

BRD - Initiatives CAR (Spartan)

Current Initiative CAR Form and Econ Analysis for both EMEA and NA:

<https://amazon.awsapps.com/workdocs/index.html#/folder/4bc420e38e82a07e9389bed785fe5f4bf41f5de4c669d68e296da9616c5ffa4c>

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Overview

Objectives

The Initiatives CAR excel macro needs to be deprecated and rebuilt on EinSight. The goal of the project would be to move Initiatives Capital Planning teams in both EMEA (Europe, Middle East and Africa) and NA (North America & ECCF) from offline CAR workflows to EinSight to allow versioning, save time spent in back and forth communication, reduce errors, and provide visibility into the current state of every Initiatives project. Moving the CAR workflows from offline excel to EinSight would help stakeholder teams that are involved in end to end processing of Initiative CARs such as Engineering Change Management (ECM), GIT(Global Initiatives Tracker), Capital Governance, and Post CAR support teams to use EinSight as the source for latest version of Initiatives CAR. A view needs to be built where GCP can track current projects, past projects, and search for projects based on different attributes and save search results in a view that can be accessed later. In NA Spartan tool would have to be part of Laminar long term but EMEA wants it to be a standalone tool.

In current state the Initiatives CAR has 4 tabs in NA: CAR form, cost detail, econ analysis, and benefit assumptions and 3 tabs in EMEA: CAR form, cost detail, and coupa CSV. As part of Spartan tool EMEA CARs will have 4 tabs when it is a sustainability initiative with CAR form, cost detail, econ analysis(optional) and sustainability and 3 tabs; CAR form, cost detail and econ analysis(optional) otherwise. Coupa CSV will be it's standalone tool on the platform and will be used by post CAR support team to generate Coupa CSV. Project requesters must be able to generate an export excel/CSV file that will be immutable and password protected. This will make users return to the Spartan tool to make edits and prevent offline edits

Coupa CSV will be it's standalone page as part of this project because it is used to generate the CSV file to be uploaded to Coupa. An administrative tool would also need to be developed through which existing lookup tables can be altered. This tool would only be available to GCP whose members can add additional sites, budget groups, car types, countries, currencies etc. Project requesters must only be able to view the projects they create and be able to transfer it to someone in certain situations.

EMEA will use the tool for buildout, initiatives, startup, and real estate and needs extra features on the tool such as dropdowns to select different project types, CAR types, CAR subtypes etc. Site code and the corresponding company code, location code, cost center, and local currency need to be mapped as part of the project

Essentially we would need to create two workflows to accommodate EMEA and NA CARs. The CAR form and cost detail tabs resemble the CAR form and cost detail tabs on SU CAR Automation Tool (SAT) and the backend code and architecture can be reused from SAT but the backend databases would need to be setup from scratch. New projects have slowed down and there will be a 25% YoY increase in Initiative CARs as per predictions and the current YoY increase in Initiative CARs is at 44.5% as of July 2022.

Background

In the last three years in NA an average of 345 Initiative CARs have been routed and fully approved and the total number of submissions exceed 500 projects a year. In EU alone an average of 370 CARs/year have been created in the last 3 years and total number of submissions across MENA and EU combined exceed 500 projects a year. The YoY increase for Initiative CARs can be expected to be around 20% in the next couple of years as new projects have slowed down due to economic and business reasons. In NA the inputs and outputs of the CAR form and econ analysis excel file are not stored in a database and retrieval of past project inputs is not supported in current state because the CAR form undergoes multiple revisions and the newest version is uploaded to SIM and tracking the changes for each version is a painful process however in EMEA the CAR form post approval has a lambda script that runs and extract the data from the CAR form to EU CAR DB. The CAR form excel file is filled out by project requesters and the current form does not have validations on each tab to maintain data integrity. In NA data resides in SIM and there is no database to track any inputs and GCP works with project requesters to gather all the inputs needed to complete the CAR form and whitepaper via email, chime, SIM, and meetings. This process is prone to manual errors and versioning is not maintained because the files reside on stakeholders' desktop. On average GCP spends somewhere between 2-4 hours across multiple days in getting inputs from project requester per project and this can be reduced to an average of 30 minutes by moving the excel macro to EinSight.

The CARs must meet certain criteria to be submitted for L10 review but 80-85% of CAR forms miss critical information such as 3 Year Net Present Value (NPV), YoY improvement in cost, and detailed calculation in econ analysis.

Business Drivers and Project Tenets

The core tenets for this project are efficiency, workflow automation, and data quality & integrity

EFFICIENCY

The current CAR form does not store information in a database and there are no data validations on required fields in NA but for EMEA there is a connection between CAR forms and the CAR DB. It requires a manual upload of the file on a ShareDrive but then there is an automated data pull from CAR forms. In NA and EMEA project requesters don't fill the required fields in 80% and 20% of projects respectively resulting in back and forth communication between project requester and GCP that can take anywhere from 2-4 hours per project. Capital Planning has to reach out to Project requester and gather inputs which is a manual, time-consuming, and erroneous process. The inconsistency in information results in delay for timely funding of the project. One big advantage of moving to EinSight is that stakeholders will always get the latest version of the CAR form thus increasing efficiency and reducing inconsistency. The automation also increases visibility into the project and would reduce the current SLA times for all teams involved.

WORKFLOW AUTOMATION

There is no central repository of information for all the details for an Initiatives project and applicable documents such as whitepaper, CAR Form, benefits of project are all added as attachments on SIM in NA but EMEA does not use SIM for Initiatives CAR. There is no versioning feature on SIM hence the documents are outdated because stakeholders often change inputs and the most updated document can reside on a stakeholders' desktop resulting in delays to routing CAR for leadership approval. Every business unit operates differently and missing information means more work for Capital Planning and there are multiple whitepaper templates for different types of funding needed. The Initiatives CAR Automation on EinSight can improve this process by streamlining the workflow to EinSight where a Project Requester can submit a CAR form using Spartan tool.

