



EDGE CASE STUDY

AUTOMATE WITH CONFIDENCE

A SMECO SUCCESS STORY WITH COMPARA

2025

ORACLE | Partner



WE INSTALL **CONFIDENCE**. NOT JUST SOFTWARE

TOPICS

- About USP
- The Challenge
- Introducing Confidence-as-a-Service
- From Toolkit to Solution
- Effects of Comparison
- Business Impact

ABOUT

UTILITY SOLUTIONS PARTNERS

(USP)

WE INSTALL CONFIDENCE

As a full-service technology firm built by seasoned utility experts, we're more than just **system integrators** -- we're your trusted partner and advisors in maximizing your software investment. Many of us come from utility companies, giving you a unique client-side perspective you won't find anywhere else.

BEYOND INTEGRATION

WE BUILD TRUST, NOT JUST IMPLEMENT SYSTEMS

DEEP INDUSTRY KNOWLEDGE

DECADES OF FIRSTHAND UTILITY EXPERIENCE

DUAL PERSPECTIVE

TECHNICAL MASTERY MEETS UTILITY OPERATIONS

STRATEGIC PARTNERSHIP

WE ELIMINATE KNOWLEDGE GAPS
AND INCREASE EFFICIENCY



NOT JUST SOFTWARE

WE'RE EVERYWHERE

WHERE WE DELIVER CONFIDENCE

Powering progress, from watts to water. USP is your utility's nationwide growth partner. We partner with mid-sized utilities – cities, cooperatives, municipalities, and investor-owned utilities – to transform their operations through expert technology solutions.

-  ELECTRIC
-  GAS
-  WATER & SEWER
-  SOLID WASTE



WHAT WE OFFER



ADVISORY SERVICES

STRATEGIC GUIDANCE POWERED BY REAL UTILITY EXPERIENCE TO DRIVE TRANSFORMATIONAL RESULTS.



CLOUD SERVICES

FUTURE-PROOF YOUR OPERATIONS BY MOVING FROM ON-PREMISE HEADACHES TO CLOUD-POWERED EFFICIENCY.



IMPLEMENTATIONS

TURNING COMPLEX IMPLEMENTATIONS INTO MANAGEABLE MILESTONES WITH PROVEN EXPERIENCE.



MANAGED SERVICES

WE HANDLE THE TECH, SO YOU CAN FOCUS ON SERVING YOUR COMMUNITY.



UPGRADES

OUR UNIQUE APPROACH SEPARATES TECHNICAL UPDATES FROM FEATURES FOR SEAMLESS SUCCESS.



STAFF AUGMENTATION

POWERING YOUR TEAM WITH UTILITY EXPERTS. DON'T LET RESOURCE GAPS HINDER YOUR PROGRESS.

THE

CHALLENGE

ABOUT SMECO

In 1935, Southern Maryland was sparsely populated that commercial electric power companies refused to extend service to the area.

In search of electric lighting for their homes, farms, and businesses, Southern Maryland's residents took matters into their own hands.

They formed local committees to seek federal assistance through the Rural Electrification Administration (REA).

Today, SMECO provides power to more than 169,000 services, but it remains a cooperative corporation, owned by its members and operated for them on a non-profit basis.



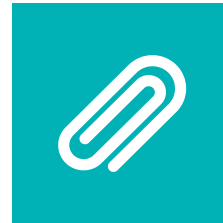
THE CHALLENGE

SMECO HAD BEEN
MANUALLY VALIDATING
150,000+ ACCOUNTS!!



THE CHALLENGE

With thousands of accounts and countless variables, manual validation wasn't just inefficient—it's unsustainable.



SCALE & COMPLEXITY

- 24 billing cycles ranging from 5,000 – 12,000 accounts
- Over 25 different rates to validate
- Manual validation of taxes, fees, budgets, and more



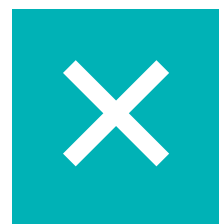
RESOURCE CONSTRAINTS

- Limited team wearing multiple hats
- Balancing daily duties with upgrade validation
- Manual data entry and calculations



CRITICAL CUSTOMER SCENARIOS

- Budget billing validation
- Payment plan verification
- Seasonal account handling
- Multi-item billing review



RISK FACTORS

- Manual validation prone to human error
- Sample size limitations
- Limited ability to catch all scenarios
- Time-intensive reconciliation process

THE CHALLENGE

SMECO's 24 billing cycles ranged in size from 5,000 – 12,000 accounts, making full validations difficult. With over 150,000 total accounts to validate, manual processing wasn't just challenging—it was nearly impossible.

