

PGR Admissions Process Rapid Improvement Workshop

University of Sussex
23-25th July 2012



Scope process

Processes that require improvement are often lengthy and complicated sequences of activities. To overcome this complexity processes are often broken down into distinct improvement projects with a defined scope for each.

SIPOC (an acronym for Suppliers, Inputs, Process, Outputs and Customers) provides a mechanism to scope each improvement project and provides a point of reference for the improvement team to judge what is and what isn't within scope throughout the project life cycle.

Suppliers	Inputs	Process	Output	Customer
Applicant/Agent	Application	Receive Application	Processed Application/Decision	Applicant/Agent
DDS	PG Admissions	↓		University/Schools
DoS & Funders	RECs	Upload Application	Management Information	Funders
ITS	Academics	↓	Applicant Response	UKBA
University/Schools	(Selectors, Supervisors)	Check Application Complete	Issuing of CAS	Partners
UKBA	Funding	↓	Reputation/Brand	
Partners	Yellow Screens	Sent to Selector(s)		
QAA	(Oracle)	↓		
	Sussex Direct	Academic Review		
	PG Apply	↓		
	NARIC	Sent to Supervisor(s)		
	Impromptu (Cognos)	↓		
	Targets/Guidelines	Supervisor Decision		
		↓		
		Selector Recommendation		
		↓		
		Check & Enter Decision		
		↓		
		Check & Send Offer Letter		
		↓		
		Applicant Response (Follow Up)		

Identify needs

As a fundamental principle process improvement projects should lead to benefits accruing to the customers of the process. But to do this effectively it is vital to understand what all the different aspects of the end product customers consider important.

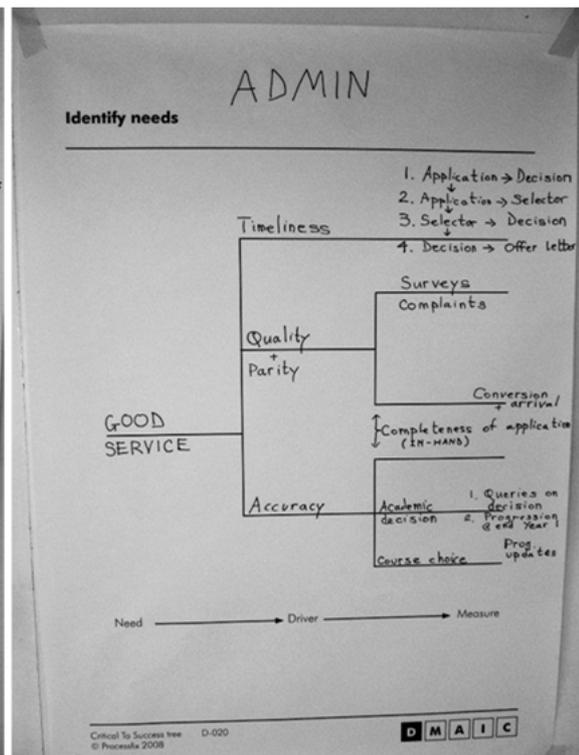
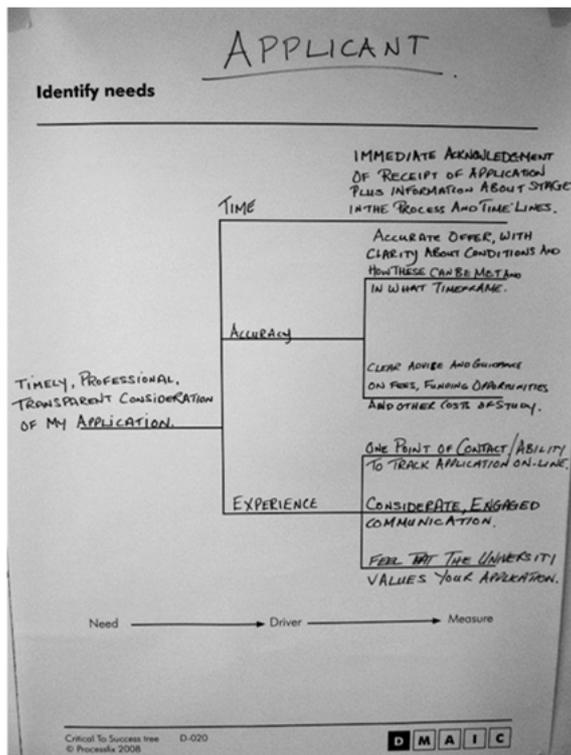
To gather this information Voice of the Customer techniques are often used. However customers often express their needs in broad terms often using subjective statements such as "I want a good service". These loose statements are not sufficient to specifically define the customers need.

The Critical To Success (CTS) tree provides a way to break down these subjective statements into something more meaningful to a point where specific and measurable attributes can be identified.

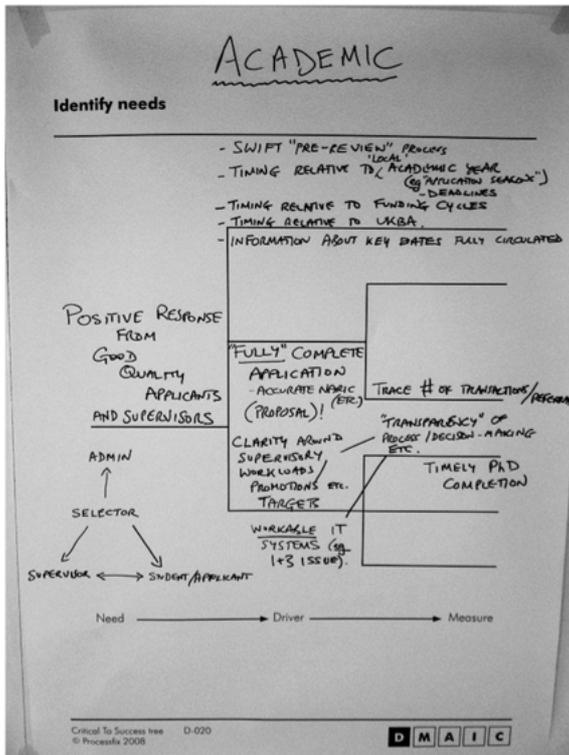
It is only by understanding all of the attributes, and after attaining information about the level of performance expected for each attribute, that overall performance of the process (from the customers perspective) can be truly understood.

Applicants

Admissions Office



Academics



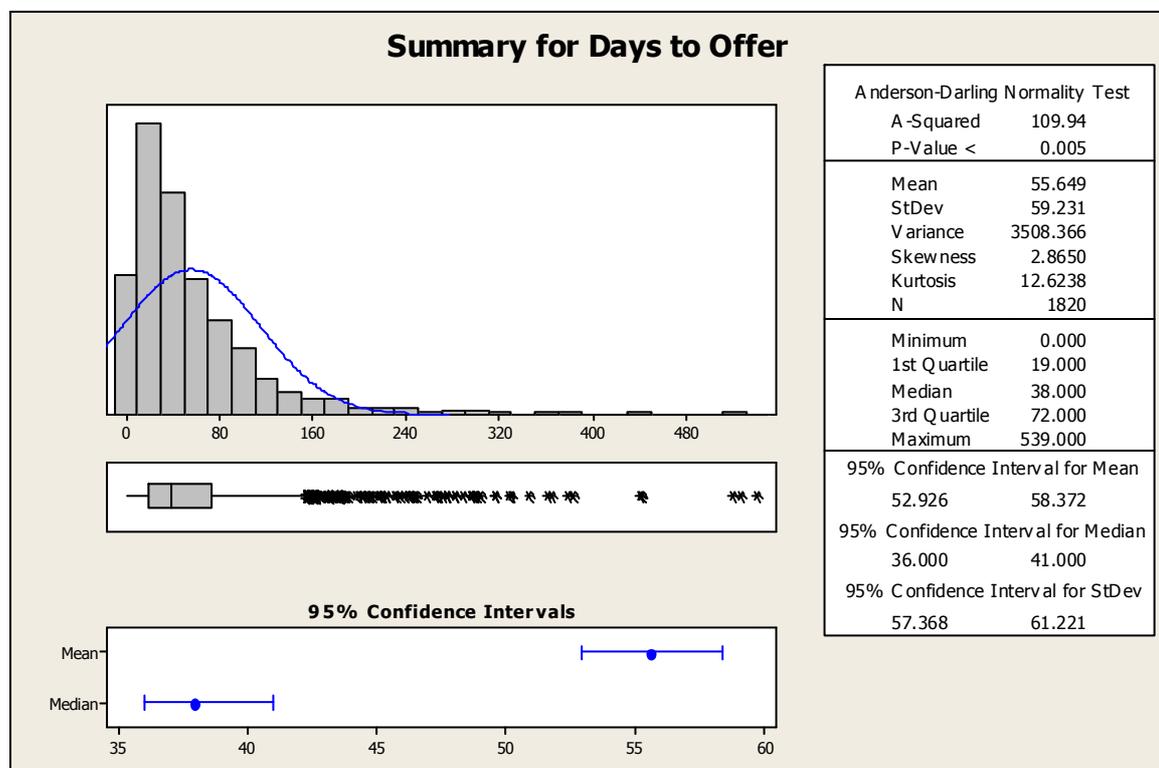
Visualise variation

Analysing data provides a great insight into the behaviour of a process, but when there is lots of it, a picture or graph is almost always easier to analyse than a set of numbers.

