2014 as the old platforms will be shut down. For Ad hoc studies this is not big issue, as only the repeated ad hoc studies need to be re-programmed on the new platform, but on an average there are about 20 tracking studies per country that need to take the historical data with them as well. The tracking studies a.k.a. trackers need to be re-programmed, reports re-created and the old data converted. Re-programming, report creation and data conversion is very time consuming and the current programming resources are cut to the minimum not counting on having resources for re-programming old surveys and programming new surveys at the same time.

There are also employee issues that rise with the change of the programming language. Dimensions requires a higher level of programming knowledge even from a basic user than the previous platforms required. The users that have been using the old platforms for years have got very comfortable in using them. Changing into a new platform forces the old experts to the situation that they no longer know the platform by heart, they need to accept uncertainty and learn from the start the commands and routines needed to accomplish their daily tasks. Most of the older experts have not been studying anything for many years and can find learning in general a very hard task. This is could drive some of the users over their comfort zone and create change resistance within the users or even push some users to leave the company also. The cost of hiring new workforce who would know market research enough, or to hire people that are experts of the new platform, is too high. Normal business has to continue as usual even during the migration phase. As the change affects the core of the organisation, people have to be trained fast and effectively to avoid any setbacks in customer experience.
1.3 Objective
The aim of this study is to find suitable and effective approaches to teach the use of a new platform to a diverse group of people with various skillsets, different backgrounds in using data collection and reporting platforms and also differences in learning and ways to learn in general. To ensure the users follow standards and can easily develop their skills further by using and creating documentation, guidelines and examples. The conclusions from this research can be used in other TNS countries in possible future trainings or migrations and also in other companies facing similar situations.

1.4 Output
Approaches on how to teach the use of a new platform to a diverse audience effectively, results and analysis of the path chosen by the company, a proposal for future adoption processes based on the information gathered from the research and next steps to follow. Standardisation, creating documentation and guidelines for the platform users not included within this thesis.

1.5 Scope
The approach of this study will be based mainly on the pedagogics, including views on knowledge transfer, organisation culture, change management, including the information derived from the input of the qualitative sessions with the users and managers regarding the new platform adoption.

1.6 Limitations
Survey was conducted only in one company, focusing mainly on a group of twenty new platform users in Finland and using experiences gathered from Nordic TNS countries. Only two approaches to the teaching could be tested due to limited time and resources. Both approaches were prepared and taught to the new users by the same people.

2 Methods and material

2.1 Research design
The thesis bases on the information gathered from group provided documentation, guidelines, platform training and also by discussions via email, group chat software, telephone and using personal interviews and sparring sessions with key people involved in the adoption. The theory is gathered from relevant literature and publications, including interviews with selected experts in pedagogics and including information gathered from the learner’s feedback.
2.2 Structure of the thesis
The thesis first describes the group approach to the platform adoption and the logic behind it, then moving on to preparation of the local training, which defines the goals and constraints for the adoption. After this an analysis of the platform is performed to seek out possible challenges in the adoption. The analysis concentrates on comparing the new platform to the old platforms and processes, also testing the current documentation. This information defines the need for testing a new approach to the adoption process. As the starting point has been established the thesis moves on to the theory of pedagogics, targeting for effective methods that could be used in short learning sessions and taken into use with little time to adopt the theory. This information is then combined into as the new approach to the training. To test the differences between the group original approach and the new approach to the training the training in Finland was divided into two waves, wave 1 using the TNS group approach and wave 2 using the new approach. Information gathered from the feedback and discussions with the management and the trainees after the training is analysed and a proposal path for future trainings or adoptions is presented. The final part of the thesis is the conclusions including next steps and evaluation of the outcome.

3 Group approach on adopting the new system

3.1 Group strategy approach
The group approach on adopting the information leans heavily towards the strategy of the whole global adoption process, thus avoiding micromanaging of the overall adoption steps within the companies itself. This leaves the actual methods and approaches for training the use of the platform very open, but at the same time provides a clear managerial level approach to the implementation.

3.1.1 The theory behind the group strategy
The change process within the company followed Kotter's well known and often used change process descriptions. The change process can be seen as a series of steps that create a push and even a pull effect towards the now common goal.
In Figure 1 the Kotter’s change process is depicted step by step added with three timing blocks “Prepare, Implement and Manage” that clarify the stage where the step should take place. “Preparation” ensures the basis of the change, “Implementation” describing steps during the change process, and “Manage” as the final stage.

The preparation phase includes three steps. Step 1 is to create a sense of urgency to indicate the need for the change and to push the change process forward. These urgency indicators can be established from the competitive realities, addressing potential crises and opportunities. Step 2 “forming a powerful coalition” aims to create the authoritative basis that can actually mandate the use of resources for the whole process and support and drive the change within the organisation. Step 3 is to create a vision, a path to help direct the change effort and strategies to achieve the vision.

After concluding the preparation phase, the change process moves onto Implement which contains three steps as well. Step 4 “communicate the vision” reduces change resistance, involving the people in the information loop early, using multiple vehicles to constantly deliver information and using the coalition to role model the behaviour expected. Step 5 in this thesis is named as “Remove Obstacles” though in some literature it is also referred to as “Empowering broad-based action”. In this step the systems or
architectures that hinder the process must be changed and people are encouraged to use out of the box ideas to solve issues. Step 6 Create short-term wins is used for motivation, having goals that can be reached in shorter time scale keeps up the motivation and morale of the people involved in the change process. Motivation is also boosted by visibly recognizing and rewarding people for their efforts that made reaching the goal possible.

After the implementation phase is the final phase Manage, containing but two steps. Step 7 building on the change takes advantage of the momentum created by the change e.g. increased credibility, empowerment and motivation to change all systems and policies that do not fit the new vision. This can be achieved by putting the right people to the right places by hiring, promoting or developing the people who can implement vision and also by using new projects or people to reinvigorate the process. Step 8 embeds the change into the culture which is done by displaying that the new behaviour is beneficial to the management and also leads to better leadership in general. Connecting the current organisational success to the new behaviour and by using leadership development and succession, the organisation can also ensure future success of the vision and the company.

3.1.2 In practice, the group strategy towards platform change
The group used clearly the Kotter’s approach to the change, created a sense of urgency, by defining deadlines for shutting down the old platform and discontinuing support to the products that were used on the old platforms. Also a financial push to move to the new platform was given by raising the costs of using the old platforms and lowering the costs to use the new platform, which ensured that the pressure for change was not only to the users but also towards the management. Having the highest global and regional operational managers driving the change throughout the group ensured that the message from the upper management was coherent and that the time pressure was perceived concrete and real. The group also created a vision of a powerful and agile platform and displayed clearly the benefits of a common platform. This increased the pressure from the management and research units and increased user interest creating also a good pull towards the new platform. The vision was broadcasted with maximum coverage within the organisation, using almost all information methods available to the organisation.

As Local managers were given the task to drive the change they then pressed the platform users to use the platform and to create solutions on the platform. The solutions
and successful projects were advertised heavily within the whole organisation. Short-term wins were also created by following the amount of projects moved to the new platform on a weekly basis, ensuring not only progress but creating a feeling of determination and success in the adoption process in all countries. New virtual technical information sharing groups were created that not only ensuring that information and solutions spread to all users but activating the users to work also as support to each other and create possibilities to receive more positive feedback from the whole user group.

Currently the adoption process is in the implementation phase, or taking its first steps in early management stage, getting more out of the system with less effort as users are getting more familiar with the platform. Organisation is also building on the change by appointing people from the adoption teams to be responsible for broader issues regarding the platform and ensuring the positive drive for the future.

[1]

3.2 Knowledge and information sharing platforms
Different solutions and platforms were used to share information with the users and also to provide a possibility for the users to interactively discuss issues with other users. It was evident that information sharing was seen as very important to the whole adoption process and great effort was taken globally to take into use and develop the information sharing platforms.

3.2.1 Group provided knowledge and information sharing
A common site was created for information sharing, including search functions, manuals and documentation of processes. A previously used Wikipedia site used for platform technical information sharing was decommissioned into read only state.

Support teams were created and trained in India to handle basic user issues with the platform using the support site. To aid the support teams to solve more complex issues a team called Second line help desk was created, that consisted of the most experienced users and developers of the system in the group. The support and the Second line provided support functions to all the group users globally. The help desk software was also upgraded from an email based ticketing system to a web based support site from where the user can follow the tickets progress.
A platform consultation group was also created to provide support for the sales and management by explaining what is currently possible with the platform and providing cost and timeline estimates if something new needed to be created to the platform. Experts and users advice was made available by email, group chat, organisation social network channels, monthly newsletters sent via email to the users and support messages informed of important updates to the system.

Various groups concentrating on different technical or managerial aspects of the adoption were created to handle information sharing via web meetings. Even before the adoption process started it was known that the Nordic countries, Denmark, Finland, Norway and Sweden shared many commonalities by the ways to operate, region, language, shared projects and customers. A Nordic group was also created that held platform related meetings to share area specific information and knowledge to the users. The Nordic meetings were mainly held as web conferences, but when needed face to face training sessions were assembled to share more complex information, and to solve specific issues with the help of the developers of the platform. TNS has for a longer time now held yearly events in Europe, Americas and Asia called TNS University, aimed to train and also to connect people, creating possibilities to share ideas and expertise. TNS University was also used for knowledge sharing and training for the platform.
Figure 2 Information sharing displays the different ways of information sharing within the company regarding the platform. The knowledge sharing channels provided by the organisation were quite exemplary.

3.2.2 Information sharing and support in practice

Though there was a multitude of platforms that provided information and knowledge sharing, there was a basic flaw in them. The documentation for Dimensions was created so that it only supported the process used by United States and United Kingdom. There was also an issue with how the information could be searched on these platforms. Most of the platforms provided by the group had good search functionalities, but unfortunately the search functions on the platform containing the system documentation did not. Also the fact that, SPSS data collection software is not very widely used system and the platform was modified for the group, made information searching via internet difficult or somewhat impossible.

