

S/4HANA Configuration Case

Phase 0 – Introduction

Before starting with the ERP configuration case, this case study presents the overall scenario using conversations within and across Global Bike departments. It helps identify issues in Global Bike’s core business processes, derive possible solutions and arrive at correct decisions.

|  |  |  |  |
| --- | --- | --- | --- |
| Product  S/4HANA 2020  Global Bike  GUI 7.70  Level  Beginner  Focus  Core business processes  IT project management  ERP configuration  Author  Stefan Weidner  Version  4.1  Last Update  August 2023 (SAP UCC Munich) | MOTIVATION  In preparation for an executive board meeting at Global Bike, the management has formed a team and assigned them the task to analyze Global Bike’s business processes, to identify common problems and derive possible solutions.  The taskforce is presented real conversations in the Global Bike company describing reoccurring issues in core processes. These issues need to be condensed into common problems.  From all possible solutions, the most fitting one is selected and further developed into a project proposal which is presented to the executive board for a final decision. |  | PREREQUISITES  None for Phase 0. For subsequent phases please refer to the respective cover pages.  NOTES  This case study uses the Global Bike data set which has been created for SAP UA global curricula exclusively.  ACKNOWLEDGEMENT  This case study was prepared with the assistance of student interns at SAP UCC Magdeburg. |



|  |  |
| --- | --- |
|  | Step 1: Introduction to S/4HANA Configuration Case |
| **Learning Objective** Understand objective and structure of ERP configuration case. **Time** 15 min | |
| **Overall Case Objective** The ERP configuration case intends to develop a basic understanding of ERP implementation projects based on a comprehensive scenario in a fictitious mid-size company (Global Bike). Based on theoretical concepts taught in lectures, the case provides real-life conversations within and across Global Bike departments for students to identify and analyze problems in business processes in order to derive possible solutions. After the best solution has been selected, it is configured in the ERP system. | |
| **Overall Case Structure** As visualized in the graphic below, the introductory part (Phase 0) of the ERP Configuration Case is independent of any specific ERP solution and any functional module. It consists of a case study document and lecturer notes. | |
| The subsequent phases focus on ERP configuration tasks for specific functional areas such as Financial Accounting, Procurement and Fulfillment. They are executed in a particular S/4HANA module like FI (Finance), MM (Materials Management) and SD (Sales and Distribution). | |
|  | |
| All phases except the introduction follow the same structure (as shown in the detailed graphic below): phase-specific scenario (case study), handbook (exercises) and a glossary (data sheet) together with slides and lecturer notes. | |
|  | |
| **Case Study Objective** Whether or not you already have previous ERP knowledge or practical experience, an introduction to the company’s organizational structures as well as its business processes is necessary. This introductory case study (Phase 0) helps develop scenario analysis, critical thinking, and project planning skills in the ERP implementation domain. | |
| **Case Study Structure** This case study is structured in 6 steps as visualized below. | |
|  | |
|  | |
|  | |

|  |  |  |
| --- | --- | --- |
|  | Step 2: Introduction to Global Bike Inc. (GBI) | |
| **Task** Familiarize yourself with Global Bike. **Time** 45 min  **Short Description** Please refer to the Global Bike story document to familiarize yourself with Global Bike’s company history and structure. You may skip this step if you have already used other Global Bike curricula and feel that you are well informed about the company.  **Name (Position)** Bianca Cavarini (Chief Information Officer) | | |
|  | | |
| The events of this case take place in **2008** when the management at Global Bike considered implementing an ERP system for its global operation. In fall 2008, during the annual management kickoff meeting, John Davis and Peter Schwarz (Co-CEO’s) gave **Bianca Cavarini** (Chief Information Officer) the task to analyze and scope a possible ERP implementation project.  Within this case study, you are representing Bianca Cavarini and her team to come up with precise results and a recommendation for possible solutions based on the problems that you identified. | | Scenario setting |
| Please use the Global Bike story document provided by your lecturer to familiarize yourself with the Global Bike company. While reading through the narratives focus on the following questions: | | Group discussion |
| 1. How was Global Bike Inc. founded? 2. What is Global Bike’s current senior management structure? 3. Based on the organization chart that you sketched in the “Corporate Overview” task, can you already identify implications on the ERP implementation project? 4. After reading about Global Bike’s IT strategy, what weaknesses exist in the different organizational units prior to the ERP implementation? 5. In addition, which objectives are already mentioned and which benefits are expected? | | Leading questions |
|  | |  |

