

Benchmark financial processes in Howest versus Mountains of the Moon university

Date: 21th November 2018

- Supervisor: Ann Deraedt, coach digital skills for business at Bachelor Network Economy
- Howest partner: Sophie Vanwijnsberghe, Research Staff Member
Financial Controller Research projects
- MMU partner: Sister Stella Kanyunyuzi, senior accountant in Mountains of the Moon University (MMU) at Fort-Portal, Oeganda

1 INTRODUCTION

In response to the visit of Sister Stella, Howest organized a benchmark for some of the business processes in both universities. This comparison was a perfect base to give students of the Bachelor network economy an opportunity for a real-life consultancy project.

Both Sophie and Ann has been in MMU for 1 week to give Office Automation courses. We felt the need that this training was not enough for business results. Kurt Debaere – international Office Howest and Ivo De Pauw – contact for MMU, encourage to submit a project, with success...

Thanks to a subvention of the province of West-Flanders “Gain up to € 4,000 for your education, work or research experience in a DAC country!”, it was possible to receive a colleague of MMU as a researcher for 1 month.

2 SET-UP OF THE BENCHMARK

2.1 INPUT

We organized 2 information sessions:

- 2e year students Bachelor Accountancy-Taxiation at Howest Brugge
- 2e year students Bachelor Network Economy (NE) at Howest Kortrijk

In each session the following subjects were explained:

- Sophie explained the importance of Research in a Belgium university, explained the process from request to final delivery, and demonstrated the processes with the different softwares in use.
- Sister Stella told about the revenue and payment sections, procurement and store.

In Kortrijk were additional info sessions:

- Ilse Beerland (staff member Howest) with a session data management in Howest
- Lien Deboosere (business consultant at iDeeds) with a session Enterprise Architecture.
- Coaching sessions from Sister Stella to support the Business Process Model Notation (BPMN)

2.2 OUTPUT

Each student of the Bachelor Accountancy-Taxiation writes his/her own reflection report.

Students of Network Economy split up the work to be able to made a demo solution in an Enterprise Resource Planning (ERP) software.

