
GROUP 1 USE CASE



AGENDA

- A. Introduction
- B. Use case 1: Rock Retail SE
 - 1. Case introduction
 - 2. Solution Task I
 - 3. Solution Task II
 - 1. Financial statement analysis
 - 2. Approach & methodology
 - 3. Data analysis
 - 4. Decision template
 - 5. Automatization potential
 - 4. Project management
- C. Use case 2: SAP Dashboard

THE TEAM - GROUP 1



Moritz Jäger (4922623)
moritz.jaeger@fs-students.de



Nicolas Kepper (8348855)
nicolas.kepper@fs-students.de



Lars Wrede (8464471)
lars.wrede@fs-students.de



Dennis Blaufuss (8458109)
dennis_simon_merlin.blaufuss@fs-students.de



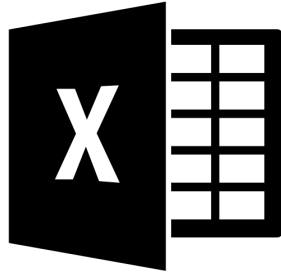
Philipp Voit (8453447)
philipp.voit@fs-students.de

A low-angle, upward-looking photograph of modern skyscrapers with glass and metal facades, set against a blue sky with wispy white clouds. The perspective creates a sense of height and architectural scale.

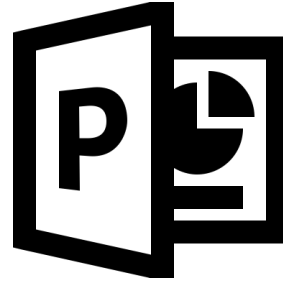
CASE 1



THE TOOLS



Excel



PowerPoint

THE CLIENT – ROCK RETAIL



Unique clothes like you are!

- Young start-up
- Manufacturer and retailer of private-label apparel in terms of sales including fashion brands like: Frankfurt School, Fancy and **Unique**.
- Multinational retail company (**Frankfurt Stock Exchange**)

- Headquarter near Frankfurt (GER) with currently 80 employees
- 2 subsidiaries in Paris (FR) and London (GB) as they are important fashion hubs



UNIQUE – THE PILLAR BRAND

End-to-end business model:

Procurement



Every day clothing (high quality, high functional material)

Design



International designer team on the cutting edge of clothing design

Retail



Sold in 5 shops located in different regions of Germany

CUSTOMER RELATIONS

The management of Rock Retail tends to **strategically optimize** their business processes. One of their topics is the “**Revenue stream**” which includes customer relationship and customers’ account receivables.



- Customers are allowed **30 days credit** in general (credit sales), with exceptions for a longer or shorter payment term.
- Rock Retail offers an early **discount of 0.5%** settlement within a 10 days payment.

A low-angle, upward-looking photograph of modern skyscrapers with glass and metal facades, set against a blue sky with wispy white clouds. The perspective creates a sense of height and architectural grandeur.

--- TASK I



GENERAL RECONCILIATION IN ACCOUNTING

Most local GAAP's contain doubly entry accounting

- Double entry accounting is already a form of reconciliation
- Example: Selling a hoodie for 119€ (19% VAT included), payment in 30 days

AR	to	Revenue	100€
		VAT	19€

- The structure in SAP is different, but the methodology stays the same:

BELNR	BUZEI	HKONT	DMBTR	SHKZG
0100000001	001	1000000404	119.00	S
0100000001	002	3000000420	100.00	H
0100000001	003	4000000069	19.00	H

- Note: some actions require special reconciliation

RECONCILIATION: REVENUE (NET) WITH AR

Direct reconciliation as given in the task is not possible



Revenue and net revenue are two different things (Recall how discounts are booked)



Income Statement is period based while Balance Sheet is date based



AR does not include the cashflows: direct cash payment & AR cash payment



AR includes VAT payments but revenue doesn't (see example before)



Impaired AR's may need to be corrected via (specific) allowance for bad loans

A low-angle, upward-looking photograph of modern skyscrapers with glass and metal facades, set against a blue sky with wispy white clouds. The perspective creates a sense of height and architectural scale.