The histogram helps to identify whether the process is capable of meeting the customer's expectation and provides an insight in to its behaviour. It provides a means to visualise the frequency (occurrence) of data, and thereby allows interpretation of process performance by analysing the centre of the data, the amount of variation and any significant changes or anomalies.

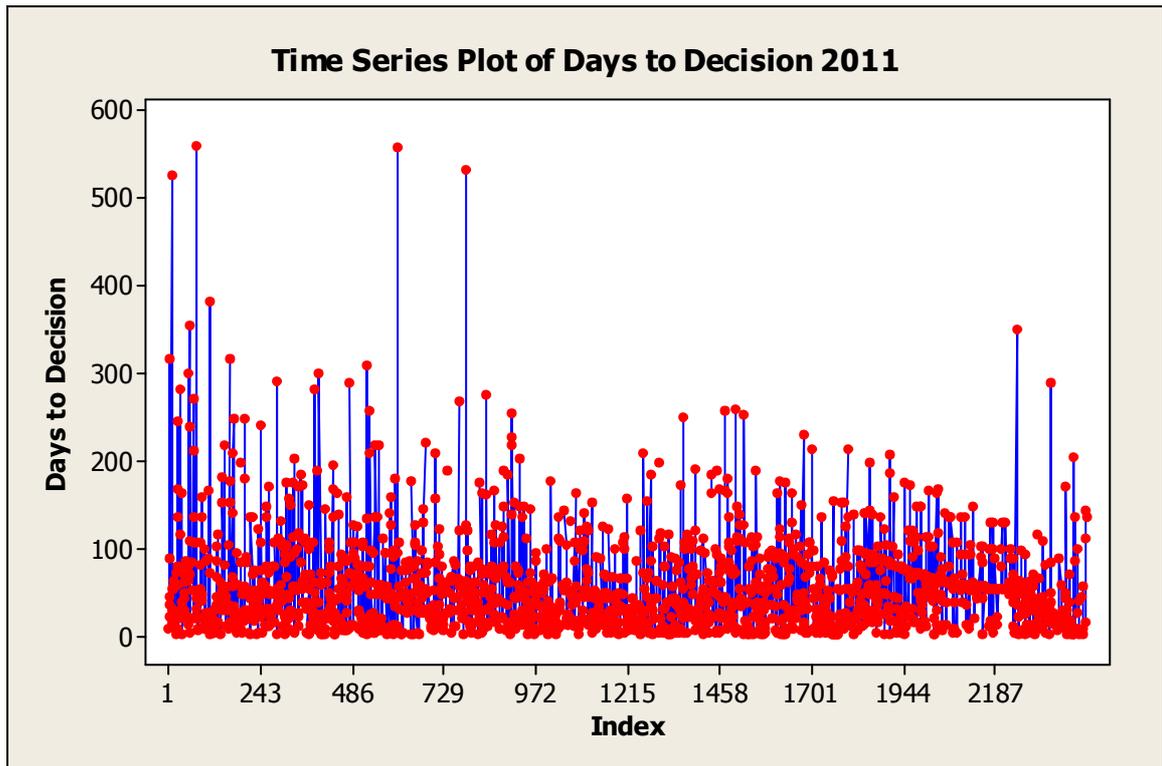
The shape of the histogram gives further insight in to the behaviour of the process. Shapes that differ from the normal distribution (a symmetrical bell curve) indicate that other factors may be affecting the process, such as imposed targets, constraints or perhaps secondary processes.

55 calendar days average time from Application Received to Offer being sent to the Applicant



Data taken from 2010, 2011 and 2012 applications.

Time Series Plot of the Number of Days from Application to Decision Date:



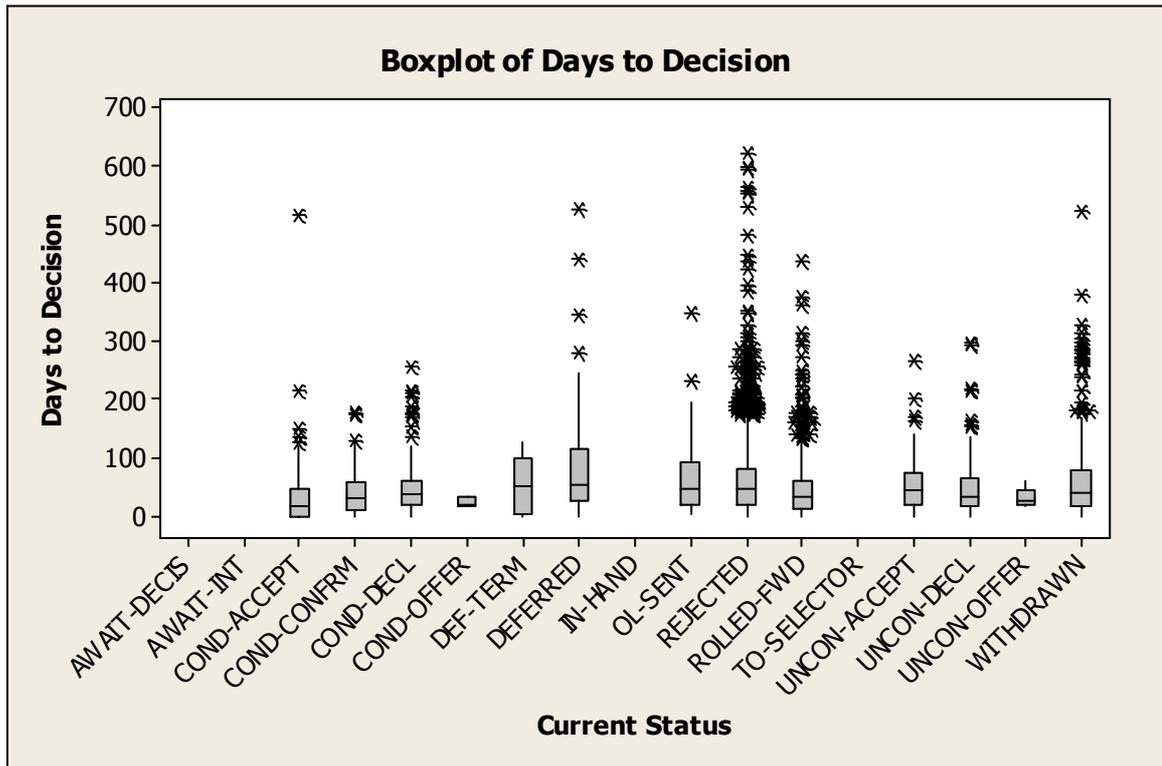
The number of days shows no particular trend for 2011. 2010 and the 2012 to date where decisions and offers have been made shows no trend either.

