



GTS Innovation Award Program Nomination Template

Outstanding Technical Achievement Award (OTAA)

Middleware & Database Watson Analytics Dashboards

Marcelo Ripoll
2018

IBM Confidential
2018 TEMPLATE

GTS Innovation WIKI: <https://ibm.biz/BdRU6a>

Nominees that Contributed to Technical Achievement or Innovation

- Marcelo Ripoll

Names of Executives Sponsoring Nomination

Note: A letter from the executive supporting the nomination and business value claimed must be included in the nomination package.

- Mark Thomas

Nominee Details

Important: the nominee's in-country and functional managers must be notified that he/she is being included on the nomination prior to the nomination being submitted for consideration

Note: Include a separate slide for each Nominee

Full Name	Julio Marcelo Ripoll
Lotus Notes email ID	Julio Marcelo Ripoll/Argentina/IBM
IBM Intranet email ID	ripollju@ar.ibm.com
Serial number	613 - 080635
Current Division (e.g. GTS, STG, SWG, Research, etc)	GTS
Division when innovation was created (e.g. GTS, STG, SWG, Research, etc)	GTS
Position Title	Global Middleware & Database Engineer
Current band level	9
Gender	Male
Bluepages in-country Manager Lotus Notes ID	Marcos Cimmino/Argentina/IBM
Manager Serial number	613 - 022589
Were both the in-country and functional managers notified that this person was being submitted for an award? Reply YES or NO.	Yes
Detailed description of how this nominee provided a <u>TECHNICAL CONTRIBUTION</u> to the submission.	Marcelo Ripoll created and led Watson Analytics Dashboards for Global Middleware & Database GTS, reporting: finance, workload, human resources, inventory, productivity and quality information for use on GTS accts; As of March 2018, 427 accts were boarded covering 328K Databases across North America, Asia Pacific, Europe, Greater China, Japan, Latin America and Middle East & Africa.

Description of Achievement (1 of 5)

- *Minor 3 OTAA Submission,*
- Design, development and deployment of GTS solution for Middleware & Database technologies providing unique centralized tool to analyze accounts status from multiple views.
- Reports used by Global strategic leaders, regional and account management team members.

Innovation

This solution lets to the user perform a visual correlation of multiple dimensions when they analyze an account status using metrics, graphics, tables, counters to identify different account values. Used since June 2016

Creation of a new consolidated platform with a total of 41 dashboards that can be filtered by service areas, technology, month, quarter regions, markets and account names

Use of Watson Analytics software features to present metrics and results to define new actions plan in less time than taken in the past by decision makers

Capability

Identification of groups or list of accounts with productivity issues

Identification of MWDB technologies below Frame Work Blue productivity targets. Accounts comparison feature is available

Trend analysis about results of improvements done post initial evaluation and deployment of action plans to increase account performance

Outcome

Over 427 accts, covering 328000 Databases across North America, Asia Pacific, Europe, Greater China, Japan, Latin America and Middle East & Africa.

Over 200 different graphics and data tables by month to analyze region/markets/accounts trends, productivity and workload behavior. Historical data from the last 12 months

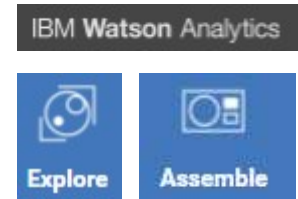
Widely used in deep dives sessions and monthly evaluation tracking meetings for Client Success improvements

Description of Achievement (2 of 5)

Middleware and Database Watson Analytics Dashboards (MWDB) [\(link\)](#)

■ Project Objectives

1. MWDB dashboards were the technical solution developed to complete the MWDB “octagon” business requirement.
2. Evaluate monthly MWDB accounts status using only 1 centralized tool.
3. Show modules or “Dimensions” with specific metric ✓ o analyze accounts from different angles:
 - ✓ Finance (Finance Reports)
 - ✓ Human Resources (HR Hub)
 - ✓ Productivity (Yardstick)
 - ✓ Workload (TvC)
 - ✓ Inventory (CMT)
 - Quality (CHIP)
4. Access to the tool is for authorized users only, from anywhere in the world and be available 7 x 24 x 365.
5. Store annual or quarters history data to analyze multiple trends.
6. Provide account list to start deep dives to increase productivity and specific improvements by each MWDB technology.



■ Use Cases / Benefits

- **Productivity evaluation to identify accounts above or below Framework Blue target**
 - Productivity could be analyzed by account, metric, technology, month, service area, region, markets, etc.
 - Technical and account management levers could be defined based on analysis results mentioned before.
- **Workload distribution analysis to identify technical strategies**
 - Define automation solutions, tools and policies to decrease effort hours on specific topics.
 - Rank world wide database technologies importance and plan educational roadmaps accordingly.
 - Analyze activity distribution by account/month.
 - Study employee task assignment by month.
 - Evaluate Idle time by account, technician, etc.
 - Show geographical distribution of resources.
- **Human resource distribution analysis**
 - Total population, Global delivery and Domestic population.
 - Breakdown and distribution of band categories. Trends analysis

Description of Achievement (Slides 3 – 5)