3 COMMUNICATION TO THE STUDENTS



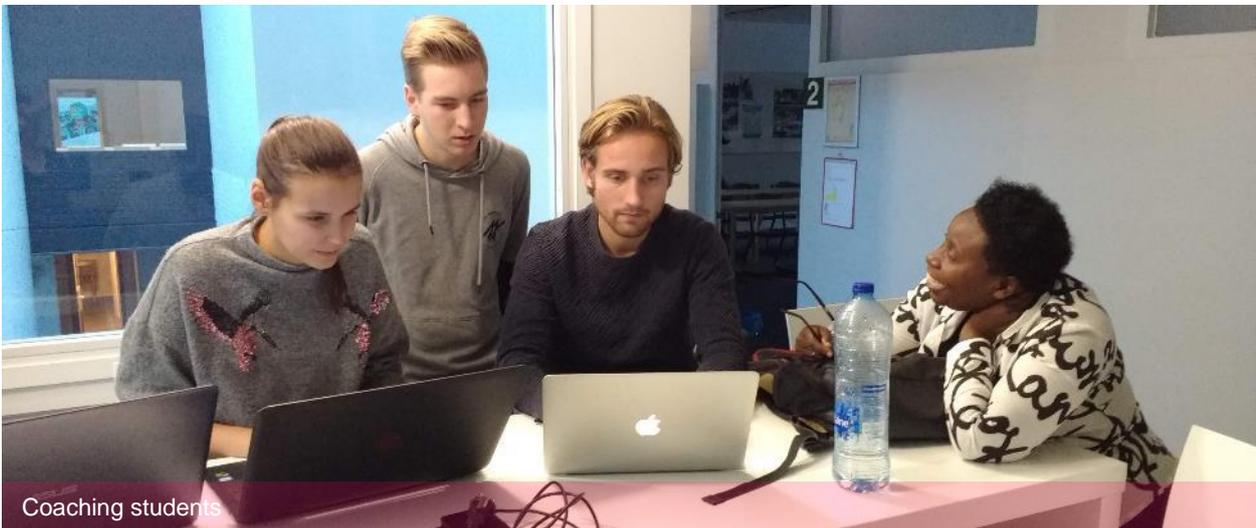
Speaker Sister Stella



Coaching student

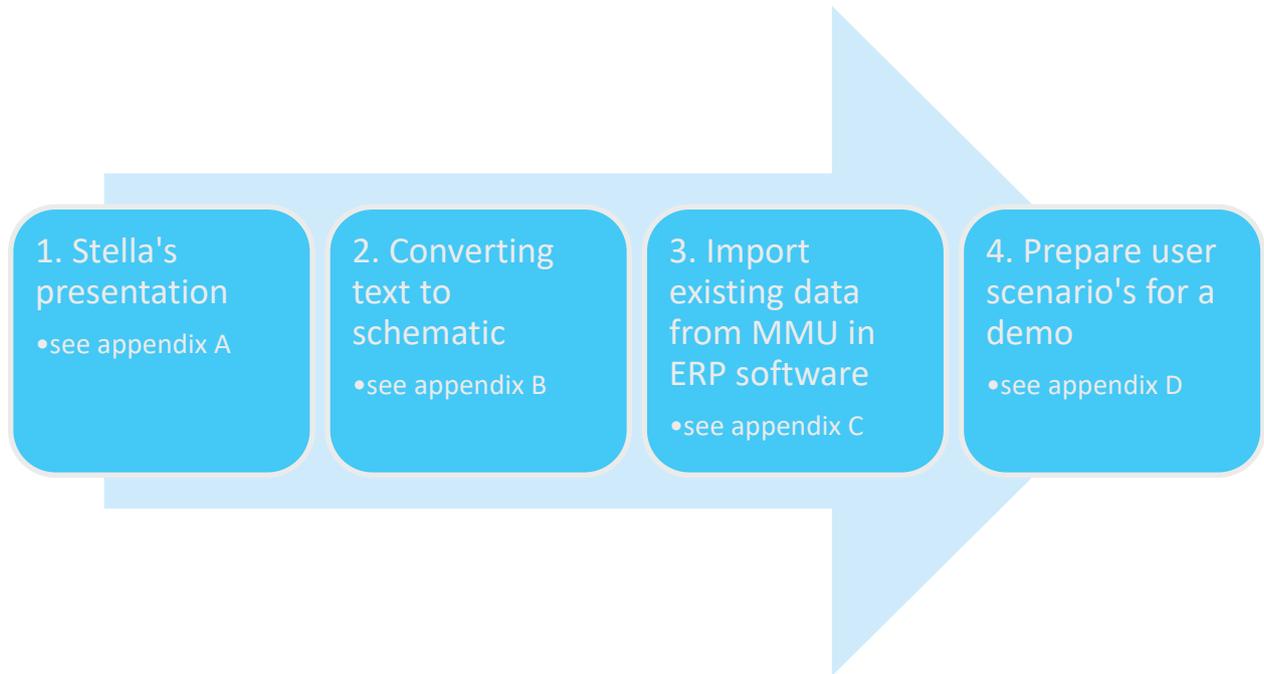


Coaching students





4 APPROACH



5 APPENDIX A – INPUT FROM SISTER STELLA



INTRODUCTION

Name: Rev Sr. Stella Kanyunyuzi

Organization: Mountains of the Moon University

Position/Title: University Bursar

Qualifications: BBA-Accounting, ACCA, MBA (on going)

Interests: Socializing and Adventuring Nature

MMU OUTLOOK

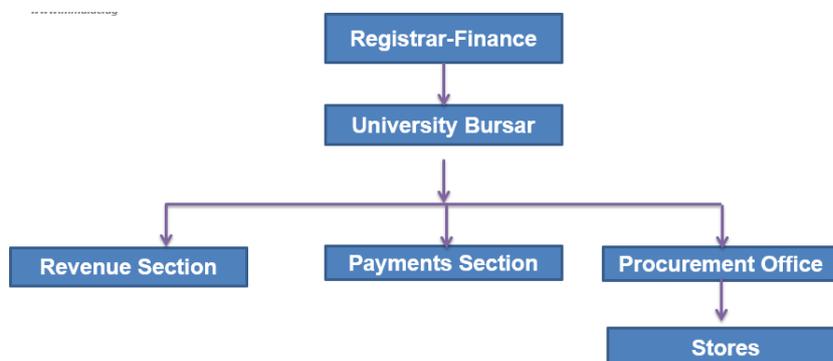
- MMU was founded in 2005 as a community university
- Located in Fort Portal Town on the Slopes of Mount Rwenzori, South West, Uganda
- MMU has its main campus at Lake Saka, facing the Rwenzori Mountain Ranges with beautiful sceneries and a Cool sunny weather across the year.
- MMU recently received a charter in Dec 2017
- Recently following a presidential directive MMU has been transformed into a public university
- Currently MMU has 5 schools (School of Business and Management Studies, School of Agriculture and Environmental Sciences, School of Health Sciences, Nursing and Midwifery, School of Education, School of Informatics and Computing.
- With current enrollment of over 2000 students
- 19 Undergraduate and 10 Postgraduate programs

