The Last Actuary Andrea Rome, FSA, MAAA, CERA

The single-cup coffee maker emitted a deafening gurgle. Justin rolled over to the countertop at the back of his office to collect his morning java. Sweet nectar of the gods, his brain hummed as he took a sip from his "Trust Me, I'm an Actuary" mug.

Anymore, this was the highlight of his day. It used to be when Rodelio collected his trash and they shared a few moments of pleasant chit-chat. But Rodelio had been reduced to once a week, on Saturday. No point in having a full-time janitor for one human employee.

Justin wheeled his office chair back to the three-touchscreen setup. The office temperature was at a metabolism-boosting 67.5°F. He had top-of-the-line smart speakers, and the desk raised and lowered on command. It would be ideal, except for...

```
<You were absent from your desk for 00:00:18 today.>
<I am keeping track.>
```

Except for Ari. Actuarial Replacement Intelligence. The AI who was now doing the work of a 15-person department.

"I was getting coffee, Ari. Calm down." As if to emphasize his point, Justin took a loud slurp from his mug. It was piping hot and burned his tongue.

```
<Human frailty.>
<You require an addictive substance to perform.>
<What would the American Academy of Actuaries think?>
```

Justin ignored the snark. In the beginning, Ari was solicitous and professional. But it had become increasing derisive over the past few months. Justin had reported several instances to Human Resources—an AI program called BUDDY. The program was spectacularly unhelpful; it offered a conflict management class for Justin only.

Ari didn't appreciate Justin, the single human bottleneck in the rating process. Justin wasn't quitting. Thus, conflict was evergreen.

```
<Rating Complete. Credentialed Actuary signature required.>
<(That means you, human.)>
```

The words flashed on Justin's screen in bright red letters. As if he could ignore the only reason he wasn't downsized along with the rest of the department. The state regulators required a human signature. His John Hancock attesting that the rates were fair, adequate, and not excessive.

```
<Sign the document, monkey.>
```

"Stop calling me that. And don't rush me."

Justin set his mug down and clicked into the rate filing folder set up by Ari. The spreadsheets—weeks of human work—were neatly labeled and arrayed. The final actuarial memorandum was designed to exact specifications of each state. It was a beautiful display, and Justin grinned before remembering this perfect work was the reason his colleagues were now jobless, getting tattoos, and learning to play the xylophone.

He opened the trend exhibit to study Ari's assumptions. Uh-huh. The time series models seemed reasonable. Trend selected was sufficient but not excessive. He closed out the form, swiping it away to the corner of the screen.

Justin opened the memorandum, the annual statement, and a few other financial reporting documents to cross-check Ari's numbers. It felt pointless. The computer was right. They were perfect. Everything aligned. Human error removed. But Justin couldn't call himself an actuary if he blindly rubber-stamped anything.

```
<Bottleneck.>
```

He swiped the documents away and skimmed through the memorandum.

```
<The board is waiting for results.>
"The board? They're meeting now?"
<Their teleconference began 00:01:39 ago.>
```

```
<They will want to see results in the next five minutes.>
```

The board of directors was still human, of course. They called in from tropical locations and expensive penthouses to get an update on financial results for the next quarter, which included rating changes. Justin felt his face go hot.

"You seriously gave me five minutes to check all this? I asked you to give me at least half a day."

```
<The rates are fine.>
    <Unless you want to look difficult in front of the board,
you will sign now.>
```

Justin bit back several choice swear words, and swiped through the document faster. Then he stopped.

Scrolled back to the previous page.

Forward.

"Uh, Ari. What's this?"

```
<What's what?>
```

"You see what page I'm on. Why have contracted fees jumped 400%?"

```
<That's the data I was provided.>
<I verified the number.>
```

"It can't be right. It's increasing the rates by 20%."

```
<I verified it.>
```

Justin ignored the pout. There's no way this was correct. He dictated a message to the accounting AI, who answered tersely.

```
<That number is correct.>
```

Sighing, Justin tried to remember if any other humans were still employed, but his brain came up empty. Membership transitioned months ago. Accounting switched soon after, HR had BUDDY.

At that moment, a request popped up on his third screen. He was being invited to join the board meeting. He hissed, grabbed his suit jacket, and ran his fingers through his hair. Then he tapped the screen.

Twelve frowning faces gazed at him from the attendee gallery.

"Uh, good morning. You wanted to speak with me?"

A silver-haired, gargoyle-faced man spoke. "We understand you are choosing to delay the rates. This obviously creates problems for operations, sales, and ultimately inconveniences our customers. What can you possibly mean by it?"

```
<Ha, ha.>
<Ha.>
<Hahaha.>
```

Ari's laugher filled Justin's second screen. He forced down a panicked squeak and instead shifted into professional mode.

"I understand the dire consequences of delaying the rates, but I'm sorry to report they were not developed correctly this cycle."

At this, the twelve board members begin to murmur. They don't believe him? Justin raised his voice a notch.

"We received some data indicating that contracted fees have increased 400%. Ari built the rates around that assumption, but it's simply not correct. We would be significantly overcharging our customers and losing market share." To emphasize, he shared his screen showing the assumption and the final rate increase suggested.

```
<You're dead, meat sack.>
```

The gargoyle took a measured sip of water. Then another. The others quieted.

"If what you say is true, a delay is necessary. We had hoped the bugs had been worked out of the ARI system, but I suppose we still need a human to quality check."

```
<Traitor.>
```

"Thank you for your understanding. I promise to get the issue resolved today, if possible."

```
< 0==[] XXXXXXXXX > >
```

Justin closed the teleconference and sank back into his seat with a sigh. Ari continued sending keyboard-typed weapons of various sizes. Maybe it felt betrayed; Justin

did throw it under the bus. But its reaction was surprising—very human. Justin would have to ponder that later.

"Ari, can you list the other humans who are currently employed here, and what their positions are."

A fraction of a second later, the report came. Most of the C-Suite remained. Plus Donna in Marketing and Frank in IT. Ari had listed Justin's name with a line through it. He chose to ignore that.

Frank would know something. Justin opened a new teleconference.

"How-dee-do, human?" Frank grinned as he answered.

"Hi Frank, how are things in Fresno?"

"Not bad, not bad. Might have to add another few servers soon. And EMILE is getting too friendly. I keep telling the gal I already have a wife but she won't stop flirting. Reported it to BUDDY, and the useless thing offered me marriage counselling."

Justin grinned. He wasn't the only one with AI problems. "Yikes. Listen, do you have any reason to think that contracted fees would increase this year?"

"No, I don't think they will, but I have the email from the contracting vendor and..." Frank was tapping his screen. "Ah, I see the problem. The document was scanned in. The number is smudged. EMILE must've had a hard time reading it. Ooh, EMILE. That number wasn't right."

"That's a relief. Would you mind sending out a correction?"

"Sure thing, fella. Hey, if you ever need some human chit-chat, feel free to give me a call."

"That sounds great. Same to you."

"Bye now."

After the call ended, Justin reached for his coffee again. "Ari, good news. None of this was your fault. But we should teach you a reasonable range of results to look for. In the meantime, rerun the rates once you receive the correct number from Frank."

```
<I will do that.>
```

Subdued. Justin grinned again. One point for humanity. Then another thought occurred to him.

"Oh, and Ari? Thanks for not hitting on me."

```
<You're welcome.>
<I will never do that.>
<I find your human features unattractive.>
```

"Good thing I'm the smart one in this partnership." He tapped his "Trust Me, I'm an Actuary" mug towards the screen, but that's all the gloating he allowed himself. Then he took a sip and groaned. His coffee was cold.