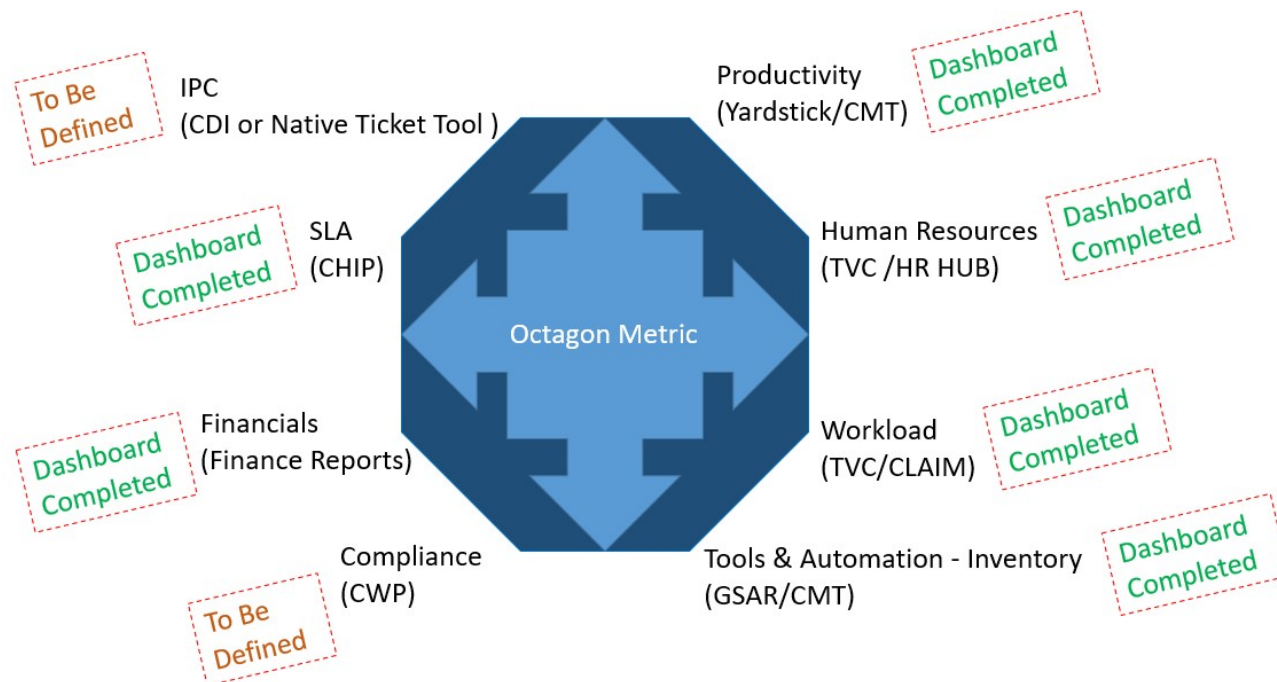
Project Name	Middleware & Database Watson Analytics Dashboards (MW&DB)						
Business Problems	<ul style="list-style-type: none">• There was not any tool to compare multiple dimensions one account.• Manual intensive administration for managing accounts data vs framework blue productivity targets.• Complex methods to get a ranking list of accounts health showing below and above productivity targets.• Huge amount of isolated reports to analyze and describe account situation in deep dives meetings.• Inefficiency with the optimization of accounts productivity.						
Client Objective (or) Requirements	<ul style="list-style-type: none">• Reduced manual effort and errors across data collection, data preparation and reporting.• Increase standard data management and processes for all MW&DB technologies.• Create an unique control dashboard environment to be available anytime, anywhere for decision makers.• Deploy a modern analytic platform to deploy the MW&DB Octagon metric model.						
Target Solution	<p>MW&DB Watson Analytics Dashboards is a modern platform for a multi dimensional view applied to data management, metric reports and control of accounts and technologies supported by MW&DB world wide delivery teams.</p> <p>There are 6 keys “dimensions” or modules:</p> <table><tr><td>.- Finance</td><td>.- Productivity</td><td>.- Inventory</td></tr><tr><td>.- Human Resources</td><td>.- Workload</td><td>.- Quality</td></tr></table>	.- Finance	.- Productivity	.- Inventory	.- Human Resources	.- Workload	.- Quality
.- Finance	.- Productivity	.- Inventory					
.- Human Resources	.- Workload	.- Quality					
Project Scope	<ul style="list-style-type: none">• Enable data collection from multiples sources.• Establish a method and tool to analyze accounts status from multiples points of view and levels.• Dashboards were built to be used by: Global, Service Areas, Region, Market, Country and Account leadership members.• Trends analysis are available inside all modules.• Drive the definition and tracking of recommendation plans provided by Global Service Line Engineers.						
Key Value from the Project Deployment	<ul style="list-style-type: none">• Automated data management to join different data sources and set new metric categories.• Decrease manual efforts used monthly to create status reports.• Increased account status visibility to define accounts ranking and so, from which accounts start corrective strategies.• The account analysis based in multiples views, give a better understanding about the real account situation, limitation, root causes and future action plans.						

Description of Achievement (Slides 4 – 5)

Middleware & Database Watson Analytics dashboard was the solution tool created to resolve the requirement of the Octagon metric model, which had been defined some time ago by the Middleware and Database Service Line leader.

The novelty of this solution was to analyze the accounts status from different angles in one unique environment, which received information from multiple IBM corporate systems, to be updated monthly and had an annual historical data stored available at any time, including: finance, workload, human resources, inventory, productivity and quality information.

The Middleware & Database Octagon Metric Model



Description of Achievement (Slides 5 – 5)

Middleware & Database Watson Analytics Dashboards

Centralized and consolidated analytics environment for decision makers, management and operational team members which helps them to analyze different dashboards for geographical regions, markets, countries or accounts at one month, different months, etc., processing information from **more than 700 accounts and 1 year of productivity historical data**.

The main goal of this is to answer the question: What is the account status?

Using this solution, the system will have different answers depending on the point of view from where the account is analyzed to have a final balanced mark about whole “Health” account status.

Finance

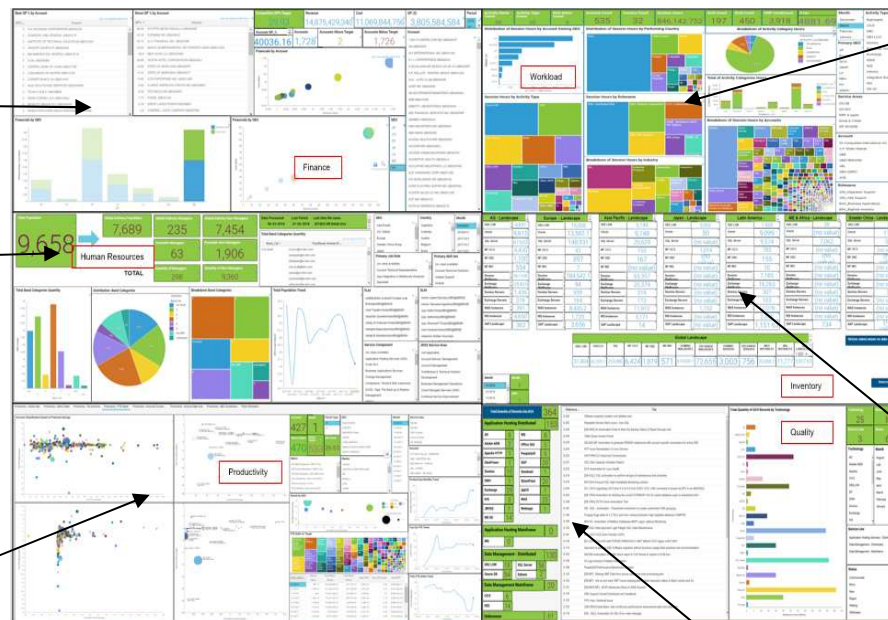
Accounts Gross Profit (GP) are shown in different formats, having a ranking of best and worst accounts by GP. There are calculations for determining above and below target accounts, revenue and costs.

