Process documentation

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1 89_model

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1.1 Diagram
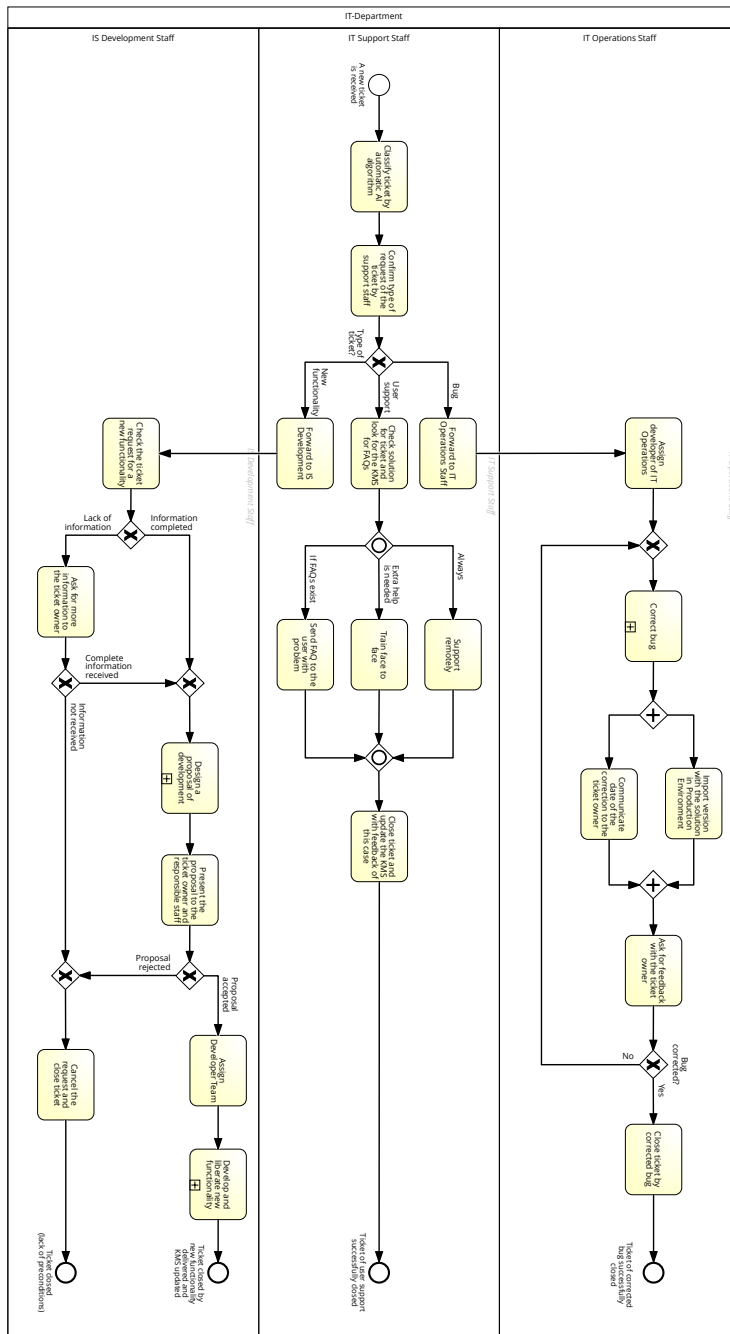
1.2 Description

In the IT Department of an organization, people are responsible for the maintenance of the information systems used by the other departments. If there is a problem with a system, a ticket is generated from the Departments and sent to the Support staff, and then the area in charge of the solution must process and solve the ticket

according to the type of problem. The time of response needs to be decreased. Recently, to improve the time that takes to derive the requests to the correct area, it was implemented an automatic procedure that classifies the ticket using AI. As the procedure is still in testing, the Support staff continues checking the type to avoid mistakes and to permit the AI improving the algorithm of classification. Sometimes, the ticket corresponds to an incorrect use of the system from part of the user, in which case the Support staff provides the guidelines through the FAQs from Knowledge Management System, that also need to be updated each time if necessary. Some users also required a closer accompaniment in person, and always are contacted remotely to help them to solve their doubts successfully.

When the request need to be solve by the techniques, the Operation staff picks the tickets that correspond to errors (bugs) and correct them quickly, but fulfilling all the necessary steps of development and testing before liberate the corrected version and communicate to the petitioner.

The other typical requests correspond to functionalities that do not exist and have to be evaluated before being implemented in the systems. The staff in IS Development needs a complete information to proceed with the analysis and create the proposal. Only if the proposal is approved by the responsible petitioner, a Developer Team is assigned for the development.

