

**BACKBONE** *IT.*MANAGEMENT ·
BACKBONE IT

YOUR *workbook*

Management at Backbone IT. You write all your answers for Day 1 and Day 2 in this file.

BEFORE YOU START

Write your answers in the white boxes, in English. German words in brackets are fine when you get stuck. Save this file at the end of every day and keep it.

DAY 1 · MANAGEMENT · BACKBONE IT

WHO ANSWERS AT 3 A.M.?

**Your contact: Sandra**

HEAD OF OPERATIONS · BACKBONE IT

Open the internship page for Day 1 and keep it next to this workbook. Work through the steps in order.

— DAY 1 · STEP 1 OF 3

A LETTER AND AN EMAIL

On the internship page: M1 (Two letters on Sandra's desk).

Write two sentences. Sentence 1: What does the works council ask for, and why? Use a number from the letter.
Sentence 2: What does Dr. Yilmaz worry about?

Help: "The works council asks ..., because the technicians ... Dr. Yilmaz worries that ..."

— DAY 1 · STEP 2 OF 3

USE THE DECISION MATRIX

On the internship page: M2 (How Management decides), M3 (Three options for the night calls).

a) Option 1: calculate the score with Sandra's weights. Write down your calculation.

b) Option 2: calculate the score with Sandra's weights. Write down your calculation.

c) Option 3: calculate the score with Sandra's weights. Write down your calculation. Which option wins?

Dr. Yilmaz and other doctors would weight the criteria differently: Costs 15%, One-hour promise 30%, Data protection 40%, Workload of technicians 15%. The points stay the same. Tip: the weights for the One-hour promise and the Workload stay the same too, so you can copy these two results from a) to c).

d) Calculate the scores of all three options with the doctors' weights. Which option wins now?

e) Compare the winners in c) and d). Explain in two sentences what this shows about a decision matrix.

Help for e): "The points are the same, but ... So the real decision is ..."

DAY 1 · STEP 3 OF 3

CALLMATE AND A REAL CASE

On the internship page: M4 (How an AI voice agent works), M5 (A real case: Air Canada).

a) Use M4 and what you know from your IT work. Name two problems a doctors' practice could call about at night that CallMate could solve on its own. Then name one call it should always pass on to a technician, and give a reason.

b) Use M5. At 3 a.m., CallMate tells a doctor: "A technician will be with you within the hour." But no technician is free. Explain in two sentences what the Air Canada case means for Backbone.

Sandra says: *“If CallMate makes a mistake, the company that sells it is responsible, not us.”*

c) Use M1 and M5. Is Sandra right? Judge in two or three sentences.

Help for c): “In the Air Canada case, the tribunal said ... Dr. Yilmaz has a contract with ..., so ...”

— DAY 1 · MY NOTES

WHAT I LEARNED TODAY

Write three sentences, one for each important thing you learned today, in your own words. For example: how a decision matrix works, and who is responsible for what an AI voice agent says.

Done for today: save this file. Then open the internship page for Day 1 and let it check your workbook.

— DAY 2 · MANAGEMENT · BACKBONE IT

WHOSE WEIGHTS COUNT?

**Your contact: Sandra**

HEAD OF OPERATIONS · BACKBONE IT

Open the internship page for Day 2 and keep it next to this workbook. Work through the steps in order.

— DAY 2 · STEP 1 OF 5

CALCULATE AND CHECK

On the internship page: M6 (CallMate at Backbone: the facts).

a) How many night calls per month would CallMate solve on its own, and how many would still go to a technician? Write down your calculation.

b) How much does Backbone save with Option 2 compared with Option 1, per month and per year? Write down your calculation.

c) How much money does one service contract bring Backbone in one year? Write down your calculation.

d) What is the largest number of practices that can cancel their contracts because of CallMate, so that Backbone still saves money with Option 2? Use the saving per year from b) and your answer from c). Give a whole number and explain your rounding in one sentence.

— DAY 2 · STEP 2 OF 5

TEST THE WEIGHTS YOURSELF

On the internship page: M3 (The points from Day 1).

