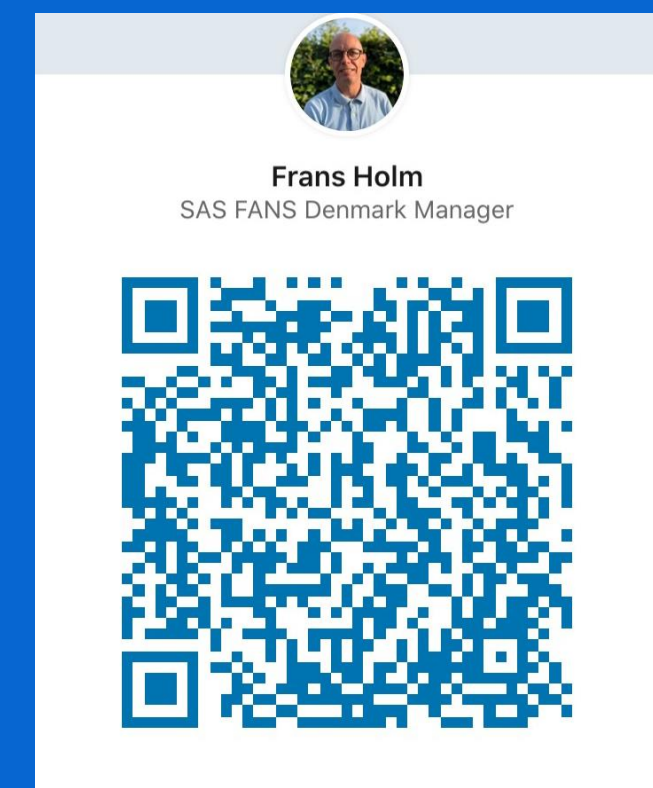


FANS

Data Science/Analytisk Netværksmøde

29/5-2024

Kl. 10.00 – 12.30



Frans.Holm@sas.com



Netværks anbefalinger

- Deltag fysisk
- Behold fokus – specielt virtuelt!
- Vær aktiv -> stil spørgsmål
- Netværk i pauserne

Dagsorden

Data Science/Analytisk Netværksmøde

- Velkomst
 - v. Frans Holm, SAS
- Viya Workbench
 - v. Mike Johansson, SAS
- Bias Assessment og Mitigation
 - v. Anette Jakobsen, SAS
- Nyheder fra SAS Innovate
 - v. Frans Holm, SAS
- Pause (indtil ca. kl. 11.30)
- Non-Predictive Use of Decision Trees and Friends (in English)
 - v. Gerhard Svolba, SAS Solution Architect
- Afslutning
 - v. Frans Holm, SAS
- Frokost & Netværk

Tak fordi du er taler - Vælg 2 ting!!

- Vis det du arbejder med
= mindre forberedelse
- *Jeg vil gerne hjælpe med
præsentationen!*



Planlægningsgruppen

Data Science/Analytisk netværket

- Mike Johansson (SAS)
- Anette Dalsgaard Jakobsen (SAS)
- Frans Holm (SAS)

Vil du deltage i planlægningen af
Data Science/Analytics
Netværksmøderne?

Diverse Nyheder

Diverse Nyheder

https://www.sas.com/en_us/webinars/new-in-sas-optimization.html

ASK THE EXPERT WEBINAR SERIES

What's New in SAS Optimization?

May 23 • 11 a.m. ET • Cost: Complimentary

About the webinar

If you think SAS Optimization is helpful now, we're continuing to make it even better for you in the future.

This is your chance to discover more about how SAS Optimization continues to improve on its powerful modeling language with unified access to a broad suite of solvers.

You will learn about:

- All the ways SAS Optimization is changing.
- Recently added features, including a conic optimization solver and an automated Benders decomposition algorithm.
- SAS Optimization performance improvements.

Diverse Nyheder

https://www.sas.com/en_us/webinars/optimizing-logistics-operations.html

ASK THE EXPERT WEBINAR SERIES

Optimizing Logistics Operations Using Customized Solutions

June 4 • 11 a.m. ET • Cost: Complimentary

About the webinar

Learn how you can use the flexible capabilities of out-of-the-box solvers to optimize logistics routing operations and improve operational efficiency.

Join this webinar to see how the flexible capabilities of SAS Optimization tools for modeling complex business problems in logistics routing operations can improve overall operational efficiency.

You will learn:

- The different capabilities available in the SAS vehicle routing problem (VRP) solver.
- How to create a customized optimization solution by combining solvers and the flexibility of SAS Optimization procedure.
- The different network solvers available in SAS Optimization.

Diverse Nyheder

<https://learn.sas.com/course/view.php?id=6443>

Responsible Innovation and Trustworthy AI

Duration: 7 hours

This course is designed for anyone who wants to gain a deeper understanding about the importance of trust and responsibility in AI, analytics, and innovation. The content is especially geared to those who are making business decisions based on machine learning and AI systems and those who are designing and training AI systems.