Human Resources

Analysis can be done at Total, Domestic or Global Delivery population, having breaks down by band categories, Total Population trends and many available filters such as Geo, Country, First Line Manager, Second Line Manager, Job Role Skill Sets, Band Quantity by Country, Population by hire date and more.

Productivity

This is one of the most important dimensions used by everyone, showing for each product metric: Total Volume, Total Hours, Metrics Results, Competitive targets, Quantity of Accounts above and Below, Total FTEs, FTE Delta Vs Framework Blue Targets, Productivity monthly trends, Volume and Hours annual Analysis, Results by market. Productivity Comparison between 2 accounts, FTE Delta vs Cost/FTE and FTE Delta vs Productivity.



Workload

Provides easy analysis about Distribution of activity categories according to Time Volume Capture (TvC) Taxonomy Activity Name, Trend of Supported Product by Performing Country or Account. Comparison of time spent between 2 accounts, TvC Utilization status by First Line Manager, Utilization Drilldown by role, etc.

Inventory

Pick ups information from CMT system and show it by product, account, market, region or globally with 1 year of historical data.

Quality (of Service)

Quantity of Service Level Agreements (SLA) by Service area, Total SLAs quantity, Total Missed SLAs quantity, grouped by Geo, Market, SLA Targets, SLA Rates, Total SLAs by Geo Trend, Total Misses SLAs by Geo.

Deployment Scope

MW&DB Watson Analytics Dashboards [\(link\)](#)

<u>Year - Month</u>	<u>Dashboard</u>	<u>Quantity</u>
2016 - June	Workload	914 Accounts
2016 - August	Human Resources	6888 Employees
2017 - March	Productivity	723 Accounts
2017 - April	Finance	800 Accounts
2017 - June	Inventory	290 Accounts
2017 - September	Quality	579 Accounts



Microsoft Excel
Worksheet

Date	Watson Analytics Dashboard	Account Name	IOT that holds the contract for the account and hosts the account	Country the account is deployed (if more than one country say Global)	How long has the solution been in use (Number of Months)
June 2016	Workload	7-Eleven Stores	AP	Global	23
June 2016	Workload	ABB	AP	Global	23
June 2016	Workload	ABN-AMRO	AP	Global	23
June 2016	Workload	ABS Australian Bureau of Statistics	AP	Global	23
June 2016	Workload	Adani Enterprises Ltd	AP	Global	23
June 2016	Workload	Affin Bank	AP	Global	23
June 2016	Workload	AIA Shared Services (Hong Kong) Limited	AP	Global	23
June 2016	Workload	Air New Zealand Limited	AP	Global	23
June 2016	Workload	Alfa S.A.B. de C.V.	AP	Global	23
June 2016	Workload	Allianz Life	AP	Global	23
June 2016	Workload	American Express	AP	Global	23
June 2016	Workload	American International Assurance-616	AP	Global	23
June 2016	Workload	Amore Pacific	AP	Global	23
June 2016	Workload	Apollo Munich Health Insurance Limited	AP	Global	23
June 2016	Workload	Australian Government Department of Defence	AP	Global	23
June 2016	Workload	Bank of Ayudhya Public Company Limited	AP	Global	23
June 2016	Workload	Bank of the Philippine Islands (BPI)	AP	Global	23
June 2016	Workload	Baxter Healthcare	AP	Global	23
June 2016	Workload	BG Group	AP	Global	23
June 2016	Workload	Bharat Light and Power Private Limited	AP	Global	23
June 2016	Workload	BHP Billiton	AP	Global	23