DATA INTEGRITY AND QUALITY

EinSight should help us to connect directly to the Chart of Accounts (CoA), have automated foreign exchange rates and reduce all potential errors and misses down the line as we would avoid any manual action from PMs. The user stories go over the dropdowns needed for EMEA and NA on certain fields. In EMEA data quality is an issue that reduces efficiency. There would be a one time data migration from EU CAR DB to EinSight backend tables to migrate historical data

Success Criteria

EFFICIENCY

This tool will be successful if project requesters can complete a new project within 45 minutes and GCP can take 30 minutes to review the form and make changes or call out errors. The overall goal would be to limit the time spent on CAR form by all stakeholders to an hour. In current state it takes an average of 3.5 hours to get all inputs and prepare the final version of CAR Form.

AUTOMATION

The tool will be successful if we can create a view to get an overview of all the current and previous Initiatives projects and allow GCP to call out errors on existing projects in a notes section on the dashboard or edit the CAR Form and make it ready for leadership approval. The tool must be highly available, durable, and latency to switch between multiple tabs must be less than 30 seconds.

ON TIME DELIVERY PERFORMANCE

The tool should help drive up the on time delivery performance of GCP. The tool should help reduce the overall approval time by 10% and reduce the time spent in GCP queue by 10-15%. This can be achieved by developing a user friendly and highly available tool

Project Scope

IN SCOPE FUNCTIONALITY FOR PHASE ONE

For MVP we would build a CAR form that is specific to NA and EMEA regions. The cost detail is needed for both NA and EMEA regions although a few fields and dropdowns would be specific to each region. Econ Analysis is needed for NA and would be an optional page for EMEA. Sustainability is a page that is necessary for sustainability initiatives in EMEA. Benefit Assumptions is needed in NA for every project. An administrative tool would need to be developed to add new data to existing backend lookup tables.

We would need to ingest existing dropdowns and data from excel macros and might need to get data from COA(Chart of Accounts) for certain fields like cost center, location code, and company code for EMEA. A one time data ingestion of existing EMEA CAR data is also in-scope for phase one.

GCP must be able to access all projects while a project requester can only view and edit the submitted projects. Project requester must be able to assign the project or grant edit access to someone else in certain situations. A toggle would need to

be created which when turned on prevents project requesters from making any new edits. It is important to release the tool by Q1 of 2023 to streamline data to our DB and start collecting clean data in both EU and NA

ENHANCEMENTS FOR PHASE 2/3/4

- 1. Integration with Laminar as part of NA workflow
- 2. Integration with SHIELD
- 3. Integration with Amazon Approvals Tool to track project status
- 4. Integration with Ledger on EinSight
- 5. Integration with OP Intake Tool

Business Requirements

User Personas

	A	A	C	B	C	D	G	H
1	1		Project Requester	GCP Team	Global Initiatives Tracker Team	Engineering Change Management Team	Post CAR Support Team	Finance
2	2	Persona #	1	2	3	4	5	6
3	3	Team	ACES Amazon Robotics Compliance GES Ops Construction GES Ops Engineering IT upto 27 different teams	Capital Planning	GIT	ECM Team (Engineering Change Mgmt)	Capital Governance	NACF, ECCF, Other BU Finance Partners
4	4	Roles/Levels	L3 - L7	L4-L6	L4-L6 + Contractors	L4-L6 + Contractors	L4-L6 + Contractors	L4-L8
5	5	Approx Number of Users	50-500 users	10-15 Users	2-4 Users	10-20 Users	6-10 Users	10-20 users
6	6	Description	Project Requesters can range from L3 to L7 levels and there could be upto 27 different user groups that could be using EinSight to make inputs to WP and CAR Form	GCP will look at the CAR Form and ask project requesters to make changes if information is missing	GIT Team would use EinSight in Phase 2/3 once we build a dashboard that can change statuses and notify GIT	ECM team would be the first to view the initiatives project and request any missing information from Project Requester.	Capital Governance team inputs the approved amounts to Ledger and makes sure the numbers on Amazon Approvals Tool matches the ledger	Finance would look at the NPV, Benefits, Cash Flow
7	7	Likes	Easy to use UI and low system latency	GCP wants users to input all the information to reduce communication time and improve SLA times	Be able to view information and input to GIT but would like to automate the information input at some phase	Be able to view the CAR form on a view	Compare the costs from Initiatives project to Amazon approvals tool. Ideally we must be able to trigger entries to Ledger whenever there is a change in a status on our Initiatives dashboard	Be a view only stakeholder who would like to see the project documents in one place and call out errors
8	8	Goals	Project Requesters would need to have an easy to use UI because everyone is not tech-savvy. Faster retrieval and CAR creation times	Automation, workflow, and reduction in communication time	Easy UI, Automation to push data to SHIELD	Tool Integration and Easy UI	Automation	Compare Previous Project

Expected Cost Savings

It takes Capital Planning PM an average of 3 hours per Initiatives CAR project to fix the CAR Form by talking to project requester and maintaining different versions of the CAR form. This can be reduced to 30 minutes by moving the CAR Form to EinSight.

800 CARs (across 2 regions) * (3-0.5) hours = 2000 hours/year

Total savings = 2000 hours * \$75/hr = \$150,000

Initiatives CAR can save \$150k a year and \$450k in three years for GCP

It takes a GIT and ECM PM an average of 1.5 hours per Initiatives CAR project to look for required fields and call out errors. This can be reduced to 15 minutes by building the Spartan tool.