01

ACCOUNT COMPLEXITY

- SMECO had to locate certain accounts based on various scenarios
- Each scenario required individual investigation
- Multiple variables to track per account

02

SCALE OF VALIDATION

- They needed to determine every customer's rate for 150,000+ accounts
- Over 25 different rate types to verify
- Each rate requiring careful validation

03

BILLING ARRANGEMENTS

- Were they on budget billing?
- Were they on a payment plan?
- Was there a payment arrangement?
- Each arrangement requiring separate verification steps

04

SPECIAL CASES

- Did they have on the multi-item tab?
- Or was it seasonal?
- Additional complexity for unique account types



THE CHALLENGE

SMECO was also challenged by their limited resources. Many had to wear multiple hats while balancing their daily duties on top of upgrade validation data. The sheer volume made manual validation unsustainable

BILLING PROCESS ALONE

01

MANUAL DATA ENTRY BURDEN

- *Manually Enter Meter Reads Plus*
- Time-consuming individual entry
- Risk of human error
- No automation support

02

COMPOUNDING DATA VOLUME

- *And more Meter Reads Plus*
- Multiple validation rounds needed
- Growing backlog of entries
- Increasing error potential

03

MANUAL CALCULATIONS

- *Check all Billing...by Calculator*
- Each bill requiring individual review
- Complex rate calculations
- Time-intensive verification process



THE CHALLENGE



LET'S NOT
FORGET ABOUT
SAMPLE SIZES.

SMECO had over **25 different rates** and with their limited resources, it was difficult to check everything:

- Multiple tax structures
- Various fee calculations
- Budget billing scenarios
- Special rate cases
- Seasonal adjustments

A **sample size doesn't always capture every situation.**

- Limited visibility into edge cases
- Missing unique account scenarios
- Error detection challenges
- Resource-intensive error correction
- Complete backtracking required for each error found
- Manual revalidation needed for corrections

THE CHALLENGE

Test Case Number	Test Case Name	Test Case Business Unit	Assigned	Tracking Status	Day	System Date	% Complete
1	BL 5	ACRE Enrollment - Add	Marty Rollins	Completed			100
2	BL 10	Address Change - Account	Marty Rollins	Completed	2		100
3	BL 15	Address Change - Person	Marty Rollins	Completed	2		100
4	BL 20	Address Change - Premise	Marty Rollins	Completed	2		100
5	BL 25	Adjustment - Add	Marty Rollins	Completed	2		100
6	BL 30	Adjustment - A-P request	Marty Rollins	Completed	1		100
7	BL 35	Adjustment - Cancel	Marty Rollins	Completed	1		100
8	BL 40	Auto Pay Source Type (Adding a Bank/Routing #)	Marty Rollins	Completed	2		100
9	BL 65	Bankruptcy - Commercial	Marty Rollins	Completed	1		100
10	BL 70	Bankruptcy - Discharged	Marty Rollins	Completed	1		100
11	BL 75	Bankruptcy - Dismissed	Marty Rollins	Completed	1		100
12	BL 80	Bankruptcy - Residential	Marty Rollins	Completed	1		100
13	BL 85	Bill Cycle (change-add)	Marty Rollins	Completed			100
14	BL 90	Budget Plan - Add	Marty Rollins	Completed			100
15	BL 90a	Budget Plan - Choice Customer - Add	Marty Rollins	Completed			100
16	BL 95	Budget Plan- Cancel	Marty Rollins	Completed			100
17	BL 95a	Budget Plan - Choice Customer - Cancel	Marty Rollins	Completed			100
18	BL 100	Budget Plan - Change	Marty Rollins	Completed			100
19	BL 100a	Budget Plan - Choice Customer - Change	Marty Rollins	Completed			100
20	BL 105	Cancel Rebill (one month)	Marty Rollins	Not Started			0%



INTRODUCING

CONFIDENCE

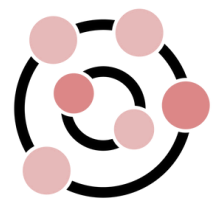
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SERVICE

(CaaS)

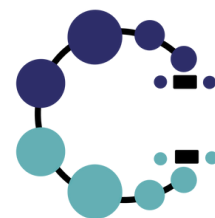
TOOLS THAT TRANSFORM

While others theorize about utility tools, we deliver them. Our **Confidence-as-a-Service (CaaS)** toolkit transforms complex utility software delivery into manageable journeys, powered by decades of utility expertise.



CARBON

Simplify team testing and training with instant data creation



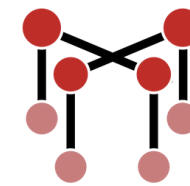
COMPARA

Your safety net for billing system transitions



CONDUIT

Control your software development framework



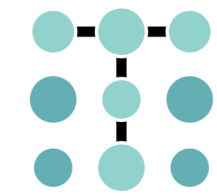
MARIONETTE

Transform testing challenges into opportunities



MYRIAD

Your project command center



TRELLIS

Efficiently manage enterprise configurations

Powered by [IntelliTect](#)

FROM

TOOLKIT TO SOLUTION

(COMPARA)

FROM TOOLKIT TO SOLUTION

WHEN SMECO NEEDED **CONFIDENCE** IN THEIR BILLING DATA...

THE SITUATION

Southern Maryland Electric Cooperative (SMECO) faced a critical challenge: validating billing accuracy for over 150,000 customer accounts.