--- TASK II



FINANCIAL STATEMENT ANALYSIS

Looking at the balance sheet the following observations can be made:

Pro

- Strong liquidity due to high CCE
- Healthy ratio of AR + Cash vs AP
- Very high ratio of Equity to Liabilities

Contra

- AR/AP payment terms seem not aligned
- Excessive inventory

Balance Sheet of Rock Retail SE					
At October 31 2021					
€ in thousands					
ASSETS			Liabilities		
Non-Current Assets		4.848	Equity		10.511
<i>Intangible Assets</i>		2.348	Shared Capital	9.000	
Goodwill	2.348		Retained Earnings	200	
<i>Tangible Assets</i>		2.500	Profit of current year	1.311	
Property Plant and Equipment	2.500				
Current Assets		6.084	Non Current Liabilities		178
Inventories	2.800		Provisions for pensions	108	
Account Receivables	1.834		Provisions for other risks	70	
Cash and cash equivalents	1.450				
			Current Liabilities		243
			Account payables	213	
			Other financial liabilities	30	
Total Assets		10.932	Total Liabilities		10.932

* Profit

= 1.226

FINANCIAL STATEMENT ANALYSIS

Looking at the income statement the following observations can be made:

Pro

- Strong margins as profit is above 30% of the total revenue
- Very few customers take advantage of the discount

Contra

- Error in calculation of operating expenses
- High rental expenses
- Interest payments seem avoidable

Statement of Income of Rock Retail SE					
At October 31 2021					
€ in thousands					
Expenses			Revenues		
Operating expenses			Operating sales/ revenues		
Cost of Goods Sold	1.766		Net sales	3.532	
Rent	245		Discount	- 4	
Depreciation	286				
Telephone costs	25				
Distribution costs	85				
Other expenses			Other income		
Interest expenses	98		Interest income	248	
Marketing expenses	45				
Profit of the year		1.311			
Total		3.776	Total		3.776

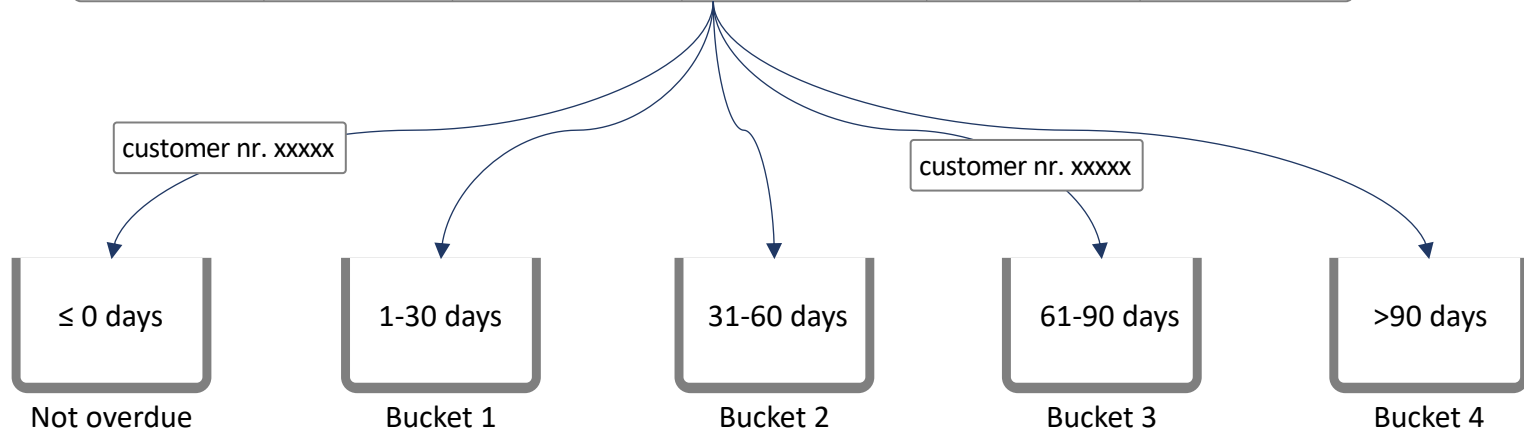
*Operating expenses = 2.407
 Profit = 1.226