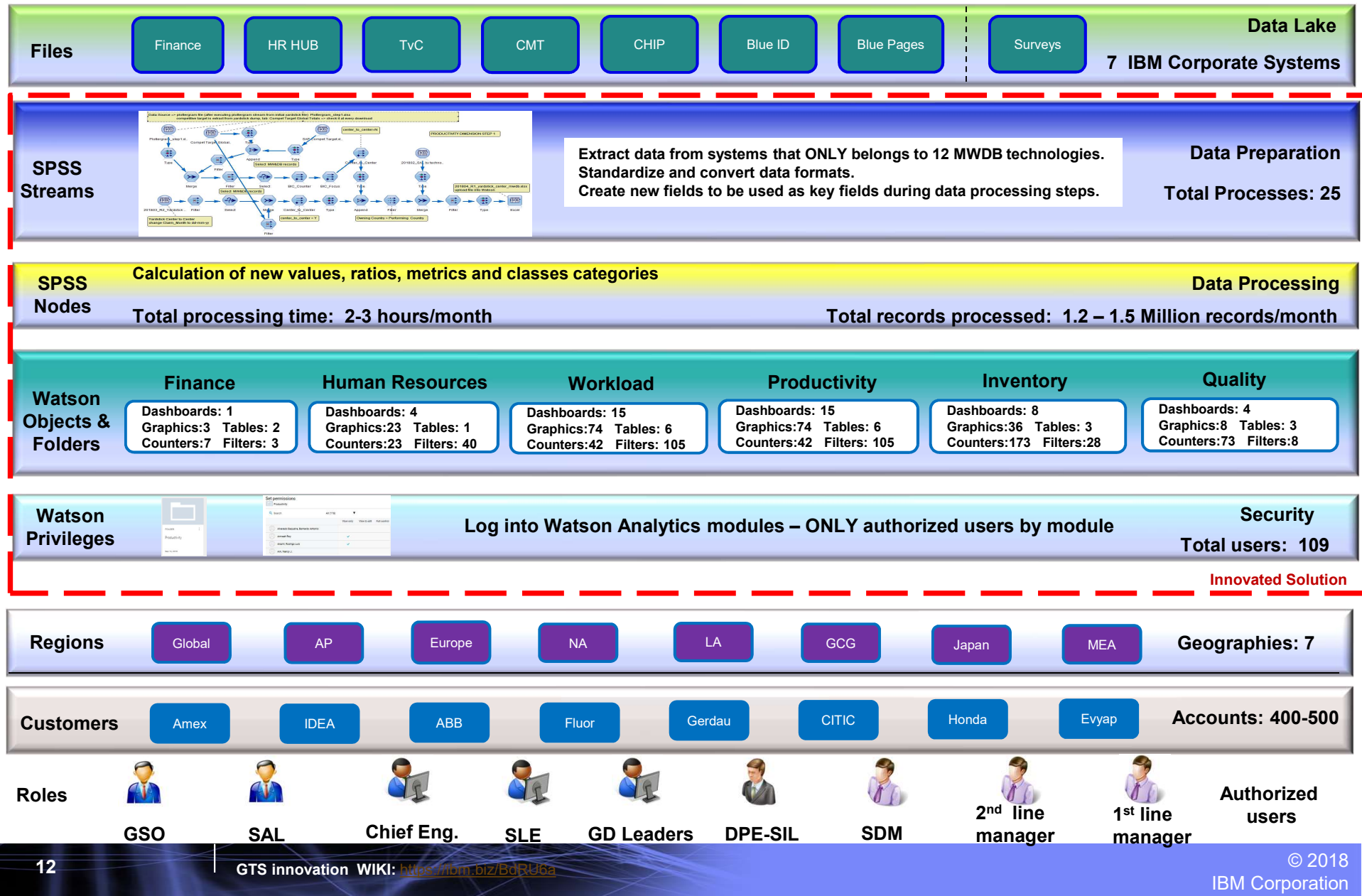
Solution Originality

- Has the solution been submitted for an award previously? **No**

If yes, answer the following questions:

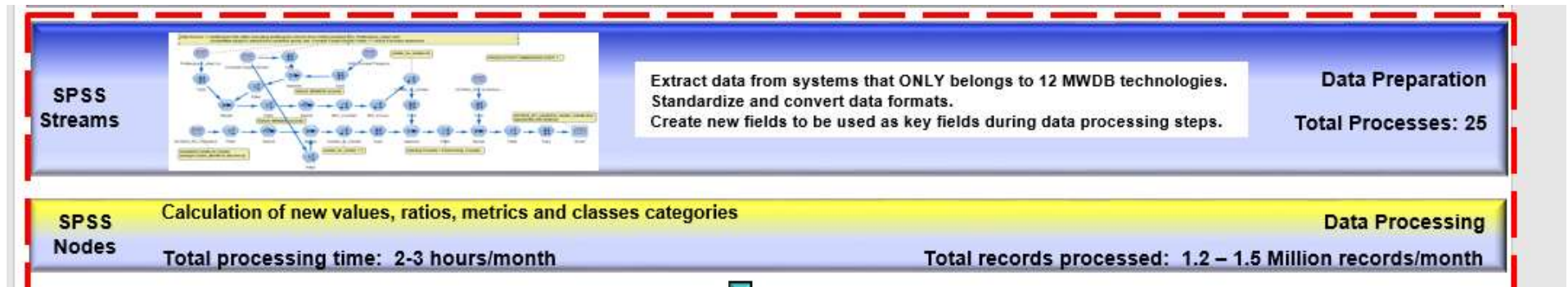
- Division under which award previously submitted (GTS, Systems, Security etc)
 - Year submitted
 - Was an award granted and if so what level awarded (Corporate, Major, Minor (1,2,3))
- Describe the originality of the solution. Choose one of the categories below and explain why the solution meets this category.
 - **Unique Solution**
 - **Middleware & Database (MWDB) Watson Analytics Dashboards is a deployment with:**
 - **MWDB Innovation on data mining and analytics for identification of client opportunity to improve their performance from multiples points of view: Finance (Finance Reports), Workload (TvC), Human Resources (HR Hub), Inventory (CMT), Productivity (Yardstick) and Quality (CHIP).**
 - **Answer the question: what is the account status? from multiple disciplinary points of view.**
 - **Centralized and consolidated Watson environment with restricted user management to define access to multiple or single reports folders avoiding spreadsheet use and document versioning issues.**
 - **Maximum flexibility: Reports format can be changed with few efforts according to users recommendations.**
 - **Web solution available 7 x 24 x 365 for any account, market or geography which supports Middleware or Database products.**
 - **Scalable: New reports can be analyzed, designed, developed and deployed/ added without any service availability interruption.**

Solution Originality



Innovated Solution

Solution Originality : Automatic Data Processes Innovation



Data Source => Monthly Yardstick dump files

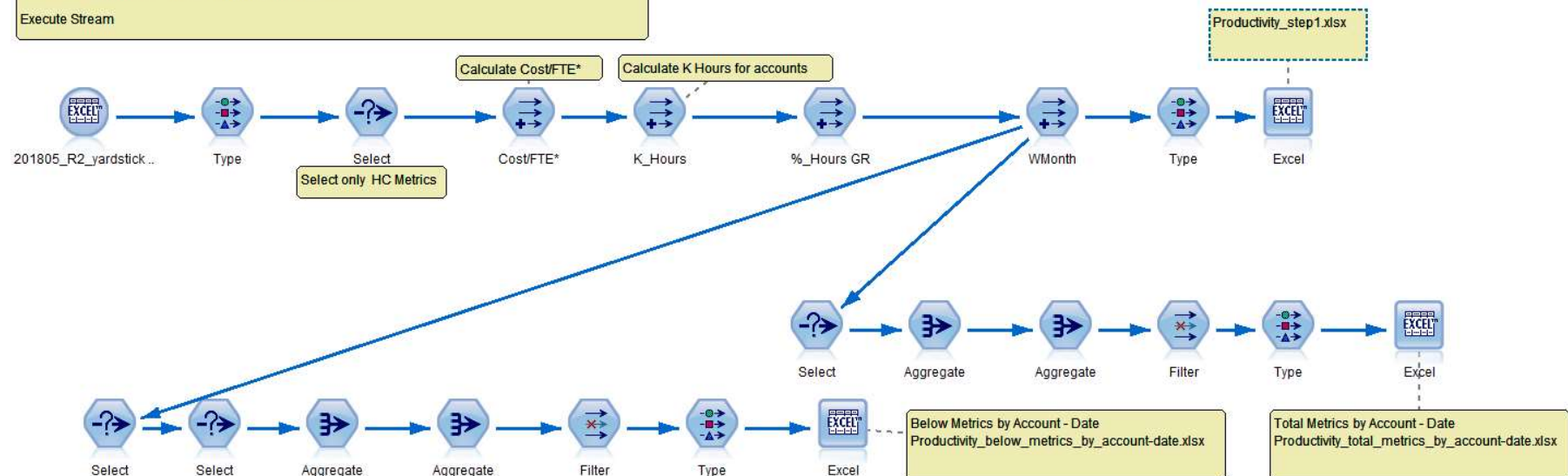
CMT tab extracted

Select metrics using excel

Convert % Hours GR, Volume Value and Total Hours fields to number 2,0 using excel cell format
 Change Claim_Month column field format to dd-mm-yy

Execute Stream

PRODUCTIVITY DIMENSION STEP 1



Solution Strategy and Scalability

Provide a short statement (2-3 sentences) for the following questions.