|  |  |  |
| --- | --- | --- |
|  | Step 3: Scenario Analysis | |
| **Task** Read the scenario and highlight the most important and relevant information. **Time** 60 min  **Short Description** Read through the scenario and critically analyze the challenges employees are facing in this company. Focus particularly on the core statements during the conversations.  **Name (Position)** Jermain Kumins (Shop Floor Worker 1)  Jun Lee (Production Supervisor)  Ricardo Robles (Warehouse Supervisor)  Juriko Hamada (Shipping Clerk)  Silvia Cassano (Accountant Payable Specialist GBI US)  **Units involved**  Manufacturing Plant Dallas  Warehouse Dallas  Accounting GBI US | | |
|  | | |
| The Dallas plant needs to assemble thirty Deluxe Touring Bikes (black). However, production is delayed due to missing frames. **Jermain Kumins** (Shop Floor Worker 1) reports the missing components to **Jun Lee** (Production Supervisor).  Jun, in return, checks the computer’s internal system and compares log sheets to track the components but is unable to find any inbound delivery record. Jun asks Jermain to perform a physical inventory count of black frames. Jermain is already in the middle of another job and now has a double duty to physically count inventory.  After the count is completed, frames are still not found. So, Jun decides to call **Ricardo Robles** (Warehouse Supervisor) asking about the missing frames. This is what was said during a phone conversation. | | Scenario setting |
| **JUN**  “Hello Ricardo. What’s happening?” | | Jun Lee  [Production Supervisor] |
| **RICARDO**  “All is well – thanks for asking. How can I help you today?” | | Ricardo Robles  [Warehouse Supervisor] |
| **JUN**  “We’re about to start production today, but we couldn’t because the black frames are not here yet. We did not get them from your warehouse. Any ideas when they should be in?” | |  |
| **RICARDO**  “Well, I don’t know what frames you are referring to? What do you mean?” | |  |
| **JUN**  “According to my production schedule I need to assemble 30 black touring bikes today. In order to do so, I need the frames to complete the assembly. On my components excel log it shows that I should have received so many bike frames from you by today… oh wait, by yesterday actually, so we can start assembling the bikes.” | |  |
| **RICARDO**  “I have my shipment log here and it doesn’t show any black frames scheduled for delivery for today. Could you give me a minute? I want to take a better look in the computer or yesterday’s log print out.” | |  |
| A few minutes later Ricardo calls back. | |  |
| **RICARDO**  “Hello Jun, I looked into our delivery log for today, yesterday, and the week as well, but I could not find any frame delivery scheduled for today. I compared my log sheet with our shop floor workers and we cannot see your transport request.” | |  |
| **JUN**  “My production planning Excel list shows that I should have 30 black frames delivered to me since yesterday. Now we have a problem. I am unable to start production without these frames. This is delaying production and we have a demand that needs to be fulfilled. We will lose customers if we don’t deliver the bikes on time.” | |  |
| **RICARDO**  “How did you place the order? When did you place the order and who did you speak with?” | |  |
| **JUN**  “I called the warehouse two weeks ago and spoke with Juriko, the shipping clerk. I placed the order directly with her.” | |  |
| **RICARDO**  “I will speak with Juriko and clarify the situation. In the meantime, I’ll get the bike frame shipment ready for you and have it delivered to you as soon as possible.” | |  |
| **JUN**  “I appreciate that but I have to inform the plant manager about this problem and ask if we could use some buffers to get production started. We cannot delay production any further. When do you think we will receive the frames?” | |  |
| **RICARDO**  “I am on it right away.” | |  |
| **JUN**  “I think we need to work with that, but please call me back with details.” | |  |
| **RICARDO**  “Thank you. I will.” | |  |
| Thirty minutes later Ricardo calls back with more information. | |  |
| **RICARDO**  “Hi Jun, I spoke to Juriko. She does remember the order, but she noted it to herself on a sticky note and unfortunately did not transfer the request into the order log. We are sorry about that, but you know there are just too many incoming orders for our small team this time of the year.” | |  |
| **JUN**  “I understand, but what are we doing now? I really need those frames.” | |  |
| **RICARDO**  “You are lucky. We still have black frames here. I will call the overnight delivery company right away and make sure you receive them by 10am tomorrow.” | |  |
| **JUN**  “Well, what else can I do? Thanks for following up on this.” | |  |
| **RICARDO**  “Ok, thanks. We will try to prevent this in future. Sorry again.” | |  |
| Although WH Dallas usually orders black frames from Space Bikes Composites in Houston, Ricardo in this case rush-orders the thirty black frames from Dallas Bike Basics to speed up the process in replenishing their buffer as soon as possible.  Two days later, WH Dallas receives 30 black frames from Space Bikes Composites in Houston. As it turns out, they actually did order the frames from their preferred vendor two weeks ago. However, when the shipment arrived 1 week later, quality inspection found out that all frames were scratched and needed to be returned.  However, the wait time to receive the frames added unnecessary costs to the production process in terms of personnel expenditure and to the delivery process to keep customers satisfaction.  At the same time, **Silvia Cassano** (Accountant Payable Specialist GBI US) receives the invoice for this second shipment from Space Bikes Composites in Houston and calls Ricardo to check why she has double invoices for the same items, because she has already paid the first invoice one week back. | | Scenario setting |
| **Silvia**  “Hello Ricardo, this is Silvia from accounts payable, how are you today?” | | Silvia Cassano  [Accounts Payable] |
| **Ricardo**  “Hello Silvia, all is well, how can I help accounting today?” | | Ricardo Robles  [Warehouse Supervisor] |
| **Silvia**  "Well I am confused and frustrated about all the invoices I keep getting regarding the same 30 frames. I am calling you now to sort the problem out. I have 2 invoices on my desk from Space Bikes Composites in Houston, both invoices are for 30 frames but are a week apart. After checking in the system, it seems that I paid the first invoice (#5105600122) a week ago, then I received a new invoice (#5105600208) for the same items, but after carefully examining the invoice, it seems that it has the exact same order of 30 frames. Could you explain these invoices to me? Is this a double invoice for the same 30 frames? Or are they different orders? Or what exactly is going on here?” | |  |
| **Ricardo**  “Do you have a Goods Receipt number?” | |  |
| **Silvia**  “Let me look. I needed to find it in your system one week ago and recorded it on my notepad. Here it is … I found it; the G/R number was 500003485.” | |  |
| **Ricardo**  “Ok, I’ll check the slips, hold for one minute please” | |  |
| After checking the goods receipt slips, Ricardo is back on the phone with Silvia. | |  |
| **Ricardo**  “Hi Silvia, I looked into this G/R, and it seems that we did receive the 30 frames but found out by doing standard quality inspection that they are defective so we returned them to Space Bikes Composites in Houston.” | |  |
| **Silvia**  “Hmmm, I see. How are you usually handling such instances because I should never have received the invoice in this case, right?” | |  |
| **Ricardo**  “That’s a good question. It shows in my documents that we have printed a return slip based on this particular shipment and we updated our stock inventory list. Don’t you have access to this list and check it before you pay?” | |  |
| **Silvia** *[with frustration]*  “Hell no! The only things I see are G/R and G/I documents, but they do not co-reference each other. So, if you are returning them to a vendor for quality reasons it is not visible to me. Maybe we have always had this problem … oh gosh.” | |  |
| **Ricardo**  “So, how are we going to solve this issue now? We do not want to pay them twice. Can we just reject the second invoice?” | |  |
| **Silvia**  “It would have been better to void the first invoice. Now it’s too late since the payment is entered in the system a week ago. I have to reverse the payment on the first invoice now and cancel the invoice. Then, I need to issue payment for the second invoice. This is possible to do, however, it is a lengthy process and G/L accounts will show a lot of unnecessary transactions.  In addition to that, to reverse a payment I need an approval from the CFO which means following another set of procedures. And, even though I understand the problem now, every employee looking at financial reports will be confused as well, because they may not have access to logistics documents.” | |  |
| **Ricardo**  “This sounds so complicated, but if you can solve this mess I’m really thankful.” | |  |
| **Silvia**  “You better be!” | |  |
| **Ricardo**  “Got it! … Oh, by the way, did I tell you we are receiving additional thirty frames from Dallas Bikes Basics, because we needed an urgent delivery of these components. Coincidentally, this is the same amount again. So, you will be receiving another invoice for 30 black frames, but from another vendor.” | |  |
| **Silvia**  “Oh brother!! You do everything possible to confuse me, right?” | |  |
| **Ricardo**  “I sure try, my dear. But seriously, thank you so much. I appreciate the extra time you put into this.” | |  |
|  | |  |