APPROACH & METHODOLOGY

Aging analysis

- Open_item_list as basis for the clustering
- Assignment of a bucket depending on the due date as different customers have different payment terms
- If payment is not received within the time frame of a bucket, the invoice automatically gets moved to the next bucket

Customer	Invoice date	Invoice amount	Open amount	Due date	Days overdue
...



APPROACH & METHODOLOGY

Risk score based on current customer data

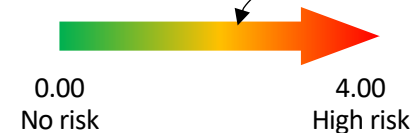
- Assesment in combination with historical data not possible as we only have received payments and not defaulted ARs
Note: historical data as a multiplier of the current risk score would be recommendable

Example:



Risk score: $0 \times 0 + 0.2 \times 1 + 0 \times 2 + 0.8 \times 3 + 0 \times 4 = 3.6$

- 0 being no risk at all and 4 with a high certainty of default
- The risk score is a dynamic value (if days pass and the bucket changes, the risk score increases as well)



APPROACH & METHODOLOGY

Punctuality score on historic customer data

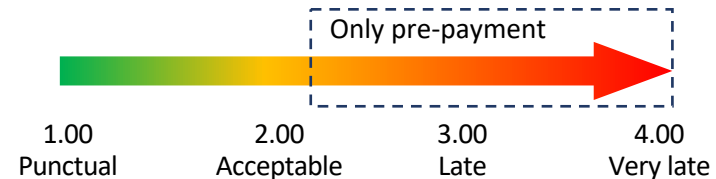
- Depending on the punctuality of historic payments of the customers we create a score
- This score can be used for decisions regarding payment terms

Example:



Punctuality score: $0.2 \times 1 + 0 \times 2 + 0 \times 3 + 0.8 \times 4 = 2.4$

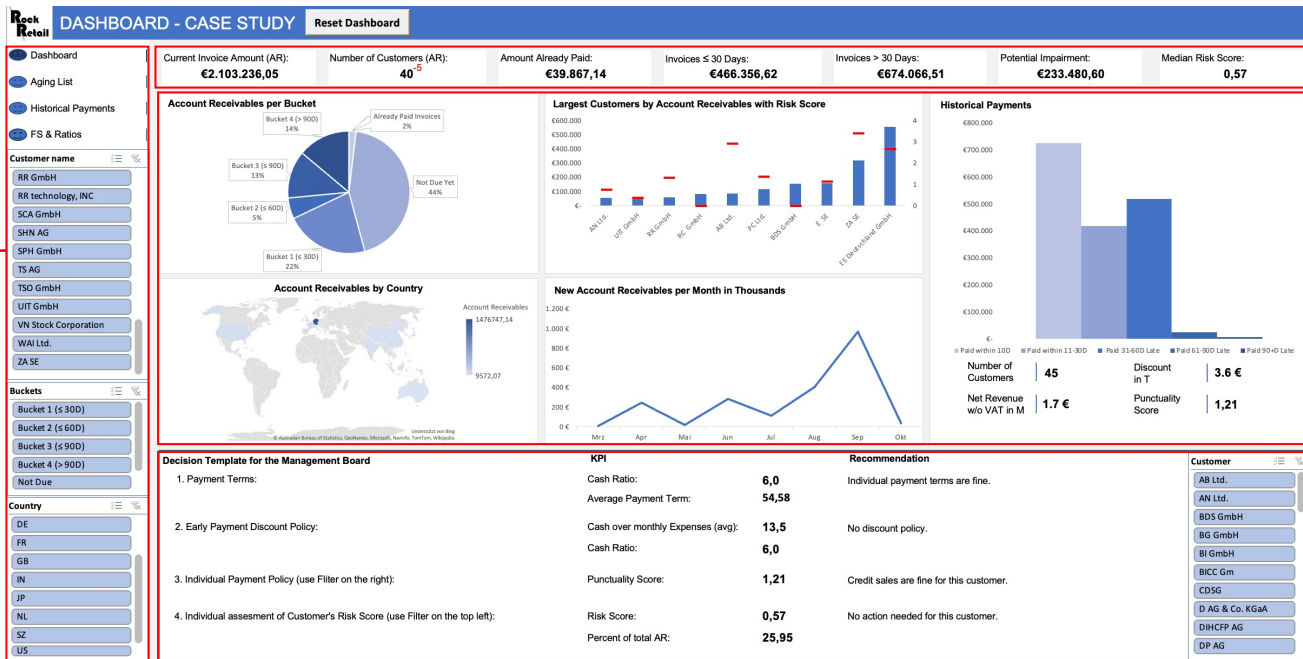
- 1 being customers that pay punctual, 4 customers that pay way to late
- A customer with a score over 2.00 should potentially not get credit sales



