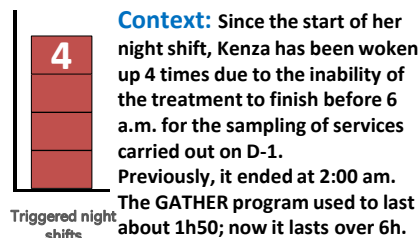


Pb: The last 4 treatments were not fully executed between 00:00 and 6:00 in the morning.



Context: Since the start of her night shift, Kenza has been woken up 4 times due to the inability of the treatment to finish before 6 a.m. for the sampling of services carried out on D-1. Previously, it ended at 2:00 a.m. The GATHER program used to last about 1h50; now it lasts over 6h.

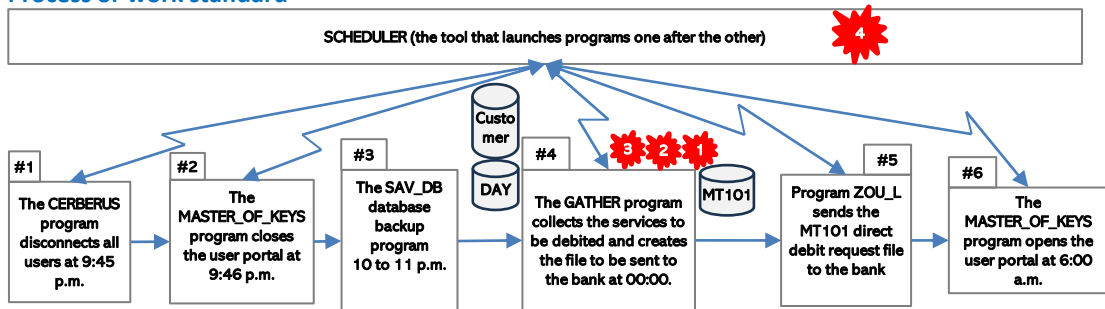
Customer impact: For the end customer, the service is debited on D+2 instead of D+1. The internal customer suffers a delay of at least 2 weeks in the delivery of 5 IT functions.

Impact Enterprise: The disorganization caused by the use of the PREPROD environment to replay night-time treatments during the day led to a 10% drop in the team's productivity over the past 4 days.

Human impact: Kenza's health is deteriorating rapidly. Kenza's colleagues have to absorb part of her daytime workload