As information searching was difficult for the users, support was needed more than expected. The support had an action learning approach to solving the issues at hand, guiding the learner into finding the solution instead of providing one quickly. The approach ensured that the programmers learned more by trying and testing out solutions
themselves. As most of the projects are on a very tight time schedule, this approach created some issues with project timelines and overall platform user satisfaction. Users were also reliant on support to solve system errors and other platform issues such as user rights and other structural changes to the platform. Without access to proper documentation the support requests in solving system errors and platform issues were very slow to resolve.

3.3 The TNS learning path to the platform
TNS Group planned to cascade the learning of the platform by selecting two main users to the platform per country. Both users were to be trained as experts of the country, to be able to handle the whole platform and the training of it for that specific country. Though both users should know the whole platform individually, they were to be selected so that one user would mainly handle the programming and the other would handle the reporting. The training of the users was to be done in a central location so that the countries that are near to the selected location will send their future main users for an intensive one week training session in survey programming, and later for one intensive week training in reporting. The learning structure included class room training, exercises that were conducted during the classes and an example project that was to be done by the trainees for the last session and then reviewed during class. No actual or pilot projects were created from start to end. After these trainings the users were to use the platform in their country, teach its use to new users and to take the platform into full use.

TNS also provided added training by the Nordic Dimensions meetings that concentrated into showing current solutions and solving common issues in the Nordic countries, TNS University training targeted mainly for deepening the understanding of the platform.

3.4 Group approach to the material and training
The group approach to the teaching relied on the plain word document process manuals, which were created for the United States and the United Kingdom. The process manuals were devoid of images, and described only the steps to take in a standard project process without any further explanation of why and what it affected. The intensive training consisted of reading these manuals in class, repeating a preselected example project more or less following the process steps, going through a few exercises
made in class, creating a questionnaire and creating tabulations from pre-extracted data.

4 Analysing the new platform, group processes and documentation

A comparison of the old system and processes was made to help understand the learning needs better. The comparisons pointed clearly that the platform and the language used are more complex for the user than any of the previous ones. The main users tested the documentation and the output of the group training by creating test projects, testing various solutions that were used on the previous platform and by creating the users and user groups for their country.

4.1 Comparison of the new and old platforms

The similarities between the old system and the new one were slight but still tangible enough to ease the adoption. The terminology was quite similar and the basic principles and logics of making questionnaires did still apply. The platform used for respondent management stayed the same and, looking at the content of the survey programming both platforms use a shell that provides the basic functionalities of the survey and communicates with the sample on which to the surveys are built on. Figure 1 below depicts how the commonalities were interlaced with the old platform and the new.

As for the differences in the previous systems it was possible for the user to use the platform effectively without much knowledge of programming languages, the platform
or the next process steps in general. The data collection platform use was a fairly intuitive drag and drop solution running on a web server via internet browser. The users could be trained to use the platform within a few days with the aid of step by step instructions even if they did not have any experience in market research or programming before. In contrast, the new system requires understanding of the whole survey process, the servers and preferably knowledge of programming or at least general understanding of object oriented programming and databases to ensure a fast adaptation of the platform. The training itself will take several days or weeks to go through because of the complexity of the different programs that are required to learn before the platform can be used.

Figure 2 Differences of the two mainly used survey programming platforms

As Error! Reference source not found. clearly demonstrates, the old mainly used survey programming platform is very different from the new platform. One could question why the group should move to a more complex platform, but the reasoning is quite obvious: better automation, almost endless possibilities to combine different program-
ming languages and databases, creating even better solutions to the respondents and the clients. The platform provides all of these possibilities and lower licence costs, but requires standardisation and more knowledge from the users to harness its true potential.

4.2 Market research
To understand the scale and the specifics of the platform adoption it is necessary to understand at least the basics or the basic processes of market research.

4.2.1 Market research basics
Market research study process is quite a complex combination of different methods and approaches. The two basic research methods are qualitative and quantitative research. Quantitative research uses systematic empirical investigations that can be mathematically analysed; the questions used in this type of research are specific and the data collected is numeric. Qualitative research concentrates on understanding of behaviour; the questions used in this type are less numerically understood open text questions that cannot be quantified as is by mathematical methods. In many studies both of these research methods are combined to create better and more informed results to the client.

Research type declares the time period used for collecting the information a market research study can be made as a tracking or an ad hoc study. Ad hoc studies are one off studies, where the data is collected at a one point of time. Tracking studies also known as continuous studies are collected over a period of time.

![Figure 3 Research method and type](image)

All research falls under the categories defined in Figure 3 above, but the data from the respondents can be collected using different methods. Data collection or field methods
include CATI, CAWI, paper, mobile and passive data. CATI is an abbreviation for Computer Aided Telephone Interviewing, wherein an interviewer calls the respondent via telephone and keys in the responses into the data collection platform. CAWI Computer Aided Web Interviews are surveys that are conducted on the internet. CAPI Computer Aided Personal Interviews are personal interviews where an interviewer asks questions of a respondent and the responses are keyed in on the data collection platform. Paper method collects the respondent answers on paper e.g. in surveys that are physically posted to the respondents or qualitative interviews where the responses are written on paper. Paper data collection also requires the data to be keyed in to the data collection platform for reporting and analysis purposes. Mobile is currently a growing market as most of the world’s population is using mobile equipment of some sort e.g. a mobile phone or a pad. In mobile field method it is possible to collect data using basic surveys or applications that collect data from the user. Passive data collection method collects data without user responses to a questionnaire. This includes mobile applications that follow the movement of the respondent’s mobile phone, following the usage of an internet browser or applications and even collecting data from respondent’s physical reactions to e.g. advertisements as sweating, pulse tracking or eye tracking.

The data collected from various field methods can be combined in reporting if the respondents have an common identification in the methods and mathematical modelling can be used to connect respondents that have responded similarly and simulate answers where needed. The trend word big data is used when larger information groups are combined and responses are also mathematically modelled and simulated.
There are also different methods in targeting the surveys to the respondents that affect the study process itself called sample types. In market research the selected respondent group for a survey is called a sample. The survey sample can be selected in many different ways and the sample can contain various background information of the respondent including the contact information. The other background information can be the respondent age, gender or region and responses to previous surveys. The sample itself can be selected using this information targeting to e.g. a nationally representative selection of respondents in Finland or customers of a specific company that purchased items this year. The sample information can be received from the customer, it can be bought from a third party or the market research company can have its own collected respondent base where it can select the sample needed for a specific survey. Studies can be made using local or outside sample providers or not using a sample at all by embedding studies on specific internet pages.

There are also different branches in market research that use specific combinations of questionnaire logic or specifically created market research tools in collecting the data. All of these selections affect the choices and programming made on the data collection platform. [2]

4.2.2  Market research process
Market research process can be broken down into steps as defining the need, selecting the methods, questionnaire planning, questionnaire programming, fieldwork, creating reports and analysis, preparing presentation and presentation of results.
In defining the need, the researcher finds out the needs and expectations of the client defining the limitations of the study, including the way to deliver the results. Selecting the methods is carried out by the researcher on the basis of discussions with the client and the production. This step defines the research method and type, specifies the market research tools to be used, the field methods and sample types. Questionnaire planning, performed by the researcher, defines the questionnaire to be asked from the respondent, incorporating the market research tools into the questionnaire and making sure that the customer requirements can be fulfilled with this questionnaire. The next step moves the questionnaire to production, which handles the programming, fielding and report creation. Questionnaire planning step is carried out by the programmers on the data collection platform making sure that the questionnaire works by the specifications given in questionnaire planning. In the fieldwork step the questionnaire is sent to the respondents and is monitored and managed by the fieldwork managers. After the fieldwork, the reports and analysis are created by the production with the guidance of the researcher, who defined the main needs in the beginning of the process. Step 7 and 8 are performed by the researcher. In preparing the presentation the researcher compares the data collected to data that is available, makes conclusions on this basis and spars the presentation with their colleagues. In the final step the presentation of results, the report and, or data is delivered to the client.

![Figure 5 Market research process](image)

The market research process can be depicted as simple as in Figure 5 above, but in reality market research involves many people with different interest that decide on the
contents and focus of the surveys. For this reason the process can require many steps back and forth in the process with iterations and discussions to find its final form. [2]

4.2.3 Platform related process, new vs the old

The survey process within the production could be simplified into three steps: 1. Survey programming, where the questionnaire is programmed; 2. Fieldwork, where the respondents are selected and the respondent data is collected; and 3. reporting the data as the last step. The process is depicted in more detail in Figure 6 below.

![Figure 6 Market Research process in production](image)

In Finland we had all of the three process parts performed inside the company by three different teams divided as steps in the Figure 6. In the UK and the US process is broken down to be handled by even more teams, survey programming and testing is done by separate teams, the fieldwork is handled by another organisation and reporting is handled by another team.

TNS group approach to the survey process involved many teams working and handing off the project to the next peer by email. As a result to this the system is included with a multitude of logins and approval steps that would otherwise been automatized.

For this reason the new users in TNS Finland would need to understand the full picture of the market research process and also to master several steps of the group process to be able to do their work.

4.3 The survey process needs

Before going to the main user training TNS Finland sent requests of issues that were to be solved and explained how they could be achieved on the new system. Most of the requests were met during the training or some moths afterwards. These issues that
TNS Finland sent to the group were of a higher level than the actual platform readiness was at.

Figure 7 The platform foundation for surveys to work

Error! Reference source not found. shows the platform foundation needed for surveys to work: 1. the platform, 2. the processes and 3. the survey solutions. The issues after the training showed that the expectations of the readiness of the platform and the processes were too high as the solution requests before the main user training were on level 3 and the issues faced were concerning the basic foundation of the system at ground levels 1 and 2.