Karim Haddad is a technician on call: he worked seven nights in a row last month. Dr. Selin Yilmaz is a family doctor: Backbone's servers hold the health data of her 4,000 patients, and she chose Backbone because she can always talk to a real person.

Write three sentences. Sentence 1, to Karim: what does Option 2 mean for him? Sentence 2, to Dr. Yilmaz: what does Option 2 mean for her and her patients' data? Sentence 3: start with Sandra's weights in the simulator, move Data protection up and Costs down: up to which weight for data protection does Option 2 still win?

Help: "Karim, with Option 2 you ... Dr. Yilmaz, with Option 2 your patient data ... Option 2 wins as long as the weight for data protection is ...% or less."

— DAY 2 · STEP 3 OF 5

ZOOM OUT: THE WHOLE CITY

On the internship page: Step 3.

a) What happens to customers when almost every IT company in Ohm City does this? Can a customer still change to a company with a real person at night? Complete this sentence in the box: “Most IT companies let AI agents answer the phone at night, so customers ..., therefore ...”

b) What happens to the people who answer calls at night today, like technicians on call or staff in a call centre? Name one problem and one chance for them. Two sentences.

c) Should customers always be able to talk to a human? Tick exactly one box.

- ☐ Yes, always
- ☐ Only in an emergency
- ☐ No

d) Explain your choice in c) in two sentences. Then name one weakness of your choice in a third sentence.

Help: Think of Dr. Yilmaz and of the Air Canada case. “I choose ..., because ... One weakness is that ...”

DAY 2 • STEP 4 OF 5

YOUR DECISION AND YOUR STATEMENT

On the internship page: Step 4.

a) Write Backbone's decision for the night calls in one or two sentences. Your decision answers three questions: Who answers the night calls? Which calls always go to a person? Who is responsible for mistakes?

Help: "At night, ... answers the calls, and calls about ... always go to a person. ... is responsible for mistakes."

b) Prepare your statement. Write exactly three sentences, one in each box.

Sentence 1 starts with: "Our decision is ..." Write your decision from a) again as one sentence and start it with these words.

Sentence 2 starts with: "The strongest reason for our decision is ..." Use a score from the decision matrix, a number from Step 1 or the Air Canada case.

Sentence 3 starts with: "The biggest weakness of our decision is ..., and we deal with it by ..."

Help for sentence 3: "The biggest weakness of our decision is that the technicians ... / that patient data ..., and we deal with it by ..."

c) Everyone prepares this part. Ms Borgwardt chooses some of you to read their three sentences out loud. Then two classmates ask two questions: “Who loses because of your rule?” and “How much does your rule cost?” In these questions, “your rule” means your decision. Write your answers here, one or two sentences each.

Question 1: “Who loses because of your rule?”

Help for question 1: Think of Karim and of Dr. Yilmaz.

Question 2: “How much does your rule cost?”

Help for question 2: Use the costs per month in M6: Option 1 €9,000, Option 2 €6,000, Option 3 €7,000. If you combine options, nobody knows the exact cost yet: start with the costs of the options you combine and say if your decision costs more or less, and why. “Our decision costs about €... a month, because ...”

— DAY 2 · STEP 5 OF 5

THE STATEMENTS

On the internship page: Step 5.

First, while you listen: who loses in each statement? A few words for each one. Then think about all the answers to the first question, “Who loses because of your rule?” Write two sentences under your notes: What do the people who lose have in common?

Help: Look at your notes. Do the people who lose decide about the rule? “Most of the people who lose are ... They all ...” If you missed the statements: leave out the notes and write two sentences. Think of Karim and of Dr. Yilmaz, and of the people who lose under your own rule. What do they have in common?

— DAY 2 · MY NOTES

WHAT I LEARNED TODAY

Write three sentences, one for each important thing you learned in Management, in your own words. For example: why the weights decide a decision matrix, and what your decision changes for Karim and Dr. Yilmaz.

Done for today: save this file. Then open the internship page for Day 2 and let it check your workbook.