Every time a new version of a system needs to be liberated, the corresponding QA test and the test from the user responsible are done, and also important is the approval from the responsible in the petitioner´s Department. However, some requests from the Departments will never be developed because are not part of the priority inside the IT Department. In that cases an IT committee reject them and explain the decision to the petitioner´s Department.

1.3 Elements

Process elements

A new ticket is received

> *Start Event*
>
> *The process starts when a ticket sent from a Department arrives to the Request Management System. The ticket is generated from the Departments if there is a problem with a system.*
>
> Organization units: IT-Department - IT Support Staff

Classify ticket by automatic AI algorithm

> *Task*
>
> *Automatic algorithm that classifies the ticket using AI. The classification can be: bug, user support, new functionality. The algorithm check the description and contrast with keywords. The criteria of classification is: bug or error if a functionality is not working correctly, user support in case there are doubts or mistakes in the use of the system, new functionality in case it is needed to develop or change an actual functionality that is working.*
>
> Organization units: IT-Department - IT Support Staff

Confirm type of request of the ticket by support staff

Task

The Support Staff has to confirm or change the type of ticket classified by the AI according to the criteria: bug or error in an information system if a functionality is not working correctly, user support in case there are doubts or mistakes in the use of the system, new functionality in case it is needed to develop or change an actual functionality that is working.

Organization units: IT-Department - IT Support Staff

Type of ticket?

Exclusive (XOR) Gateway

Which is the type of ticket: bug, user support, new functionality.

Organization units: IT-Department - IT Support Staff

Forward to IT Operations Staff

Task

Bugs or errors in an information system are sent to the IT Operations Staff to be corrected.

Organization units: IT-Department - IT Support Staff

Assign developer of IT Operations

Task

A developer or developer team is assigned for the correction of the bug, according to the system, magnitude of the problem, level of urgency of the solution.

Organization units: IT-Department - IT Operations Staff

Exclusive (XOR) Gateway

Exclusive (XOR) Gateway

Next activity can happen if a developer has been assigned or if the bug was not correctly solved.

Organization units: IT-Department - IT Operations Staff

Correct bug

Collapsed Subprocess

Sub-process for correction of the bug. The problem is analyzed, the solution is developed and tested. The bug is corrected in the Staging Environment of the system.

Organization units: IT-Department - IT Operations Staff

Subprocess reference: /model/1f153ca18c44485cbc703c3b6bbef399 (/ model/1f153ca18c44485cbc703c3b6bbef399)

Parallel Gateway

Parallel Gateway

Next activities are done in parallel.

Organization units: IT-Department - IT Operations Staff

Import version with the solution in Production Environment

Task

The version corrected in Staging Environment is imported to the Production Environment and internally is checked that is working.

Organization units: IT-Department - IT Operations Staff

Communicate date of the correction to the ticket owner

Task

The user or ticket owner is contacted by e-mail to inform that the system has been corrected or it is inform the date when it will be corrected.

Organization units: IT-Department - IT Operations Staff

Parallel Gateway

Parallel Gateway

After the user is informed and the solution is done or scheduled.

Organization units: IT-Department - IT Operations Staff

Ask for feedback with the ticket owner

Task

Once the solution is in the Production Environment of the system, the user or ticket owner is asked to check that the system is working correctly.

Organization units: IT-Department - IT Operations Staff

Bug corrected?

Exclusive (XOR) Gateway

Two roads: if the bug was corrected the next activity close the ticket, if the problem continues the next task is correct the bug.

Organization units: IT-Department - IT Operations Staff

Close ticket by corrected bug

Task

If the bug is corrected, the ticket is closed. A message is sent to the user to inform him about the close of the ticket and the solution provided.

Organization units: IT-Department - IT Operations Staff

Ticket of corrected bug successfully closed

End Event

This part of the flow finishes with a corrected bug and a closed ticket.

Organization units: IT-Department - IT Operations Staff

Check solution for ticket and look for the KMS for FAQs

Task

The Support Staff analyses the request to answer doubts and clarify mistakes in the use of the system, and looks for the topic in the Knowledge Management System to provide the FAQs to the user.

Organization units: IT-Department - IT Support Staff

Inclusive Gateway

Inclusive Gateway

The support to the user can be delivered in three ways according to the level of lacking of knowledge about the system, and if there is information in the KMS about it.

Organization units: IT-Department - IT Support Staff

Support remotely

Task

The user always receives a remote support through e-mail, chat or phone, according to the level of use and lacking of knowledge.

Organization units: IT-Department - IT Support Staff

Train face to face

Task

In case it is a complex doubt, the user received a visit of the Support Staff and a training program is done. In case of more than one user the training is planned according to the availability of the users.