DATA ANALYSIS

Showcase of the Excel dashboard

Filter



Key figures

Tables

Decision template

DATA ANALYSIS

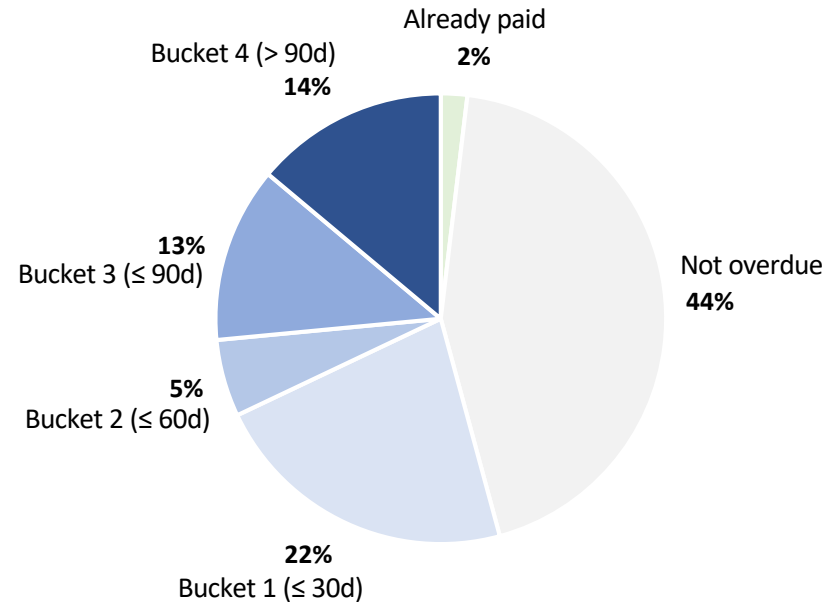
Accounts receivable per bucket

Use:

- Gives a quick overview how the receivables are distributed
- The darker the colour the higher the default risk and hence impairment rate

Analysis:

- Almost half of the ARs are in the no risk area
- Nearly 30% is in an dangerous area of default
- Size of last bucket is too big (High risk!)