|  |  |  |
| --- | --- | --- |
|  | Step 4: Problem Identification | |
| **Task** Revisit the reference symptoms/issues and condense them into problems **Time** 30 min  specific to this case.  **Short Description** You (in the role of Mona Falco – System Design and Dev Manager) need to come to a clear understanding of the most relevant symptoms in the respective organizational units in order to identify the causes and underlying problems.  **Name (Position)** Bianca Cavarini (Chief Information Officer)  Mona Falco (System Design and Development Manager) | | |
|  | | |
| **Bianca Cavarini** gave **Mona Falco** (System Design and Development Manager) the task to look into each organizational unit’s daily operations and record symptoms for system failures that occur during the execution of Global Bike’s core processes.  Based on the reference highlights from the conversations in Step 3 (listed below), identify together with your peers’ symptoms, causes and effects in the Global Bike organization. | | Scenario setting |
| * 30 black frames are missing to complete today’s assembly (discrepancy between excel components log sheet and shipment sheet, and production planning logs) | | Reference symptoms and issues |
| * The order of the 30 black frames was placed by phone; the person in charge noted the order on a sticky note and did not transfer the order to the log (they are experiencing a high number of customers calls this time of year) | |  |
| * The warehouse did receive the shipment of 30 black frames, but returned the first shipment of frames after discovering that they are defective and issued a return slip | |  |
| * This led to delayed production, time spent on working overtime and additional costs to rush delivery | |  |
| * 2 invoices received in accounts payable, and both are about the same 30 black frames (A/P paid both invoices for the same shipment twice) | |  |
| * A/P does not have access to the return transaction and these docs do not reference each other | |  |
| * too late to simply reverse the invoice since the payment was issued and to rectify the error A/P is forced to seek approval from the CFO | |  |
| * yet another shipment of 30 black frames is to arrive from a different vendor | |  |
|  | |  |