400 CARs * (3-0.5) hours = 1000 hours/year

Total savings = 1000 hours * \$75/hr = \$75,000

Initiatives CAR can save \$75k a year and \$225k in three years for GCP

Total savings in three years by building just the MVP is \$675k

User Stories

	A	B	C	D	C
1	Tool	User Story	Functionality Specific	Requirement	Notes
2	CAR Form	As a user I must be able to input data into the fields on the CAR Form as described in the fields section below based on the region. i. As an NA user I must be able to input data into only custom NA fields ii. As an EMEA user I must be able to input data into only custom EMEA fields	All	P0	
3	CAR Form	As a user I will first choose if I want to create a project in NA or EMEA regions and based on the region the dropdowns and fields will populate accordingly	All	P0	
4	CAR Form	As a user I must be able to choose sites based on region	All	P0	
5	CAR Form	As a user I must be able to choose business unit	All	P0	
6	CAR Form	As a user I must be able to input Project Title in text	All	P0	
7	CAR Form	As a user I must be able to input multiple CAR numbers for a single project	All	P0	
8	CAR Form	As an EMEA user I must be able to choose project type between Initiative Buildout Startup Real Estate	EMEA	P0	
9	CAR Form	As a user I must be able to choose if my project was planned in OP based on a 'YES' 'NO' dropdown	All	P0	
10	CAR Form	As an EMEA user I must be able to choose the budget group (added as lookup table in DB design) ACES,AMXL,AMZL,ATS,Automation,Engineering Services,IT,MOD,Not Planned,Real Estate,Regional CAR,RME,Safety,Security,Sustainability	EMEA	P0	

11	CAR Form	As a user when project type is 'buildout' I must be able to input data for 'Cost per cube\$/sqm"	EMEA	P0	
12	CAR Form	As a user I must be able to input Project Requester, Coupa Project Manager, Procurement Support name in text	All	P0	
13	CAR Form	As an EMEA user I must be able to choose project subtype based on project type and project subtype for every project type is added as lookup table on DB design document	EMEA	P0	
14	CAR Form	As a user I must be able to choose if ROI Project from 'YES' 'NO' options	All	P0	
15	CAR Form	As a user I must be able to input brief summary	All	P0	
16	CAR Form	As a user I must be able to choose multiple sites/networks	All	P0	
17	CAR Form	As a user I must be able to input inservice date as a date field	All	P0	
18	CAR Form	As a user I must be able to choose multiple countries in the countries dropdown	All	P0	
19	CAR Form	As a user I must be able to input launch year	All	P0	
20	CAR Form	As an EMEA user I must be able to choose from these car type New CAR Request Supplemental – New / Change in Scope Supplemental – No Change in Scope CAR Reallocation Transfer Transfer between CARs Opex/Capex Transfer	EMEA	P0	
21	CAR Form	As a user I must be able to input requesting department	All	P0	
22	CAR Form	As an NA user I must be able to enter cost center data As an EMEA user cost center data must auto-populate from CoA	All	P0	
23	CAR Form	As a user I must be able to input CAR approval required by date as a date field	All	P0	
24	CAR Form	As a user I must be able to input approval ID	All	P0	
25	CAR Form	As a user I must be able to see the dynamic update of request in USD based on CAPEX, OPEX, lease, and prepaid amounts	All	P0/P1	Based on complexity we can decide priority
26	CAR Form	As a user I must be able to view the breakdown of costs based spend category on financial detail tab. This would be based on the country chosen(refer to wireframes or excel). For NA it would be 10 categories and for EMEA it would be 17	All	P0/P1	Based on complexity we can decide priority
27					
28					
29					
30					
31		COST DETAIL			
32					
33	Cost Detail	As an EMEA user I must be able to write multiple program IDs on cost detail tab but write only one program ID per row	EMEA	P0	
34	Cost Detail	As a user I must be able to write multiple CAR numbers on the cost detail tab but choose only one CAR number per row	All	P0	
35	Cost Detail	As a user I must be able to input data for multiple sites on a single CAR via a dropdown based on the region and country I chose in CAR form	All	P0	
36	Cost Detail	As an EMEA user the system must populate company, location, cost center, and account based on opex type, spend category, site, and spend type I choose	EMEA	P0	

37	Cost Detail	As an NA user I must be able to input data into company, location, cost ctr, spend type, account, opex type, and spend category fields	All	P0	
38	Cost Detail	When Spend Type is Opex, then Opex Type must be configurable to choose from the following dropdowns which would be available as lookup tables Repairs/Spare Parts ITRepairs/Spare Parts OPS EquipmentRepairs/Spare Parts MODMaintenance Conveying SystemsRepairs/Spare Parts Conveying systemsSoftware ExpenseLicense ExpenseMaintenance IT SoftwareENG Equipment < 350 EUOPS LV Equipment < 350 EURIT Equipment < 350 EURRental Engineering EquipmentRental Material Handling EquipmentRental Operations EquipmentRental Equipment ITOffice Supplies - MaterialSafety SuppliesFreight Non-InventoryThird Party Labor Cost	EMEA	P0	
39	Cost Detail	As an EMEA user Opex account would change based on Opex category which is available as a lookup table	EMEA	P0	
40	Cost Detail	As a user I must be able to input data into item description field	All	P0	
41	Cost Detail	As a user I must be able to choose spend type between Capex, Opex, Lease, and Prepaid and based on the selection, the corresponding field must populate	All	P0	
42	Cost Detail	If the unit price of an item is greater than \$500 and the user chooses spend type other than CAPEX then we can give an error message stating 'Please choose spend type as CAPEX for items whose unit price is greater than \$500'	All	P0	
43	Cost Detail	As a user I must have the following mapping between account and spend type 16999 ---- CAPEX 64460-----OPEX 16996-----LEASE for NA and 64116 for EMEA 14490-----PREPAID	All	P0	
44	Cost Detail	As a user I must be able to input data into Currency, Unit Price, and exchange rate must be ingested based on country input	All	P0	
45	Cost Detail	As a user I must be able to input data into quantity, expected invoice date and data must be ingested to capex, opex, lease or prepaid fields based on 'Spend Type'	All	P0	
46	Cost Detail	As a user I must be able to see the total \$ value which is calculated as price*qty	All	P0	
47	Cost Detail	As a user I must be able to input data into Accounting code field but the system must concatenate the data as (Company code - Location code - cost center- ACCOU - PROD - CHAN - PROJ)	All	P0	
48	Cost Detail	As a user I must be able to view the data in coupa capex, opex, and lease fields because this will be ingested based on country and currency fields	All	P0	
49	Cost Detail	As a user I must be able to see financial detail summary based on cost detail breakdown. This would be different for NA and EMEA but this calculated based on spend category	All	P1	
50	Cost Detail	As a user I must be able to input multiple company code for NA and automatically populate company code for EMEA based on the site code	All	P0	
51	Cost Detail	As a user there are certain data validations that might need to be added --> to be decided	All	P1	
52					
53		SUSTAINABILITY			
54					
55					
56	Sustainability	As a user I must be able to input data into sustainability fields	EMEA	P0	