With:

- 24 billing cycles
- 25+ different rate types
- Multiple billing scenarios
- Limited team resources

THE NEED

They needed more than just a billing validation tool. They needed:

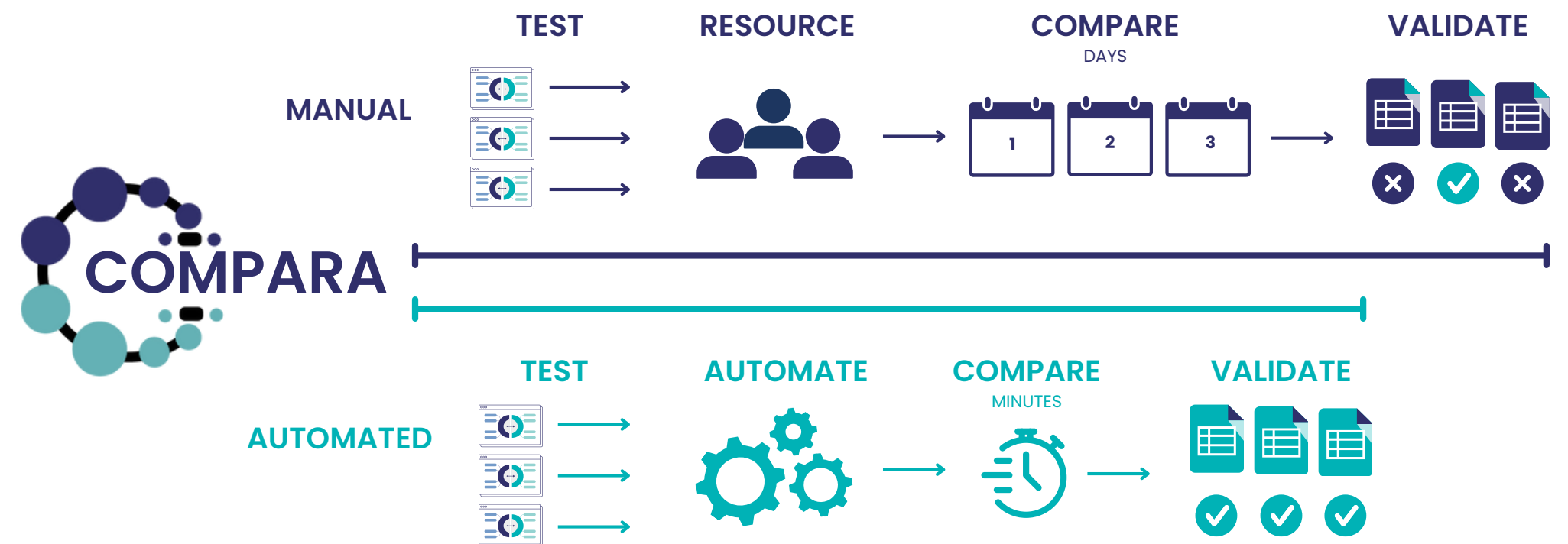
- 100% account validation
- Automated testing capabilities
- Error elimination
- Resource optimization
- Complete confidence in results

FROM TOOLKIT TO SOLUTION

This comprehensive need led SMECO to **Compara**, our automated parallel billing solution from the CaaS toolkit.

KEY FEATURES:

- Automated comparison between systems
- Catches discrepancies before they impact customers
- Processes entire billing cycles at once
- Detailed reporting of any variations
- Eliminates human error in validation
- Handles complex rate structures and scenarios



FROM TOOLKIT TO SOLUTION

01

WHAT IS IT?

When implementing parallel billing testing, two or more systems run side by side—parallel, if you will—to verify the quality of the data being migrated from the existing system to the target system. Running parallel systems is critical for ensuring that the utility is using correct data for billing.