Y=f(x)

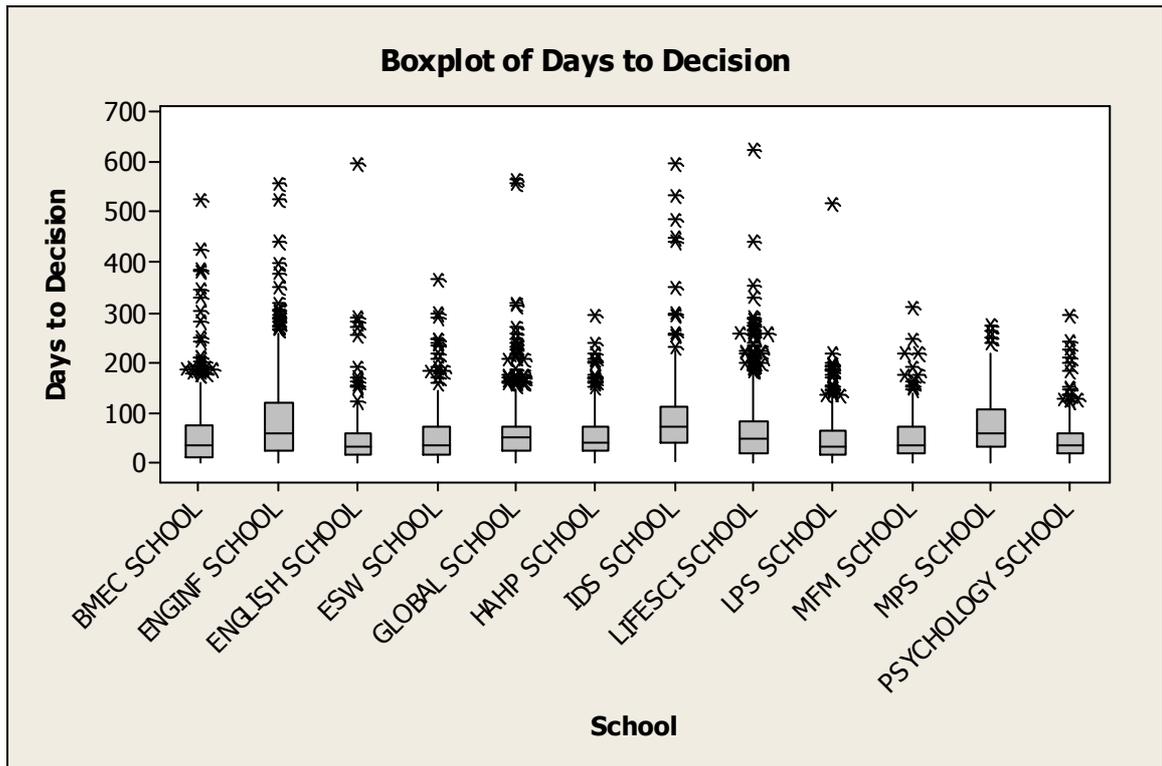
Y=f(x) describes the relationship between the output (Y), the process and its inputs (x's) and provides a way of thinking about how the process operates.

Essentially Y=f(x) defines a cause/effect relationship such that the output is an effect of the underlying causes within the process and its inputs. This enables the team to pinpoint improvements, confident that each solution will result directly in process improvement.

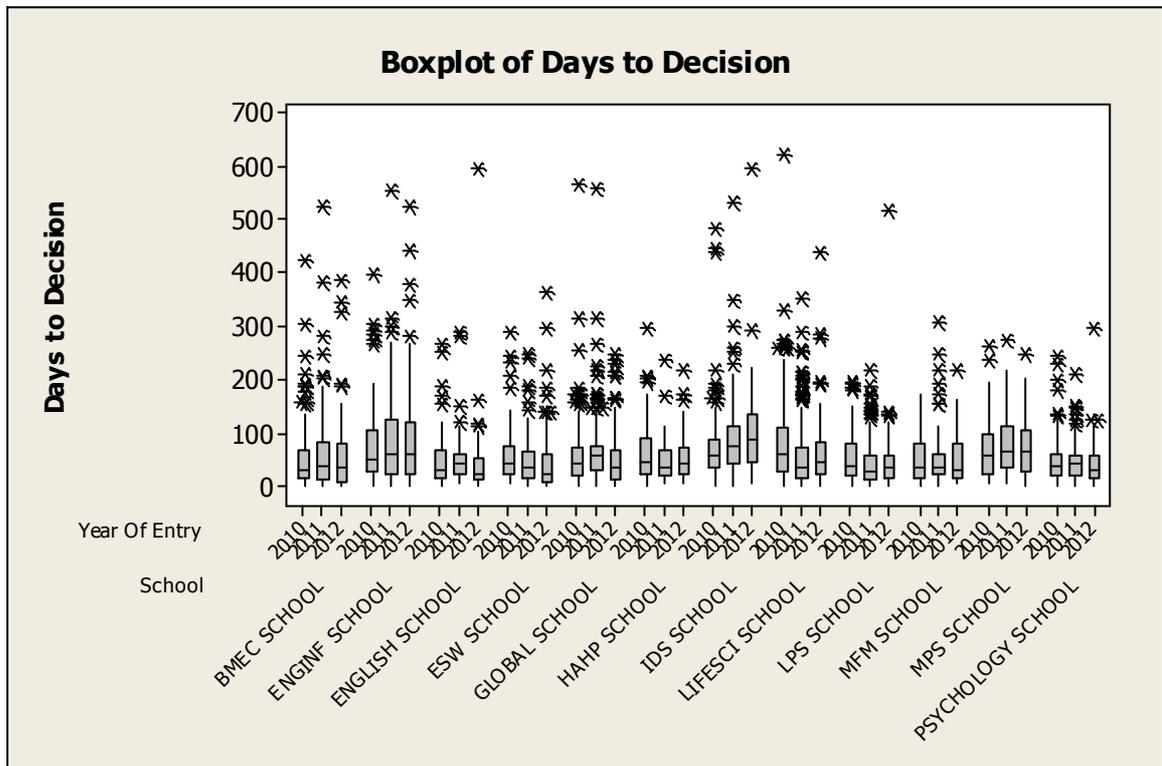
X₁ = Days to Decision by Current Status:



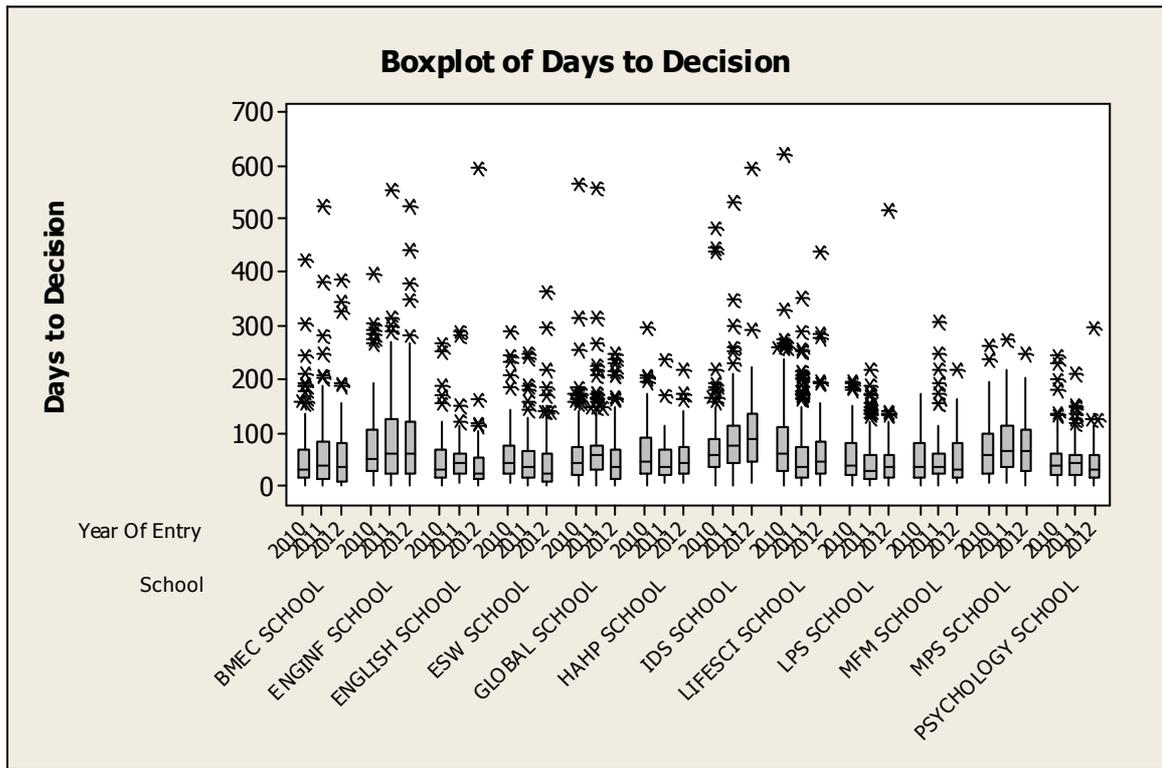
X₂ = Days to Decision by School:



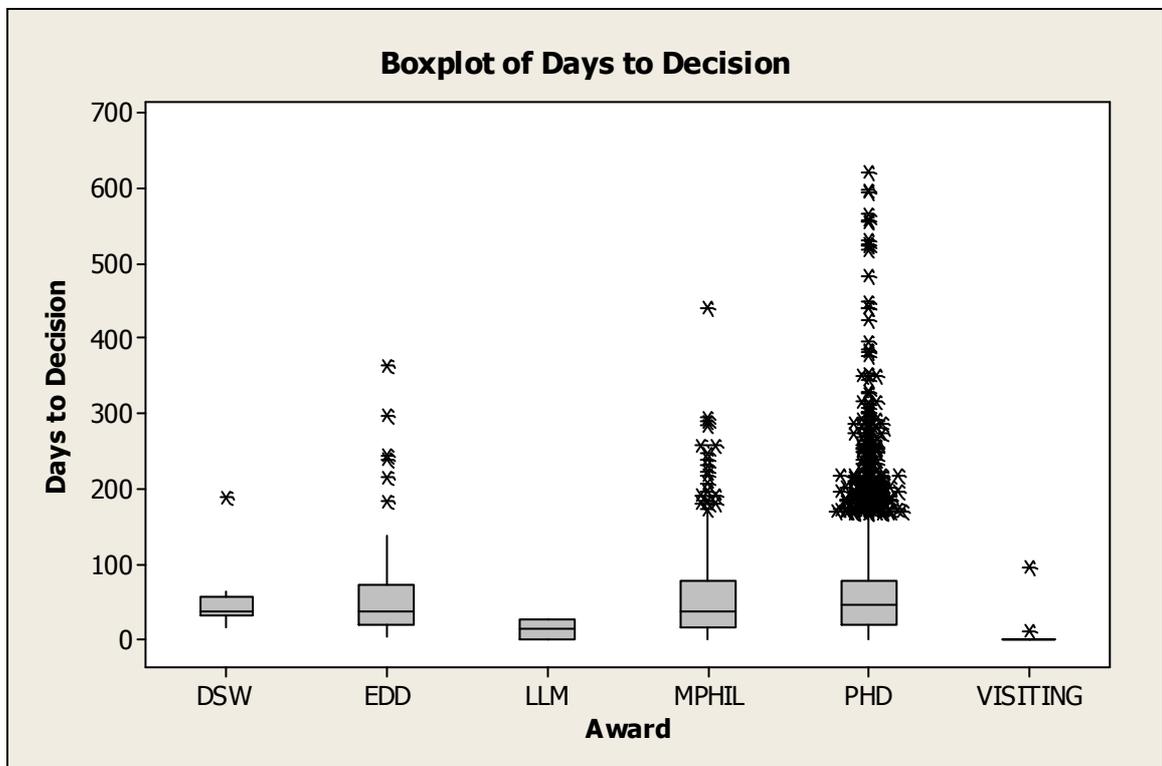
Days to Decision by School by Year:



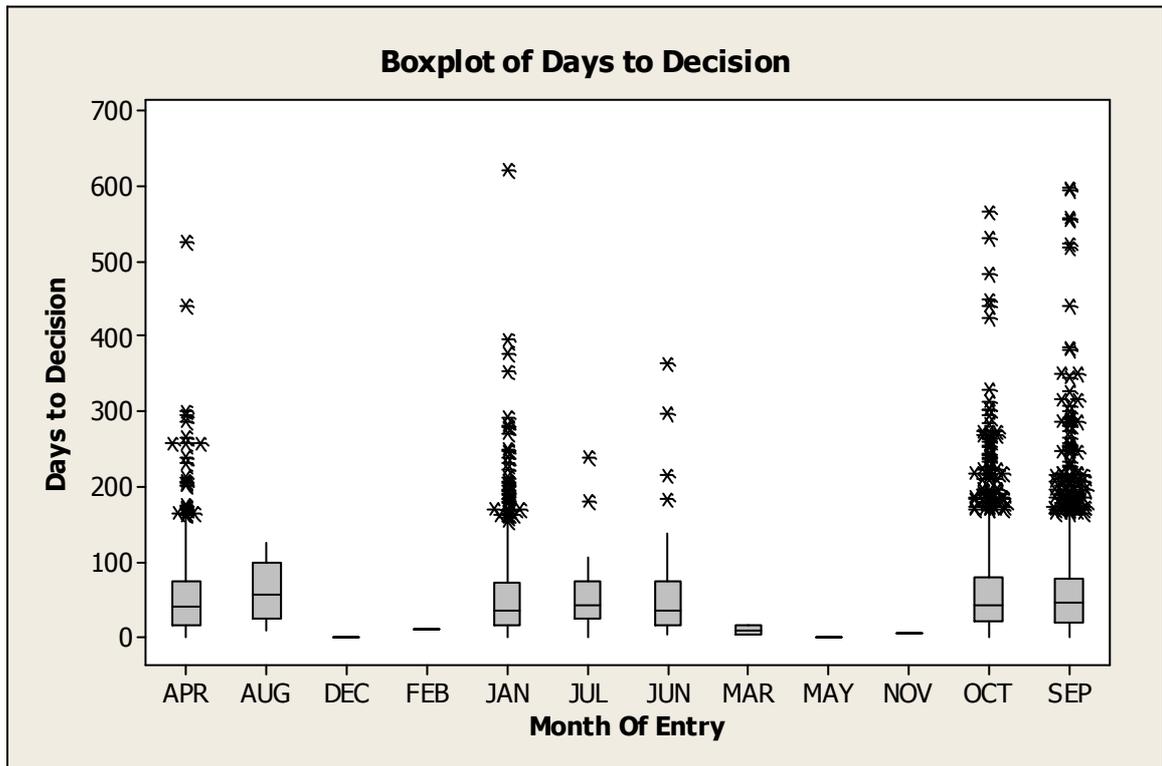
X₃ = Days to Decision by Department:



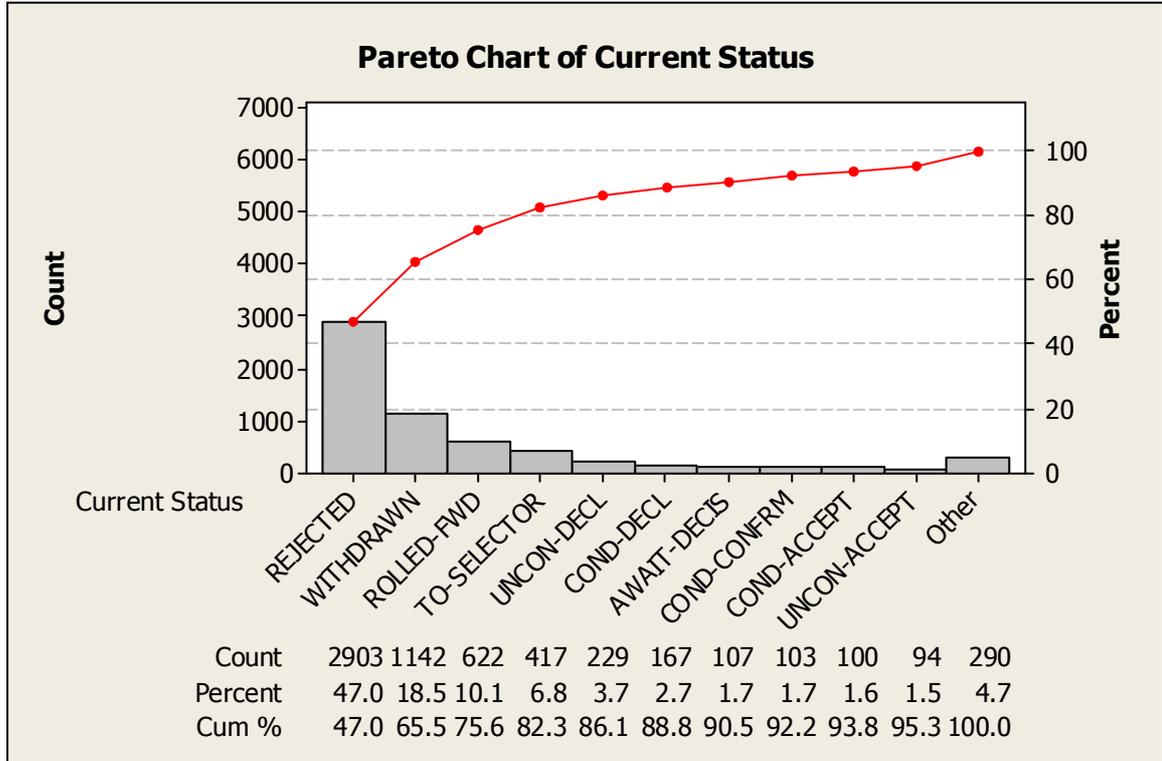
X₄ = Days to Decision by Award:



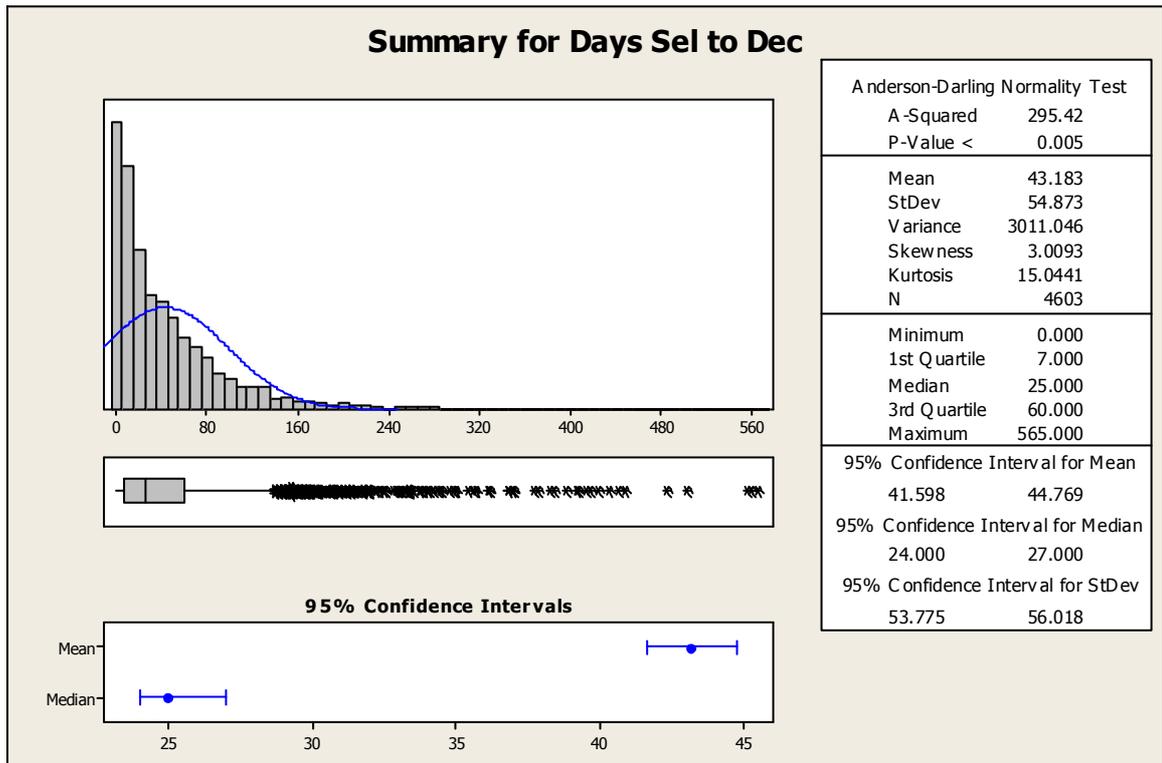
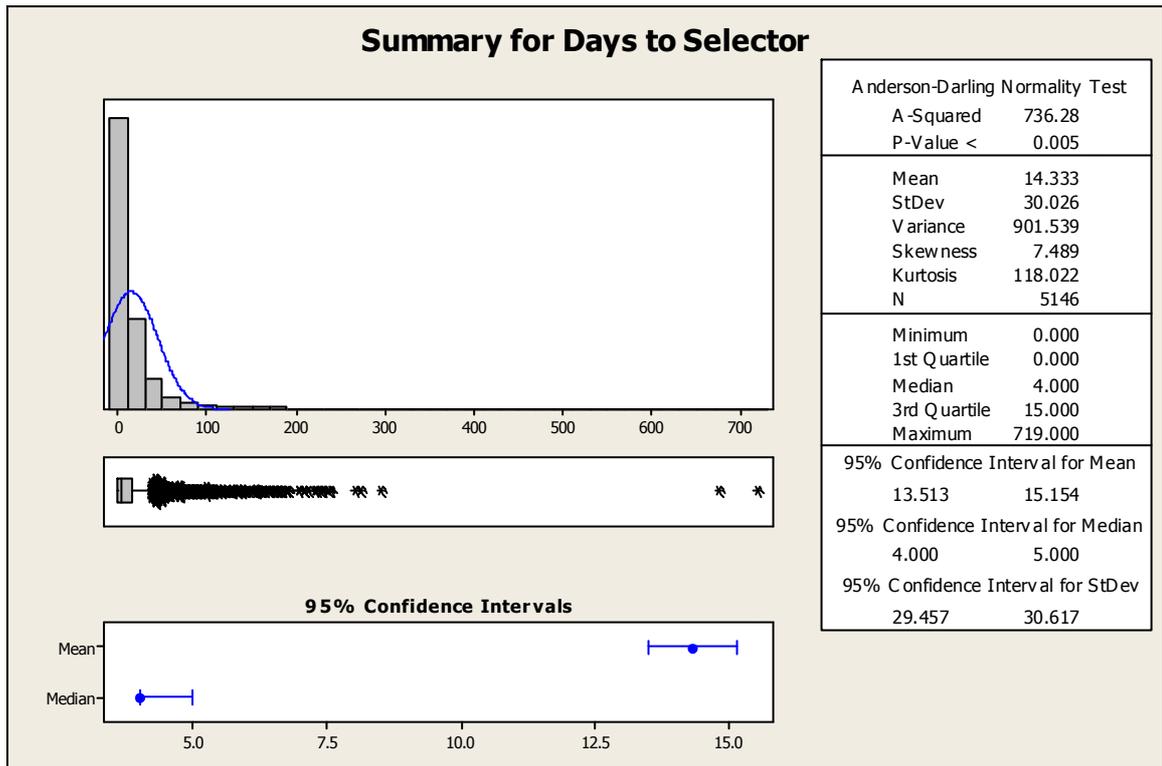
X₅ = Days to Decision by Month of Entry:

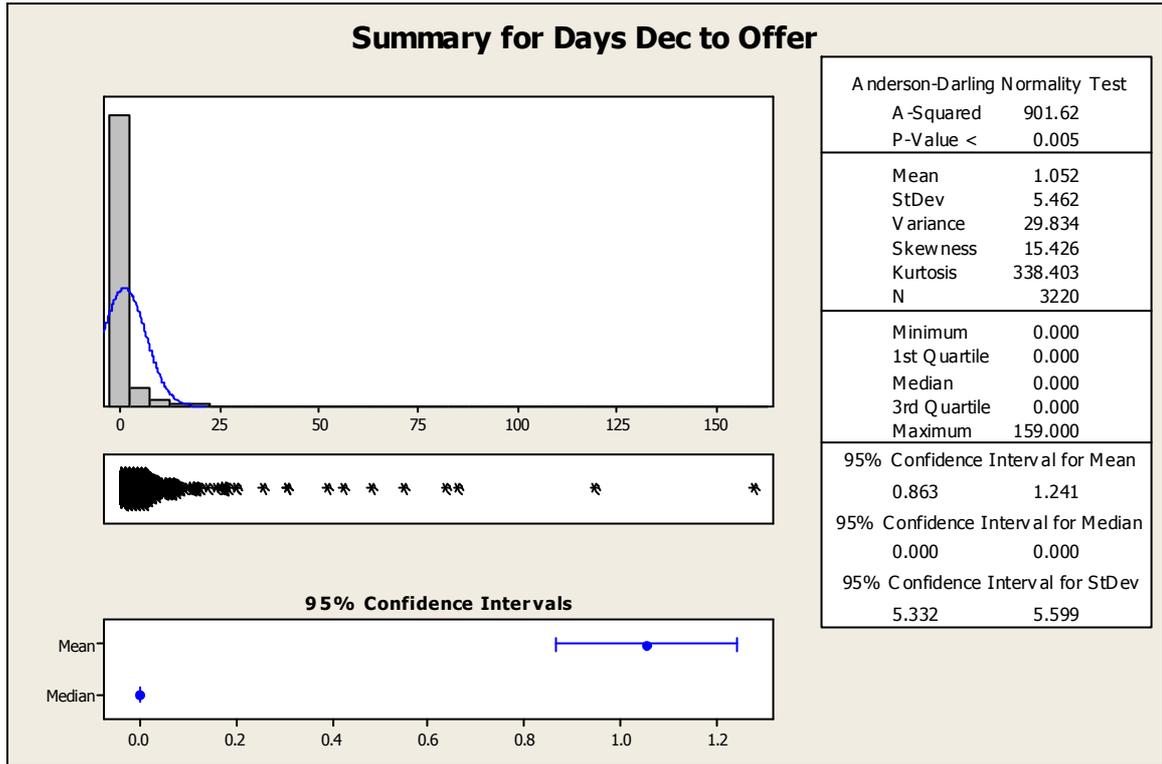


X₆ = Pareto of Current Status:



X₇ = Days spent at Different Stages:





The average number of days spent at each stage are:

Application to Selector = 14 days
 Selector to Decision = 43 days
 Decision to Offer = 1 day

As-is process

A process is a sequence of activities that transforms various inputs into an output. The as-is process map describes the existing process and provides a visual representation of the sequence and flow of the activities which ultimately delivers the output to a customer.