Whether you are a programmer, an executive, an advisory board member, a tester, a manager, or an individual contributor, this course helps you gain foundational knowledge and skills to consider the issues related to responsible innovation and trustworthy AI. Empowered with the knowledge from this course, you can strive to find ways to design, develop, and use machine learning and AI systems more responsibly.

This course will be released several modules at a time until all modules are available. We expect that each module can be completed in under an hour, and you can work at your own pace to complete the material. As we release new modules, you might lose progress through the material that you have completed, so please make a note of where you are leaving off before exiting the course.

Diverse Nyheder

<https://learn.sas.com/totara/program/view.php?id=34>

SAS Advanced Machine Learning Subscription

For machine learning modelers who are well versed in machine learning basics and want to go deeper. These advanced machine learning courses address many different types of models and their applications in artificial intelligence.

ENROLL FREE

7-Day Trial

1

COURSE
Advanced Machine Learning Using SAS® Viya®

SHOW MORE ~

COURSE
Deep Learning Using SAS® Software

SHOW MORE ~

COURSE
Tree-Based Machine Learning Methods in SAS® Viya®

SHOW MORE ~

COURSE
Network Analysis and Network Optimization in SAS® Viya®

SHOW MORE ~

COURSE
Advanced Analytics for IoT Using SAS® Event Stream Processing

SHOW MORE ~

COURSE
ModelOps: Governing AI and Machine Learning Models That Drive Your Business with SAS®

SHOW MORE ~

Diverse Nyheder

Oplæg

- Hvad kan SAS Viya?
 - 1 time til 2½ time

Interesseret – kontakt: Frans.Holm@sas.com

Diverse Nyheder

[Innovate.sas.com](https://innovate.sas.com)

On-Demand Experience



I attended SAS Innovate 2024

For our attendee experience, log into the Attendee Hub where you can:

- View presentation slides for nearly all sessions.
- Watch the keynotes, general sessions and 22 breakouts.
- Connect with other attendees.

[Log into the Attendee Hub](#)



I did not attend SAS Innovate

For those of you unable to join us, we're offering a limited on-demand experience. Here you can:

- Watch our keynotes, general session and 22 breakouts.
- Use the closed captioning in multiple languages.

[Sign up to watch](#)

Diverse Nyheder

<https://www.sas.com/sas/events/innovate-on-tour/24/london/june-12.html>

sas innovate on tour 2024

At SAS Innovate, we focus on how to drive business value with Data & AI: Learn from leading organisations and thought leaders and network with your peers.

June 12th // London

Diverse Nyheder

<https://www.sas.com/sas/events/innovate-on-tour/24/london/june-13.html>

sas innovate on tour 2024

At SAS Innovate, there is something for everyone. From novice coders to professional statisticians – and everyone in between. Get your hands on the latest Data & AI technology in our workshops, learn from industry experts, experience live demos, and network with your peers.

June 13th // London

FANS Netværks møder

Danmark

- 30/5 Platform (København) 10.00-16.00
- 6/6 Programmering (København) 13.00-16.00
- 6/6 Sommerafslutning – Skuespilshuset* (København) 16.00-22.00
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- 3/12 Mini FANS Forum (København)* 10.00-22.00

FANS Lodtrækning

FANS Lodtrækning

Dagens gave!



Vi fortsætter forsøget!!

- Vi vil gerne understøtte netværksdelen ved FANS
- Man for mest ud af fysisk fremmøde
- Nudging....

FANS lodtrækning

Kom et lod i bowlen...



Viya Workbench

v. Mike Johansson, SAS

Bias Assessment og Mitigation

v. Anette Jakobsen, SAS

Nyheder fra SAS Innovate

v. Frans Holm, SAS

Innovate

Mit indtryk

- 👍 med fysiske konferencer – se/mødes/snakke/netværke
- Måske ikke Microsoft størrelse – men stort...
- Nemmere at få lov at deltage når I har konference billetter via FANS

Opsummering

- Key notes
- Kunde præsentationer
- Hands-on gennemgange
- Super demos
- Innovation Hub
- Netværk