FINANCE DEPARTMENT AT A GLANCE

- Financial Planning and Management of MMU is guided by the financial policy manual
- which is issued with the approval and authority of the Governing Council.
- It spells out the line of authority as far as financial mgmt is concerned.
- The Policy spells out the basis of accounting, the recommended chart of accounts showing how to deal with bank accounts, assets, liabilities, income, expense, and equity accounts.
- It also spells out the financial guide lines, the duties and responsibilities of all financial officials, the various types of reports necessary.
- The policy enables the Finance Department to manage the day-to-day financial affairs of the University.



The Finance Department Structure



The revenue section

- Responsible for issuing receipts to students after making payments of tuition in the Bank.
- They also receive any monies paid directly to the University in form of cash
- This section is currently manned by 3 members of staff (Accounts Assistants)
- One in charge of Postgraduate students,
- The other in charge of the school of business and management studies
- The third in charge of other schools

The Payments Section

- Responsible for making all payments after all approvals from responsible authorities
- Receiving requisition from members of staff, material suppliers and all service providers.
- Implementing and monitoring the annual budget
- Responsible for project funds management and accountability
- Payroll management
- Conducting bank reconciliations
- Managing other university statutory obligations like submitting tax returns, paying taxes and NSSF
- Currently manned by 2 members of staff (Accounts Assistants)

The Procurement Section

- Currently managed by one member of staff alongside a standing procurement committee
- The procurement officer prepares an annual procurement plan following the approved annual budget
- Receives procurement requisitions from the user department
- Checks the procurement plan to ensure the items requested are budgeted for
- Identifies the procurement method depending on the need
- Raises a local purchase order
- Receives procured goods and services with their invoices
- Forwards the invoice to finance-payment section to plan for their payment
- Reconciles with finance – payment section on the suppliers paid and those pending to ensure correct records

The Stores Section

- Currently the stores section receives items procured. Records them and issues them out to various schools/departments. The system is manually generated using the stores ledger. Information is then entered in quick books accounting package which is not linked with finance.
- Ensures the right qualities and quantities of material delivered by different suppliers
- Liaise with different prequalified suppliers
- Update and manage the Asset register of the university
- Monitor stock usage to avoid stock outs

PLANNING AND BUDGETING PROCESS

- The University conducts a rigorous budgeting process that involves all stakeholders
- The university conducts a bottom up budgeting process
- Each section, department, school, is required to make its own budget.
- Departmental and school budgets are then incorporates in the university master budget. This budget is then discussed in a stakeholder budget conference to come up with the final annual university master budget which is then managed and controlled by the finance department.
- The budgeting process is a consultative process that involves a lot of time at MMU

KEY CHALLENGES

- Lack of an automated system to link the finance department with other departments in the two campuses leads to unnecessary delays and errors. Finance has to keep reconciling manually the students who have registered from the academic registrar there is no automatic system
- Manual system results into many errors and poor record keeping.
- Rely on QuickBooks accounting package which limited. The package has no option for generating a receipt after entering the fees paid. The system does not generate the payroll. These are done manually.
- There are normally long lines of students clearing fees at the last minute at the time of exams. Students pay at the last minute giving reasons of having no money so people in finance have to work extra hours at exam time