57	Sustainability	As a user I must be able to view the unit of measurement next to the metric field	EMEA	P0	
58	Sustainability	Per year, impact over 20 years and verified by POC --> to be confirmed by customer	EMEA	P0	
59		ECON ANALYSIS(Mandatory for NA, optional for EMEA)			
60					
61	Econ Analysis	As a user the project start date must be carried over 'CAR Form' page and the subsequent months, quarters, and years must be calculated on the UI so that the data can be entered	All	P0	
62					
63		Benefit Assumptions(Mandatory for NA)			
64					
65					
66					
67		Tool Ownership			
68					
69	Tool Ownership	As a GCP user I must be able to access all projects and edit the details	All	P0	
70	Tool Ownership	As a project requestor I must be able to only edit the projects I create	All	P0	
71	Tool Ownership	As a project requestor I must be able to transfer the ownership of a project to a user. Based on the complexity we can decide to add upto 4 users per project --> can be discussed in our sync	All	P0	
72	Tool Ownership	As a GCP user I can turn on a toggle for every project that prevents the project requester from making any new edits to the project	All	P0	
73					
74					
75		GENERAL TOOL FEATURES			
76					
77	General	As a user I must be able to copy and paste into certain columns	All	P0	
78	General	As a user I must be able to drag cell feature to move data into subsequent cells	All	P0	
79	General	As a GCP user I must be able to view all projects	All	P0	
80	General	As a GCP user I must be able to turn on and off a toggle which would prevent project requesters from making any new edits	All	P0	
81					
82		PAGE NAVIGATION			
83					
84	General	As a user I must be able to move between the 5 pages as every page must be a hyperlink on the view on the left side	All	P0	
85	General	As a user I must be able to hit 'Next' and move to the subsequent page	All	P0	
86	General	As a user I must be able to click on 'Previous Page' and go to the previous page in the list	All	P0	
87				P0	
88					

89		GENERATE CSV			
90					
91	General	As a user I must be able to generate a CAR CSV file as output that must be read-only	All	P0	
92	General	As a user the CAR CSV file must resemble the current output files from NA and EMEA regions which is very similar to SU CAR export files	All	P0	
93	General	If generating PDF is easier then we can do that as well --> something to consider with SDE --> customer is aligned with using PDF instead of excel	Suggestion		
94	General	As a user I must have both dropdowns for validation and copy paste feature on the tool	All	P0	
95					
96					
97		GCP Administrative Tool			
98					
99	General	As NA or EU GCP I must be able to update the lookup tables on the frontend that would reflect in the places referenced on the tool. For example: new sites, location code, company code etc	All	P0	
100					
101		Coupa CSV			
102					
103	EMEA	As a user I must be able to generate a Coupa CSV file based on the cost detail tab that is uploaded. The format of the file can be found in the workdocs folder and there is a lookup table called 'Coupa CSV generation table' in the 'high level DB design document'	EMEA	P0	
104	EMEA	As a user coupa CSV file will produce an output of budget line code, corresponding chart of accounts, budget period, budget owner, budget amount and currency. --> idasujay@ can get the sproc that EU uses to get this file so that we can move to EinSight	EMEA	P0	
105	EMEA	Logic --> Budget line code is {company code} - {location code} - {cost center} - {account} - {Car number} --- Basically its one line item per car number and per cost center			
106					

Fields on Initiatives CAR (Spartan) Tool (Refer to Fields and Validations for more details)

1. CAR Form

	A	B	C	D	E	F	G
1	Proposed Order	Field Name	EMEA	NA	Result	Required	Data Type
2	3	Region	Yes(Needs to be able to input multiple sites regions)	Yes(Needs to be able to input multiple regions)	To be included	Yes	Dropdown (Text)
3	7	Country(multiple select)	Yes	Yes	To be included	Yes	Dropdown (Text)
4		Site OR ASK FOR JUST ONE OR MULTIPLE					
5	1	Project Title	Yes	Yes	To be included	Yes	Text
6	9	CAR Number OR ASK FOR JUST ONE OR MULTIPLE	Yes (Needs to be able to input multiple CAR numbers)	Yes (Needs to be able to input multiple CAR numbers)	To be included	Yes	Text
7	10	Program ID OR ASK FOR JUST ONE OR MULTIPLE	Yes (dropdown of single or multi)	No	To be included	Yes	Dropdown text (single or multi)
8	5	Project Type	Yes (Existing mapping)	No	To be included for EMEA CARs based on user selection of region	Yes	Text
9	14	Planned in OP	Yes	No but to be included	To be included	Yes	Yes/No dropdown
10	13	Budget Group	Yes (Can be removed if we include requesting department field)	No	Undecided (can be excluded)	Yes	text
11	17	Project Requestor	Yes	Yes	To be included	Yes	Text
12		Project Requestor Email	Yes(can be derived from EinSight login)	Yes(can be derived from EinSight login)	To be included	Yes	Text
13	18	Coupa Project Manager (BUSINESS TEAM)	Yes	Rename in NA to follow suit	To be included	Yes	Text
14		Coupa Project Manager (BUSINESS TEAM) Email	Yes	Yes	To be included	Yes	Text
15	19	COUPA BUDGET OWNER (FINANCE TEAM)	Yes (prepopulate to Dominik Wasiak)	Yes(prepopulate to Boian Marinov)	To be included	Yes	Text
16	0	COUPA BUDGET OWNER (FINANCE TEAM) EMAIL	Yes (prepopulate to dwwasiak@)	Yes(prepopulate to marinovb@)	To be included	Yes	Text
17	20	Procurement Support	No but to be included as an optional field	Yes	To be included	Yes	Text
18	0	Procurement Support EMAIL	Yes	Yes	To be included	Yes	Text
19	6	Project SubType	Yes	No	To be included for EMEA CARs based on user selection of project	Only for EMEA	Dropdown (Text)