Progam

Innovate 2024

Agenda at a glance



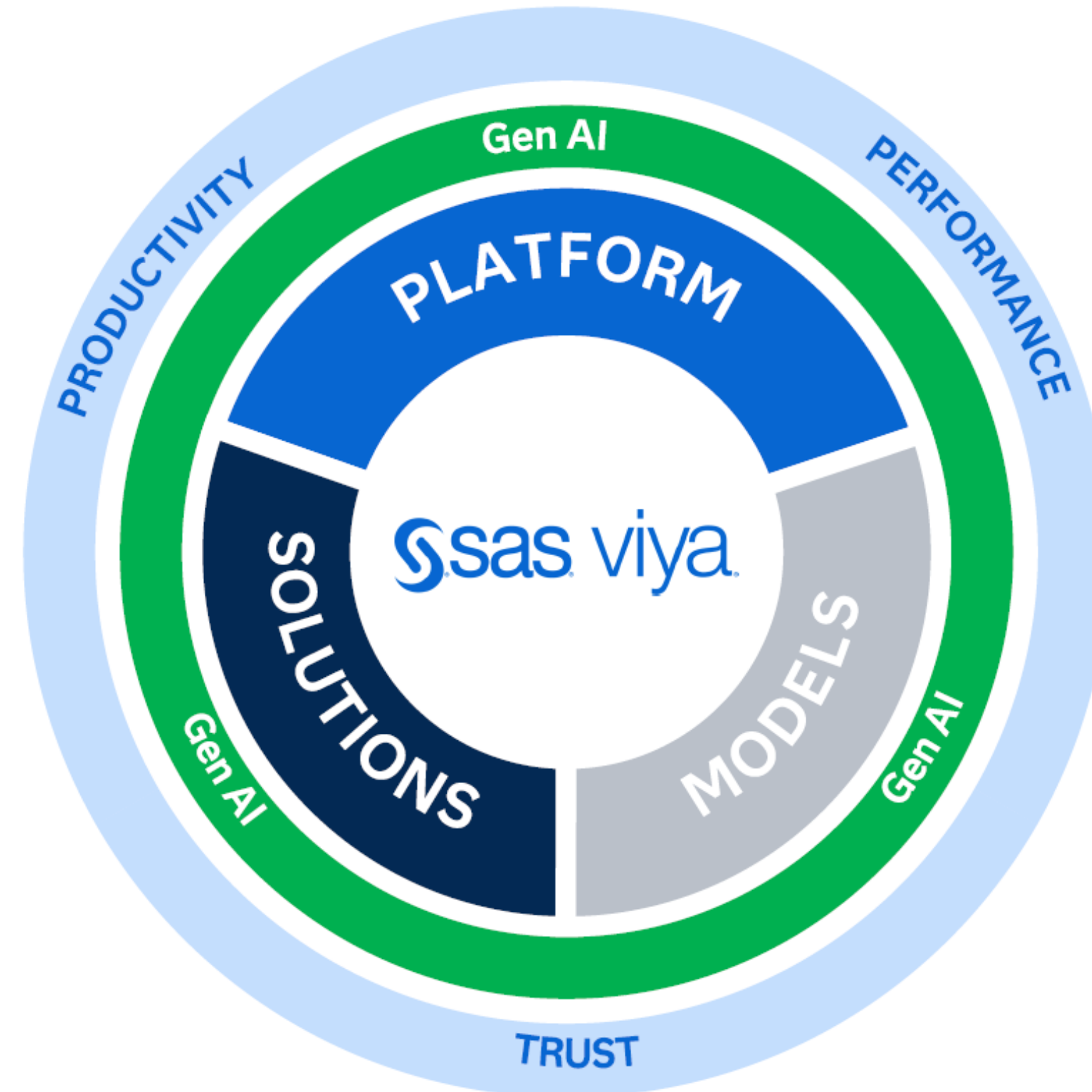
| 04/16 | TUES | 04/17 | WED | 04/18 | THURS | 04/19 | FRI |
|--|------|--|-----|---|-------|---|-----|
| 10 AM – 7 PM Registration Open | | 7 AM – 7 PM Registration Open | | 7 AM – 6 PM Registration Open | | 7 AM – 1 PM Registration Open | |
| 12 – 3 PM Hackathon Boot Camp Option 1 | | 8 – 9 AM Mornings in the Innovation Hub | | 8 – 9 AM Mornings in the Innovation Hub | | 8 – 9 AM Continental Breakfast | |
| 1 – 6 PM Training, Tutorials & Certification | | 9 – 11 AM Opening Session with Cassie Kozyrkov | | 9 – 11 AM Responsible AI Panel with Kara Swisher | | 9 – 10:30 AM Closing Session | |
| 3 – 5 PM Partner General Session, Customer Intelligence Connect | | 11 AM – 4:45 PM Innovation Hub Open | | 11 AM – 3:45 PM Innovation Hub Open | | 10:45 AM – 12:30 PM Hands-On Workshops, Quick Tips & Breakouts | |
| 3:15 – 6:30 PM Hackathon Boot Camp Option 2 | | 11:15 AM – 12:45 PM Networking Lunch | | 11:15 AM – 12:45 PM Networking Lunch | | | |
| 5 – 6 PM Partner Happy Hour | | 1 – 4:45 PM Industry & Tech Breakouts, Hands-On Workshops | | 1 – 3:45 PM Roundtables, Tech Breakouts & Hands-On Workshops | | | |
| 6 – 7 PM Welcome Reception in the Innovation Hub | | 5 – 5:45 PM Sean Evans from Hot Ones & Bryan Harris | | 4 – 5 PM Afternoon Session with Adam Grant | | | |
| | | 6 – 7 PM Wing Fling Happy Hour in the Innovation Hub | | 5 – 6 PM Innovation Hub Open | | | |
| | | | | 7 – 9:30 PM Kickback Party | | | |

FANS tur:
Show

NE middag

SAS Innovate

Hovedtemaer



SAS Innovate

Gen AI

Generate code

```
/* Generate a scatter plot of Age_at_Study_Entry against Time_to_Event grouped by Event_Occurred */  
proc sgplot data=mycas.pharma;  
  scatter x=Age_at_Study_Entry y=Time_to_Event / group=Event_Occurred;  
run;
```

< 1/1 > Accept Tab Accept Word ⌘ ↵ ...