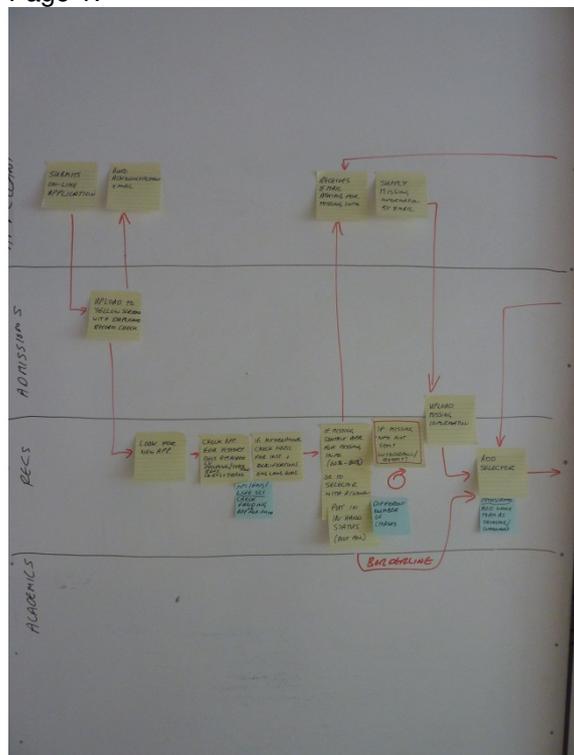
Customers have little interest in what activities or steps occur within a process, as these are often hidden from them. What customers are interested in is receiving the output, regardless of how it gets there. Thus a customer's perception is built on the outcome of the process, although in reality the performance is determined by the way in which the hidden process operates.

Those at the top of the organisational hierarchy typically have some understanding of the end-to-end process. Likewise those at the lower levels have some understanding as they are often responsible for the process flow.

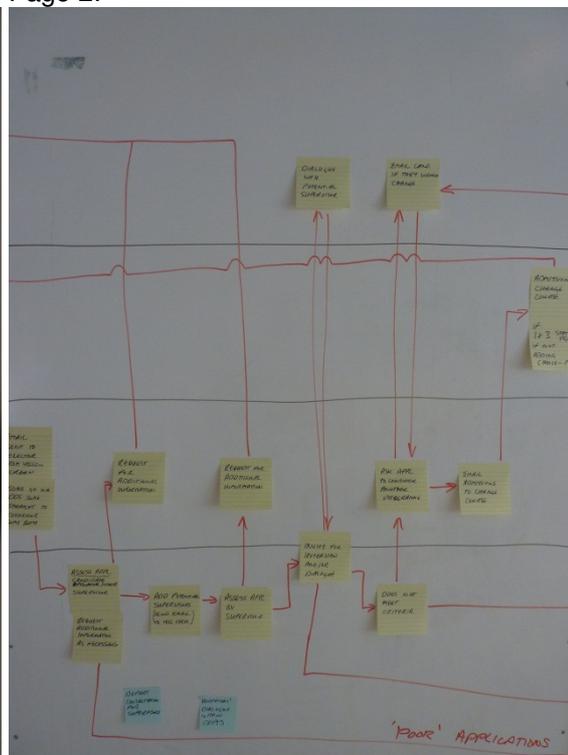
Whereas the majority of people working in the process understand their 'activity' extremely well, they typically have little understanding of the other activities that go to make up the complete end-to-end process or the effect that their particular activity has on delivering the output to a customer. They are happy to 'do their bit', meet their targets and go home at the end of the day thinking 'job well done'.

Yet to meet or exceed customer expectations, the whole team need to know how their actions impact on the overall process. The as-is process provides a way of representing the current process to everyone involved and helps clarify activity steps, create common understanding and view the end-to-end process from the customer's perspective. It describes what actually happens in the process rather than what "should" happen, enabling the team to uncover waste, duplication and idiosyncrasies in the current way of working.

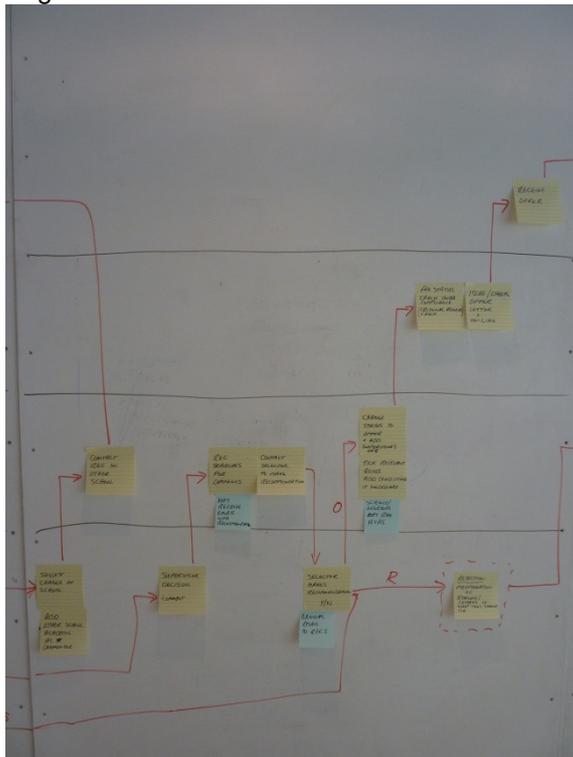
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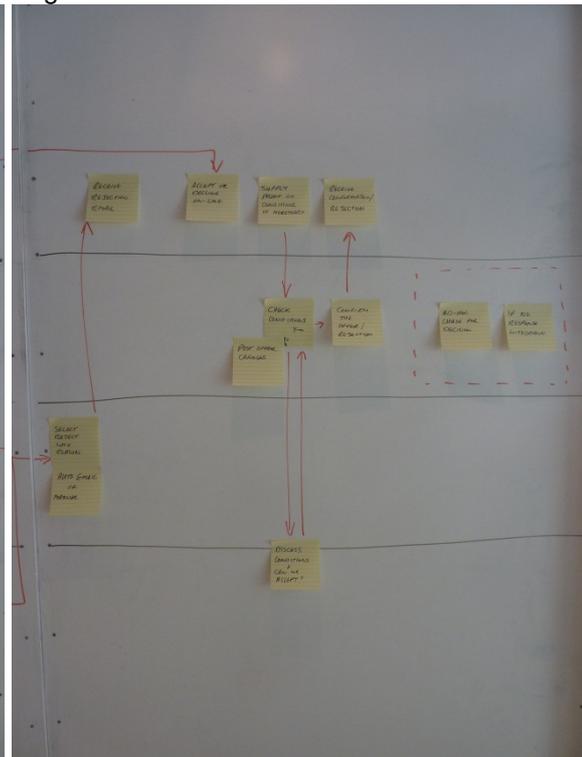
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Use zoom function to view detail

Define opportunity

Eighteen words is a 'rule of thumb' that refines a statement to become focused, clear and concise. The rule states that any statement should be ideally limited to eighteen words to eliminate any unnecessary 'waffle'.

Too often time is wasted in writing, reading or interpreting long winded reports or statements. Wordy documents run the risk of not bringing out the salient points quickly and clearly to the reader. It is somewhat counter intuitive but quite often the more words that are written, the greater the chance for misinterpretation.

The Eighteen Word rule is used in process improvement to ensure time is not wasted as a result of miscommunication or lack of clarity about a project's needs, objectives or definitions. The rule may be applied to any written statement and is judged successful if readers consistently and fully understand what the statement intended.

Reduce the decision time for complete applications to 28 days by supporting high quality applications and processing them efficiently whilst improving communication by Jan 2013.



Eliminate waste

Waste is defined as any activity that does not add value to the customer or that the customer is not willing to pay for. Waste occurs in every process and in organisation. No matter how effective or efficient a process may be, some level of waste is always present.