20	15	ROI Project	Yes	No but to be included as optional field	To be included	No	Dropdown (Text), yes/no
21	16	Brief Summary	Yes Yes(ONLY WHEN	Yes	To be included	Yes	text
22	21	Cost per cube \$/sqm	PROJECT TYPE IS 'BUILDOUT'	No	To be included	Yes	Numerical
23	4	Business Unit	Yes	Yes	Yes	No	text
24	22	InService Date	Yes	Yes	To be included	Yes	Date
25	23	Launch Year	Yes to be renamed to Launch Year	No but NA to follow suit	To be included	Yes	Year, dropdown
26		Project num	System generated key	System generated key	To be included	Yes	Alphanumeric value
27		Project ID	Yes (concat of program ID and location code) visible in backend DB only	No	To be included	Yes	Alphanumeric value
28	2	CAR Type	Yes	No	To be included to accommodate EMEA logic	Yes for EMEA	text, dropdown
29	12	Requesting Department	No but to be included as an optional field	Yes	To be included	No	text
30		Cost Center	No but to be included	Yes	To be included	autopopulate for EMEA but NA it will be a required field	text
31	25	CAR Approval Required by Date	No but okay to be included	Yes, can include this and get rid of Vendor Lead Time	To be included	No but required for NA	date
32	11	Approval ID	To be included	Yes	No but okay to be included	No	numerical

2. Cost Detail

	A	B	C	D	E	F
1	Field Name	EMEA	NA	Result	Required	Data Type
2	CAR Number	Yes	Yes	Included	Yes	Text
3	Program ID	Yes	No	Included	Yes	Text
4	Site	Yes	Yes	Included	Yes	Text
5	Company	Yes	Yes	Included	Yes	Text
6	Location	Yes	Yes	Included	Yes	Text
7	Cost Ctr	Yes	Yes	Included	Yes	Text
8	Spend Type (dropdown)	Yes(Capex, Opex, Lease, Prepaid)	Yes(Capex, Opex, Lease, Prepaid)	Included	Yes	Text
9	Account	Yes	Yes	Included	Yes	Numerical
10	OPEX Type	Yes	Yes	Included	Yes	Text
11	Item Description	Yes	Yes	Included	Yes	Text
12	Supplier	Yes	Yes	Included	No	Text
13	Part NUM	Yes	No	Included	No	Text
14	Module ID	Yes	Not in Scope	To be included	No	Numerical value
15	Module Description	Yes	Not in Scope	To be included	No	Text
16	Currency (pick dropdown)	Yes	Yes	Included	Yes	Text
17	Unit Price (local currency)	Yes	Yes	Included	Yes	Numerical
18	Exchange Rate (US\$/local)	Yes	Yes	Included	Yes	Numerical
19	Unit Price (USD)	Yes	Yes	Included	Yes	Numerical
20	Quantity	Yes	Yes	Included	Yes	Numerical
21	Expected Invoice Date	Yes	Yes	Included	No	Date
22	CAPEX (16999)	Yes	Yes	Included	Yes(either of three)	Numerical
23	OPEX (64460)	Yes	Yes	Included	Yes(either of three)	Numerical
24	LEASE (16995)	Yes	Yes	Included	Yes(either of three)	Numerical
25	PREPAID (14490)	Yes	Yes	Included	Yes	Numerical
26	TOTAL, \$	Yes	Yes	Included	Yes	Numerical
27	Accounting Code (CO - LOC - COST - ACC - PROD - CHAN - PROJ)	Yes	Yes	Included	No	Text
28	LC OPEX	Yes	No	Included	Yes	Numerical
29	LC CAPEX	Yes	No	Included	Yes	Numerical
30	LC LEASE	Yes	No	Included	Yes	Numerical
31	LC PREPAID	Yes	No	Included	Yes	Numerical
32	Total, LC	Yes	Yes	Included	Yes	Numerical
33						
34						

3. Sustainability ----- gotten rid of for phase 1 (with and without)

	A	B	C	D	E	F	G
1	Field Name	Unit	EMEA	NA	Result	Data Type	
2	Carbon impact	tCO2e	Yes	No	Yes	Numerical	
3	Embodied carbon	tCO2e	Yes	No	Yes	Numerical	
4	Waste diversion rate Total	%	Yes	No	Yes	Numerical	
5	Recycled waste	tons energy recovery pKw	Yes	No	Yes	Numerical	
6	Energy recovery	tons energy recovery pKw	Yes	No	Yes	Numerical	
7	Waste diversion rate - excluding product	%	Yes	No	Yes	Numerical	
8	Recycled waste	tons	Yes	No	Yes	Numerical	
9	Energy Recovery (waste)	tons	Yes	No	Yes	Numerical	
10	Landfill	tons	Yes	No	Yes	Numerical	
11	Litres of water reduced	L	Yes	No	Yes	Numerical	
12	TOTAL Reduced car waiting time	minutes	Yes	No	Yes	Numerical	
13	TOTAL Reduced truck waiting time	minutes	Yes	No	Yes	Numerical	
14	Effect on Ozone depletion	CO2 equivalent	Yes	No	Yes	Numerical	
15	MAC (marginal abatement cost)	\$/metric tonne	Yes	No	Yes	Numerical	
16	Energy use intensity	kwh/sqm	Yes	No	Yes	Numerical	
17							

