

ANNUAL

— MEETING —

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Hilton Hawaiian Village
Waikiki Beach Resort

Artificial Intelligence and Insurance Perspectives

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EVP, Finance
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Chief Actuary
CSAA Insurance Group

Agenda

- What is Artificial Intelligence
- Reserving Analysis & Personal Line Pricing with AI
- AI Application for Commercial Line Insurance
- Regulatory Perspective on Adopting AI
- Q&A

Will AI Replace Actuaries?



**artificial
intelligence**



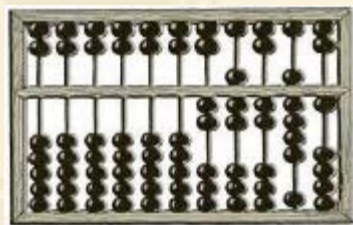
data analytics



computer



calculator



abacus

Artificial Intelligence



**Machine Learning
(Narrow AI)**



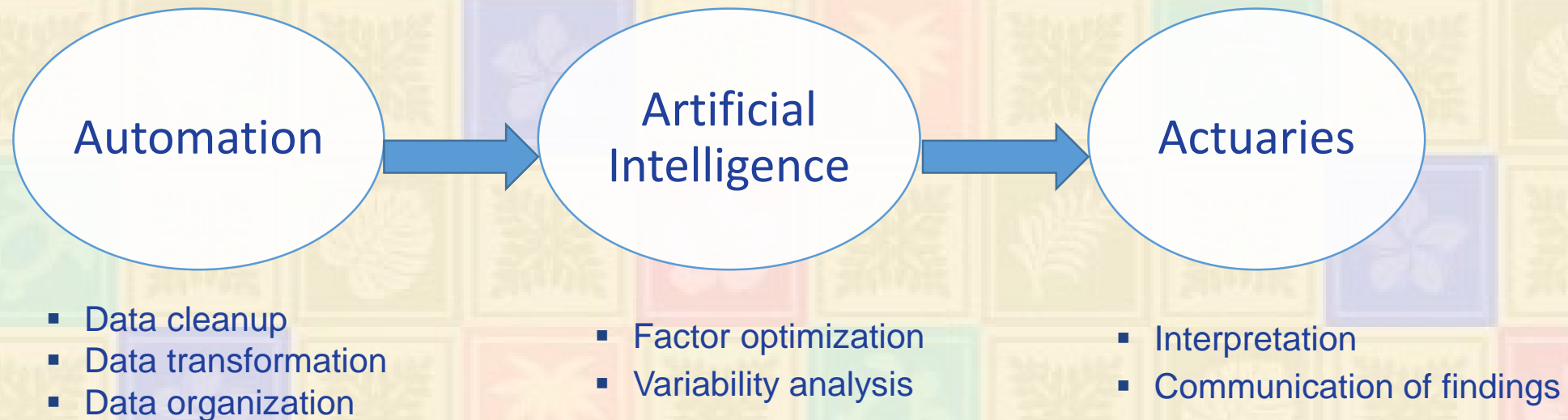
**Human-level
Comprehension**



**Ability to learn
(General AI)**

Reserving Analysis with AI/Automation

- Actuaries' main responsibilities are to interpret results and tell a story



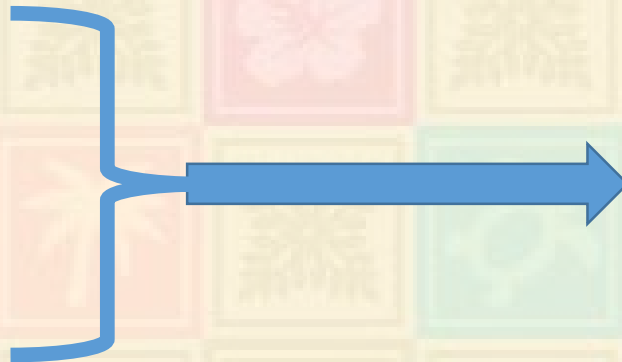
- Overtime, estimate of loss for individual claims will be integrated within claims administration system based on policy, claims and external data.