Generate Code

Add Comment

Explain Code...

Find Problems...

Show Examples...

Format Code

Refine Code

Brainstorm...

Analyze Log...

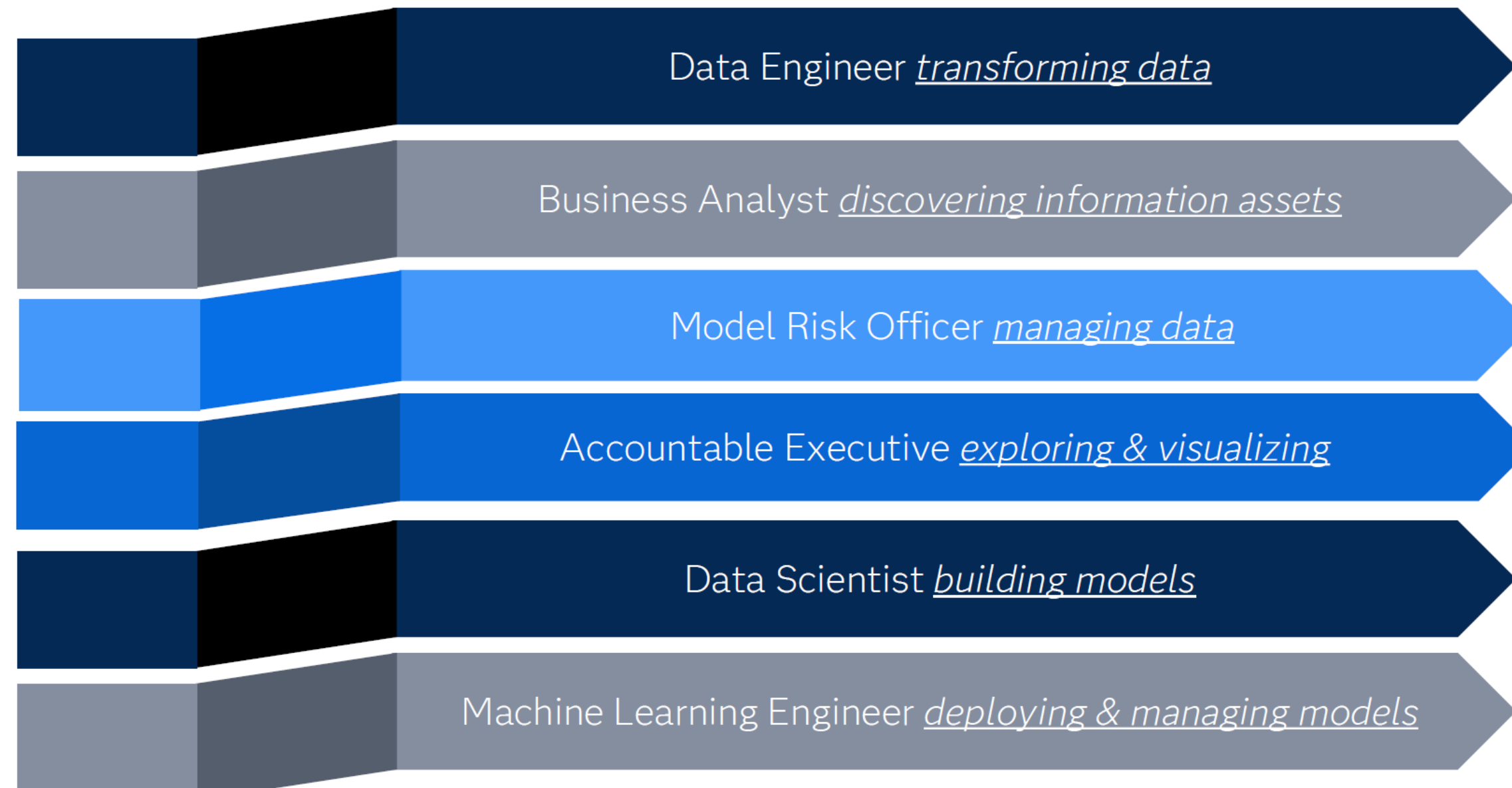
SAS Viya Copilot is an early feature and can make mistakes. Verify its outputs.

SAS Innovate

Gen AI

SAS' GenAI Product Strategy

Copilots to help you use SAS Viya 4 tools...