Taichi Ohno, often referred to as the father of the Toyota Production System, identified seven forms of waste that exist in a process:

- **Waiting time** – the time spent waiting between activities
- **Transport** – the movement between activities
- **Component design** – the effectiveness of the tool in meeting its intended purpose
- **Inventory** – the number of items of work at each activity step
- **Over production** – any effort or output that exceeds the customer expectation
- **Motion** – the movement within each activity
- **Defective goods** – outputs that do not meet the customer expectation

The continuous identification and removal of waste is at the heart of continuous improvement and operational excellence.

Eliminate waste

Type of waste:
WAITING TIME

Specific example	Proposed solution
MISSING DOCS (PROPOSAL REFS. FUNDING INFO. ETC.)	<ol style="list-style-type: none"> 1. IMPROVE ONLINE FORM (INFO) 2. DEFINITION OF MINIMUM REQUIREMENTS (CANT GROUP) 3. AUTOMATIC REJECT (RE: NO CHASING) 4. IMPROVE GUIDELINES/WEB INFO.
CLARIFYING "COURSE" (SPECIAL NEEDS)	<ol style="list-style-type: none"> 1. REMOVE MPINL (IN SOME UNITS) 2. MAKE ALSO SIMR (ANT PPT)
IDENTIFYING SUPERVISORS	<ol style="list-style-type: none"> 1. APPLICANT TO (INTERVIEW) SUGGEST SUPERVISOR (CANT INTERVIEW) 2. COMMUNICATE EXPECTATIONS TO SUPERVISOR (WHAT DO THEY NEED TO DO?) 3. CLEARER MANAGEMENT AND RE. SUPERVISOR WORKLOAD 4. BETTER MANAGEMENT OF CONVENIENCE/ACCESS & WORKLOAD 5. MANAGEMENT OF "REC/ACADEMIC COVER" MODEL DIFFICULTY "SCHEDULE"
ITERATIONS / "TODAY AND PREVIOUS"	<p>LINKED TO DISTINGUISH PRODUCTIVE VS. UNPRODUCTIVE (RE: CLARIFYING CHASING TRANSPARENT & IDENTIFYING RESEARCH PARADIGM).</p>
WAITING FOR THE APPLICANTS	<ol style="list-style-type: none"> 1. "TIME OUT" QUERIES TO APPLICANTS 2. CUT DOWN/AD HOC CHASING REMOVE
NEGOTIATIONS OVER CONDITIONS	<ol style="list-style-type: none"> 1. QUALITY vs QUANTITY / SELECTION is BEYOND NEGOT. 2. NO NEGOTIATION OVER CONDITIONS. 3. RETHINK THE NATURE OF TARGETS IS: MEETING A TARGET AS AN OUTCOME 4. REMOVE PROFESSIONAL EFL FOR PGR.

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Eliminate waste

Type of waste:
WAITING TIME

Specific example	Proposed solution
WAITING FOR ADDITIONAL APPLICATIONS INFORMATION (FROM APPLICANT FROM REFEREES)	<ul style="list-style-type: none"> - PG Apply solutions - Defined Chasing criteria and by whom - Candidate Chasing Refs. - Define policy on how many referees to make offer.
WAITING FOR APPLICANT RESPONSES	<ul style="list-style-type: none"> - Defined policy - USE 'In Hand' !!
WAITING FOR SELECTOR/SUPERVISORS RESPONSES	<p>(NEW... WITH SUPERVISORS)</p> <ul style="list-style-type: none"> - Standards of expectations - Staffing cover (Study leave, etc.) - Looking at alerts/support workflow management.
WAITING FOR RECS TO PROGRESS	<ul style="list-style-type: none"> - Reduce need for email communication - STAFFING COVER/WORKLOADS (COMPETING PRIORITIES) - CONTEXT / PLANNING DURING REC
WAITING FOR ADMISSIONS TO ISSUE LETTERS	<ul style="list-style-type: none"> - NOT CURRENTLY A PROBLEM
ADMISSIONS SCHEDULE DEADLINES (NOT PLANNED TO BUSINESS CYCLE)	<ul style="list-style-type: none"> - CONSIDER OPTIONS FOR THIS DEADLINE?

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Eliminate waste

Type of waste:
TRANSPORT

Specific example	Proposed solution
COMMENTS "TRAVEL" BY RECS	1. SYSTEM FLAGS. 2. FULL SYSTEM TRAINING.
SYSTEM "PARALLAX" (if RECS use yellow screens; FACULTY use SY DIRECT).	1. INTEGRATE YELLOW SCREENS AND SYSEX DIRECT.
LACK OF KNOWLEDGE / IDIOSYNCRATIC USE OF SYSTEMS	1. PROPER INDUCTION / TRAINING FOR ALL. 2. BETTER MANAGEMENT OF SECONDARY REC / OR. WORKLOAD 3. COMPREHENSIVE / COMMITMENTABLE OVERVIEW OF ADMINIS. PROCESS/ SYSTEMS (NEW ONE)
INTR - REC DISCUSSION / DEBATE SCHEDULE SLO - IN G CULTURE OF RESD WITH KNOWLEDGE - BUREAUCRATIZATION OF PGR ADMISSIONS	1. SCHOOL SCHEDULING 2. CULTURE OF 1. ESTABLISH KEY ROLE FOR RECS IN PROCESS (OR NOT) 2. RECS AS EXPLICIT "RELATIONSHIP MANAGERS".

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Eliminate waste

Type of waste:
COMPONENT DESIGN

Specific example	Proposed solution
APPLICATION FORM	ENFORCED • REQUIRED FIELDS - SI UNIT e.g. RESEARCH PROPOSAL • EMBEDDED GUIDANCE • SPECIFIC FOR PGR ONLY SEPARATE SYSTEM FROM PGT? • FUNDING SECTIONS MORE PROMINENT? INTERACTIONS WITH FUNDING OPPORTUNITIES.
TWO SYSTEMS	• SEE TRANSPORT.

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Eliminate waste

Type of waste:
COMPONENT DESIGN

Specific example	Proposed solution
INCONSISTENT - USE OF STATUSES	- CLARITY OF STRUCTURE
- INSUFFICIENCY OF STATUSES	- REVIEW AND REFINE FOR WORKFLOW
- SEE DEFECTIVE GOODS.	

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Eliminate waste

Type of waste:
INVENTORY

Specific example	Proposed solution
APPLICATIONS HANGING AROUND	• <u>TERMINATION POLICY!</u>

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Eliminate waste

Type of waste:
OVER PRODUCTION

Specific example	Proposed solution
TOO MANY APPLICATIONS OF QUESTIONABLE QUALITY (up to 30% are inapplicable)	• WASTE AUTO-REJECT AT EARLY STAGE.
E-MAILS	• SYSTEM CHANGED TO AUTO-FLAG

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Eliminate waste

Type of waste:
OVER PRODUCTION.

Specific example	Proposed solution
- VOLUME ^{OF POOR} AND QUALITY OF APPLICATIONS RECEIVED	- pg Apply relations - clearer entry requirements pre-application (Marketing) - consistency of presentation of requirements in all media.
LACK OF EARLY DECISION TO REJECT WEAK/INCOMPLETE APPS.	- Authority for REC's - Ability to go direct to 1+3 or Masters (not needing to negotiate with applicant) - Decision tree for borderline apps.

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Eliminate waste

Type of waste:
MOTION

Specific example	Proposed solution
- TRACKING APPLICATIONS (yellow Screens)	- ACCESS - BY WHO AND WHAT PURPOSE
- TRACKING AND ALERTS (SUSSEX DIRECT)	" "
LACK OF INTEGRATION BETWEEN SYSTEMS	- INTEGRATION OF SYSTEMS
- LACK OF COMMUNICATION WITH STUDENT	- USE OF STATUS WITHIN SYSTEM
- PRE-ACADEMIC REVIEW: FILTERING PROCESS, AND AUTHORITY FOR REC.	- GUIDELINES FOR RECS - How many choices - Clarity of entry requirements - re-allocating under qualified apps
- STAFFING AND COVER (periods of leave, sickness etc.) - Both RECS + SELECTORS	- Email Aliases (communication) - Workload Management - Staff training.

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Eliminate waste

Type of waste:
DEFECTIVE GOODS

Specific example	Proposed solution
GENEROUS OFFERS	• LESS BENEFIT OF DOUBT? • HIGHER IELTS?/ACADEMIC ABILITY.
PRESSURE OF TARGETS	• ENSURE QUALITY IS NOT COMPROMISED • COMMUNICATION OF FUNDING + COMPLETION CHALLENGES. (EXPECTATION MANAGEMENT ALL PARTIES)

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Eliminate waste

Type of waste:

DEFECTIVE GOODS.