- Describe how this nomination is part of or contributes to GTS's strategic portfolio of solutions and services.
 - **Middleware and Database (MWDB) Watson Analytics Dashboards are a consolidated Management system which gets data from 7 IBM Corporate tools: Finace, HR Hub, Time Volume Capture, Competitive Metric Tool, CHIP, Blue ID and Blue Pages; provides information about, geographies, markets, countries and accounts from multiple points of view to have a whole picture and understanding about accounts or regions status; processing around 1.2 to 1.5 millions of records by months.**
- Describe how this nomination will be re-used within GTS.
 - **MWDB Watson Analytics Dashboards is a standard solution that can be used by any IBM services area which has productivity, volume, human resources data and metrics in place, saving: access time to connect to the different data sources, processing, drawing, showing graphics and creating tables with results in seconds, with a simple and friendly operation.**
- Describe how the nomination will be scaled to support multiple accounts and/or IOTs and the timeframe.
 - **Initially MWDB Watson Analytics Dashboards only included Middleware and Database metrics, but in June of 2018, it was decided to be strategic standard for all Hybrid Compute services areas : Distributed Middleware, Distributed Database, Distributed (Intel & Unix) and Sysops (System Operations).**
 - **The future Hybrid Compute Watson Analytics Dashboards will include 11 metrics, 4 services areas, 7 geographies and more than 900 accounts. It is planned to be completed during Q4 2018.**

Solution Documentation (also referred to as Intellectual Capital, IC)

IMPORTANT: The IC submitted must be of sufficient quality such that it can be used by others to reuse and apply the solution elsewhere.

- **List all IC related to the project**, for example, assets that have been registered in IRAM, GSAR, GDA+, Lotus Connections Communities, etc. Also include the current state of any Patents FILED, Patents ISSUED, Publications issued, Whitepapers or external publications, etc.
- **Include a link to the repository that contains the IC**, and make sure the reviewer of the submission has access to review it.
- *Note: a spreadsheet can be embedded (attached) to this page if there is insufficient space in the table (make sure to include all the fields in the table below in the spreadsheet).*

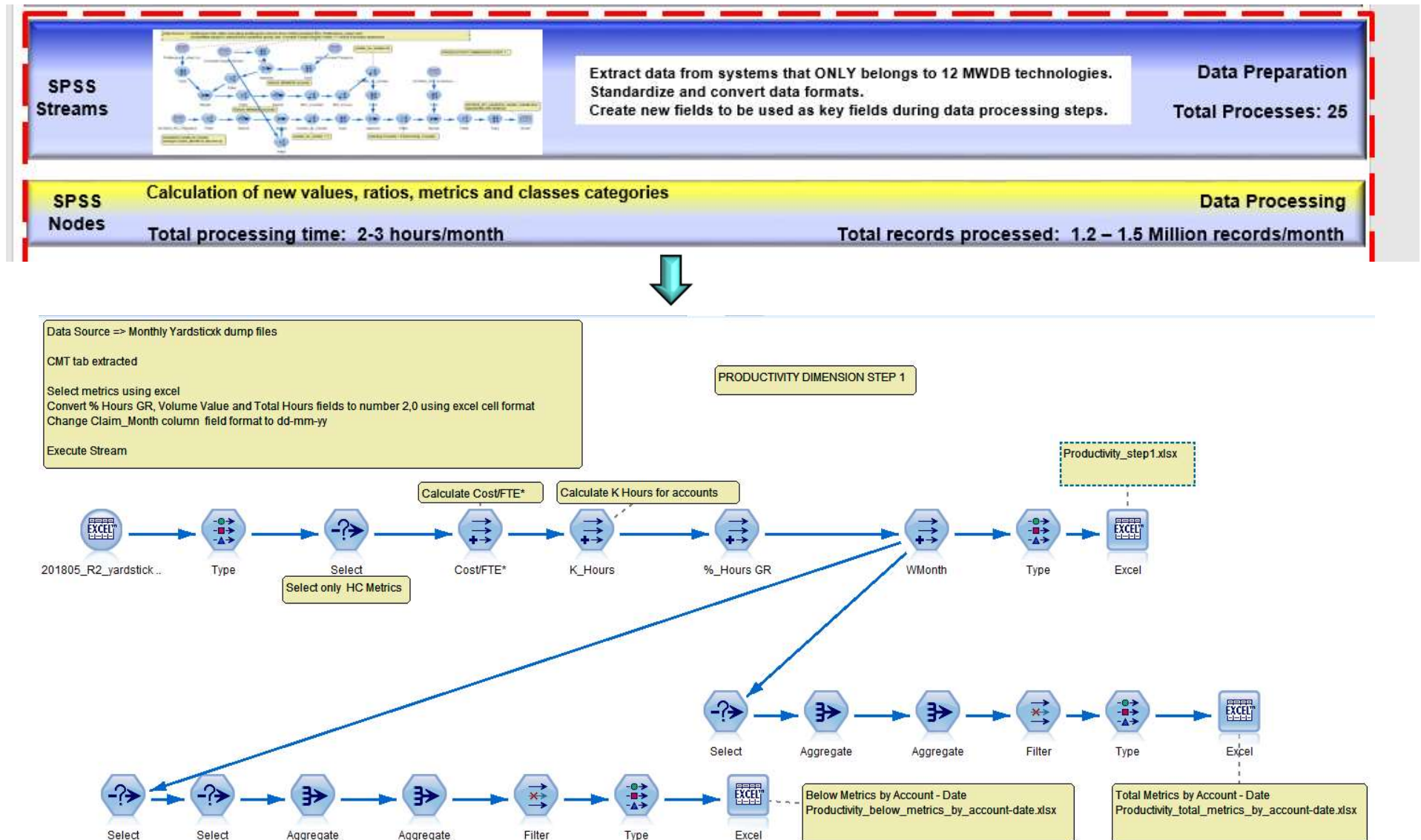
Documentation/Asset name/IC name	Link to Repository that houses the documentation	Date Submitted	Patent # and status if applicable	Contact name for the Asset
Middleware & Database Analytics Dashboards	https://w3-connections.ibm.com/wikis/home?lang=en-us#!/wiki/Wd533af36fa72_4fa7_b17c_8696d9232fcd/page/MW%26DB%20Watson%20Analytics	June – 2016	N/A	Julio Marcelo Ripoll/Argentina/IBM
Middleware & Database wiki	https://w3-connections.ibm.com/wikis/home?lang=en-us#!/wiki/Wd533af36fa72_4fa7_b17c_8696d9232fcd/page/MW%26DB%20Watson%20Analytics	May – 2018	N/A	Julio Marcelo Ripoll/Argentina/IBM