- The system does not automatically control the budget that is to show the accountant the amount left on the vote, this is done manually by creating a report to find out the amount on the vote which is not done on time leading to over spending on some votes
- Liquidity challenges especially during the recess. In most case the expenditure exceed the revenue leading to many things not done in time, payments accountants meet twice a week to prioritize items to pay which is not easy
- At present the procurement and Stores are not linked with finance for effective monitoring of the budgets.
- The local purchase order (LPO) is manually generated. There is need to have computer generated local purchase orders which are then linked directly with finance and stores to update the suppliers with other subsequent transactions.
- There is need for procurement officer to be given rights to view suppliers' statements in the system in order to follow up the unpaid invoices.
- It's difficult to monitor stock usage at school/departmental level
- Project accounts are different from MMU accounts, different year end, and different systems. Reports are done according to the need of the donor not according to the University systems
- Different year ends and systems makes it difficult to consolidate them with the University accounts to make university reports for the university management
- Project accounts are not automatically linked with University accounts; information is manually entered in the system. Reconciliations are not done in time to ensure project accounts in the university system matches with the project accounts.
- The head finance is not involved in the running of the projects; only trust those in management of projects for work done.

CONCLUSION

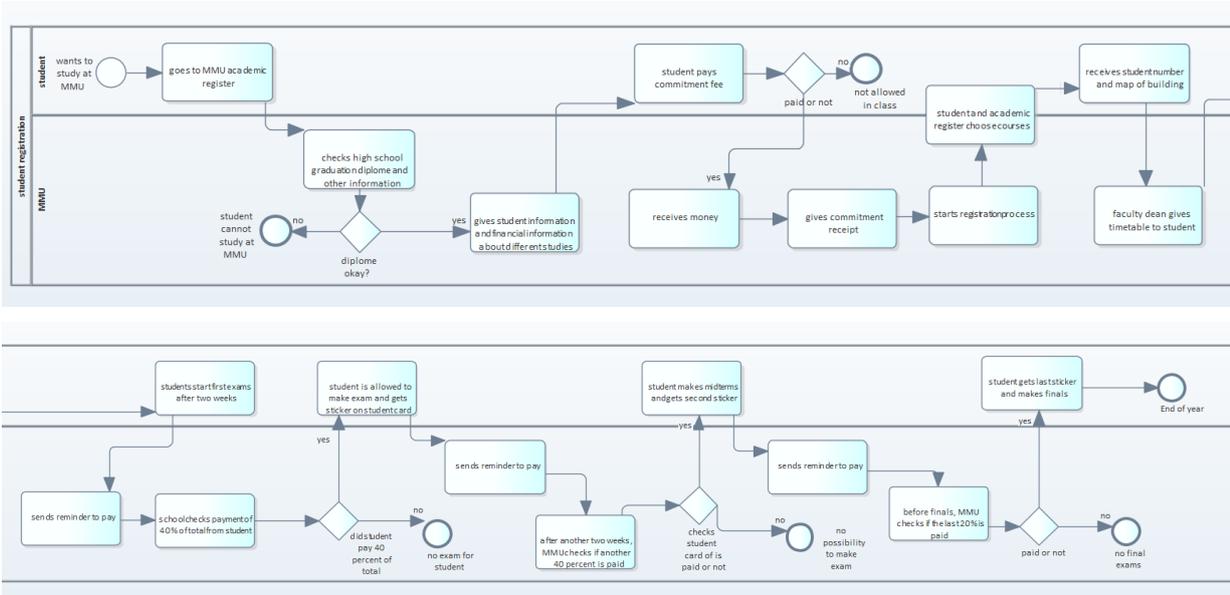
- There is need to create an accounting system that is user tailored that links the finance with other departments. This system should be able to extract information from other departments for instance the Registrar's Office, the university bankers.
- Timely data processing by other departments since the finance departments relies on records from other departments
- Need to create a projects section to manage the project accounts and integrate them with the University master accounting system
- Need to diversify the revenue sources of the university in order to reduce liquidity shortfalls during recess.