SAS Innovate

Models (as a service)

Models

Payment Fraud Detection

- Credit/Debit Card
- Check
- Wire/Peer to Peer



Welfare Fraud Detection

- Health Care
- SNAP
- TNAF



Document Vision

- Insurance Claim Fraud
- Health Care Claims
- Billing Determination



AI Digital Assistants

- Warehouse Delivery
- Call Center Resources
- Law Enforcement



SAS Innovate

Document Vision - Models (as a service)



DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Industrial Wastewater Program, 13051 North Telecom Parkway, Temple Terrace, FL 33637-0926

PERMITTEE NAME: John Doe
 MAILING ADDRESS: 123 Pasadena Ave. Lakeland, FL 33801
 FACILITY: Doe Family Ranch
 LOCATION: 555 La Costa Dr. Lakeland, FL 33801
 COUNTY: Polk
 OFFICE: Southwest District

PERMIT NUMBER: FLA12345
 LIMIT: Final
 CLASS SIZE: Monthly
 MONITORING GROUP NUMBER: RMP-AA
 MONITORING GROUP DESCRIPTION: Class AA Biosolids
 RE-SUBMITTED DATA:
 NO DISCHARGE FROM SITE:
 MONITORING PERIOD: From 8-1-17 To 8-31-17

| Parameter | Sample | Method | Result |
|--|--------|-----------------|--------|
| *Coliform, Fecal | Sum | Mem | |
| PARM Code 74055 | Mon | Site No. RMP-AA | |
| OR | | | |
| *Salmonella, sp. bacteria | Sum | Mem | |
| PARM Code 71204 | Mon | Site No. RMP-AA | |
| F Nitrogen, Sludge, Tot, Dry Wt (as N) | Sum | Mem | |
| PARM Code 78470 | Mon | Site No. RMP-AA | |
| F Phosphorus, Sludge, Tot, Dry Wt (as P) | Sum | Mem | |
| PARM Code 78478 | Mon | Site No. RMP-AA | |
| F Potassium, Sludge, Tot, Dry Wt (as K) | Sum | Mem | |
| PARM Code 78472 | Mon | Site No. RMP-AA | |
| Arsenic Total, Dry Weight, Sludge | Sum | Mem | |
| PARM Code 49565 | Mon | Site No. RMP-AA | |

I certify under penalty of law that this document and the information submitted hereon are true and accurate. I understand that anyone who furnishes false or misleading information on this report or who omits material or information requested on the report may be subject to criminal sanctions (including fines and imprisonment) and/or civil sanctions (including civil penalties).

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER: _____

COMMENT AND EXPLANATION OF A: _____

PA File No. FLA86022-003-IWF/M DEP Form 03-020-910(10)

```

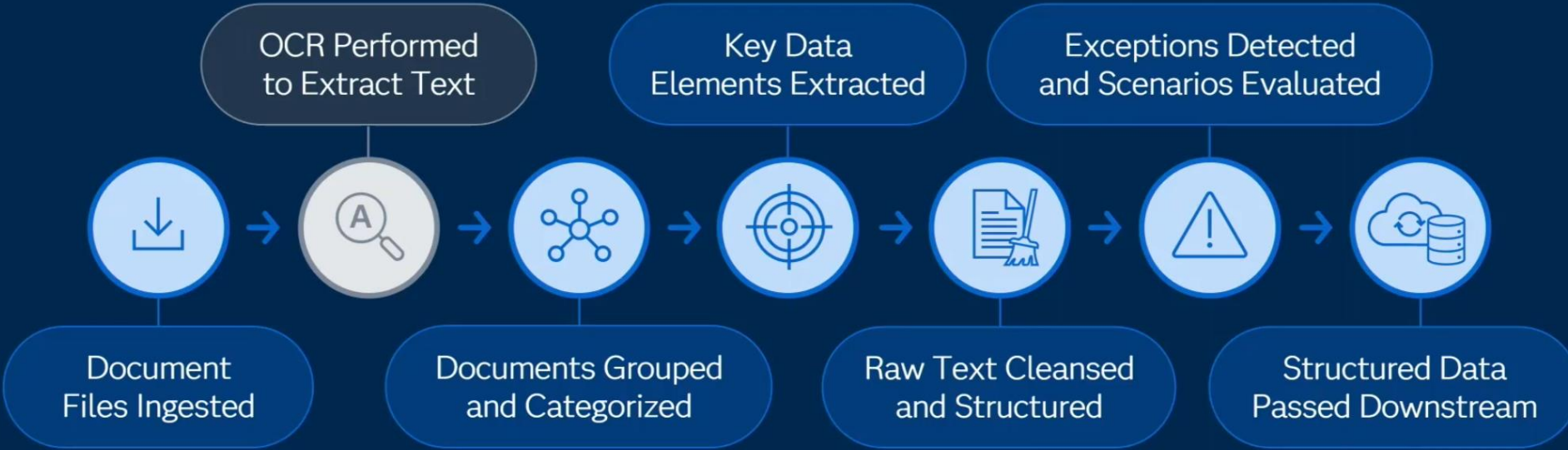
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"KEY-VALUES EX":
"Permittee N":
"Permit Num":
"Facility":
"Location":
"County": "P":
"Office": "S":
"Monitoring":
"Monitoring":
"TABULAR DATA":
    
```