4.4 Testing the group documentation
To create the new learning material, the current material provided by the group and the basic market research process needed to be tested using the platform. During these tests it became evident that the material and the training the main users had received was missing important parts that were not yet documented at all and of which the support knew little about.

4.4.1 Creating new users and undefined policies
For any user to actually use the platform, the user needed to have the software installed in using specific settings and installation files, the user needed to be created, user rights needed to be set to specific servers and services. As previously stated the group could be seen as a combination of different companies, managing these issues was also spread throughout the organisation to different entities. It became evident that to create a new user, the trainers of the platform needed to contact various supports with exact requests of what was needed for the new user logins to work. While testing user logins it was found that the platform includes various subprograms, different pro-
gramming languages, and required different levels of access rights to certain servers and services, which needed to be requested again from different support sites. No pre-designed process was made for including new countries, new user groups nor new users to the system. No servers were designated either for the use of new countries, though it was made clear during the training that specific servers should be used. As the processes were not clearly defined for creating any of these and the fact that the support was also relatively new to the platform, the support needed to lean heavily on the help of system designers to solve any of the issues. Solving these issues in the end clogged up the few designers’ telephones, calendars and emails, delaying the response time for other countries and thus the whole adoption process. Only after the issues with rights and logins were cleared, the current group process could be placed under closer observation.

4.4.2 The shell and fieldwork management needs
The survey programming itself is built on the shell that communicates with the sample coming from the fieldwork. The sample carries information to the survey as contact information and other background information needed for the survey as age, gender or region where the respondent lives. This process has been quite different in all countries and has not been standardised for the group and of course the shell created by the US and UK did not contain local sample provided specifications. Needless to say, the whole survey process itself does not work unless local changes were made to the shell of the platform. Problems arose as making these needed changes required higher knowledge of the platform that was provided by the group to the main users. The training given to the main users did not contain information on how to localize the shell and the fieldwork management documentation was missing in total. This meant that the local main user had to create, solve and document these issues to be able to make even a single project on the new platform, let alone to teach the platform to new users. To accomplish this, the main user had to master the platform enough, not only to teach it, but to create a local variation of the shell that could communicate with the local sampling system. All of this required deeper understanding of sampling and programming on the new platform plus knowledge of the system as a whole including physical servers and login levels. As the shell was purely defined for the use of another organisation, there were no experts within the company to help and create the linking between the fieldwork and the programming shell. These issues needed to be solved with the help of local area experts, other main users, programming support, server support, main user trainers and in the end the developers of the platform.
4.4.3 Survey programming needs
In perspective of the pure survey programming we needed to ensure that the shell, on to which the surveys are all built on, is working for our local needs. The shell localization should be dynamic and update as the shell is updated, it should include locally specified standard background and quality questions, local sample provider specific routings and layout styles, translations of all system messages and messages defined in the shell itself. Also, all the technical solutions that were possible on the old platform needed to be re-created for the new platform, for example recoding background information to provide categorization of the respondents, media players, question layouts and even survey logic working unseen by the respondent in the background of the surveys.

4.4.4 Reporting needs
In reporting, we needed to find solutions for combining different data sources, recalculating variables, creating a raw short document of the survey results called top lines, reporting and exporting data to a predefined format. In short, all the technical solutions and research methods that had been used in the previous system had to be tested and the new solutions documented or created if needed. Most of these issues needed to be addressed before the teaching of the new platform could be started as they were key components needed for most of the studies.

5 Preparing for the local training
The preparation for the training is divided into expectations, the trainees, pre-requirements and the constraints. Expectations part describes what was expected of the training from a managerial view. The trainees describe the employees that were to be trained to use the system and their expectations of the training. The pre-requirements describe the needs for the training to succeed. Constraints define the limitations that were set to the training by the organisation.

5.1 Expectations for the training
The management expectations of the training were quite straight forward: to have the users learn the system in a fast and efficient way, to develop the training where possible, creating documentation for local needs and minimizing the impact on client projects for the whole of the adoption process.
5.2 The trainees
The users that were to be taught to use the system were from various different backgrounds, including age, programming experience, learning style, general attitude toward change the tasks they have handled at work, the amount of experience in their current job and their general knowledge of the current processes. The tasks that the users needed to do in their daily work varied greatly which posed a challenge to address during the training. Many of the tasks needed to be redefined as the new system operated in a very different way altogether.

As the learning group was very heterogeneous, it was important to create learning material and learning experience that would describe the whole process in enough detail so that it could be understood by all trainees.

5.3 Pre-requirements for the adoption
With the help of the input from the discussions with the users and managers of the new platform it was possible to define the requirements and start the preparation for the adoption. A SWOT analysis was made of learning at work, to clarify the possible issues in the adoption process.

<table>
<thead>
<tr>
<th>Strength (internal)</th>
<th>Weakness (internal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers and learners know the business</td>
<td>Limited pedagogical experience</td>
</tr>
<tr>
<td>Knowledge possible problem points</td>
<td>Amount of user experience on new platform</td>
</tr>
<tr>
<td>Common jargon</td>
<td>Change resistance</td>
</tr>
<tr>
<td>Logical approach to issues</td>
<td></td>
</tr>
<tr>
<td>Good team spirit</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunity (external)</th>
<th>Threat (external)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning by doing</td>
<td>Time</td>
</tr>
<tr>
<td>Chance to to influence platform development</td>
<td>Project work</td>
</tr>
<tr>
<td>New automation possibilities</td>
<td>Fast project schedules</td>
</tr>
<tr>
<td></td>
<td>Platform readiness</td>
</tr>
<tr>
<td></td>
<td>Support</td>
</tr>
<tr>
<td></td>
<td>Management support</td>
</tr>
</tbody>
</table>

Figure 3 SWOT, learning at work

On the basis of the discussions and the SWOT analysis in Figure 3 it was possible to discover possible problem points and to plan appropriate strategies beforehand. From this analysis four issues were raised as priorities for the adoption process to succeed optimally: time, technical support, managerial support and system readiness.
Time is money. [3]

Time is of the essence as Market research work is mainly fast paced project work that has to be completed on a tight schedule. Taking into use a new system can pose great challenges to project schedules, not only during the training, but also after training when the projects need to be done on the new platform with limited experience. To make the training possible at all, there has to be time scheduled for the training and for the users to adopt the new information. Because of this the training should be set to happen at a time where there is less project work for the trainers and the trainees before, during and after the training sessions. This will enable the new users to adopt the information faster as they can test the capabilities of the system and try out different approaches to solve the issues. Unfortunately learning by hands on practices and testing the processes takes more time than just going through theoretical material in a class room.

The support in solving technical issues has to be responsive and providing not only the solution quickly but also the reasons why certain approaches worked or did not work. In issues that are not critical to solve on a tight schedule the user should be guided to solve issue by appropriate guiding questions. These approaches in support ensure quick project turnaround and also provide the users with a positive learning experience.

The managerial support throughout the whole adoption process ensures faster resolution of issues and better information flow within the company. Managers and the trainers should have an open dialogue during the whole process, as this will enable the managers to keep track of the process. If there are critical issues that need to be solved, the managers can raise the priority to solve the issue by escalating the support ticket with the support and informing the global management about the issue. Also, the managers work as information deliverers to the rest of the organisation, as they have more information of the possibilities and the limitations of the system.

System readiness was also selected as the system is new to the whole organisation and it was not without its own teething issues. To ensure that the survey programming, data collection and the reporting can be moved to the new platform, the market research survey process in its full extent must be tested through locally and documented
for the new platform. After this, the process has to be compared to the current process and any possible issues that would halt the process or slow it down unnecessarily have to be solved.

5.4 Acknowledged constraints for the training
The group approach was to train two main users per country to adapt the information, take the platform into use and train new users in their country to use the platform. Two main users were selected on the basis of a question sheet that was filled in by the local managers. The sheet included a scoring system that helped to find the employees who were considered as the best choice to train as the main users. The group trained the main users to the new platform on two separate weeks, the first concentrating on survey programming at end of October 2013 and the second week concentrating on reporting at the beginning of February 2014. The group wanted the new platform to be in full use by mid-2014.

Time was the main constraint of the whole project along with resources. Both constraints dictated when the platform must be in use, when the users could be trained and how much time could be used for finding out solutions, training, creating documentation and creating the material that was to be used in the training.

As the customers should only get the benefits of the system, all the project work should continue while learning and training. This meant that testing and solution finding had to be done on a very fast pace at the same time working on projects on the old platform as usual. Finding, testing and creating solutions that were possible on the old platform needed to be solved by the main user or sent to the support and developers to solve before the local training could even begin.

The local platform training had to be done in a window of four weeks during April and August of 2014. This gave the trainers roughly seven months to adopt the information, test the platform, to document everything and to find, create and test solutions. As well as creating the training material and train the users. Discarding the time used for other project work, national holidays and annual leaves. Shortly after the first training sessions the main user responsible for the survey reporting was changed and a new person was chosen to take the task.
5.5 Selecting a two way approach to training

As there were two main users that had been trained to use the new platform and there was no time to train additional trainers, the main users of the platform acted as the teachers of the system. The timing of the training was all in all predefined by the limitations, but the method and structure of the training were left open for local modifications. Having received the group training, there were many issues that were left unclear and open for the main users to solve. The training that the main users were to give to the local users could not have these information gaps. The local training should focus on making the whole survey process possible with the new platform and delivering the information efficiently.

"I never pick up an item without thinking of how I might improve it."
Thomas Edison

All items and issues should be contemplated as Thomas Edison put it, especially when striving for a more efficient method of working. After discussions with the TNS Finland production management and using the information gathered from qualitative discussions with the trainers and main platform users from the Nordic countries, it was decided that a two way approach would be used for the training. TNS Finland would use the TNS method for the first group of the trainees and after the first training session a new modified method to deliver the information would be tested. This approach divides the trainees into two groups, takes more time for all to be trained, but provides opportunities to enhance the training on the basis of the previous session and it also ensures that enough employees are working on current projects that cannot be delayed. The groups are named wave 1 and wave 2, as depicted in Figure 8 below.
Wave 1
- TNS group approach

Wave 2
- New approach

Figure 8 Waves

Wave 1 would follow the manual based method of information delivery, but filling in the gaps that were left in the main user training. The new modified training, targeted to Wave 2, would lean more on pedagogics, theory of learning and teaching and was to use more effective methods to deliver the information.