02

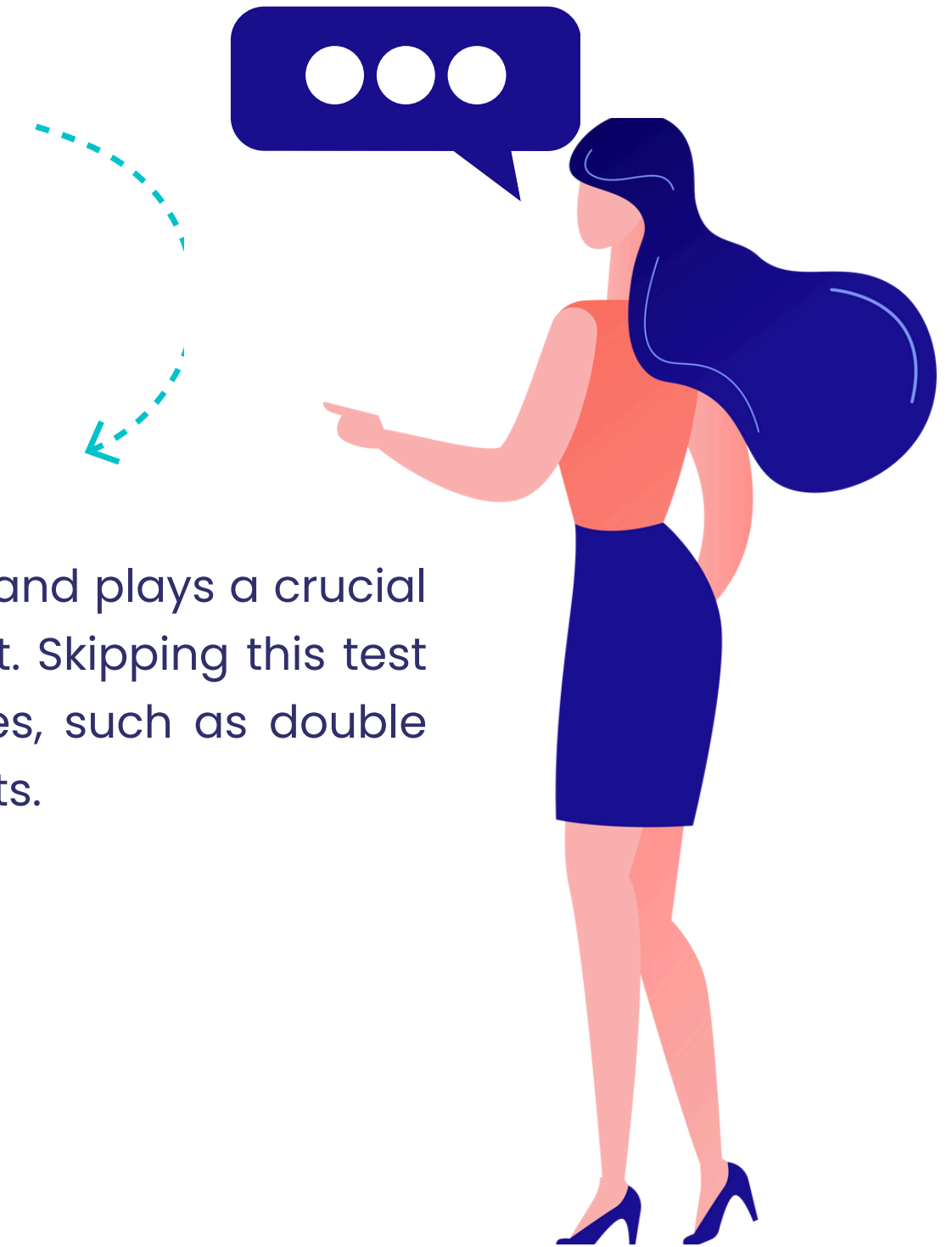
WHAT ROLE IT PLAYS

While parallel billing testing is straightforward and plays a crucial role in billing accuracy, not every utility does it. Skipping this test puts a utility at risk of negative consequences, such as double billing or charging customers incorrect amounts.

03

THE BENEFITS

For the average utility, it could take five people, dedicated solely to the project, up to three weeks to manually spot check. This means utilities need additional staff to serve as backups. And even with a team performing parallel billing testing, there's still the risk of human error.



WHY SMECO CHOSE COMPARA?