4. Econ Analysis

	A	B	C	D
1	Field Name	EMEA	NA	Data Type
2	Cost - Capex	Optional	Yes	Numerical
3	Cost - Opex	Optional	Yes	Numerical
4	Description	Optional	Yes	Text
5	Benefit 1, Benefit 2....	Optional	Yes	Numerical
6	Benefit - Description	Optional	Yes	Text
7	Outputs - Capex	Optional	Yes	Numerical
8	Outputs - Opex	Optional	Yes	Numerical
9	Outputs - Benefits	Optional	Yes	Numerical
10	Net Cash Flow	Optional	Yes	Numerical
11	Discount Factor	Optional	Yes	Numerical
12	Discounted Cash Factor	Optional	Yes	Numerical
13	Cummulative Discounted Cash Flow	Optional	Yes	Numerical
14				

5. Benefit Assumptions

	A	B	C	D
1	Field Name	EMEA	NA	Data Type
2	Current State - Item Description	Optional	Yes	Text
3	Current State - Value	Optional	Yes	Numerical
4	Current State - Data Source	Optional	Yes	Text
5	Proposed State - Item Description	Optional	Yes	Text
6	Proposed State - Value	Optional	Yes	Numerical
7	Proposed State - Data Source	Optional	Yes	Text
8	Output - Item Description	Optional	Yes	Text
9	Output - Value	Optional	Yes	Numerical
10	Output - Data Source	Optional	Yes	Text
11				
12				
13				

6. Coupa CSV

This is a CSV generation based on logic in the excel which can be explained by idasujay@. An example Coupa CSV can be provided by idasujay@

Missing Pieces

Required fields for every page from customer
Lookup tables on site, cost center, business unit

APPENDIX

Tool Diagrams/Workflows

1. Landing Page



Create New NA Initiatives CAR

Create New EMEA CAR

View & Edit Projects

Generate Coupa CSV

GCP Administrative View

GCP Administrative Tool

2. CAR Form NA

Step 1: CAR Form
Step 2: Cost Detail
Step 3: Econ Analysis
Step 4: Benefit Assumptions
Step 5: Review and Submit

Region (EU or NA) ▼

CAR Number

Project Requester

Project Manager

Requesting Department

Finance Support

Disclaimer: Does not contain all fields, refer to BRD

Request in USD	Prior Approval	Current Request	Future Request	Total Project
Capital	100000	1000000	0	1100000
Expense	200000	3000000	0	3200000
Equipment Lease	0	0	0	0
Pre Paid	0	0	0	0
Other	0	0	0	0

Financial Detail

Category	Description	Capital	Expense	Lease	Prepaid	Other/Labor
Amazon Robotics	100000	1000000	0	1100000		
Loss Prevention	200000	3000000	0	3200000		
Material Handling	0	0	0	0		
Operations IT	0	0	0	0		
Other	0	0	0	0		
PIT	111	222	333	4444		
Processing	111	222	333	4444		
Safety	111	222	333	4444		
Storage	111	222	333	4444		
Support	111	222	333	4444		
Subtotal	3039828	285939	282847	847578		
Tax in %	7	10393	398384	2938		
Freight in %	5	84958	388730	9348982		
Contingency in %	4	8489	388938	274949		
Total in USD	3384457	4473947	5839274	9284840		

3. CAR Form EU

Step 1: CAR Form

Step 2: Cost Detail

Step 3: Econ Analysis

Step 4: Review and Submit

Region (EU or NA)

CAR Number

Project Requester

Project Manager

Requesting Department

Finance Support

Save for later

Disclaimer: Does not contain all fields, refer to BRD

Request in USD	Prior Approval	Current Request	Future Request	Total Project
Capital	100000	1000000	0	1100000
Expense	200000	3000000	0	3200000
Equipment Lease	0	0	0	0
Pre Paid	0	0	0	0
Other	0	0	0	0

Financial Detail

Category	Description	Capital	Expense	Lease	Prepaid	Other/Labor
Amazon Robotics	100000	1000000	0	1100000		
C>Returns	200000	3000000	0	3200000		
Climate Control	0	0	0	0		
FC Facility Improvements	0	0	0	0		
Inbound Cross Dock	0	0	0	0		
Incremental Real Estate	111	222	333	4444		
IT and RF Infrastructure	111	222	333	4444		
MOD	111	222	333	4444		
Packaging Initiatives	111	222	333	4444		
Processing	111	222	333	4444		
Productivity/ROI	3039828	285939	282847	847578		
Safety	10393	398384	2938			
Sort Centers	5	84958	388730	9348982		
Storage Capacity	4	8489	388938	274949		
Total in USD	3384457	4473947	5839274	9284840		

Cancel

Next

4. Cost Detail

Step 1: CAR Form
Step 2: Cost Detail
Step 3: Sustainability
Step 4: Econ Analysis
Step 5: Review and Submit

COST DETAIL

Save for later

Cost Summary				
Capex	Opex	Lease	Prepaid	Total
Total LC	100000	1000000	0	1100000
Total USD	10000	10000	0	100000


Site	Company	Location	Cost Ctr	Spend Type	Account	Cost Type	Spend Category	Item Description	Supplier	Currency	Exchange	Unit Price	Quantity	CAPEX	OPEX	LEASE	PREPAID	TOTAL
MTYZ	0	0	1000	Prepaid	14410	Repairs	Contingency	MHE	MHE	EU	0.80	\$100	1.0	100	10	1	1	300
MTYZ	0	0	1000	Prepaid	14410	Repairs	Contingency	MHE	MHE	EU	0.80	\$100	1.0	100	10	1	1	300
MTYZ	0	0	1000	Prepaid	14410	Repairs	Contingency	MHE	MHE	EU	0.80	\$100	1.0	100	10	1	1	300
MTYZ	0	0	1000	Prepaid	14410	Repairs	Contingency	MHE	MHE	EU	0.80	\$100	1.0	100	10	1	1	300