Using this path also enabled the company to quickly get the most adaptive programmers to use the platform, to have the first wave solve any remaining issues and to have more the skilled programmers to helping the second wave of training.

6 Theory behind the new approach

Learning and teaching is a science of its own, providing insights into how to teach and how we learn. It describes the ways we learn as groups or individuals, what sensory input works for us, what type of learners we are and what type of information we accumulate best. Given the limited time for the teaching, the approach needed not only to be efficient but also easy to adopt and use. Using this information and having discussed with professional teachers and trainers, it was possible to narrow down the possible pedagogical approaches that could be used for the training. To apply these methods effectively, it was necessary to study psychology of learning and teaching, and also methodology and theories of pedagogics.

[13] [14] [15]

6.1 Human memory and learning, psychological view

To understand learning in general, it is also necessary to understand the limitations of the human mind in learning. Psychology as a science, very extremely simplified, stud-
ies the human mind and behaviour and provides a good ground for the pedagogic approach. The following chapters concentrate on the psychological aspect of learning.

6.1.1 Working memory
Theories suggest that the human brain has a limited working memory which enables an individual to memorize roughly seven plus or minus two pieces of information at a glance. Given this limitation, the information should be dispersed in bursts that do not contain too much information at a time.

6.1.2 Chunking and paths
At this point it was clear that learning the use of the platform was a very large and complex issue to begin with. A massive or a complex task can intimidate the learner, thus creating a mental block that shuts down all possibility of learning anything at all. For this reason, the content should be broken down to smaller pieces which are learned individually and together create the context of a larger picture.

“When eating an elephant take one bite at a time”
Creighton Williams Abrams Jr.

As the content is broken down into smaller chunks of information, the task does not seem overwhelming. To ease assimilation, various paths need to be created between the groups of information and pre-learned information. This way the memory has more points to attach on to and a multitude of different routes to the same memory point, making the information more manageable and the issues easier to remember.

[16]

6.1.3 Multiple input methods
Most people find it quite easy to remember the basic outline or specific parts of their favourite movies or songs or what they were doing when something dramatic happened, as they incorporate stories and use multiple input points at the same time e.g. feelings, visual stimuli, rhythm and sound.
The effective use of multiple input modes depicted in Figure 9 above, especially connecting to feelings, can create strong memory imprints that can last even for a life time. Although combining multiple input points in learning creates a better possibility for a memory imprint, it is important to remove the other background noise and keep the information logical and consistent to support the memory when quick adaptation is needed. [17]

6.1.4 Teaming, repetition and limiting distractions

The military and sports associations have researched teaching, learning and psychology to create better and faster ways to learn and succeed in physical and mental endeavours. Both incorporate and support learning by creating and using team spirit, having multiple repetitions and limiting distractions. A good team spirit can raise not only the team performance, but also the individual performance by generating a healthy competition within the team and by pushing all its members to a better performance. Acknowledging the common goal and the benefit of supporting all team members leads to better results, not only in physical endeavours, but also in learning. Having a team with a common goal can make the whole learning experience more fun and create a possibility to incorporate positive feelings even in a very stressful situation. Repetitions form very strong memory imprints and a very good example of this is learning to ride a bicycle, when the amount of repetitions gets high, it is possible to automate the actions and leave a long lasting imprint into memory.

*KISS “Keep it Simple, Stupid”*  
U.S. Navy training principle created in 1960

Limiting distractions in the classroom and having commands guidance given in short simplified sentences, concentrating on specific error points makes the information faster to assimilate. [17]
6.1.5 Incorporating psychological aspect into the teaching

Understanding at least the basics of the psychology of learning and the limitations of how the human memory works, it is possible to create better learning material that is easier to adopt and to remember. This could be achieved by taking more care in creating the material, simplifying and breaking the content into smaller chunks, creating paths and stories to follow and making memorizing the route to the solution easier. Showing a bigger picture where the smaller details are linked and showing the path of the current issue up front, thus linking the issue at hand to previously learned information and using visualization creates more connection points to aid memory. Enforcing the learning by repetition by explaining what was learned again at the end. The limitations of short time memory could be taken into account by limiting the amount of information per slide, using breaks to give time for information to settle and using hands on training to activate trainees during training. Off class exercises were used to provide repetition. Team spirit was incorporated by underlining the fact that this is a team effort and making sure that the trainees in the end need each other’s expertise to use the platform at all. To boost the team effort it was made obvious that supporting your co-workers is appreciated within the company.

While all of these psychological approaches to the material might seem self-evident, they are in the core of how to deliver information in general and are too often forgotten when making presentations and creating teaching material.

6.2 Combining learning styles and methods, pedagogics

The group approach to passing the knowledge to the new users did contain some elements of the following learning and teaching methods, but it fell quite short of its mark due to the time limitations for the training preparations and to the lack of readiness of the platform itself. Therefore the training was more based on quickly going through the UK process documentation, and not concentrating on how the information was given to the trainees. This approach is efficient and fast in delivery on paper, but in learning and adopting the information it is quite the opposite. The approach does not take into account different kind of trainees and learning styles nor does it give the learner time to test and actually adopt the information. It is a generally known fact that we all learn in different ways and we learn best when combining different approaches to the learning experience. In TNS Finland we combined several methods and learning styles to create the new approach to the training. Having multiple approaches provided touch points for most types of learners and also created links between the different learning styles enforcing the learned information into memory.
6.2.1 Classroom participation, a cognitive approach to learning styles

Cognitive learning styles are different and it can be difficult to accommodate all different learning styles during the learning sessions. Therefore the styles can be supported best by combining class training and exercises, and by providing support throughout the learning. The different learning styles according to Grasha and Sheryl Reichmann were created based on college students’ styles of classroom participation, but can be used in classroom training situations in general. The different participation types are avoidant, participative, competitive, collaborative, dependent and independent. [18]

<table>
<thead>
<tr>
<th>Style</th>
<th>Manifestation</th>
<th>Approaches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoidant</td>
<td>- Tries to avoid the training&lt;br&gt;- Manages work poorly&lt;br&gt;- Sees own learning as the teachers responsibility, not as his own</td>
<td>- Activate by tying the learning to their daily work&lt;br&gt;- Remind that the old system will cease to be used&lt;br&gt;- Give time for personal testing and question asking&lt;br&gt;- Need encouraging and support</td>
</tr>
<tr>
<td>Participative</td>
<td>- Active self-learner&lt;br&gt;- Relates well to others&lt;br&gt;- Accepts responsibility</td>
<td>- Provide extra material&lt;br&gt;- Need little support</td>
</tr>
<tr>
<td>Competitive</td>
<td>- Does not relate well to others&lt;br&gt;- Motivated from rewards and recognition</td>
<td>- Encourage healthy competition and information sharing to provide more speed and motivation to learning</td>
</tr>
<tr>
<td>Collaborative</td>
<td>- Enjoys working with others</td>
<td>- Encourage to go through the tasks in groups and using other trainees as a source as well</td>
</tr>
<tr>
<td>Dependent</td>
<td>- Needs clear objectives or becomes frustrated</td>
<td>- Show step by step approaches&lt;br&gt;- Guide groups to break down the tasks and discuss</td>
</tr>
<tr>
<td>Independent</td>
<td>- Prefers to work alone&lt;br&gt;- Require little direction</td>
<td>- Encourage to test other approaches and sharing of information</td>
</tr>
</tbody>
</table>

Figure 10 Participation styles

Being aware of the different learning styles, depicted in Figure 10, aids to identify the different learners and provides possible approaches to aid them in their learning process. Having pre-thought and prepared approaches and material made it possible to direct focus on the issues at hand, rather than intimidating the learner with a wrong approach to teaching. The styles helped to adapt, support and guide especially in one to one discussions and during the learning sessions.

6.2.2 Action learning

Action learning as by its name bases on learning from actions. This type of learning can be seen as moving forwards as a continuous cycle called learning cycle. In the cycle the students experience something, reflect upon the experience, then conclude or conceptualize what is learned from the experience and lastly test an approach. [19]
<table>
<thead>
<tr>
<th>Kolb and Fry learning cycle</th>
<th>Honey and Mumford learning cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Test</strong></td>
<td><strong>Planning</strong></td>
</tr>
<tr>
<td><strong>Experience</strong></td>
<td><strong>Doing</strong></td>
</tr>
<tr>
<td><strong>Conceptualise</strong></td>
<td><strong>Concluding</strong></td>
</tr>
<tr>
<td><strong>Reflection</strong></td>
<td><strong>Reflecting</strong></td>
</tr>
</tbody>
</table>

1. Concrete experience  
2. Observation of and reflection on that experience  
3. Formation of abstract concepts based upon the reflection  
4. Testing the new concepts

1. Doing something, having an experience  
2. Reflecting on the experience  
3. Concluding from the experience, developing a theory  
4. Planning the next steps, to apply or test the theory

**Figure 11 Action learning cycles**

The learning cycle steps depicted above were taken into account when planning the training schedules and structure of the teaching day. The trainees were provided with this approach to their exercises and were encouraged to use it in their problem solving also. To gain more momentum of the learning cycle and to push for more active reflection, the trainees were set into groups where they had to discuss their approaches with their group members.

6.2.3 Learning styles, VARK model

Neil Fleming in his research claimed that we learn best by using our preferred channels. The name for the model VARK derives from the different learning styles or stimulus: Visual, Auditory, Reading and Kinesthetic. For example visual learners remember and learn by images, graphs, charts and symbols, auditory learners learn by listening, reading-writing learners learn by reading and writing and kinesthetic or tactile learners learn by doing and touching. Though one learning style is dominant, most of us learn best by using a combination of these.
Figure 12 Learners and stimuli

To gain from the VARK model the material and the classes need to be designed so that stimulus is provided for the different learning styles. Figure 12 depicts the approaches adapted to the training from the model.