DATA ANALYSIS

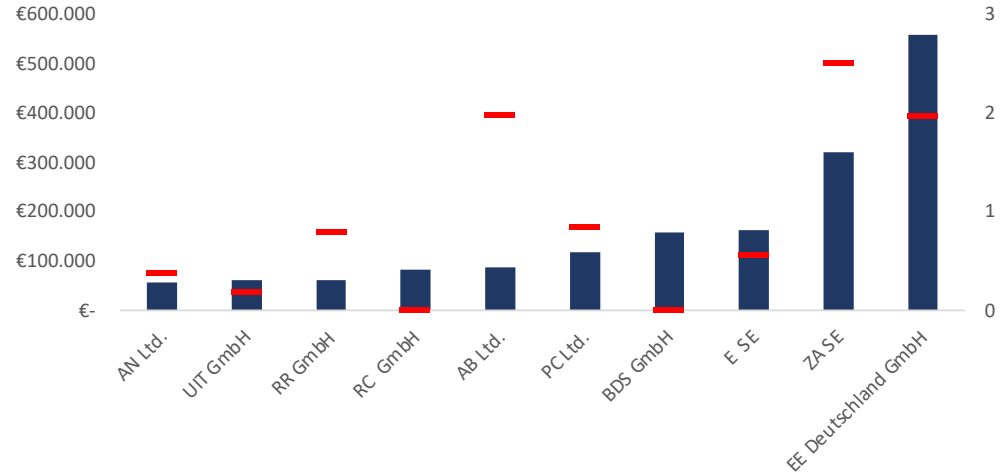
Largest customers by account receivables with risk score

Use:

- Shows which clients have the highest outstanding amounts in combination with their risk score
- Management can make targeted follow-ups

Analysis:

- One client “EE Deutschland GmbH” is responsible for nearly 30% of the account receivables with a risk score close to 2



DATA ANALYSIS

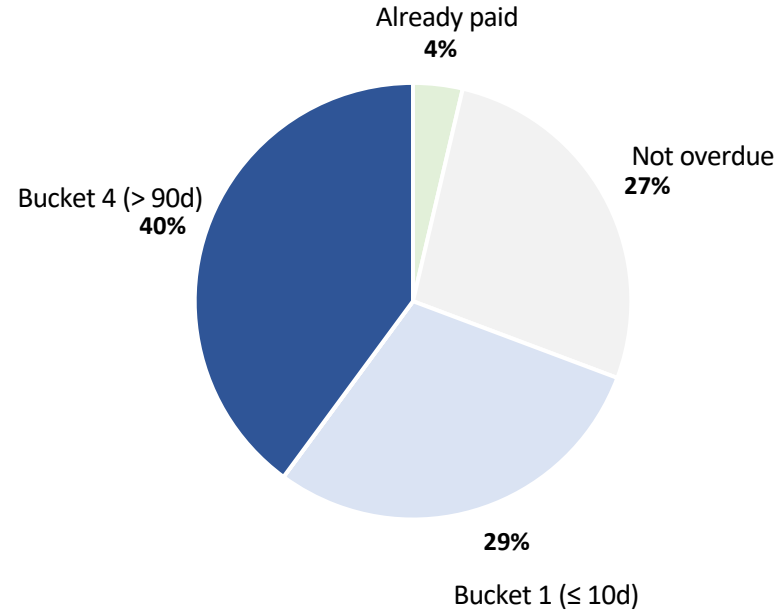
Deep Dive into EE Deutschland GmbH - Account receivables per Bucket

Use:

- If one finds high dependencies or irregularities, the management can have a deeper look into the customers data

Analysis:

- This client has 40% of the receivables in Bucket 4 which means it is at high risk of default
- Current risk score is 1.96