Societal/Environmental impact: No impact identified

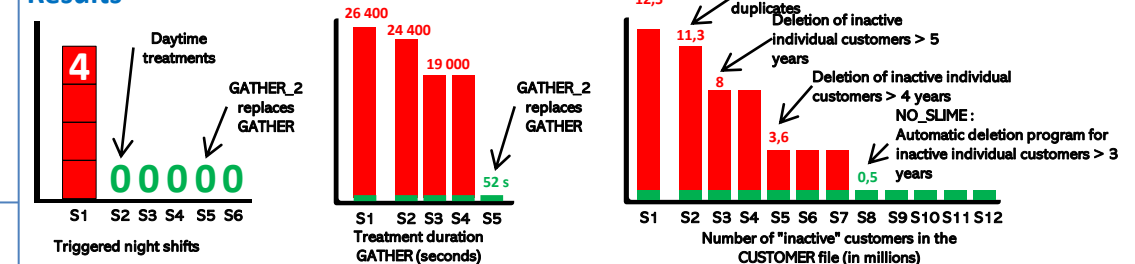
Process or work standard



Causal hypothesis	How can the hypothesis be validated? + Observations	OK/KO?
Does the GATHER program only start from the services to be billed (DAY file) to fetch the customer data, or does it start from the CUSTOMER file and then determine who needs to be billed for something?	Gemba in computer code. The CUSTOMER file serves as the master file, so it processes 12 million customers every night, looking for the 31,000 who have a service to pay for: > Nobody remembers the reason for this technical choice, which does not correspond to the state of the art, because the specifications are missing, because they have been lost, because initially (a long time ago) technical documentations were kept locally on the employees' workstations, instead of being kept on a server with archiving. > Nobody knew that the CLIENT file was the master file for the GATHER program.	OK
Has the number of customers to be processed each day increased?	Determining the evolution of the customer file size : The integration of the Northern Europe and Eastern Europe zone has quadrupled the size of the CUSTOMER database (from 4 to 16 million referenced customers). > No test of correct operation after a 300% increase in the size of the customer database, because Operations had not been informed of the change nor of its date, and because the « Business » teams in Paris only communicate with IT for program or data structure modification requests. > Of the 12 million new "customers" integrated, 90% have been inactive for more than 3 years.	OK
Has the quantity of services to be processed each day increased?	Controlling the number of services to be processed per day : The number of services to be billed per day increased by 3% (from 30,000 to 31,000). Insufficient contribution to justify 4-fold increase in treatment time	KO
Does the scheduler run other programs in the background that consume server resources?	Control of programs running in the background : No programs competing for machine resources (processors and disk access) in the background	KO

Actions	Action to be tested	Expected result	Who	Start/end	OK/KO
⚙️	Modification of the GATHER program so that it uses the DAY file as the master file for its processing instead of the CLIENT file.	Reduce GATHER program processing time from 7h20 (26400 seconds) to 60 seconds (GATHER_2 version)	IT_CASA + team Trade Team	Immediately. Completion within 10 days	✓
⚙️	Creation of a PREPROD_2 environment to temporarily run GATHER processing during the day, while waiting for its modification to be completed. Temporary reassignment of a person to perform GATHER treatment during the day	The night shift is no longer called upon to deal with this problem. The team gets back its PREPROD environment to work	IT_CASA Team Leader	Immediately. End on delivery of modified GATHER	✓
⚙️	Updating the good architecture practices file: the master file is the one that generates the minimum number of operations	In their development requests, business lines specify the number of operations generated by their architectural choices.	IT_CASA + team Trade Team	Immediately. Completion within 10 days	✓
⚙️	Determine the lifespan of "inactive customers" in the database and remove those that are "obsolete". The GDPR says "3 years from the end of the commercial relationship."	No customers inactive for more than 3 years in the CUSTOMER file.	IT_CASA + team Trade Team	Immediately. Completion within 10 days	✓
⚙️	Do not include customer data for which the last commercial relationship dates back more than 3 years. Integration of this rule into the best practices repository.	No customers inactive for more than 3 years in the CUSTOMER file.	Trade Team	Immediately. Completion within 10 days	✓
⚙️	Develop a means of "run-of-the-mill" cleansing of customer data whose last commercial relationship dates back more than 3 years.	No customers inactive for more than 3 years in the CUSTOMER file.	IT_CASA + team Trade Team	Immediately. End within 30 days	✓
⚙️	Inform IT development and operations teams at least one month before integrating a quantity of data that increases file size by more than 5% at a time. RACI modification	No unexpected degradation of IT application performance	PMO DCCP	Immediately. Completion within 5 days	✓
⚙️	Mandatory performance test before integrating a quantity of data that increases file size by more than 5% at a time. Addition of a step in the workflow of the Accounting and Payment Chain Domain (DCCP) teams.	No unexpected degradation of IT application performance	Product Owner DCCP	Immediately. Completion within 5 days	✓

Results



Acting on our practices / Lessons learned

- Identify the state of the art in IT and train everyone involved in designing and developing an application. For example:
- > The master file of an application is the one that contains the final data to be processed, not the file that enriches this data.
 - > Before inserting data, it is necessary to determine quality and relevance criteria that will ensure that only complete and useful data is included in the target database.
 - > RGPD is EVERYBODY's business!

Measuring quality of life at work (QWL) helps us find the right problems to solve, because :

- > QWL tells us about the quality of interpersonal relations,
- > QWL tells us something about the quality and quantity of the resources made available to people,
- > QWL tells us about the meaning of the missions and activities we give to these same people.