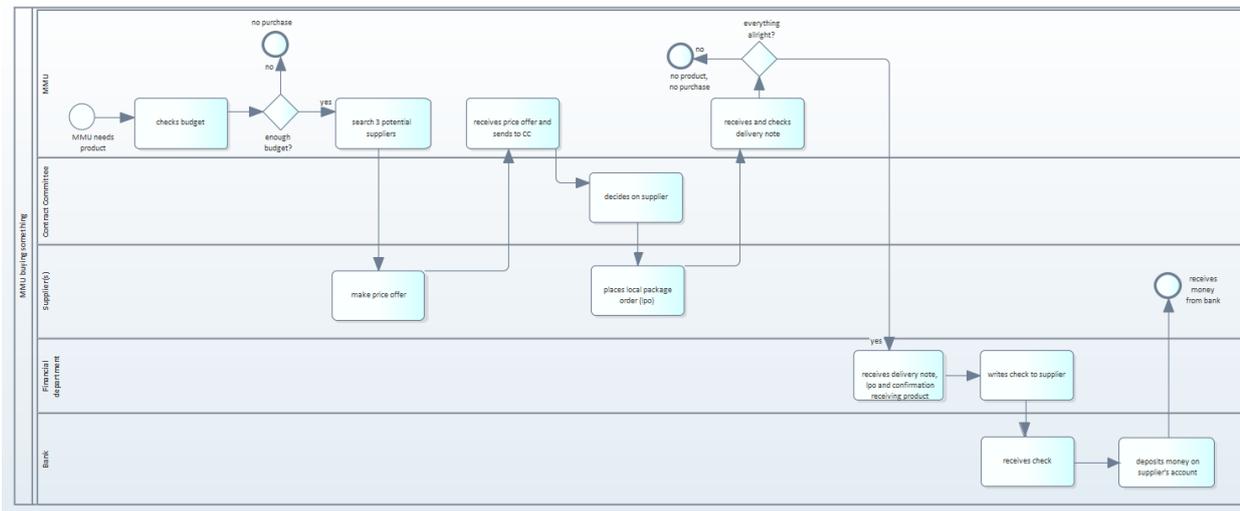
6 APPENDIX B – CONVERTING STORIES TO SCHEMATIC

Business Process Modelling Notation (BPMN). 2 examples are worked out. This step is necessary to implement a business process into a software solution.

STUDENT REGISTRATION



PURCHASE



7 APPENDIX C – IMPORTING EXISTING DATA

The current software solutions in MMU are not integrated. Examples:

- The student administration master file is an Excel document.
- The stock is a PHP web application programmed by an intern.
- The accounting is done with Quickbooks.
- The follow-up of monthly payments happens with exports in Quickbooks and manual counting in Excel sheets.

Odoo is a software solution where everything for a business is connected. They call it Enterprise Resource Software (ERP). There is an educational version available that runs 10 months for free in the cloud; perfect test environment. The startup screen for all different departments can have this look:

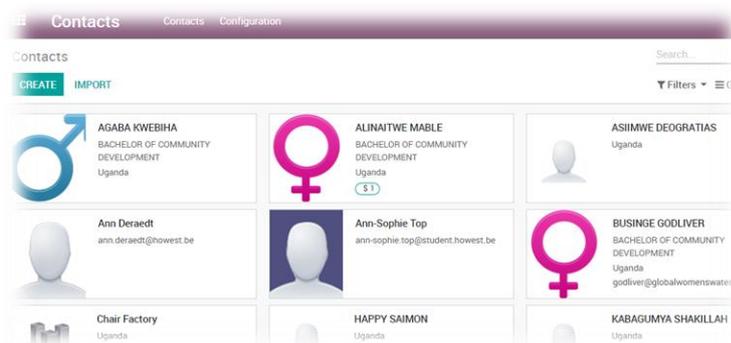


The available data in Excel is analyzed and fields are converted to fields of Odoo:

Input students main document

MOUNTAINS OF THE MOON UNIVERSITY									
SCHOOL OF BUSINESS AND MANAGEMENT STUDIES									
REGISTERED STUDENTS OF SCHOOL OF SCHOOL OF BUSINESS AND MANAGEMENT STUDIES									
SEMESTER ONE 2016/2017 ACADEMIC YEAR									
PUBLIC ADMINISTRATION DEPARTMENT									
BACHELOR OF COMMUNITY DEVELOPMENT - AUGUST INTAKE 2016/2017 ACADEMIC YEAR									
NO	NAME	REGISTRATION NUMBER	SEX	STUDY OPTION	NATIONALITY	DISTRICT	DATE OF BIRTH	TEL.NO	EMAIL ADDRESS
1	KAGORO HUSEN	2016/U/AMU/BCD/001	M	DAY	UGANDAN	KYENJOJO	5/01/1995	750554806	
2	MUSIME DIANA	2016/U/AMU/BCD/002	F	WEEKEND	UGANDAN	KABAROLE	24/08/1981	700821094 / 0777878583	dianamusime@yahoo.com
3	BUSINGE GODLIVER	2016/U/AMU/BCD/003	F	WEEKEND	UGANDAN	KABAROLE	7/04/1986	774210307	godliver@globalwomenwater.com
4	KYARIKUNDA ANGELLA	2016/U/AMU/BCD/004	F	WEEKEND	UGANDAN	KANUNGU	25/05/1992	772467150	angellakununda@gmail.com
5	BYAMUKAMA LAUBEN	2016/U/AMU/BCD/005	F	DAY	UGANDAN	KYENJOJO	24/04/1992	773902874	
6	KAJOBE RACHEAL	2016/U/AMU/BCD/006	F	WEEKEND	UGANDAN	KABAROLE	30/7/1994	788321437	kajobe34@gmail.com
7	KANSIME AGNES	2016/U/AMU/BCD/007	F	WEEKEND	UGANDAN	KABAROLE	20/11/1992	784045064	
8	MASIKA ROSELYN	2016/U/AMU/BCD/008	F	WEEKEND	UGANDAN	KASESE	20/5/1995	789716973	
9	NGABIRWE PROSPER	2016/U/AMU/BCD/009	M	WEEKEND	UGANDAN	IBANDA	1/07/1994	781261016	ngabirweprosper@gmail.com

Output students (Contacts)



Input HRM Excel file with different tabs

	A	B	C	D	E	F	G
		Names	Title	Basic	Allowance	Gross	PAYE
1		Prof.Kasenene John	Vice Chancellor	4.180.000		4.180.000	1.150.000
2		Dr. Kagambe Edmond	Deputy Vice Chancellor	3.100.000	800.000	3.900.000	1.010.000
3		Mr. Kakungulu Yunusu	Registrar Finance	2.073.321		2.073.321	523.000
4		Mr. Kisubi Robert	Assistant Academic Reg.	1.175.151		1.175.151	251.000
5		Ms. Nyakahuma Grace	Ass.Reg.Acad.	1.246.722	838.000	2.084.722	551.000
6		Ms.Kugonza Gorreti	Councillor	1.246.722	100.000	1.346.722	306.000
7		Sr. Stella Kanyunyuzi	Senior Accountant	1.175.151		1.175.151	251.000
8		Miss Tibisiinwa Irene	Accounts Assistant	650.900		650.900	160.000
9		Miss.Kyaligonza Linia Diana	Admin Ass.PRO	650.900		650.900	97.200
10		Mr Kasaija Julius	Estates Manager	1.246.722		1.246.722	276.000
11		Mr Kasamba Flavia	Admin Assistant	650.900		650.900	97.200