DISCHARGE MONITORING Table rows: 18 | Columns: 3 of 3

Enter expression

| | type | key | value |
|---|----------------|-----------------|--|
| 1 | METADATA | source_filepath | ./DEP.pdf |
| 2 | METADATA | file_uuid | 21b3853e-c0f2-4602-848f-ee1c022d7871 |
| 3 | CLASSIFICATION | Page Category | FLDEP: Discharge Monitoring Report |
| | | | John Doe |
| | | | FLA12345 |
| | | | Doe Family Ranch |
| | | | 555 La Costa Dr. Lakeland, FL 33801 |
| | | | Polk |
| | | | Southwest District |
| | | | RMP-AA Class AA Biosolids |
| | | | 01AUG2017 - 31AUG2017 |
| | | | PARM Code 74055 Coliform, Fecal 1-U-tested |
| | | | PARM Code 71204 Salmonella, sp. bacteria - N/A |
| | | | PARM Code 78470 Nitrogen, Sludge, Tot, Dry Wt 1.2 % |
| | | | PARM Code 78478 Phosphorous, Sludge, Tot, Dry Wt 0.29 % |
| | | | PARM Code 78472 Potassium, Sludge, Tot, Dry Wt 0.17 % |
| | | | PARM Code 49565 Arsenic Total, Dry Weight, Sludge 2.4 mg/kg |
| | | | 8-1-17 8-31-17 A Pre-Consumoi Soil L John Doc (573) 882-3067 9-28-17 |

Document Vision Pipeline



Unstructured Data

SAS Data Maker Capabilities

Address gaps and limitations in real-world data

Now in Private Preview

1

Generate data on demand using algorithms. Enable pre- and post-processing data



2

Replicate data characteristics including statistical properties, distributions



3

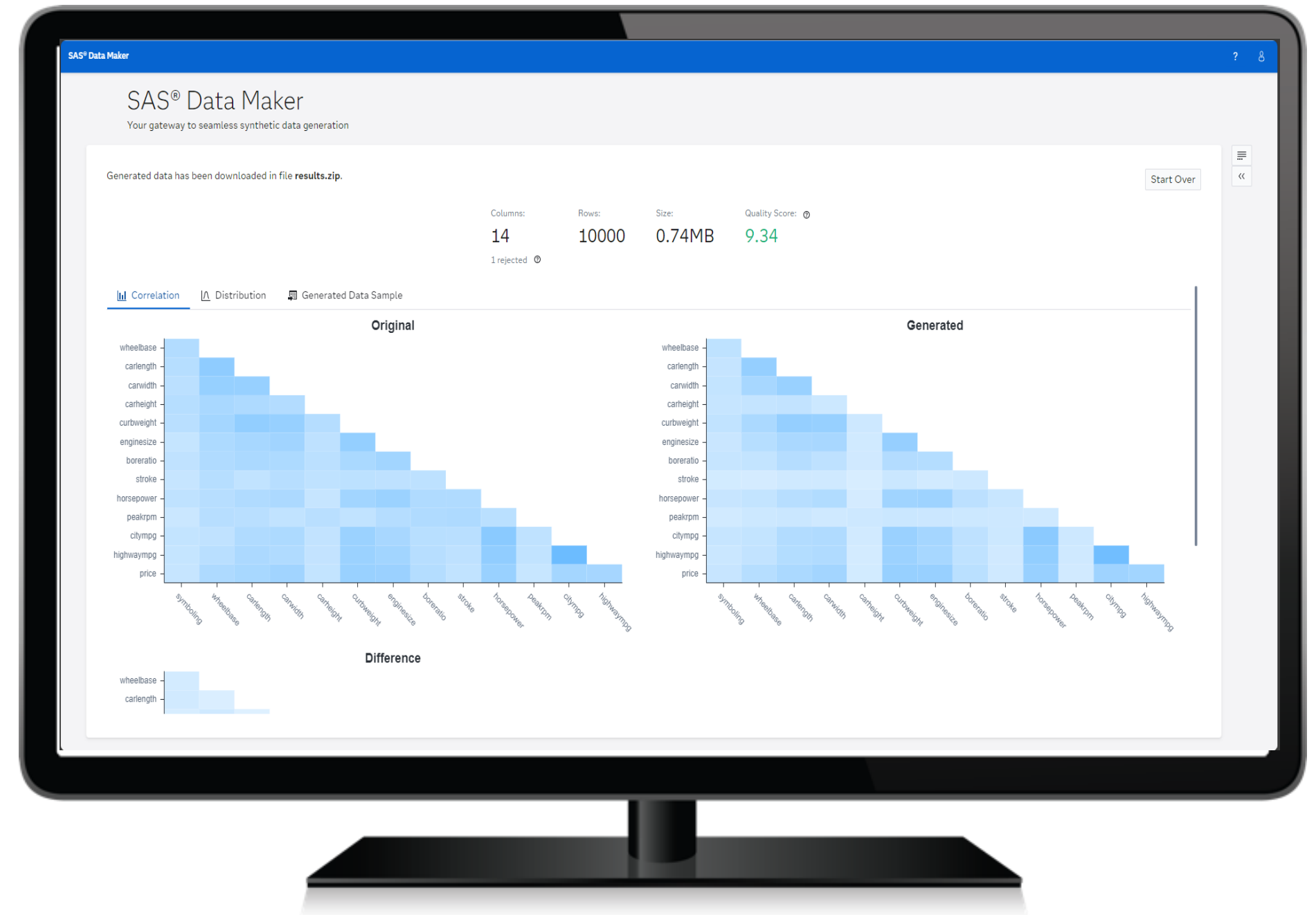
Evaluate synthetic data quality with visual, evaluation metrics