6.2.4 Andragogy

Andragogy can be viewed as a separate form or a part of pedagogics that aims for adult teaching. Some literature argues that it should not be separated from pedagogics, the art of teaching, at all. However in this thesis, to clarify the target audience better, I will use the term and not go into the details of this discussion between scholars. In andragogy the adult learning experience relies heavily on having the reason for learning, motivating the learners and taking different backgrounds into account. The Knowles’ assumptions of motivation in andragogy connect well with the Accelerated Learning Cycle. Knowles’ assumptions are built on six steps. In these steps the learner is given the reason to learn the issue as the need to know, the new issues are connected to previous information or the foundation. The learner is set to be responsible for learning himself and to evaluate his own learning in self-concept, having immediate relevance to the learned issue and the possibility to influence their own learning experience increases the readiness to learn. The learning should be more problem oriented instead of memorization, motivation emerging from within the learner as they appreciate the reasons for the learning and the benefits of it.

[21] [22]
Knowles’ assumptions of motivation in adult learning

1. Need to know
2. Foundation
3. Self-Concept
4. Readiness
5. Orientation
6. Motivation

The assumptions helped to take into account the different handling of learners and to understand that motivation is built from inwards as long as the learner is given reasons to learn the new issue. Providing the possibility to affect the way to do his own work with the new platform, giving guidance on problem points and respecting the learner as an expert created a positive drive for the learner.

6.2.5 Instrumental Enrichment
The Israeli developed method of teaching called Instrumental Enrichment bases its foundation on teaching the pupils how to learn, giving them tools to analyse and improve their own learning skills and also incorporating multiple input modes to build stronger memory imprints. The idea of Instrumental Enrichment was incorporated to teaching by using visual aids and solving real current work issues. To activate the learners to be more analytical of their approaches and to learn from their own learning experience as well, the trainees were divided into teams to solve problems. When a solution was found the teams themselves explained the solution to the other teams also depicting the thought path they followed to get to the solution and how they would incorporate this in their work. This method proved very helpful for the learners that had graduated long ago and been to only a few internal or external trainings during their career.

[23]

6.2.6 Co-operative learning
Teaching can be perceived as having two members, the teacher and the student. A common misconception is that learning during teaching only happens from the teacher to the student. Teaching is actually a two-way process having the two members in the process actively influencing each other, both learning at the same time. For the teacher the learning comes from repeating and reprocessing pre-learned issues, enforcing the learned, and also from learning new approaches and views to the issue that are ex-
pressed and discussed with the student. The concept of co-operative learning organizes the classroom learning into an academic and a social experience, where the students also teach each other. This is achieved by forming smaller groups of learners and providing them with tasks that are intellectually demanding and that can be creatively solved. The groups are encouraged to use each of their group members' talents and to openly share and evaluate each other’s ideas to reach a solution. All of the members are accountable for the group to succeed in the task. To reach the best result the teacher must encourage the group to strive for open feedback and promote interaction. Group skills need to be taught or revised for effective communication, decision-making, trust-building, communication and conflict-management skills. As the final task the group should evaluate their own effectiveness and make notes of how to improve it.

1. Positive Interdependence
2. Individual and group accountability
3. Promotive interaction
4. Interpersonal and small group skills
5. Group processing

The elements described above create the basis of co-operative learning in general, on which the co-operative learning techniques can be applied. There are many different techniques incorporated with Co-operative learning e.g. Jigsaw and Think Pair Share. Jigsaw is a technique where the groups create a solution for their task and then teach this to the other groups or send a group expert to the other groups to explain the solution. Unfortunately the Jigsaw technique requires time to explain the approach to the learners and to use in general. Think Pair Share technique is instead a faster and simpler to organise in a short time frame. In Think Pair Share the students contemplate the task themselves first and then pair up to discuss the issue and create a solution.

Co-operative learning methods were used in the training and were very much presented in the exercises. In the new approach the learners were divided into waves and groups, and the learners quickly paired with the learners next to them. A supportive information sharing atmosphere was created with a positive group drive for reaching a solution. All of the groups were given the same tasks, which were challenging but not very time consuming to solve e.g. from five minutes to two hours. Time limits were also made clear to create the sense of urgency, to press for quick solutions and effective use of time. Using gained experience from Think Pair Share, the learners were to con-
template the task first by themselves and then actively discuss in groups the task itself and the possible issues or solutions they found. Due to the limited time schedule group presentations of the solutions were not given, but instead the solutions were actively shared between the groups. When a group could not find a solution to the task the solution was presented by the teacher with the aid of the learners after the task time was over. No actual returnable group assessment was made afterwards.

6.2.7 Accelerated learning cycle
Alistair Smiths accelerated learning cycle describes an efficient step by step path to teaching and combines different efficient learning methods. The cycle steps are: 1. Learning environment, 2. Connect the learning, 3. Give the Big picture, 4. Describe the learning outcomes, 5. Provide input, 6. Activity, 7. Demonstrate learnings and 8. Review. The learning environment must only be created once with the learning group, if more issues are covered with the same learning group the next issue can be started from step 2. Connect the learning. The learning cycle is depicted in Figure 13 below.

![Accelerated Learning Cycle](image)

In the first step called “Learning environment” the cycle is started by creating a safe but stimulating learning environment. In a safe learning environment the students are active, allowed to make mistakes, speak their minds and question items, but they also respect each other and give space to others ideas. In step 2 “Connect the learning”, the student is provided with tangible connections to what is known before and the issue that is going to be learned during the session. Connecting the issue at hand to previous knowledge provides a better memory imprint, whilst activating the student to find possible different uses for the issue. Step 3 Give the big picture, shows the big roadmap of what is going to be learned and what touch points and interconnections there are between the issues. Step 4 Describe learning outcomes concentrates on what you should
be able to do with the knowledge provided in the training, showing the goal of the training. The main purpose of this step is to motivate to the user to learn and to actively participate, to ask for more information during the training if he feels that something is missing or the goals are not met. Step 5 Provide input is where the information is actually taught to the students. Step 6 Activity is used for tasks and activities, encouraging the learners to apply the information learned in step 5. Applying the learned information activates the students if they fell into a passive input mode during the step 5. If information is actually used, the information stays in memory better than something learned passively. Step 7 Demonstrate the findings, the issues learned during the activities are demonstrated to the whole learning group, enabling the students ground their findings and discuss the outcomes. By grounding and discussing the findings the students actually teach each other approaches to the issue and learn at the same time. Step 8 Review concludes the cycle, unless a new issue is brought up and the cycle returns to step 2. In Review step the issue learned during the session is condensed into a tight packet, revising the information to make clear what was actually learned.

The steps of the Accelerated Learning Cycle can be seen as a clear path through the whole of the learning process, almost as a movie storyline that could easily be followed and understood by the learner. [25]

The whole structure of the training and the material for the training followed Alistair Smith's Accelerated Learning Cycle depicted in Figure 13 above. For the platform adoption to succeed it was very important that the experts of the previous platforms felt free to ask questions and were actively participating during the training. It was a difficult moment for many of the previous experts to phase the fact that they didn't know how to do, what they used to do so well before. For this reason a learning environment was needed, where the experts could get information without feeling that they were pushed down in rank or level of respect. A safe learning environment was created by making the trainees feel special and selected for the training. This was achieved by painting an image of the new trainees being the pioneers of the system and pointing out opportunities in the company as there were only a few who yet know the system very well. The sessions had a planned structure but the climate was also held casual and open. Encouraging the trainees to question the learned, to comment and to ask questions made sure that the training provided the information that the trainees actually needed keeping them awake and active during the training. The learning groups were made smaller and trainees were paired up during the training to ensure more active participation and to
encourage the trainees to actively help each other. While helping each other or the
group next to them the trainees improved their own memory print and created positive
experiences within the whole group.

Connecting the issues to be learned to the vocabulary and process steps of the previ-
ous system by using translation tables made it easier for the trainees to adapt the
amount of information. Forming the big picture of the platform and what was to be
learned provided the trainees easier key points and key words with which they could
find more information to the issue. During the activities step, most of the focus of the
trainer was to make sure that the trainees were actively looking for answers and also
sharing information. It was positive to see that the trainees felt comfortable in sharing
solutions and grounding them on the manuals and documentation. Using this ap-
proach, we gained more speed to the learning cycle as the learners were actively re-
flecting the learned, having to rethink their approaches when explaining them to others.

Teaching in class was also a learning experience for the platform main users who act-
ed as the teachers. To gain more experience in teaching, assessments of the teaching
were required. The assessments included information of how the teaching was per-
ceived in general, which issues were hard to follow and what was felt as trivial or very
well deconstructed.

7 The new approach for local training
The new approach uses experience gained from the main user training, platform test-
ing, psychology and pedagogics, taking into account the limitations set by other project
work.
The style used in the material and during the classes reflected very much on the accelerated learning cycle, co-operative learning and instrumental enrichment.

To achieve best impact multiple input methods were used to give stimulus to the learners for example in readable form, in images, audio and also activating them by exercises. As most of the literature suggested the issues were deconstructed into smaller parts and connected with visual demonstrations. The connections were made to the old system, comparing the terms and the process steps and also creating visualised connections between the larger structure and the issues that were being learned at the time. Displaying the big picture of the issue at hand and the connections to other issues also provided a reason to learn. Examples depicted in Appendixes.