Cancel Previous Page Next

Disclaimer: Does not contain all fields, refer to BRD

5. Econ Analysis

amazonEINsight



Step 1: CAR Form

Step 2: Cost Detail

Step 3: Sustainability

Step 4: Econ Analysis

Step 5: Review and Submit

ECON ANALYSIS

Discount Rate/WACC

Save for later

Cost	Month 1	Month 2	Month 3	Year 1 Total	Month 13	Month 14	Year 2 Total	Month 25	Month 26	Year 3 Total
CAPEX	100	100	100	1200	100	100	1200	100	100	1200
OPEX	100	100	100	1200	100	100	1200	100	100	1200
Description										
Total Cost	200	200	200	2400	200	200	2400	200	200	2400

Add Additional Benefit SectionRemove Benefit Section

Benefit	Month 1	Month 2	Month 3	Year 1 Total	Month 13	Month 14	Year 2 Total	Month 25	Month 26	Year 3 Total
Benefit 1	100	100	100	1200	100	100	1200	100	100	1200
Description										
Total Cost	200	200	200	2400	200	200	2400	200	200	2400

Output Cost	Q1	Q2	Q3	Q4	Year 1	Year 2	Year 3
CAPEX	300	300	300	300	1200	1200	1200
OPEX	300	300	300	300	1200	1200	1200
Total Cost	600	600	600	600	2400	2400	2400
Benefit	300	300	300	300	1200	1200	1200
Total Benefit	300	300	300	300	1200	1200	1200

Net Cash Flow	100	0	0	0	0
Discount Factor					
Discounted Cash Flow					

CancelPrevious PageNext

Disclaimer: Does not contain all fields, refer to BRD

6. Benefit Assumptions

Step 1: CAR Form
Step 2: Cost Detail
Step 3: Sustainability
Step 4: Econ Analysis
Step 5: Review and Submit

ECON ANALYSIS

Discount Rate/WACC

Save for later

Cost	Month 1	Month 2	Month 3	Year 1 Total	Month 13	Month 14	Year 2 Total	Month 25	Month 26	Year 3 Total
CAPEX	100	100	100	1200	100	100	1200	100	100	1200
OPEX	100	100	100	1200	100	100	1200	100	100	1200
Description										
Total Cost	200	200	200	2400	200	200	2400	200	200	2400

Add Additional Benefit Section

Remove Benefit Section

Benefit	Month 1	Month 2	Month 3	Year 1 Total	Month 13	Month 14	Year 2 Total	Month 25	Month 26	Year 3 Total
Benefit 1	100	100	100	1200	100	100	1200	100	100	1200
Description										
Total Cost	200	200	200	2400	200	200	2400	200	200	2400

Output Cost	Q1	Q2	Q3	Q4	Year 1	Year 2	Year 3
CAPEX	300	300	300	300	1200	1200	1200
OPEX	300	300	300	300	1200	1200	1200
Total Cost	600	600	600	600	2400	2400	2400
Benefit	300	300	300	300	1200	1200	1200
Total Benefit	300	300	300	300	1200	1200	1200

Net Cash Flow	Year 1	Year 2	Year 3
Discount Factor	0.909	0.826	0.743
Discounted Cash Flow			

Cancel

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Disclaimer: Does not contain all fields, refer to BRD

7. Sustainability

https://enight-eng-services.s3.amazonaws.com/EnSightTools/InitiativeCAR/Dashboard

amazonEinSight

global engineering services

Step 1: CAR Form

Step 2: Cost Detail

Step 3: Sustainability

Step 4: Econ Analysis

Step 5: Review and Submit

SUSTAINABILITY

Save for later

Metric	Value	Unit	Per Year	Total Impact Over 20 Years	Verified by POB
Carbon Impact	0	AC02e			
Embodied carbon	0	AC02e			
Waste diversion rate - Total	0				
Recycled waste	0				
Energy recovery					
Waste diversion rate - excluding product					
Recycled waste					
Energy Recovery (waste)					
Landfill					
Liters of water reduced					
TOTAL Reduced car waiting time					
TOTAL Reduced truck waiting time					
Effect on Ozone depletion					
MAC (marginal abatement cost)					
Energy use intensity					

Cancel

Previous Page


Next

Disclaimer: Does not contain all fields, refer to BRD

8. Review and Submit

https://enight-eng-services.s3.amazonaws.com/EnSightTools/InitiativeCAR/Dashboard

amazonEinSight

global engineering services

Step 1: CAR Form

Step 2: Cost Detail

Step 3: Econ Analysis

Step 4: Benefit Assumptions

Step 5: Review and Submit

Review and Submit

CAR FORM

Request in U	Prior Apr	Current Req	Future Req	Total Req
Capital	100000	1000000	0	1100000
Expense	200000	3000000	0	3200000
Equipment Leas	0	0	0	0
Pre Prod	0	0	0	0

COST DETAIL

Cost Summary	Capex	Opex	Lease	Preprod	Total
Total LC	100000	1000000	0	0	1100000
Total USD	100000	100000	100000	0	300000

ECON ANALYSIS

Outputs Cost	Q1	Q2	Q3	Q4	Year 1	Year 2	Year 3
CAPEX	300	300	300	300	1200	1200	1200
OPEX	300	300	300	300	1200	1200	1200
Total Cost	600	600	600	600	2400	2400	2400
Benefits							
Benefit 1	300	300	300	1200	1200	1200	

BENEFIT ASSUMPTIONS

Output	Value	Data Source
Item Description		
Head count change	50	Subtract headcount