SAS Data Maker Process

Synthetic data generation capabilities

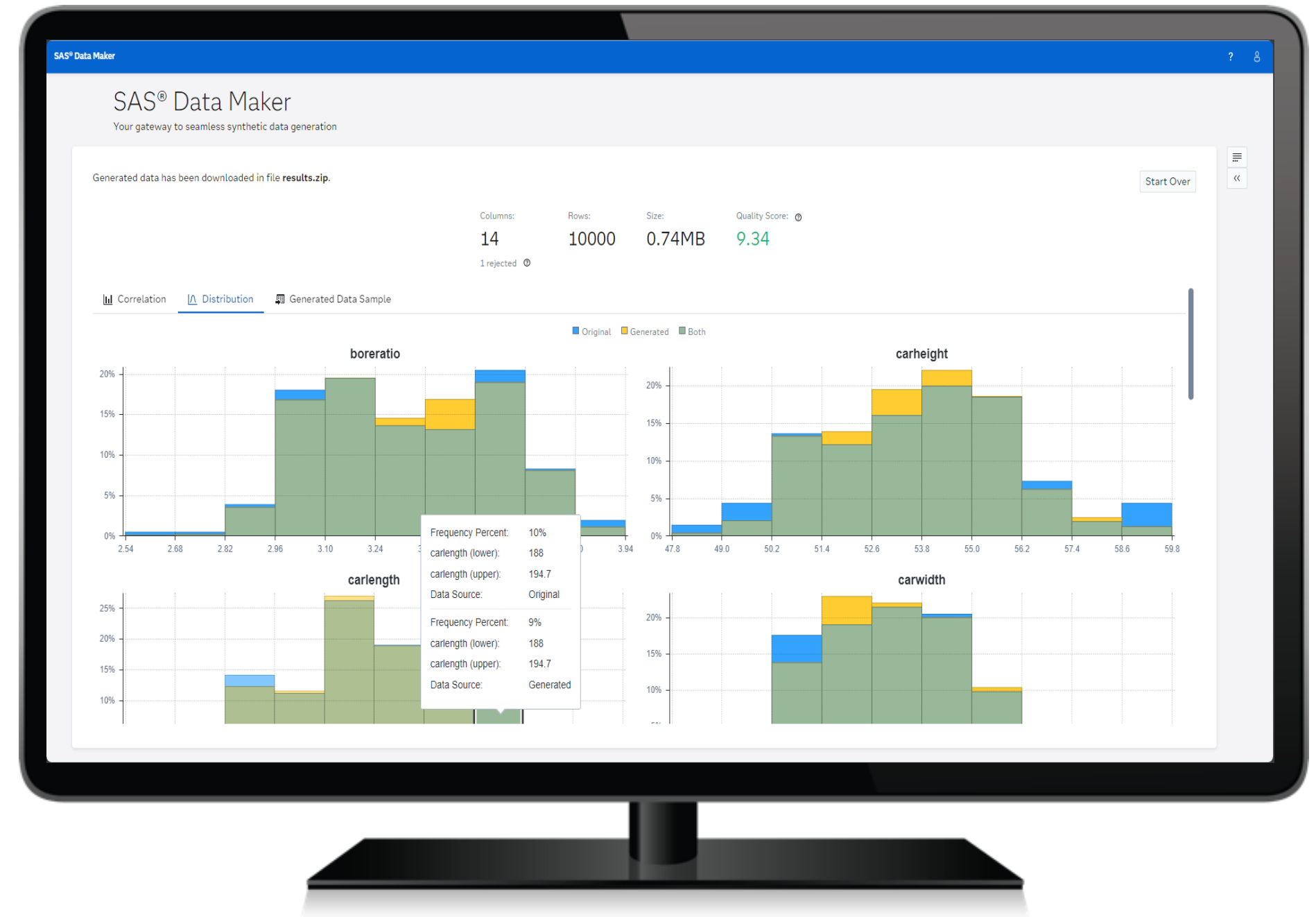
- 1 Prepare source data
- 2 Generate synthetic data
- 3 Evaluate statistical properties
- 4 Evaluate distribution
- 5 Download results