Motivation and drive for the adaption process was increased by fostering group spirit and team work. This included encouraging the groups and individuals to healthy com-
petition in their learning and activity during classes. The trainees were also driven to challenge themselves and the trainees were also encouraged to collaborate with each other to reach the desired goal. As the trainees were already the experts of specific areas or process steps with the old platforms, it was necessary for them to actively participate the training. If inactivity was perceived during the training, it was fairly easy to motivate the trainees back on track by reminding them of the fact that after the training they should be able to do their job on the new platform. If something seemed unclear the trainer would guide the trainee to the right path and promote the trainees to be proactive in finding the answers. The trainees were also more eager to share their thoughts and solutions when their problem solution was given positive attention during the learning session. On the other hand, this provided a good opportunity to find the most adept learners in the group.

As the old platforms were to be replaced on a tight schedule and the trainees were made aware that they should be the main users of the future, they were keen to learn the new system.

7.1 The main structure for local training
As the platform and the programming language differ greatly from the previous ones that the learners had used, it was decided to keep the separation of the two main issues of survey programming and reporting in the training. The whole training was to be conducted in four weeks and therefore waves 1 and 2 would both have to be trained during two weeks. First week of training would be dedicated to survey programming and then the next week for reporting.

<table>
<thead>
<tr>
<th>Time</th>
<th>Subject</th>
<th>Attendees</th>
<th>Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>½ day</td>
<td>Info</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>Week 1</td>
<td>Survey programming</td>
<td>Wave 1</td>
<td>Group</td>
</tr>
<tr>
<td>Week 2</td>
<td>Reporting</td>
<td>Wave 1</td>
<td>Group</td>
</tr>
<tr>
<td>Week 3</td>
<td>Survey programming</td>
<td>Wave 2</td>
<td>New Approach</td>
</tr>
<tr>
<td>Week 4</td>
<td>Reporting</td>
<td>Wave 2</td>
<td>New Approach</td>
</tr>
</tbody>
</table>

Table 1 Training waves and the approach to teaching

The structure of the training in general and the topics to be learned were basically the same. It followed the TNS method by having class room sessions added with exercises, and having an example project programmed individually, with the help of the other trainees by the end of the training and reviewing the results.
To avoid production to halt during the training sessions it was necessary to not only divide the new users into groups but also to leave time for the basic project work to continue. The time used for training and exercises per day also had to be adjusted. The Wave 2 classroom training session structure was even more clearly divided between the theory part and the hands on training.

The daily training sessions were divided into four hours of basic classroom training. One quarter of a day was used for exercises and the rest to current project work. Eventually the amount of training days was pushed from ten to eight days, which provided the learners a very short time span for learning the system and its use: 4 hours classroom + 1,5 hours exercises) x 8 = 32h classroom + 12h exercises = 44 hours in total.

The topics of the training sessions were defined, so that the user first gains the basic understanding of the platform and form the larger picture of the processes, then moving on to the programs and language used on the platform, finally tying this all up to specific actions. The choice for this approach was based on the theories of accelerated learning cycle and chunking. Both training waves used the same topic approach.
Although most of the users were to use only parts of the platforms capabilities to handle their task in their daily work, it was necessary to build a information data base for all to find, understand and to use the tools provided by the system and also to interpret or create code with the platform. Both survey programming and survey reporting required their own introduction to structures and tools as the platform used different programs and slightly differing language for each.

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**Figure 15 Training week agenda with waves**

<table>
<thead>
<tr>
<th>Time</th>
<th>Description</th>
<th>Subject</th>
<th>Attendees</th>
<th>Pax</th>
</tr>
</thead>
<tbody>
<tr>
<td>½ day</td>
<td>DimensionTraining pg1-31, server structure 171</td>
<td>Info</td>
<td>All</td>
<td>21</td>
</tr>
<tr>
<td>Week 1</td>
<td>Mon, Question types 31-126, tasks question types</td>
<td>IOM</td>
<td>Wave 1</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Tue, [Task Training questionnaire start]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wed, Training questionnaire, Quotes 218-237</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thu, The Shell144, images170, Survey creation 177, Project launch 188 (601 auto activation), (video adding sample)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fri, No training</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Material**
- DimensionsTraining.docx
- Auto_Activation_Documentation_v601.pdf
- DimensionsExercises.docx (exercises)
- Questionnaire.doc (training questionnaire)

**Week 2**
- Mon, Structure                                                             | TOM     | Wave 1    | 9   |
- Tue, Question types                                                        |         |           |     |
- Wed, FasTabs                                                               |         |           |     |
- Thu, Combine data, open ends                                               |         |           |     |
- Fri, No training                                                           |         |           |     |

**Material**
- TSS_TOM_Adhoc-Tracker_Process.pdf
- TSS_TOM_Code_Guide.pdf

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**Figure 16 Learning path to effective use of the platform**
Figure 16 above depicts the training topic path for survey programming which was used for the training.

7.2 Local training session structure
The training sessions used the pedagogical and psychological theories effectively to achieve the desired outcome, fast learning of the platform, thus making the users active learners who openly share their knowledge. The learning sessions used the accelerated learning cycle as a structural base for all sessions.

![Accelerated learning cycle during the training sessions](image)

7.3 Communicating the change
Sharing information and communicating the change was essential for the new training to succeed. Starting the communication in an early phase ensures that the employees feel involved in the process and accept the change. Providing information beforehand also creates possibilities to weed out possible trouble points in the design. Having more information also reduces uncertainty and stress that are connected to change processes.

For these reasons, information sessions were conducted prior to the training sessions. These included info sessions with the researchers, during which the researchers were given information regarding the new platform, what was needed on their part when old surveys are to be converted to the new platform. Prior to the training waves, it was seen as important to have all the trainees ready for the learning sessions, so they were given a preview of the platform in a half a day presentation session of the basics of
using the platform, including discussions addressing questions of the trainees. During this session the focus was to relieve fears of the new system, providing users with the confidence that they can learn to use the platform and empowering the users to be proactive in answering, asking and solving questions regarding the platform.

Figure 18 Timings and waves

Having the info sessions clearly eased the adoption and reduced stress. The info timings and a rough schedule is depicted in Figure 18 above.

7.4 The training material
As the learners were not a homogenous group, the material had to include the whole market research process and some basic programming principles. The material was distributed to the learners beforehand, using a local intranet site dedicated for the platform documentation and a project folder residing on local servers. The material included new platform scripts, links, presentations as well as word- and excel-documents.

The material included the following:

1. Basic information of the system
2. The market survey process
3. Process terms incorporated in the new system
4. Basic programming principles, logic and problem solving
5. Programs, programming language and system commands
6. Survey process with the new system
7. Exercises and solutions
8. Local documentation
9. Support and additional information
10. Example library with comments

Updating the document and guideline material was set as every platform user’s responsibility and this was to be supervised by the main users. Screenshots of the material can be found in the Appendix part of this thesis.

7.5 Creating a stronger support
Training ideology was based on active search of relevant information which requires a strong support network. It was immediately made clear to the new users, that asking questions and sharing knowledge is vital for all, as this is a new platform for all users. The introduction of waves provided the possibility to test two approaches, and having smaller learning teams aimed to make users open about the new platform activating them to help each other inside their group. The groups were chosen so that they could interact easily after the sessions without leaving their own seats.

Figure 19 On-site support network for trainees
Having a close and strong support network as depicted in Figure 17 the learners felt more at ease with exchanging knowledge. Minimizing the barriers of open discussion and easing the possibility of raising questions regarding the new platform contributed in forming the team spirit, thus creating a positive drive to learn from teaching and explaining issues.

To ease the information flow within the company even more, TNS Finland had its own library, and also a group managed library for working solutions on the old data collection platform. The solutions collected in the library varied from large complex code to simple short examples on how to create some survey specific functionality. These solutions could be easily added, found, copy pasted and edited where needed by all users. The platform tests, browsing the manuals, conversing with the support and the developers gave a good inclination that a local solution library had to be created to aid the adoption.

8 The local training

The local training was started later than scheduled, but still at a point where the research process could not have been tested from start to end on the new platform. The main users, support and the developers had still not found solutions to fix some of the process steps. The shell was not fully customised; there were still many issues unclear about adding sample and sending out the surveys. Reporting had not been locally tested on an actual project at all. The remaining unsolved issues were set as targets to solve when the training commenced, not only for the main users, but for all the local users.

The fact that the normal project work had to continue as usual, took its toll on the exercises and self-learning. Some of the learners had very little opportunity to get familiar with the platform outside the classroom at all. Sick leaves and holidays also tasked the learning group, as the project work needed to be done in less time and with fewer resources. The greatest challenge came with the organisation employee co-operation negotiations which occupied the main users time not only during the negotiations, but also afterwards, when handling the tasks of the employees made redundant.

Regardless of the challenges, the training itself proceeded as planned, with only a few modifications. The remaining issues that made the using of the platform impossible or very difficult, were solved within a month of the training. Henceforth the problematic
issues were smaller in scale and easier to solve with more survey specific technical solutions.

Comparing the two approaches from the teacher's perspective gave a clear indication of what path should be followed. The group approach was faster to prepare and easier to read aloud, but the main target in my opinion was not achieved. The new approach took more time to prepare and required more thought during the training as well, but learning was more active and faster for the new users.

Looking at the training from local management perspective it was in many ways quite successful. The trainees learned to use the system quite rapidly, the issues within the platform were solved and no visible impact of any of the issues was evident to the client. From the trainee perspective, the training was a stressful experience, but at the same time the experience welded the users together. The training in the end had a rather positive impact on the learners and seemingly motivated them to more openly share their ideas and thoughts on Market Research issues in general.

8.1 Qualitative output of local training
Qualitative discussions were held to discover the end state of the adoption. In the discussions the two approaches were compared to each other.

Wave 1
- TNS group approach

Wave 2
- New approach

Figure 20 Training approaches

8.1.1 Wave 1, TNS Group approach
The approach to training in wave 1 was perceived as difficult to understand, and was seen more as reading manuals out loud. This left the audience quite distanced from the
platform itself, deactivating the audience and creating very little activity between the trainees.