Business Value

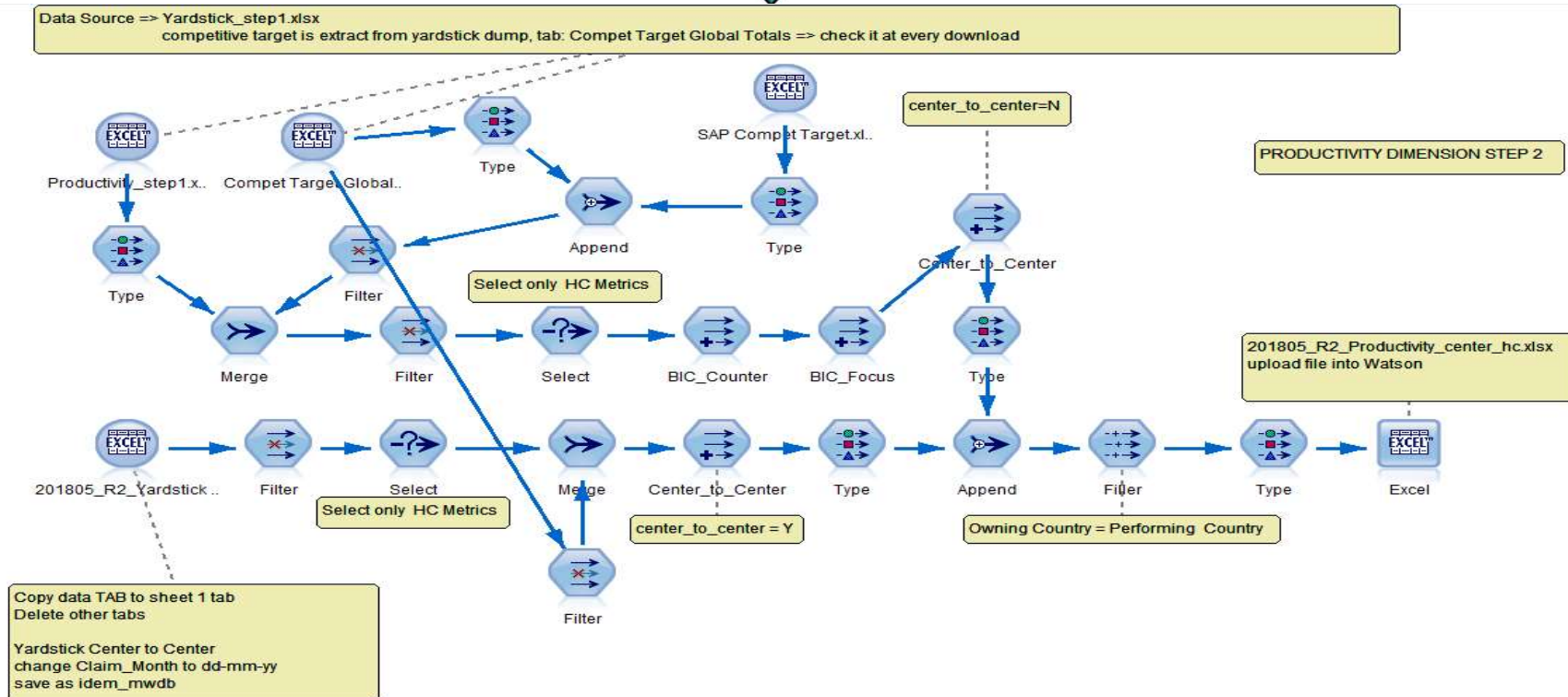
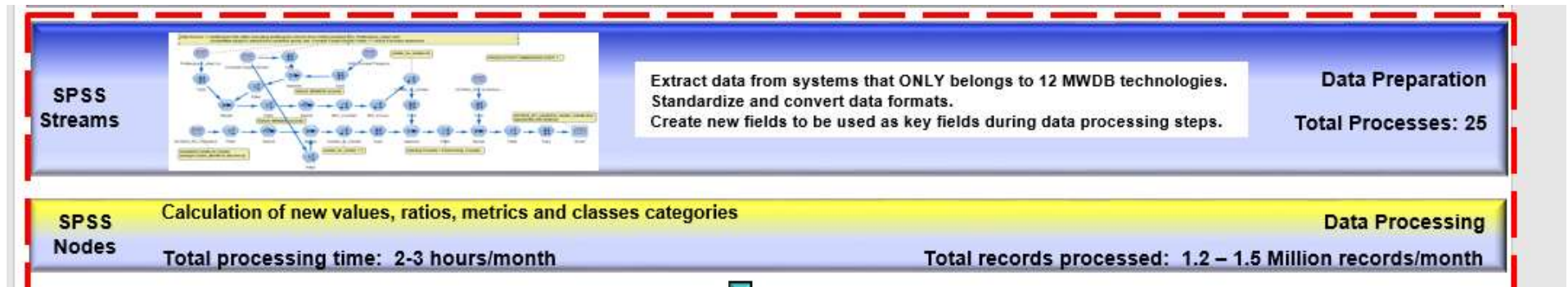
Value Area	Impact (U\$S)	Method of Calculation
Reducing Human effort	\$ 80,641	Time spent at each account to get similar reports
Decrease analysis time about conclusions on reports outcome	\$ 24,601	Analysis for geographies, markets, countries and accounts status, finance, productivity, workload, inventory, quality, and other reports outcomes, accounts comparison are done in much less time with this initiative
Monthly	\$ 105,241	Deployed across 7 Geographies, all Markets, and 400 - 500 accounts supporting Middleware and Database products, processing 1.2 to 1.5 Millions of records by month.
Annually	\$ 1,3 M	