Organization units: IT-Department - IT Support Staff

Send FAQ to the user with problem

Task

If the KMS has the necessary topics to answer or clarify the doubts, this information is provided to the user.

Organization units: IT-Department - IT Support Staff

Inclusive Gateway

Inclusive Gateway

All the support activities are done o schedule.

Organization units: IT-Department - IT Support Staff

Close ticket and update the KMS with feedback of this case

Task

Once all the support activities are done o schedule, the ticket is closed and the KMS is updated according to the experience and collected information about the case and the FAQs are created or updated. A message is sent to the user to inform him about the close of the ticket and the solution provided.

Organization units: IT-Department - IT Support Staff

Ticket of user support successfully closed

End Event

This part of the flow finishes with a successfully closed ticket .

Organization units: IT-Department - IT Support Staff

Forward to IS Development

Task

The ticket is sent to IS Development Staff in case a new functionality or change in the system is requested.

Organization units: IT-Department - IT Support Staff

Check the ticket request for a new functionality

Task

The request is analyzed by the IS Development Staff. It can be found that all information is provided or that it is a lack of information.

Organization units: IT-Department - IS Development Staff

Exclusive (XOR) Gateway

Exclusive (XOR) Gateway

Two different flows start: one is all the necessary information for the development was provided; the other flow occurs when the information is not complete.

Organization units: IT-Department - IS Development Staff

Ask for more information to the ticket owner

Task

If the information is not completed, the staff ask for more information to the ticket owner. A message with the details is sent to the user or ticket owner.

Organization units: IT-Department - IS Development Staff

Exclusive (XOR) Gateway

Exclusive (XOR) Gateway

Two flows can follow: the user or ticket owner does not provide all the rest of the information and the ticket must be closed; the user or ticket owner provides all the information to continue with the next step.

Organization units: IT-Department - IS Development Staff

Exclusive (XOR) Gateway

Exclusive (XOR) Gateway

Organization units: IT-Department - IS Development Staff

Design a proposal of development

Collapsed Subprocess

Once a request of a new functionality is received by the IS Development Staff and all the information is provided, it is necessary to check if the request is according the priorities of the IT Department. If the IT Service Committee approve the request, the Developer Team creates a prototype of the solution, which is tested and adjusted considering the feedback of the users and the people responsible of the request.

Organization units: IT-Department - IS Development Staff

Subprocess reference: /model/0a0bb302f0cd43a594feaee5450e10df (/ model/0a0bb302f0cd43a594feaee5450e10df)

Present the proposal to the ticket owner and responsible staff

Task

After creating a feasible and tested prototype, this is formally presented to the ticket owner and responsible area, looking for the formal approval to continue with the development.

Organization units: IT-Department - IS Development Staff

Exclusive (XOR) Gateway

Exclusive (XOR) Gateway

Organization units: IT-Department - IS Development Staff

Assign Developer Team

Task

If the proposal of development is accepted by the ticket owner or the corresponding responsible, a developer team is assigned to develop the proposal for the new functionality.

Organization units: IT-Department - IS Development Staff

Develop and liberate new functionality

Collapsed Subprocess

Sub-process. The proposal of development is implemented and tested in the development environments to finally liberate it and make it available for the users in the Production Environment. The ticket is successfully closed with a new functionality delivered and the KMS updated according the new operation.

Organization units: IT-Department - IS Development Staff

Subprocess reference: /model/d9a879be2c0b4bd986755f97b79d27dd (/model/d9a879be2c0b4bd986755f97b79d27dd)

Ticket closed by new functionality delivered and KMS updated

End Event

This part of the flow ends with a ticket closed and the new functionality delivered, as well as an update to the KMS.

Organization units: IT-Department - IS Development Staff

Exclusive (XOR) Gateway

Exclusive (XOR) Gateway

Next task is done if the ticket´s owner does not provide all the required information or if the proposal of development is rejected by the responsible or ticket owner.

Organization units: IT-Department - IS Development Staff

Cancel the request and close ticket

Task

The request is rejected and a message is sent to the ticket owner to inform him about the close of the ticket and the reasons of rejection.

Organization units: IT-Department - IS Development Staff

Ticket closed (lack of preconditions)

End Event

The ticket is closed due to the request does not fulfill the condition prioritization of the IT Department.

Organization units: IT-Department - IS Development Staff

Organization units

IS Development Staff

Lane

Organization unit: IT-Department

IT-Department

Pool

IT Operations Staff

Lane

Organization unit: IT-Department

IT Support Staff

Lane

Organization unit: IT-Department