EXIT



PREVIOUS PAGE

SUBMIT

Disclaimer: Does not contain all fields, refer to BRD

9. GCP View/ View and Edit Projects

<https://winsight.eng-services.az2.com/#/EinSightTools/InitiativesCAR/Dashboard>



GCP Administrative View - All Projects

View

Edit

Delete

Name of Project	Site Code	Region	Country	Project Title	CAR Number	Project Type	Is Editable
Tall Sorter-Retrofit	SCK1	NA	USA	New Technology	1000	New Initiatives	Yes
Yellow Tote Purchase	SCK1 SCK2	EU	Germany	Essentials	2000	Needed Items	No

10. GCP Admin Tool



GCP Administrative Tool

Input Table ▾

Show Data

Add Row

Update

Delete


<input type="checkbox"/>	Budget Group
<input type="checkbox"/>	ACES
<input type="checkbox"/>	AMXL
<input type="checkbox"/>	AMZL
<input type="checkbox"/>	ATS
<input type="checkbox"/>	Automation
<input type="checkbox"/>	Engineering Services
<input type="checkbox"/>	IT
<input type="checkbox"/>	MOD
<input type="checkbox"/>	Not Planned
<input type="checkbox"/>	Real Estate
<input type="checkbox"/>	Regional CAR
<input type="checkbox"/>	RME
<input type="checkbox"/>	Safety
<input type="checkbox"/>	Security
<input type="checkbox"/>	Sustainability

11. Coupa CSV

https://enlight-eng-services.s2.com/#/EnlightTools/InitiativeCAR/Dashboard

amazon

EinSight



Coupa CSV

Generate Coupa CSV

	Region	Country	Site/Network	Project Title	CAR Number	Program ID	Project Type	Project Requestor	Project SubType	Brief Summary	Business Unit	IS/Service Date	Launch Year	Project num	Project ID	CAR Type	Requesting Department	Cost Center	CAR Approval Required by Date	Approval ID	CAR Number	TOTAL \$	TOTAL LC
<input type="checkbox"/>	EMEA	Spain	ARS	Large project	NKR1	ACDF1	Real Estate	pimathie	new	large	ATS	01/01	2024	A/D	ABCD	Real Estate	Procurement	1290	2D	02/01	12345	\$450k	100k
<input type="checkbox"/>	EMEA	Poland	ARS	small project	NKR2	ACDF2	Startup	pimathie	new	large	ATS	01/01	2024	A/D	ABCD	Real Estate	Procurement	1290	2D	02/01	12345	\$50k	100k
<input type="checkbox"/>	EMEA	Spain	ARS	Large project	NKR1	ACDF1	Real Estate	pimathie	new	large	ATS	01/01	2024	A/D	ABCD	Real Estate	Procurement	1290	2D	02/01	12345	\$450k	100k
<input type="checkbox"/>	EMEA	Poland	ARS	small project	NKR2	ACDF2	Startup	pimathie	new	large	ATS	01/01	2024	A/D	ABCD	Real Estate	Procurement	1290	2D	02/01	12345	\$50k	100k
<input type="checkbox"/>	EMEA	Spain	ARS	Large project	NKR1	ACDF1	Real Estate	pimathie	new	large	ATS	01/01	2024	A/D	ABCD	Real Estate	Procurement	1290	2D	02/01	12345	\$450k	100k
<input type="checkbox"/>	EMEA	Poland	ARS	small project	NKR2	ACDF2	Startup	pimathie	new	large	ATS	01/01	2024	A/D	ABCD	Real Estate	Procurement	1290	2D	02/01	12345	\$50k	100k

12. View and Edit Projects - Project Requester View

Project Requester View, Edit and Delete

View

Edit

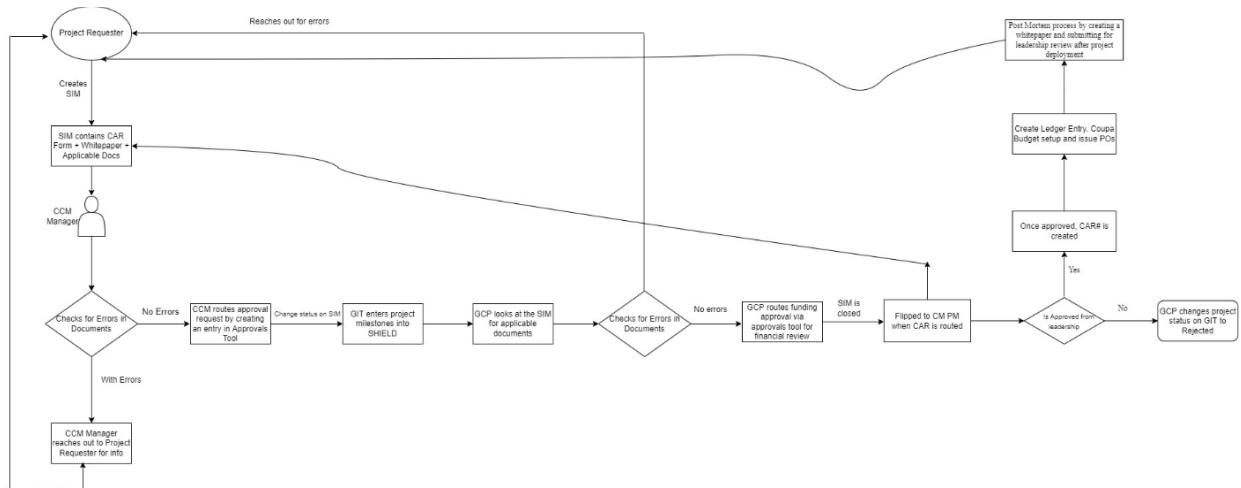
Delete

Name of Project	Site Code	Region	Country	Project Title	CAR Number	Project Type	Is Editable
Tall Sorter-Retrofit	SCK1	NA	USA	New Technology	1000	New Initiatives	Yes
Yellow Tote Purchase	SCK1 SCK2	EU	Germany	Essentials	2000	Needed Items	No

HIGH LEVEL DB DESIGN DOCUMENT

You can find high level DB design document on this quip (High level DB Design) ---> **Please review the lookup tables as customers on this document**

WORKFLOW IN NA



Workflow in EU