Back up

Solution Originality : Automatic Data Processes Innovation

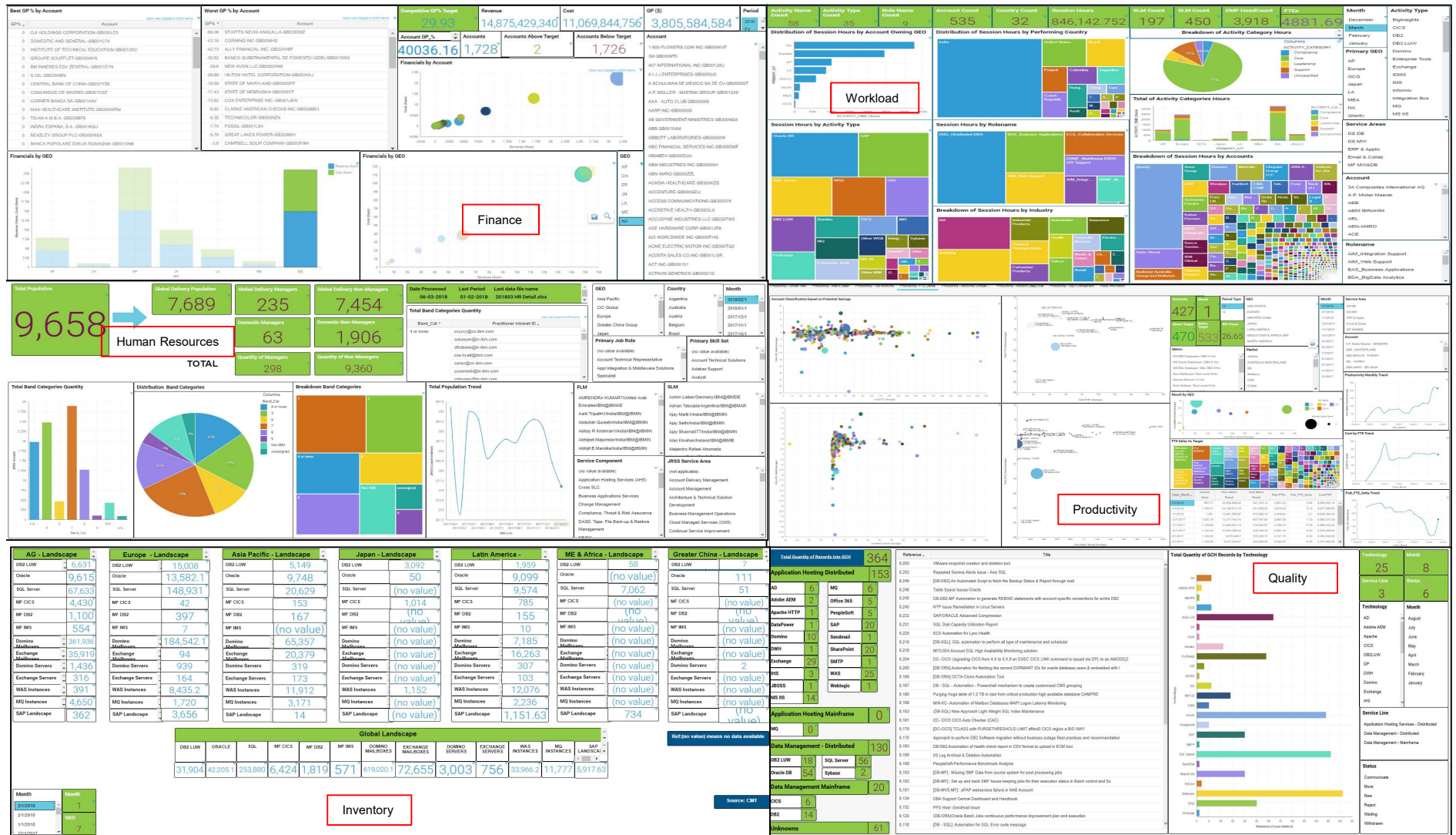


Solution Originality : Automatic Data Processes Innovation



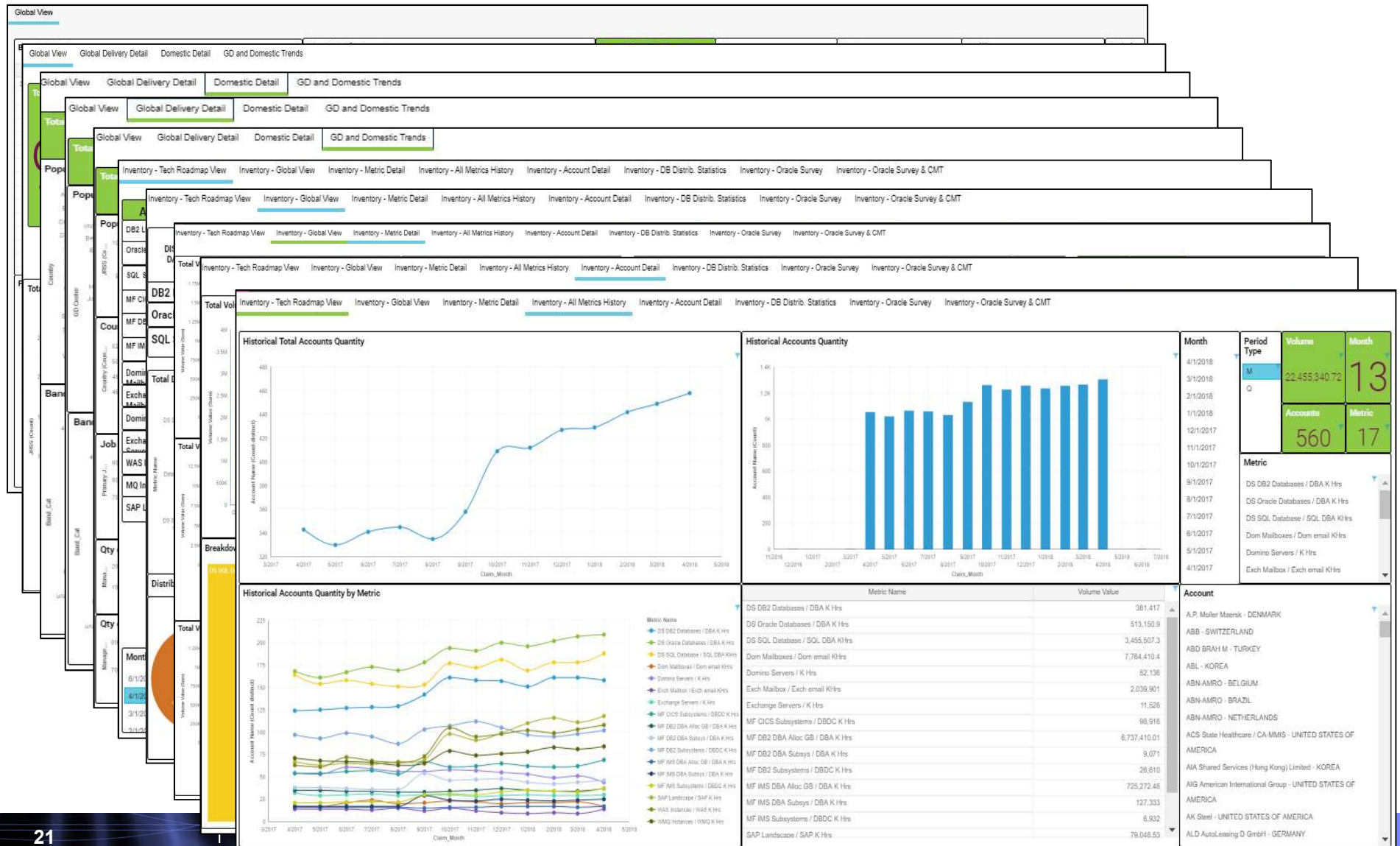
Description of Achievement (Slides 5 – 5)