8.1.2 Wave 2, the new approach
The new users felt that it was easier to follow the process path. The trainees were activated after the training and felt at ease to share information with each other.

8.2 Experience gained from both approaches
In both trainings the trainees and the teachers felt that the time allocated for training and testing the platform capabilities was not long enough.

The training should be prepared well, using pedagogics and psychology to aid the process. The training should activate the trainees, incorporate visualisation, form a big picture and break the issue down to smaller items. If only three main aspects could to chosen from pedagogics they would be: accelerated learning cycle, co-operative learning and learning styles, the psychological aspects are embedded quite well into these three already.

9 Proposal for future trainings
Future trainings should use more time for planning, preparation, piloting and building support. The information delivery should also be aimed to be pedagogically more effective using at least accelerated learning cycle, co-operative learning and learning styles.

Users and user groups need to be created and their rights should be defined and tested if they are not created on a group level on the basis of the old systems. Also it is important to document how to administer the users within the new system.

If the adaption is to take over an old platform, it is crucial to know how the new platform will handle the processes that the platform is intended to perform. If the process itself is modified from a previous one, the new process has to be pre-planned, ready and tested for use.

All process parts should be documented and the training documentation should incorporate pedagogics. Multiple channels should be created to enable information exchange, including company to user and user to user documentation, solutions and examples.
Enough time should also be allocated to go through test projects from start to end for new users from different countries. The trainers should also be made aware of the pedagogical approaches to be able to deliver the information more efficiently to the learners.

The process should be simplified as much as possible keeping in mind the fact that there are actually people who will need to use the platform to get their work done. The amount of logins and knowledge needed to know to use the system should be minimized. Extensive pilot testing should be done and time should be allocated to design the user interface. The overall design should be made to be easily alterable and well documented to provide easier customisation and faster response to user requests.

The support should be supersized in the first pilot phases to overcome possible obstacles, to minimize response time and to keep up the faith of the users to the system. It should be made sure that there is a fast response system in place for support queries that can provide solutions to the users and deliver instructions after implementation. The queries sent in the beginning of the platform adoption should be able to be flagged as urgent.

There should be a defined process for training new users and group created training material with further education possibilities for the platform users. This should also be provided as a base for the local training. E-learning and gamification should be used if possible to find out potential weak spots in the training and to provide targeted learning material accordingly.
Pre-assessing background information

- Who know the old system best
- Who know any equivalent programming languages
- When was the last time they learned something new
- Voluntary learners

Basics

- Break the issues into smaller components
- Create a learning path, a story with full episodes
- Visualise
- Hands-on training
- Exercises
- Support
- Feedback
- Recap
- Run through real projects to adjust and test learning materials, manuals, and to detect issues

Learning groups

- Create groups
- Inspire information sharing
- Activating the groups

Motivation

- Positive constructive feedback
- Making learning fun
- Time limit tasks
- Connect the learners' actual tasks to the training
- Acknowledge the learners as experts

Additional learning

- Gamification
- e-learning

Figure 21 Displays the basic approach to the training

9.1 Training and adoption programme for the future

The future training programme consists basically of 4 steps with each step having a preparation phase prior to the training to ensure the training will run as smoothly as possible.
1. Preparing for the pilot (mapping needs and meeting them)
   1.1. Pre-requirements
       1.1.1. Pilot test the platform training programme with 5 countries before launching globally, if possible limit the amount of new countries to adoption to ensure support capacity
       1.1.2. Leave a week for solution creation, documentation, increased support before training the next pilot country
       1.1.3. Map user needs
   1.2. Material
       1.2.1. Provide access to material and libraries
       1.2.2. Meet the user needs, prioritise the needs and set deadlines
   1.3. Document
1.3.1. Users should get information when documents are updated
1.3.2. Documentation relieves pressure on support
1.3.3. Should be searchable and linkable

1.4. Access
1.4.1. Ensure user rights to platform
1.4.2. Allow testing of the platform even before the training if possible
1.4.3. Create a process for managing users and user groups

1.5. Libraries
1.5.1. Create solutions for the needs, libraries
1.5.2. If something worked before, get to know why it was used and create a similar solution if needed
1.5.3. Users should be able to add to the libraries

1.6. Create Process
1.6.1. Test process flow with local users
1.6.2. The users should be able to do their work on the platform before the training starts

1.7. Support
1.7.1. Ensure support capacity
1.7.2. Use a ticketing system
1.7.3. Managers should pay extra attention to ticket volumes and time to solve during the beginning phases of local adoption
1.7.4. Minimize the strain on developers by having more qualified support people
1.7.5. Have ready solutions for support issues to ease support work
1.7.6. Ensure that support solutions can be learned from by the users
1.7.7. Create platform for users to interact with each other to share solutions

2. Pilot phase (testing the approach, limiting the impact)
2.1. Go through the training
   2.1.1. Test the processes
2.2. Create solutions
   2.2.1. If processes or solutions are missing create them
2.3. Document
   2.3.1. Analyse and improve documentation
2.4. Estimate capacity
   2.4.1. needs for increased support need
   2.4.2. needs for system capacity
2.5. Activate users
   2.5.1. to learning
   2.5.2. to information sharing
   2.5.3. to support other users

3. Preparation to training wave 1 (preparing for the main user training)
   3.1. Pre-requisites
      3.1.1. Map user needs
   3.2. Material
      3.2.1. Meet user needs
   3.3. Access
      3.3.1. Create users beforehand
      3.3.2. Test access for users
   3.4. Libraries
      3.4.1. Create solutions based on needs
   3.5. Create process
      3.5.1. for the local users
      3.5.2. test process
   3.6. Support
      3.6.1. Ensure support capacity

4. Training 1st wave (training the main users)
   4.1. Central location by developer
      4.1.1. Training in central location, the users travel for the training
      4.1.2. Training by very adept users/developers of the platform
   4.2. 2 Main users
      4.2.1. Teach 2 main users of the platform in a common training session
   4.3. Activate users
      4.3.1. to training
      4.3.2. to sharing
      4.3.3. to support
   4.4. Test process and modify
      4.4.1. Go through and test the process with the local super users
   4.5. Create solutions
      4.5.1. Address local issues immediately and provide solutions
   4.6. Follow up weekly
      4.6.1. for one month to discuss and solve issues with main users

5. Preparation for training 2nd wave (local training preparations)
5.1. Pre-requisites
   5.1.1. Map user needs

5.2. Material
   5.2.1. Meet user needs

5.3. Access
   5.3.1. Create users beforehand
   5.3.2. Test access for users

5.4. Libraries
   5.4.1. Create solutions based on needs

5.5. Create process
   5.5.1. for the local users
   5.5.2. test process

5.6. Support
   5.6.1. Ensure support capacity

6. Training 2nd wave (training local users)
   6.1. Locally by developer
      6.1.1. Min one month after main user training
      6.1.2. Training by very adept users/developers of the platform
      6.1.3. The local main users act as support teachers
   6.2. Train rest of the users
      6.2.1. to the platform
   6.3. Enforce training on main user
      6.3.1. to solidify knowledge
      6.3.2. prepare the main user to act as trainer
   6.4. Solve local issues
      6.4.1. address local issues immediately and provide solutions
   6.5. Activate users
      6.5.1. to work as support for others
   6.6. Follow up weekly for one month to discuss issues with users

7. Preparation for additional trainings ()
   7.1. Commonalities
      7.1.1. search for commonalities with countries to find better solutions or processes
      7.1.2. search for new ideas
   7.2. Material
      7.2.1. revise as needed
7.3. Access
   7.3.1. ensure access for all new users to system and material

7.4. Libraries
   7.4.1. revise, request and develop solutions

7.5. Create process
   7.5.1. ensure process works with the other users

7.6. Support
   7.6.1. analyse support needs
   7.6.2. activate main users

8. Additional training

8.1. Local training by main users after 2\textsuperscript{nd} wave
   8.1.1. on demand
   8.1.2. to new platform users
   8.1.3. to local users for new processes or solutions

8.2. Centrally quarterly
   8.2.1. Four times a year extra training sessions by group
   8.2.2. Once per year in TNS Universities

8.3. Monthly WebEx meetings
   8.3.1. Once a month video meetings providing information of solutions via WebEx meetings

8.4. Recorded sessions of trainings
   8.4.1. informed to users
   8.4.2. saved to a common information platform

8.5. Documentation
   8.5.1. revise as needed
   8.5.2. most documents to be revised by all users

9.2 Feedback to proposal

The proposal was sent to production management, Dimensions integration managers and the Global production manager for evaluation.

10 Conclusions

Of the whole process

Most of the problems that were faced during the training and in the adoption in general were because of lack of preparation. When the adoption started, the basic market survey processes, the support processes, the support itself or even the platform were not
prepared to handle new countries and users. To have a very dramatic change on a very tight schedule in many countries, on a platform that handles the main business information, requires well thought, out pre-planned, tested and piloted processes, with possible fall-back plans to ease the adoption.

There is no single solution of how such a large adoption could be executed without any problems or delays. To avoid these problems the company must have good communication channels that can be used for delivering information as documentation and manuals from company perspective to the users. Also, the organisation should have user to user solution sharing and readymade channels for users to answer and ask questions. Support network must be in place for the users on issues regarding the system, and processes must be built for the support to work to solve the issues at hand. Organisational support from the management is mandatory to allocate resources, helping to solve issues and guiding the adoption when needed.

Still, having all of these issues checked does not secure the adoption to be without any problems. Not only the trainees need to be ready to learn, but the whole organisation must be ready to learn and to develop itself in the same process.

**About the training**

As the subject of the training was very large to begin with, it was mandatory that during the training to underline the importance of the new users as being as self-guiding as possible in problem solving and in further learning. Providing the trainees with a model of sharing and actively asking for solutions, not only gave the students a better learning experience, but also created a very positive team spirit in the group as a whole.