Specific example

INCOMPLETE APPLICATIONS

- missing/weak proposal
- References
- CV (where relevant)

POORLY ALIGNED APPLICATIONS

FUNDING

Proposed solution

- Better advice in PG-apply.
 - Tailored to School/program
 - Clear guide lines
- mandatory fields are defined
- Statement on important fields (tick box to ensure they read).

- Clear information on ~~prospects~~ and PG-Apply

- CHANGE PG APPLY (+ CAS) TO CAPTURE MORE FUNDING INFO FOR SCIENCE (PG ONLY)

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Eliminate waste

Type of waste:

COMPETITION FOR FUNDED STUDENTSHIPS

Specific example

- APPLICATIONS GETTING CAUGHT UP IN INAPPROPRIATE PROCESSES

Proposed solution

- DEFINE PROCESS
 - GTA STUDENTSHIP
 - RESEARCH COUNCIL STUDENTSHIP
 - DTC STUDENTSHIPS
 - CHANCELLORS STUDENTSHIP
- SCIENCE MODEL VS ARTS + Soc. Sci. MODEL
- SI - MONEY AND BLAZE LINKED
- A+SB - PLACES + THINKING DECOUPLED

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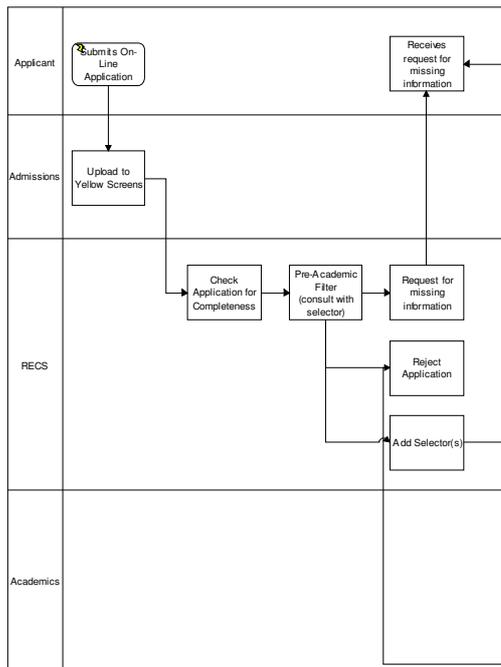
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To-be process

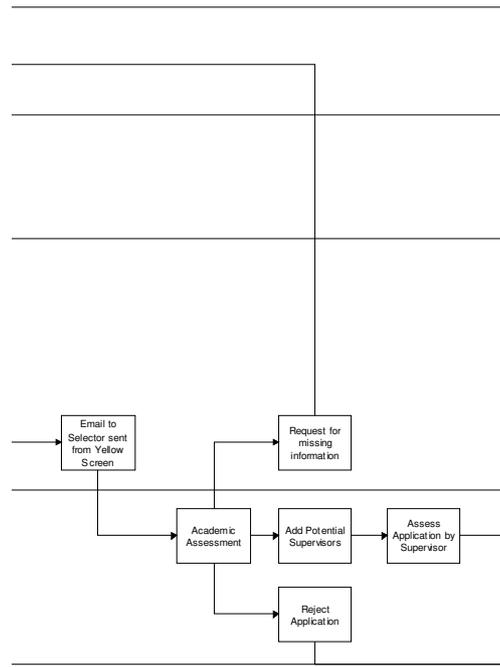
The to-be process illustrates the future state of the process as it will be upon completion of the implementation plan. It is the culmination of the analysis undertaken during the workshop to minimise waste, eliminate duplication and resolve idiosyncrasies in the previous way of working.

The to-be process often starts as an ideal way of working that may be adapted and modified during the course of implementation to overcome any immovable barriers or constraints. Yet throughout it remains essential for communicating the new process to the team and stakeholders whilst providing the basis for on-going continuous improvement.

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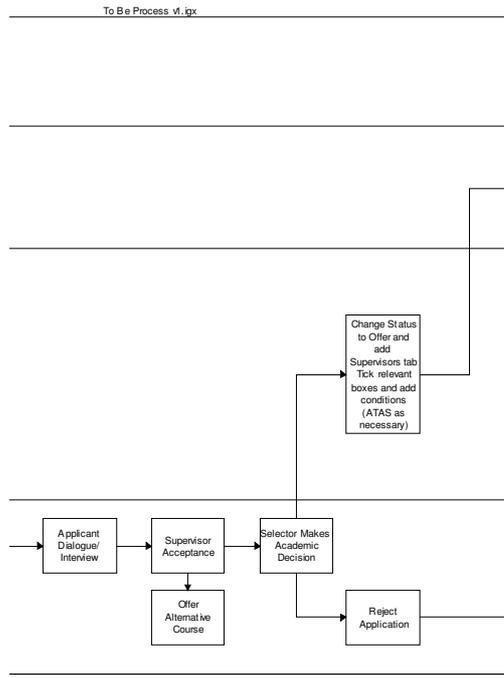


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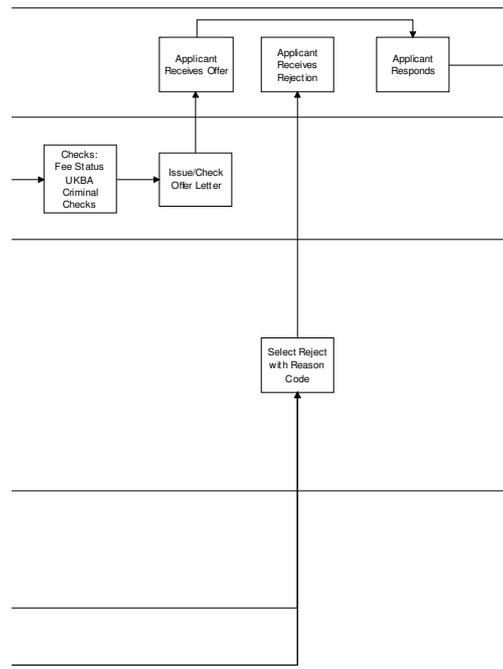


For detail see: To-Be Process v1 pdf

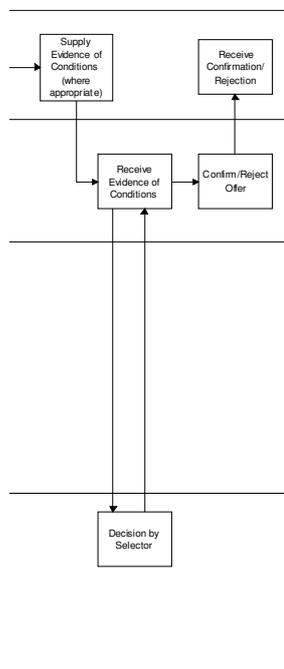
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Implementation plan

ID	Action	Owner	Date
1	Working party on PG Apply (Consistent across all media)	RE	Jan 13
2	Definition of complete application by School/Course	PR	Sep 12
3	Define delegated authority for RECs Rules for pre-academic filter Policy on chasing Criteria for reject/reasons to be notified in email	PR	Sep 12
4	Development of Sussex Direct and prompts	PB	Jan 13
5	Create new status 'With Supervisor' in Yellow Screens	MS	Jan 13
6	Work out process for offering alternative course (e.g.: +3, 1+3)	RE/PAB	Jan 13
7	Develop PGR Admissions policy, staff development and training to support roles & responsibilities	RE/PAB/PR	Dec 12
8	Develop policy on deadline for applications including policy on chasing/closing applications	RE/PAB	Dec 12
9	Develop MIS report for VCEG, HoS, DDS	SJ	Jan 13
10	Develop policy and procedure for handling PGR scholarships aligned to revised PGR admissions procedures	PR	Jan 13
11	Relaunch REC forum to development/continuous improvement	PR	Jul 12
12	Develop online application process for scholarships/funding applications	PR	Nov 13
13	Review arrangements for 1+3 admission, including ensure the MSc SRM is redefined as PGR	PR	Sep 12
	Follow-up review meeting	All	Mid Dec 12

Parking lot

The items below were outside the scope of this Rapid Improvement Workshop and are to be raised to the appropriate persons by the Improvement Champion.

- 1 Link to the enquiry process (pre-application enquiries)

Improvement facilitator

Your Processfix facilitator for this Rapid Improvement Workshop was:

Dave Jones

For further information your facilitator can be contacted on:

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Workshop output

High resolution versions of all the images shown in this report are available from your improvement facilitator.

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