01

Built for high-volume parallel billing testing

02

Automated validation across multiple scenarios

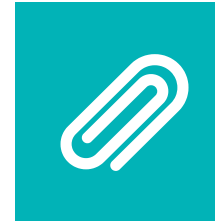
03

Clear reporting and reconciliation capabilities

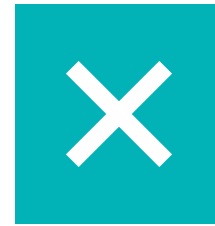
04

Perfect fit for SMECO's complex rate structure

KEY BENEFITS



Ensure a Smooth Transition



Eliminate Errors



Frees Up Workers



Reduces Costs

EFFECTS OF

COMPARA

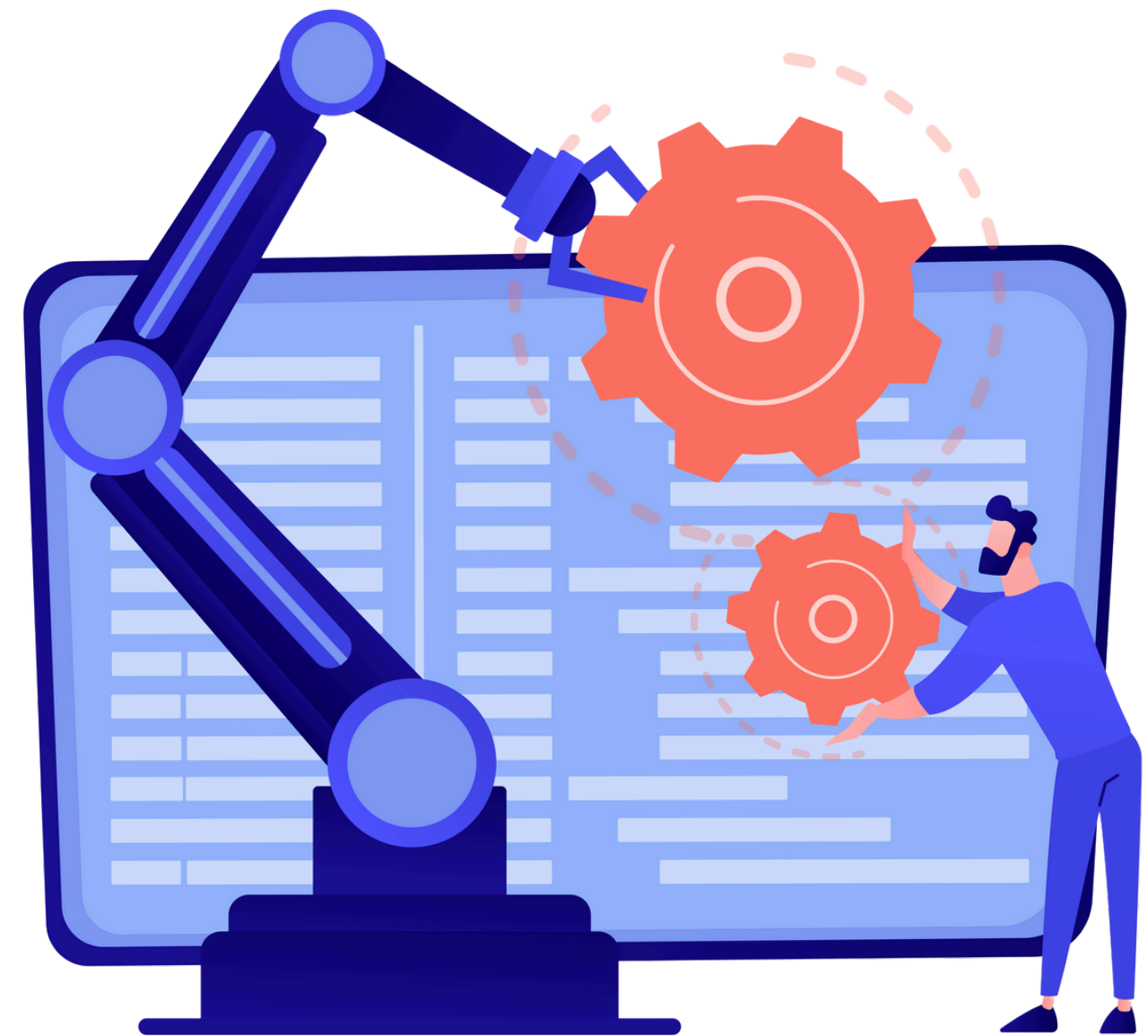
EFFECTS OF COMPARA

- 01 100% Reconciliation
- 02 Accelerate Testing Effort
- 03 Compare 100% of Customers Bills
- 04 Produce Discrepancy Output
- 05 Allow for Reconciliation of Expected and/or Legitimate Differences
- 06 Provide High-Level Confidence

EFFECTS OF COMPARA

Remember when we showed you the painful process of manually validating the billing cycle....all the spreadsheets?

LET'S SHOW YOU
THE **DIFFERENCE**
AUTOMATION HAD....



EFFECTS OF COMPARA

SMECO pulled a sample size and **ran 20 tests.**



20 TEST RUNS



RUNS 1- 6

EFFECTS OF COMPARA

**OUT OF THE TEST RUNS
(1 – 6), FOUR HAD A MATCH
RATE **BELOW 90%****

What's a **match rate**?

Were there any discrepancies in the test or reconciliation items.



(4) of RUNS 1 – 6

EFFECTS OF COMPARA

**OUT OF THE TEST RUNS
(1 – 6), THE OTHER
TWO HAD A MATCH
RATE OF **ABOVE 90%****



(2) of RUNS 1 – 6

EFFECTS OF COMPARA

**REMAINING TEST RUNS
(6 – 20) HAD A
98% MATCH RATE,
MEANING ONLY 2% HAD
ANY ERRORS.**

Those **2% errors** was due to a drift in environments
(change of name, stopped accounts...etc)