Shifting Landscape of Personal Line Insurance

Risk exposure for many personal line coverages will shift from fixed exposure to variable exposure or on-demand basis.

Personal Auto Insurance Coverages:

- Collision
- Bodily injury
- Property damage
- Medical
- Un/Under-insurance
- Comprehensive



Trip-based coverage

Future Auto Insurance Rating Process with AI

Real-time risk exposure adjustment and rating:

- Driving pattern
- Real time feedback
- Route optimization



- Challenge to current regulatory review process

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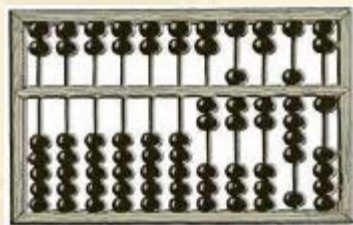
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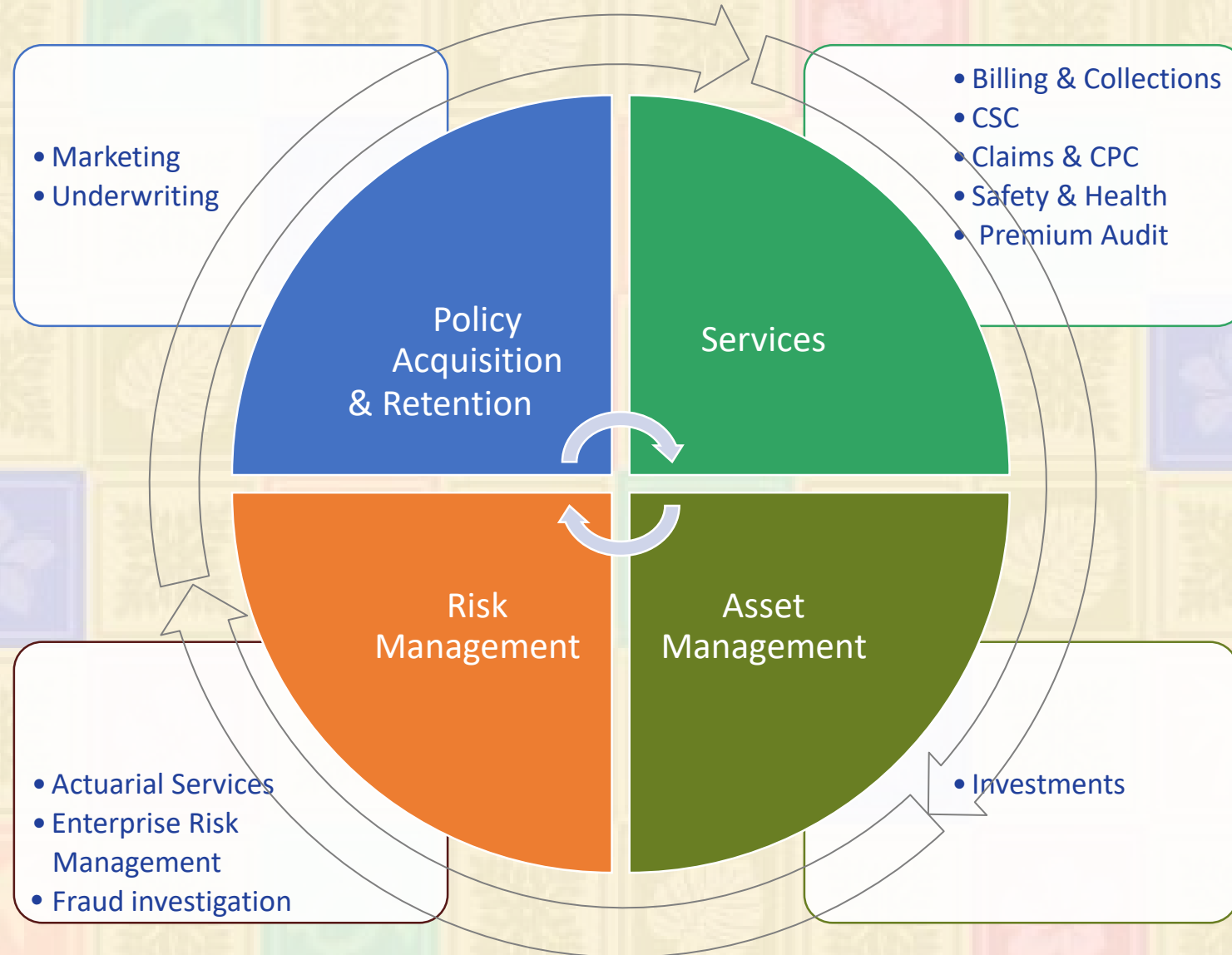