DATA ANALYSIS

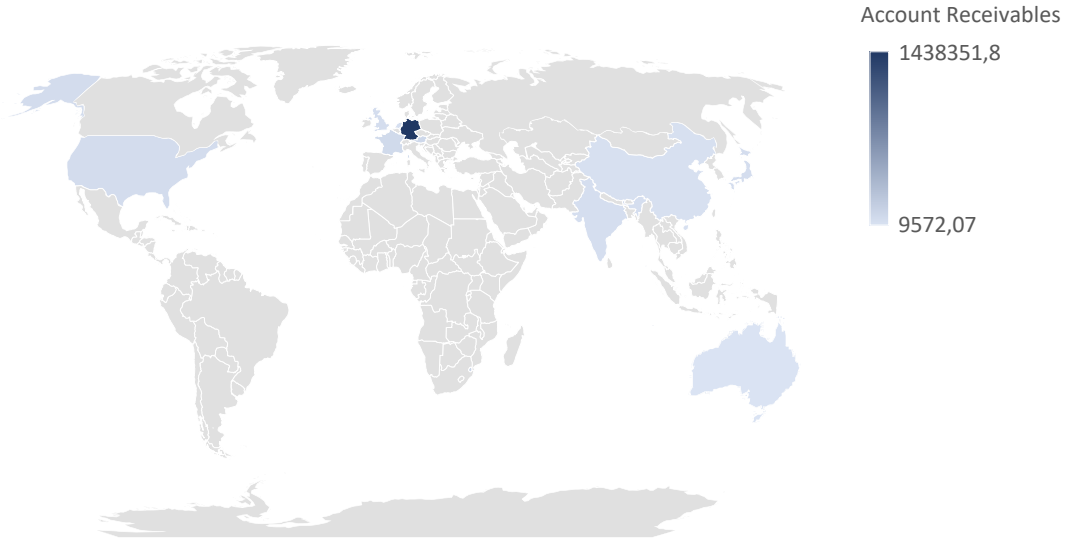
Account receivables by country

Use:

- Gives a quick overview from which countries the different customers are
- Different countries have different tax and accounting laws

Analysis:

- Mostly German customers
- Rest of the countries have minor amounts of accounts receivables
- Main focus should therefore be on the German market



Unterstützt von Bing
© Australian Bureau of Statistics, GeoNames, Microsoft, Navinfo, TomTom, Wikipedia

DATA ANALYSIS

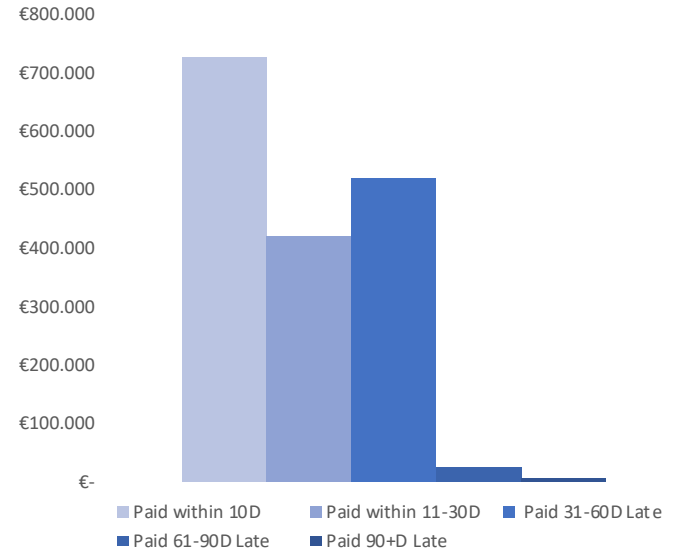
Historical payments by clusters

Use:

- Gives an overview within which time frame customers paid for their goods
- Visualizes effectiveness of discounts

Analysis:

- More then 70% paid within 30 days
- 40% took advantage of the 0.5% discount
- The lost profit due to the discount is negligible (0.2% of total revenue)