The different learning styles of the trainees needed to be addressed by providing different stimulus material and exercises during class to guide the trainee to his individual learning path. Breaking down the material into understandable smaller bits, grouping relevant issues and visualizing their interconnections is a much more learner friendly and efficient approach to teaching. It is said that images say more than a thousand words and for visual learners it is one of the key factors in learning.

Building bridges between previously learned information and the new information helped the trainees to memorize and to understand the issues faster. This was
achieved by providing translations of the terms and techniques used in the new system to the old platform.

Although the learners were motivated by the fact that the platform change is going to happen, they also needed a positive push by acknowledging them as the experts and by including them as active members in the information chain at an early stage. Good motivational path was also found by empowering the learners by giving them more responsibilities to test, thus helping them to understand that they can actually do their work on this platform.

There are two main issues that can be learned from this whole exercise. The first one is the importance of preparation in projects that need a quick turnaround. As an easy example for an Olympic sprinter, the competition itself lasts only a few seconds, but to be able to succeed in the competition takes hours and hours of preparation and training to achieve. In the whole adoption process, the adaptation speed was to be relentlessly fast and the faster the speed the less possibilities you have to adjust the course chosen in mid-flight.

The second issue would be information sharing, the importance of multiple and adoptable information channels. Although multiple information channels are used during this process, there was no information base that could be used for quick solution finding. There were many cases where the information was stored, but it could not be found by any reasonable keyword. The information needs to be searchable and the users should be given rights to edit out dated or fill in missing information.

The timing and schedule of the overall project and the platform adaptation on an organisational level were rather optimistic, as the platform in general was in a development stage itself.

Taking into use a new and still evolving platform while still having the normal project work running on the side, is very taxing on the learners as well as the teachers.

All in all the training and the adoption went fairly well considering the starting point.
It was a good challenge to handle training, normal project work and organisational changes at the same time as preparing and giving the training, and supporting the new users took almost the full day to handle.

10.1 Next steps
As it has been over half a year since taking the platform into full use, the learners are gradually developing a deeper understanding of the intricacies of the system, providing them with more opportunities for automation and generally more effective use of the whole platform.

What is needed still is more information sharing between all users, to share the already developed solutions and to embrace the economics of scale. Using more communication methods, file sharing and even granting users access to support information can reduce the need for basic support, provide faster responses to queries and also develop the knowledge of the platform.

Short term goals should be set to ease information sharing, to collect current best practices, to create common solution libraries and to provide further education possibilities. The library project was started in Finland and discussions have been opened up with the Nordic countries on the basis that it should be accessible to all users. The library should have all comments in English, containing even simple solutions, having the possibility for all users to add to the solutions and having the group approved solutions in it as well.

The long term goal would be to learn from the outcomes of the whole adoption process and to use these in future trainings or adoption projects in the organisation. Incorporating pedagogical approaches to the teaching and to the learning material would make the teaching and the learning of the future adopters less strenuous. Secondary objective would be to gamify the learning and take into use a platform for e-learning systems and processes to require less physical attendance to the trainings, tests and exercises.

10.2 Evaluation
10.2.1 Outcome vs the Objective
The trainings were held and a proposal was created for future use on any adoption process. Because of over optimistic planning for the adoption time, the preparation for main user training did not serve its purpose as it should have. This slowed down the whole process unnecessarily, as the main users were busy solving issues with slow
responsive support instead of training the next users to the platform. In the end the training was seen as a success and the platform was taken into use with very little negative impact towards the customer. The whole project was a great challenge to all who were involved in the adoption process. Obstacles were conquered and the people involved went through this ordeal by fire, proving their skills and improving them even further. The training created good team spirit and more active information sharing between all the users. This also affected positively the relations between the experts and the management, by increasing open discussions and adding trust in the expertise of the employees.
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Sons, 2010.


Appendix 1.1: Strategy for the adoption

1. Create a Sense of Urgency
2. Form a Powerful Coalition
3. Create a Vision
4. Communicate the Vision
5. Remove Obstacles
6. Create Short-Term Wins
7. Build on the Change
8. Embed the Change into the Culture

Appendix 1.2: Local training agenda

Training week agenda

<table>
<thead>
<tr>
<th>time</th>
<th>Description</th>
<th>subject</th>
<th>Attendees</th>
<th>pax</th>
</tr>
</thead>
<tbody>
<tr>
<td>½ day</td>
<td>DimensionTraining pg1-31, server structure 171</td>
<td>Info</td>
<td>All</td>
<td>21</td>
</tr>
<tr>
<td>Week 1</td>
<td>Mon Question types 31-126, tasks question types</td>
<td>IOM</td>
<td>Wave 1</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Tue [Task Training questionnaire start]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wed Training questionnaire Quotes 218-237</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thu The Shell144, images170, Survey creation 177, Project launch 188 (601 auto activation), (video adding sample)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fri No training</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Material:
- DimensionsTraining.docx
- Auto_Activation_Documentation_v601.pdf
- DimensionsExercises.docx (exercises)
- Questionnaire.doc (training questionnaire)

Week 2

<table>
<thead>
<tr>
<th>Mon</th>
<th>Structure</th>
<th>TOM</th>
<th>Wave 1</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tue</td>
<td>Question types</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wed</td>
<td>FasTabs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thu</td>
<td>Combine data, open ends</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fri</td>
<td>No training</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Material:
- TSS_TOM_Adhoc-Tracker_Process.pdf
- TSS_TOM_Code_Guide.pdf
Appendix 1.3: DimensionsNet login structure

DimensionsNet

Appendix 1.4: Process steps to create a questionnaire

Dimensions
Appendix 1.5: Survey process steps, detailed

DimensionsNet

IOM-scripting

- Create TOM structure
- Extract to local project folder (T-drive)

Job Builder

- Create on local project
  - Create to local project
  - Test the survey

Survey link viewer

- Test link
  - Scripting for scripter
  - Viewer (for-line setup)

Auto Activate

- Activates the project lines for scripting/preview/line setup
  - Preview (gifted)
  - Line (switch)

Job.ini

- Create topclines
- Toplines.mrg

ConfirmIT2DPP

- Export data to local project folder (T-drive)
- Convert ConfirmIT data to Dimensions

Fieldwork
Appendix 2.1: Interconnections, links to known information
Appendix 2.2: Dimensions platform survey programming and reporting

MDD rakenne

**IOM (Interview Object Model)**
- Lomake-ohjelmointi
- Base Professional Author
- MDD (Metadata Document)

**TOM (Tables Object Model)**
- Taulukointi, Excel, PPT, Word, HTML
- Base Professional & Survey Reporter
- DMS (Data Management Script)
- MRS (MrScriptBasic Script)

Appendix 2.3: Dimensions survey programming structure

IOM rakenne

**IOM (Interview Object Model)**
- Lomake-ohjelmointi
- Base Professional Author
- MDD (Metadata Document)
Appendix 2.4: Dimensions survey programming metadata

Metadata

A "What is your age? (Single Response)"
    long [1 .. 100]
    order(
        " - Prefer not to answer" NA
    )
A1 "Am I in which age range does your age fall?"
    categorical [1..1]
    _under18 "Under 18",
    _18to20 "18-20",
    _21to25 "21-25",
    _26to40 "26-40",
    _41to65 "41-65",
    _65plus "65 and over"
);  
B "B. Please indicate your gender: (Single Response)"
    categorical [1..1]
    Male "Male",
    Female "Female"
);  
C "C. Do you or does any member of your household work in any of the following occupations?"
    categorical [1..1]
    Advertising "Advertising",
    MarketResearch "Market Research",
    Marketing "Marketing",
    Journalism "Journalism",
    PublicRelations "Public Relations",
    HealthcareManufacturer "Healthcare manufacturers",
    "None of these" NA
);  

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Appendix 2.5: Dimensions survey programming metadata content

Kysymysrakenne

Metadata

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Appendix 2.6: Dimensions survey programming routing

Routing (Web)

Routing (Web) määrittelee missä järjestysessa-, mitä- ja millä ehdollilla kysymyksiä esitetään.

```plaintext
A.ask()
if A>76 then
goto EndSurvey
end if
if A.Response.Coded.ContainsAny(['NA']) then
A.ask()
end if
if (A<18 OR A>76) and A.Response.CodedContains(['NA']) then
goto EndSurvey
end if
if A.Response.Coded.ContainsAny([_under18,_7plus]) then
goto EndSurvey
end if

B.ask()
C.ask()
'or
'if not C.Response.ValueContains(['NA']) then
if not C.Response.Value.ContainsAny(['NA']) then 'this works
end if
```

Appendix 2.7: Dimensions survey programming routing content

Kysymysrakenne Routing

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## Appendix 2.8: Dimensions and ConfirmIT translation table

### Nimikkeet Dimensions vs ConfirmIT

<table>
<thead>
<tr>
<th>Dimensions nimi</th>
<th>D sijainti</th>
<th>ConfirmIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Info</td>
<td>[metadata]</td>
<td>Info-node</td>
</tr>
<tr>
<td>Avoin</td>
<td>Text (text/long/double [scale])</td>
<td>[metadata]</td>
</tr>
<tr>
<td>Single</td>
<td>categorical [1..1]</td>
<td>[metadata]</td>
</tr>
<tr>
<td>Multi</td>
<td>categorical [1..]</td>
<td>[metadata]</td>
</tr>
<tr>
<td>Loop</td>
<td>Loop</td>
<td>Loop</td>
</tr>
<tr>
<td>Grid</td>
<td>loop (expand)</td>
<td>[metadata]</td>
</tr>
<tr>
<td>Maskaus</td>
<td>QuestionFilter</td>
<td>[routing]</td>
</tr>
<tr>
<td>Reitityys</td>
<td>if (then, end if)</td>
<td>[routing]</td>
</tr>
<tr>
<td>Validointi</td>
<td>Validation</td>
<td>[routing]</td>
</tr>
<tr>
<td>muuttuja</td>
<td>Declare in memory</td>
<td>[routing]</td>
</tr>
</tbody>
</table>

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