|  |  |  |
| --- | --- | --- |
|  | Step 5: Problem Analysis / Solution Finding | |
| **Task** Revisit the reference problems and identify possible solutions for Global Bike. **Time** 30 min  **Short Description** In the role of Mona Falco (System Design and Dev Manager) and Rick Sanchez (Business Analyst 1), establish an effective baseline to spot the key problems quickly and come up with a solution to optimize performance.  **Name (Position)** Mona Falco (System Design and Development Manager)  Rick Sanchez (Business Analyst 1) | | |
|  | | |
| Mona Falco and **Rick Sanchez**’s (Business Analyst) task is to revisit the problems they found and spot problematic trends that cause system failures and come up with possible solutions that prevent the problems from occurring again.  Based on the reference problems you identified in Step 4 (listed below), track, together with your peers, the connection between these problem symptoms across the organization, identify the source of each issue, its particular effect on the organization unit and finally its corporate effects. | | Scenario setting |
| * Symptoms: 30 black frames missing to produce 30 black touring bikes at Dallas plant, “triple-invoicing” of 30 black frames (30 returned, 30 reshipped, 30 reordered) | | Reference problems |
| * Particular effect: delayed production, higher shipping and production costs, customer dissatisfaction, multiple invoices paid by A/P, unnecessary financial transactions, extra personnel effort | |  |
| * Underlying cause/problem: missing computerized system to simplify/control the order and shipment (esp. returns) processes as well as the automated integration to FI; most documents are kept in a non-systematic filing system instead of a standard computerized system. | |  |
| * Corporate effect: reoccurring instances of such communication problems leading to the above mentioned effects in all affected organizational units (PP, MM, and FI). | |  |
|  | |  |

|  |  |  |
| --- | --- | --- |
|  | [OPTIONAL] Step 6: Project Planning | |
| **Task** Revisit the reference solution and come up with a project proposal. **Time** 60 min  **Short Description** In order for Mona Falco and Rick Sanchez to prepare for a corporate executive board presentation they need to evaluate the reference solution and fill in the Global Bike project proposal template.  **Name (Position)** Bianca Cavarini (Chief Information Officer)  Mona Falco (System Design and Development Manager)  Rick Sanchez (Business Analyst 1) | | |
|  | | |
| The presentation to the executive board should include the problems found in the analysis as well as proposed possible solutions (with pros and cons). For the most fitting solution, prepare a project proposal outlining objectives, scope, employees involved, benefits and costs.  Based on the results of Steps 3 - 5 including the reference solution (find below) discuss in your group whether implementing an ERP system at Global Bike meets all the requirements identified in the previous steps.  Finally, use the Global Bike project proposal template provided by your lecturer to collect all relevant information for the board presentation. | | Scenario setting  Project proposal template |
| * Overall solution: implementation of ERP system for all organizational units involved including Production Planning (PP), Materials Management (MM) and Financial Accounting (FI) | | Reference solution |
|  | |  |