DATA ANALYSIS

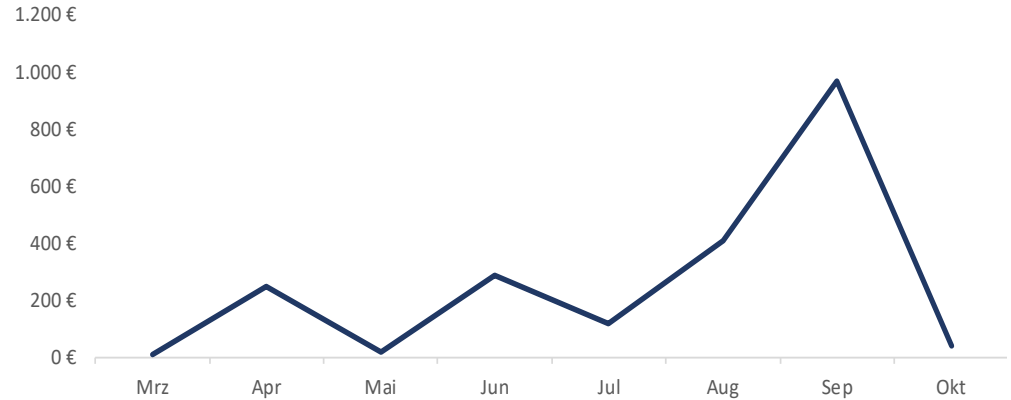
New account receivables per month (in thousands)

Use:

- Evolution of the account receivables over the periods

Analysis:

- Steep incline over the months Aug & Sep
- 3 months with nearly 0 goods sold (March, May, October)
- Further investigation regarding fluctuation necessary



DECISION TEMPLATE

Management decision matrix

	1. Payment terms	2. Payment discount	3. Credit sales	4. High risk customers
Condition	Cash ratio below threshold 2	Cash over monthly expenses below 3 AND cash ratio below 2	Punctuality score above threshold 2	Risk score above 2 and share of total AR's above 5%
Recommendation	Fix payment terms to 30 days	Activate discount policy	Prohibit credit sales for unpunctual customer	Contact and further inspection of customer (e. g. debt restructuring)
Advantages	Increases mid term liquidity	Increases short term liquidity	Reduces default risk	Increases recoverability of outstanding amount
Disadvantages	Potentially damages customer relationship	Decreases profit	Potentially lost sales	Requires higher effort

DECISION TEMPLATE

General recommendations



1. Implement controls

- For reporting purposes and to prevent errors (reconciliation)
- To increase usability in the accounting system



2. Keep an eye on bad debt and overdue receivables

- Update buckets > 30 days for lump-sum allowances based on historical payment data
- Monitor changes and potential impact from impairments
- Implement distress indicators for individually significant customers early in the process



3. Gather more data to include more meaningful KPIs

- Add potential impacts from expected credit loss
- Consider modelling impact from material events and country specific risks
- Inspect alternative option to fulfil cash ratios such as factoring, credit lines, etc.

AUTOMATIZATION POTENTIAL

Outlook: Optimizing the analysis on a regular basis



1. Status quo

- Dashboard is fully automated (with mentioned Excel restrictions)
- Input data sheets allow new inputs -> will be automatically added to pivot calculations



2. Biggest problems

- Data transfer from client ERP to Excel
- Data interface & structure in client ERP is unknown
- Excel input sheets have a very strict ruleset of formatting/structuring for given data



3. Solutions & Thoughts

- Excel Makro to transform ERP extraction data structure to desired one
- Optimally use a web-based application to not save and modify data locally

PROJECT MANAGEMENT

Focus on an agile workflow to maximise results



1. Reading and reviewing of the cases

- Understanding of the given data sources & structure
- Identification of To-Do's



2. Identifying strengths of the different group members

- Distribution of the tasks depending on the strengths of individual team members (more tech related, others with an accounting background, etc.)
- Individual working sprints for the assigned tasks



3. Continuous reviewing

- Due to the tight deadline, problems were discussed and solved immediately
- Consultation of different views on problems (tech, accounting, etc.)
- Major rework of critical parts as full group