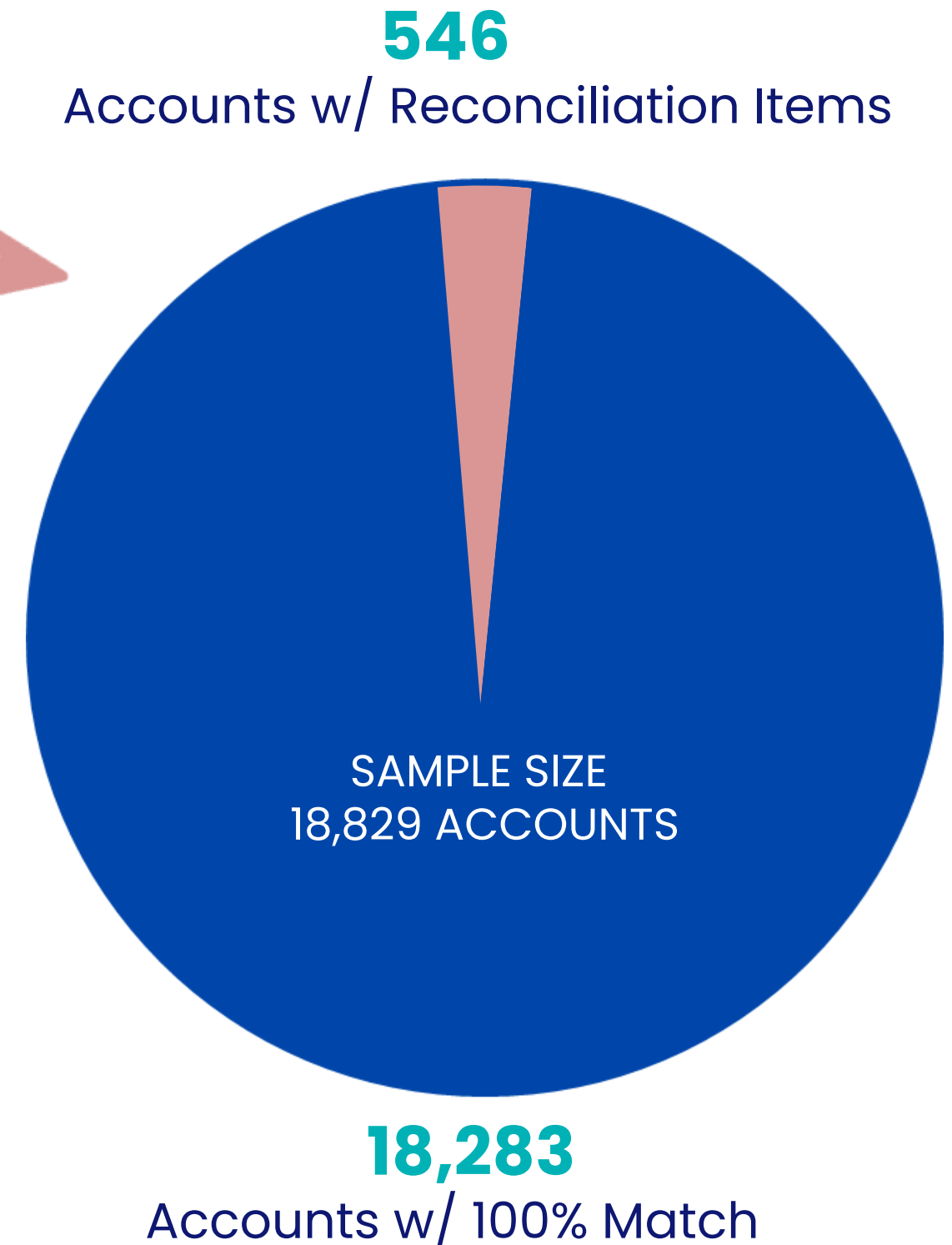


RUNS 6 – 20

EFFECTS OF COMPARA

LET'S TAKE A DEEPER DIVE IN ANOTHER SAMPLE SIZE.

Of the 18,829 accounts, 18,283 had a **100% matching rate** whereas only 546 accounts had reconciliation items.



EFFECTS OF COMPARA

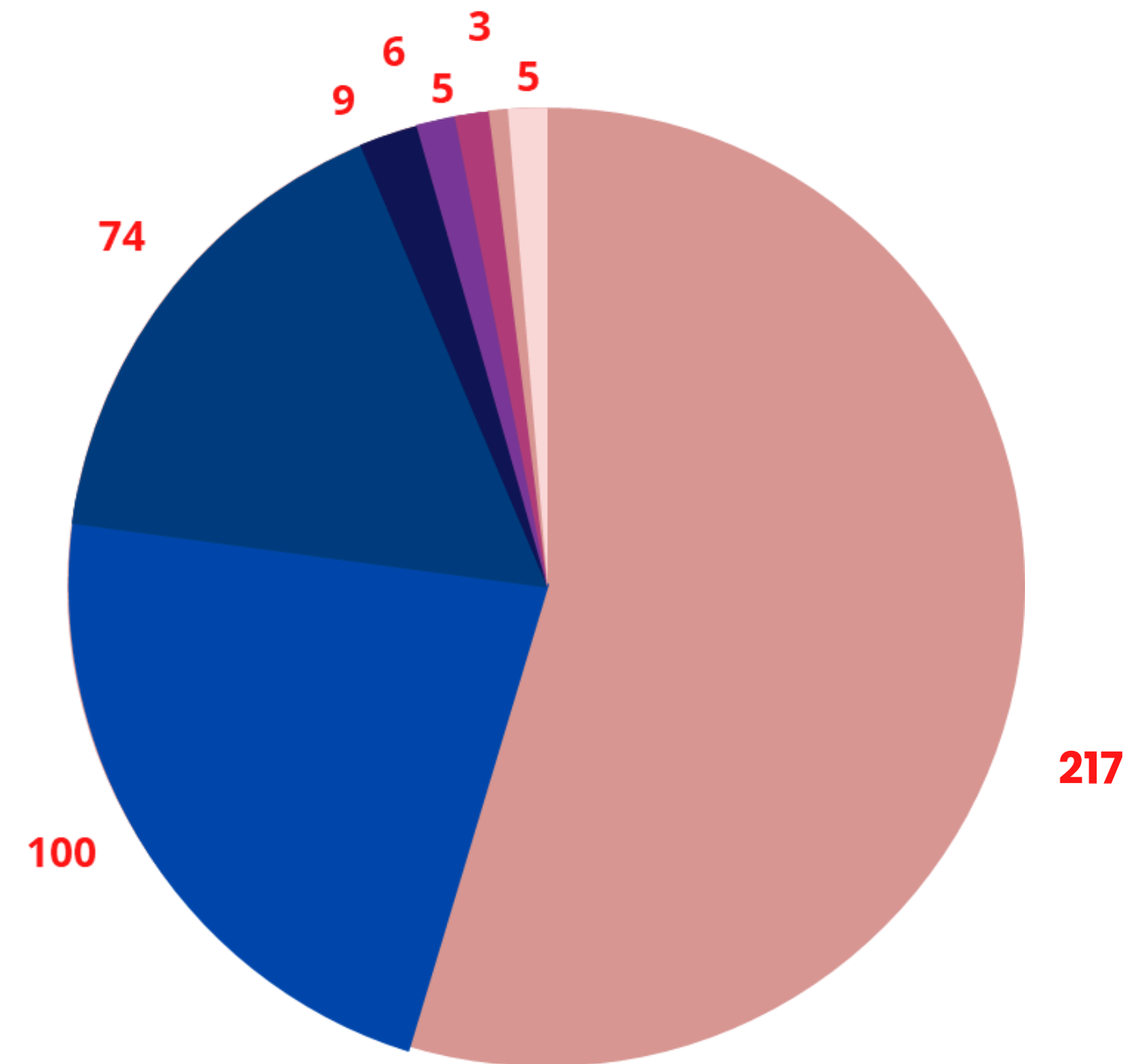
WHERE DID THE **546**
RECONCILIATION ITEMS COME
FROM?