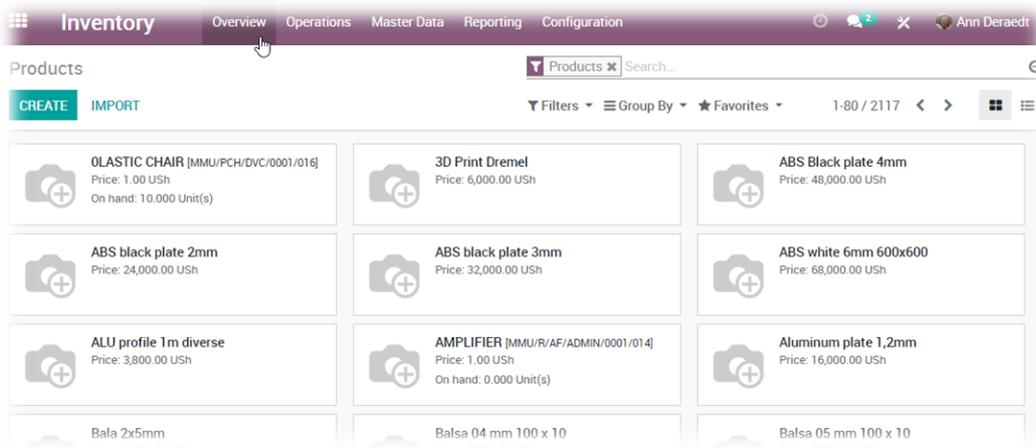
Output Employees

The screenshot shows a web application interface for managing employees. It features a navigation menu with 'Employees', 'Contracts', 'Departments', and 'Configuration'. The main content area displays a list of employees grouped into three departments: Academic, Admin, and Teaching. Each employee entry includes a profile picture, name, title, and office location. For example, in the Academic department, there is Ann Deraedt, Academic, School of Agricultural Sciences. In the Admin department, there are Agonzewa Robinah, Ahebwba Christopher, Junior Ali, Sr. Stella Kanyunyuzi, and Alija Ronald. In the Teaching department, there are Bunhizi Rose Mary, Kabazira Dinah, Katende David, Miss Kansime Harriet, and Miss Kyaligonza Linia Diana.

Input Inventory export from Web application to excel list

External ID	Name	Product Type	Internal Reference	Cost	sale description
MMU_0001	WOODEN TABLE	Storable Product	MMI/TBW/PDU/0002/	250000	user = STAFF ADMINISTRATION - PDU 2015-05-20
MMU_0002	SOLLATE VOLTAGE	Storable Product	MMU /R/SVS/ADMIN/	500000	user = STAFF SCHOOL OF BUSINESS 2014-01-01
MMU_0003	laminator	Storable Product	MMU 01/05	150000	user = staff ADMINISTRATION - FINANCE 2005-01-01
MMU_0004	TEST TUBE	Storable Product	MMU/ VLIR/SAES/T/0055/014		user = STAFF SCHOOL OF APPLIED SCIENCES 2014-01-01
MMU_0005	TEST TUBE	Storable Product	MMU/ VLIR/SAES/T/0101/014		user = STAFF SCHOOL OF APPLIED SCIENCES 2014-01-04
MMU_0006	TEST TUBE	Storable Product	MMU/VLIR/SAES/T/0002/014		user = STAFF SCHOOL OF APPLIED SCIENCES 2014-01-01
MMU_0007	WOODEN TABLE	Storable Product	MMU/01/07	150000	user = STUDENT POST GRADUATE STUDIES & RESEARCH 2007-01-01
MMU_0008	PLASTIC TABLE	Storable Product	MMU/019/09	60000	user = STAFF POST GRADUATE STUDIES & RESEARCH 2009-01-01
MMU_0009	PLASTIC TABLE	Storable Product	MMU/031/09	60000	user = POST GRADUATE STUDIES & RESEARCH 2009-01-01
MMU_0010	WOODEN TABLE	Storable Product	MMU/04/07	150000	user = STUDENT POST GRADUATE STUDIES & RESEARCH 2007-01-01
MMU_0011	WOODEN CHAIR	Storable Product	MMU/06/05	50000	user = STAFF CADS 2005-01-01
MMU_0012	WOODEN CHAIR	Storable Product	MMU/07/05	50000	user = STAFF CADS 2005-01-01
MMU_0013	PLASTIC CHAIR	Storable Product	MMU/198/09	85000	user = STUDENT POST GRADUATE STUDIES & RESEARCH 2009-01-01
MMU_0014	WOODEN STOOL	Storable Product	MMU/26/06	20000	user = STAFF CADS 2006-01-01
MMU_0015	OFFICE CHAIR	Storable Product	MMU/338/09	60000	user = STAFF SHS CADS 2009-01-01
MMU_0016	PROJECTOR	Storable Product	MMU/BM/VLIR/0001/	1420000	user = STAFF VLIR OFFICE 2013-01-01
MMU_0017	CUP BOARD	Storable Product	MMU/CB/RAC/0001/C	300000	user = STAFF ADMINISTRATION - RAC 2010-01-01
MMU_0018	WOODEN CUPBOARD	Storable Product	MMU/CB/RAC/0001/C	150000	user = STAFF ADMINISTRATION - RAC 2008-01-01

Output Master data



8 APPENDIX D – DEMO BASED ON USER SCENARIO'S

To test a procedure, you take a special scenario (example a student is registering in Nursering), you follow the BPMN and you do the actions in the new software, Odoo.

You start from the "AS IT" situation and you end with an "HAS TO BE". Example: the naming of the ODOO objects are business words, not educational contacts. Contacts instead of students, Product categories instead of education program.

Student Sam Volckaert made a screencast for edu-howestmmu.odoo.com :

<https://youtu.be/iChK7hAikew>