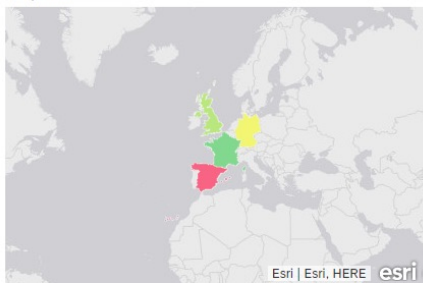
CASE 2: SAP DASHBOARD



SCREENSHOTS DASHBOARD

Employee Count

Europe View

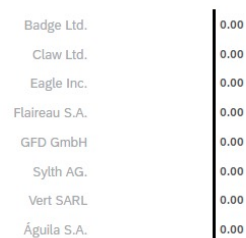


Employee Count

Australia View

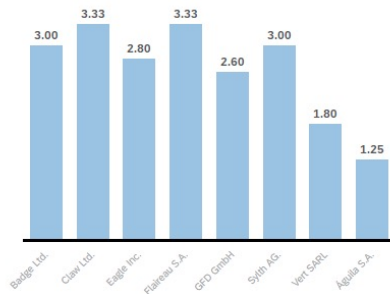


Employees going into Pension in the next 5 years



Employee Loyalty

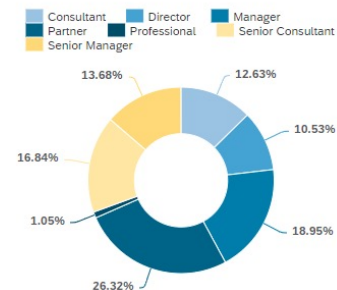
Average years working for company



Average years working for company

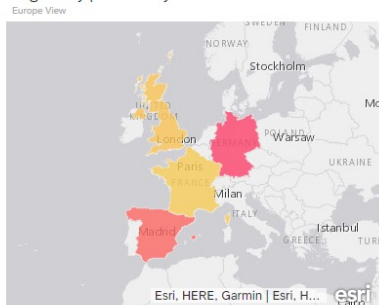


Distribution of positions worldwide



SCREENSHOTS DASHBOARD

Avg Salary per Country



Average Salary per Country

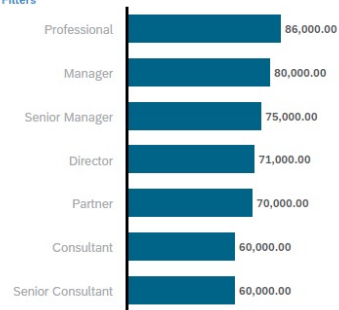


Total Salary paid by Company

	Salary
Badge Ltd.	305,000.00
Claw Ltd.	210,000.00
Eagle Inc.	300,000.00
Flaireau S.A.	205,000.00
GFD GmbH	405,000.00
Sylth AG.	80,000.00
Vert SARL	380,000.00
Águila S.A.	315,000.00

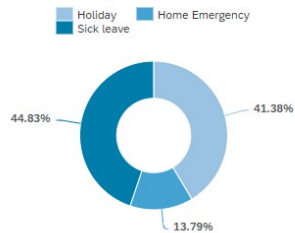
Avg Salary

2 Filters

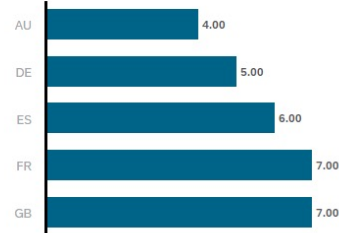


SCREENSHOTS DASHBOARD

Distribution of reasons for absence

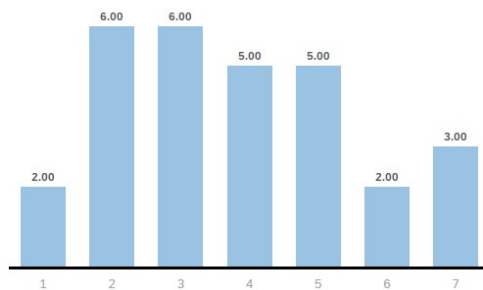


Absent days per country



Absent days per weekday

1 Filter



Sick days per Month

1 Filter