Middleware & Database Watson Analytics Dashboards

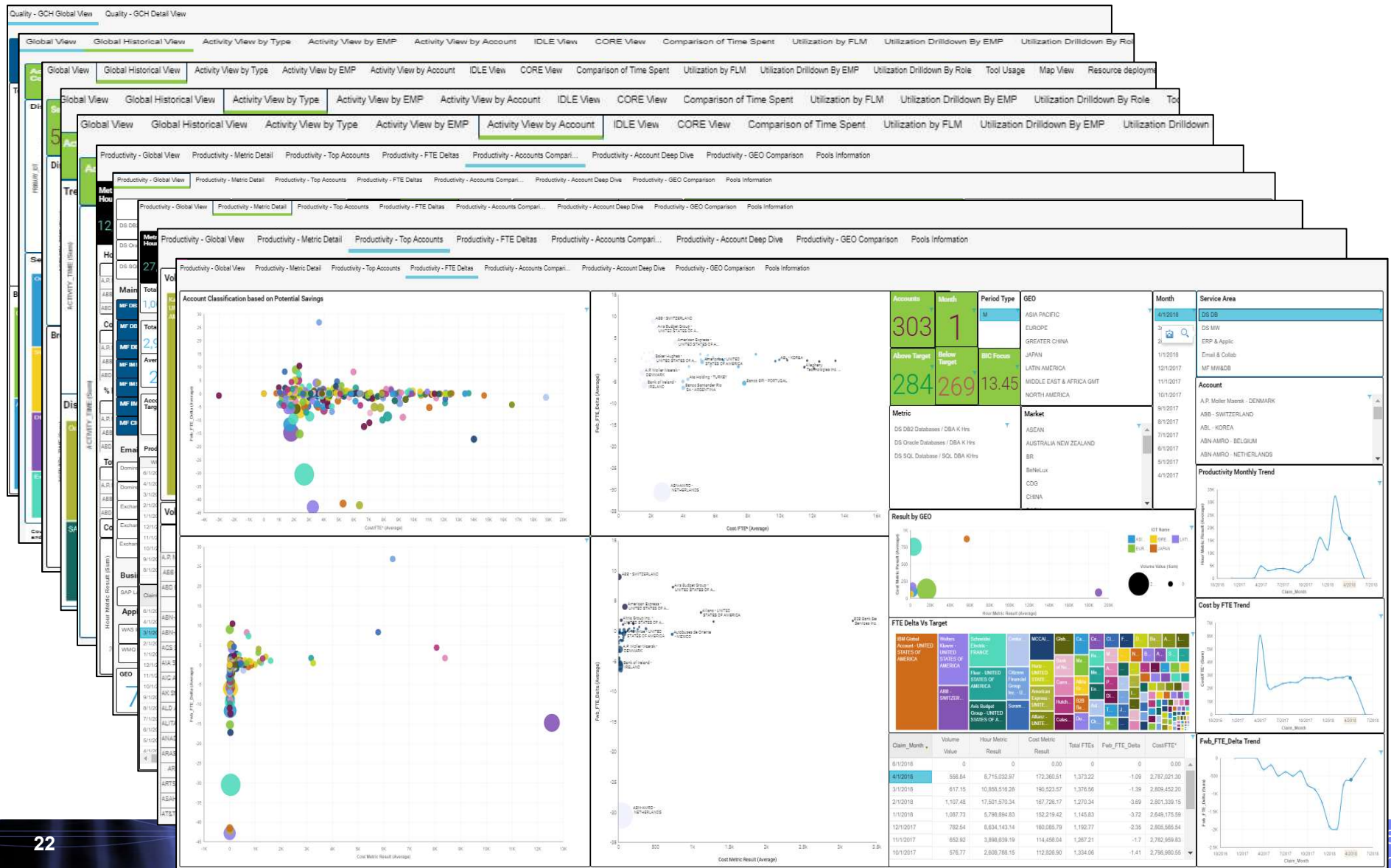


Description of Achievement (Slides 5 – 5)

Middleware & Database Watson Analytics Dashboards



Description of Achievement (Slides 5 – 5) Middleware & Database Watson Analytics Dashboards



Sponsor Letter for: Middleware & Database Watson Analytics Dashboards

----- Forwarded by Julio Marcelo Ripoll/Argentina/IBM on 04-07-18 10:26 -----

From: Mark A Thomas/UK/IBM
To: Julio Marcelo Ripoll/Argentina/IBM@IBMAR
Cc: Marcos Cimmino/Argentina/IBM@IBMAR
Date: 04-07-18 10:16
Subject: GTS Outstanding Technical Achievement and Outstanding Innovation Awards - Review Board

Dear Board Members,

In my role as sponsor for the nomination "**Middleware & Database Watson Analytics Dashboards**", I can confirm the following business value in terms of cost savings that have been achieved by the project during the stated periods. The numbers were recorded/measured via applying adoption/usage of the solution for the subscriber base with cost avoidance savings for estimated time saved each month. Cost of development & deployment have been factored into the total savings.

Cost Savings: Period January 2017 to December 2017; US \$1.3M

I look forward to the opportunity to further discuss this letter of support with the Review Board during its assessment and validation phase.

Yours Sincerely, Mark

Mark A Thomas
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