EFFECTS OF COMPARA

LET'S BREAK IT DOWN:

- No bill cycle
- LA Agreements stopped after cutoff date
- Manually billed in source
- No meter read w/in billing windows target
- SQ Rule not in target
- SA pending start in target
- Not properly bill due to SA Tax Exempt in source
- SA stop delayed in source
- Target bills were accumulated, source bill data cutoff



BUSINESS

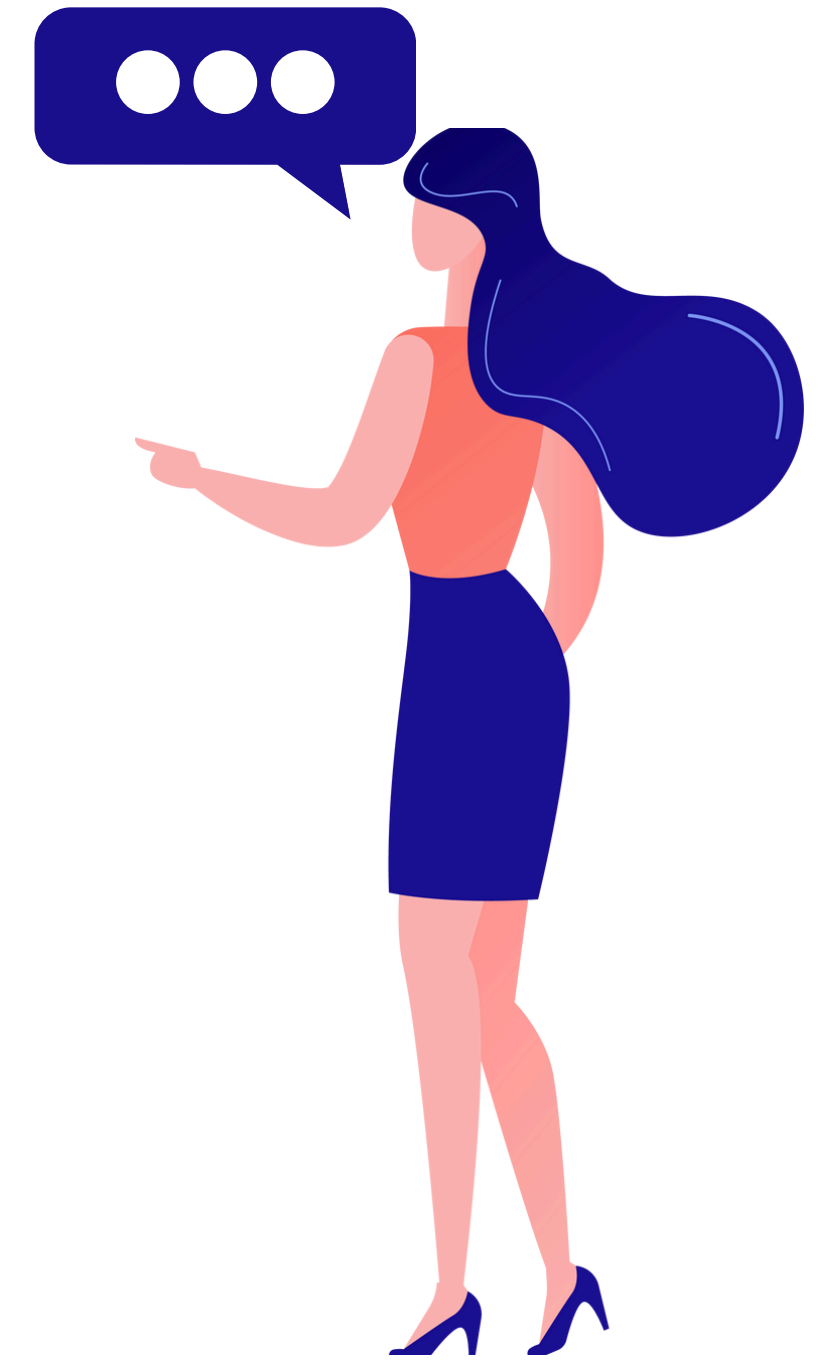
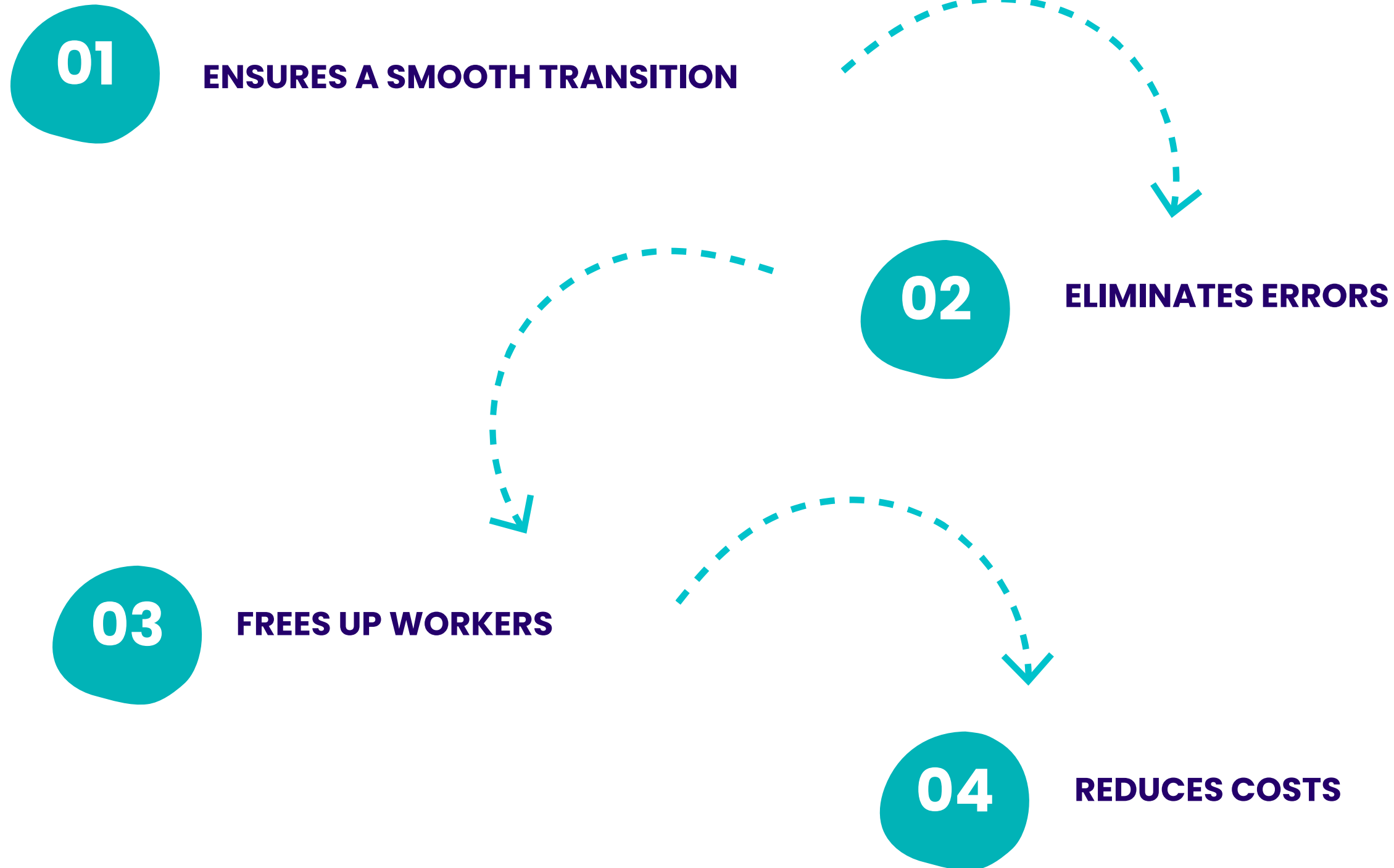
IMPACT

BUSINESS IMPACT

AUTOMATION HAS
BECOME A **SMART**
BUSINESS DECISION



BUSINESS IMPACT



WE INSTALL
CONFIDENCE
NOT JUST SOFTWARE



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