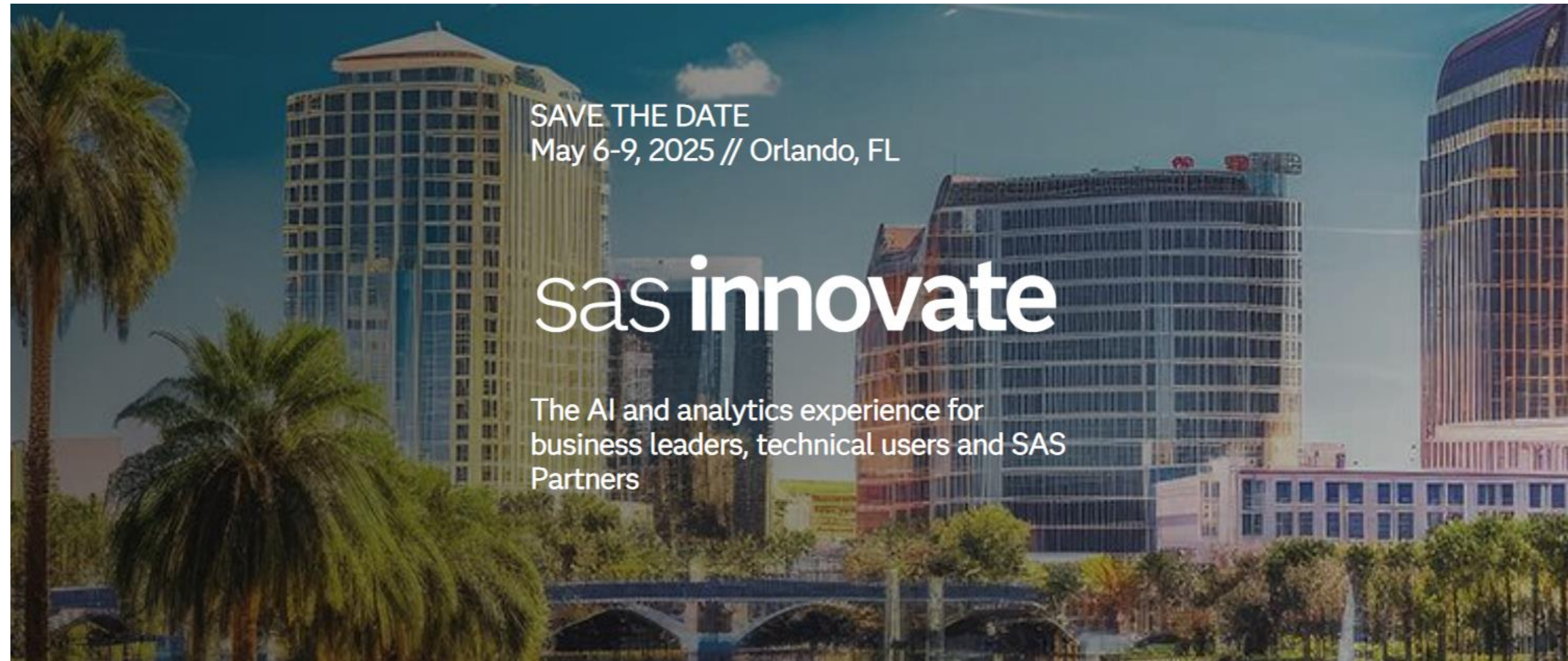
SAS Data Maker Process

Synthetic data generation capabilities

- 1 Prepare source data
- 2 Generate synthetic data
- 3 Evaluate statistical properties
- 4 Evaluate distribution
- 5 Download results



Næste år



Pause

Indtil kl. 11.35

Dagsorden

Data Science/Analytisk Netværksmøde

- Non-Predictive Use of Decision Trees and Friends (in English)
 - v. Gerhard Svolba, SAS Solution Architect
- Afslutning
 - v. Frans Holm, SAS
- Frokost & Netværk

Non-Predictive Use of Decision Trees and Friends (in English)

v. Gerhard Svolba, SAS Solution Architect

Afslutning

v. Frans Holm, SAS

Forslag til emner

- ??????????????????
-
-
-

FANS Netværks møder

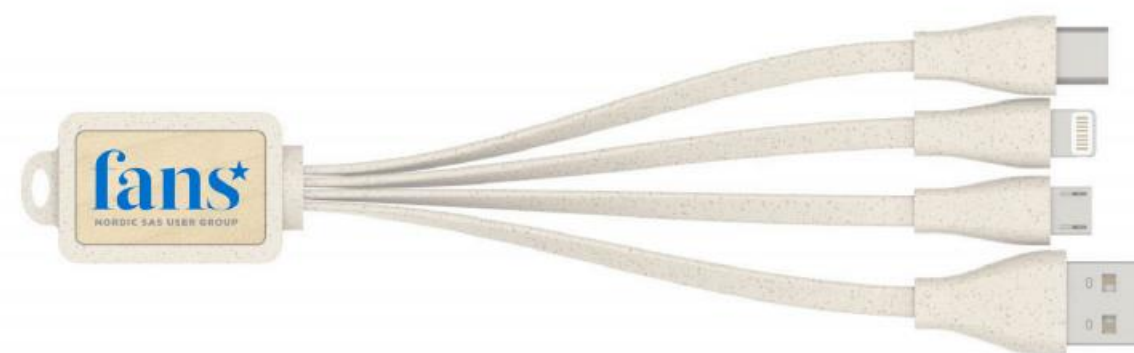
Danmark

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FANS Lodtrækning

Dagens gave!



Tak for i dag

Frokost & Netværk

Vi ses FANS!

Frans.Holm@sas.com