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Traditional Insurance Life cycle



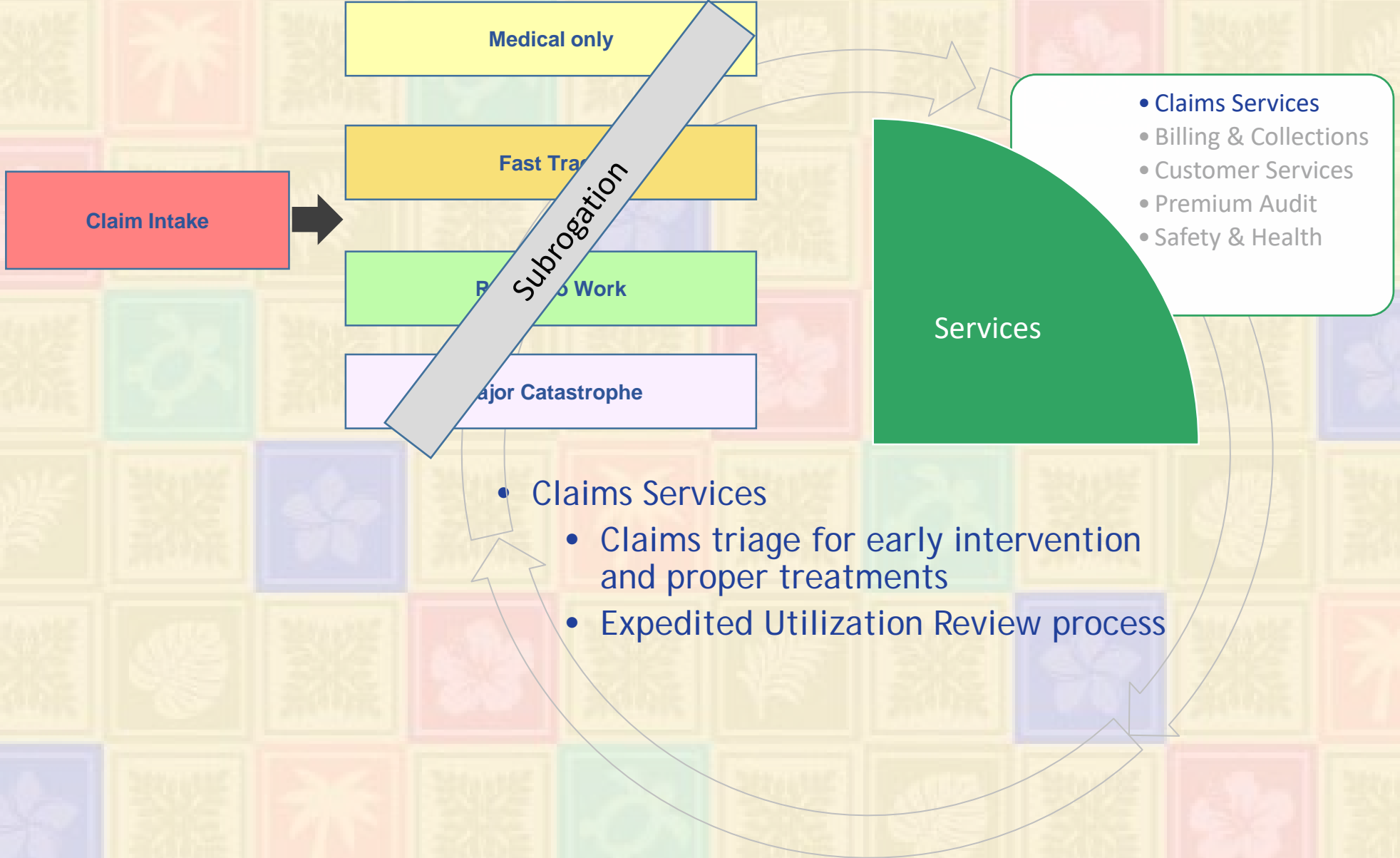
- Marketing
- Underwriting

Policy
Acquisition

• Quoting & Pricing

- Info auto-fill from cross references to other verified data sources
- IoT and Analytics to prompt key data points for verification





CHATBOT



Services

- Claims Services
- Billing & Collections
- Customer Services
- Premium Audit
- Safety & Health

- Customer Services
 - Chatbot
 - Training new representatives with VR
- Billings & Collections
 - Targeted efforts for collections and referrals
- Premium Audit



Services

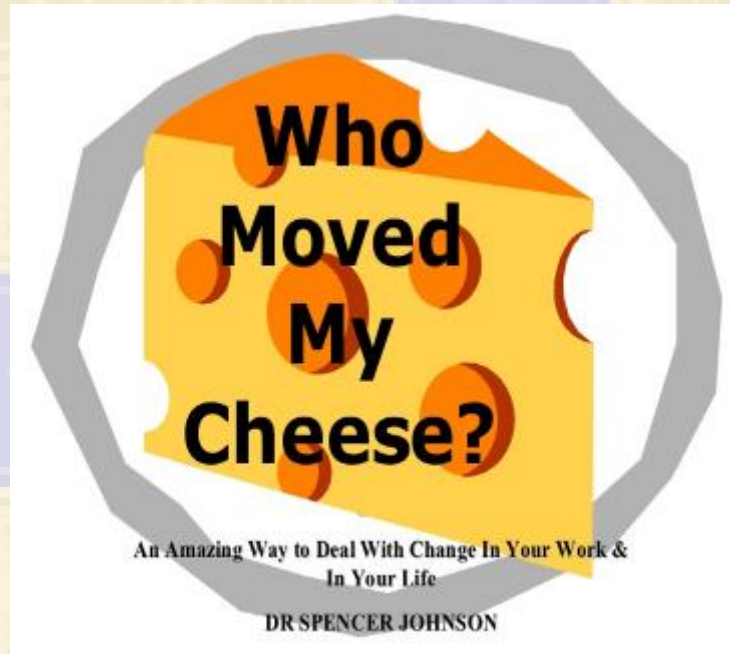
- Claims Services
- Billing & Collections
- Customer Services
- Premium Audit
- Safety & Health

- Safety & Health
 - Safety training:
VR; Wearables
 - Loss Prevention Site Visits
Drones
Analytics



Will AI Replace Actuaries?

“It is natural for change to continually occur, whether you expect it or not.”



“Maybe we should stop analyzing the situation so much and just get going & find some New Cheese.”

“Smell the cheese often so you know when it is getting old. The quicker you let go of the old cheese, the sooner you find new cheese.”

“Movement in a new direction helps you find new cheese. When you move beyond your fear you feel free.”

Regulatory Perspectives - RCPS

- Policy
- People
- Process
 - Data Governance
 - Black Box
 - Risk Control
 - Product Design and Reporting

Will AI Replace Actuaries?



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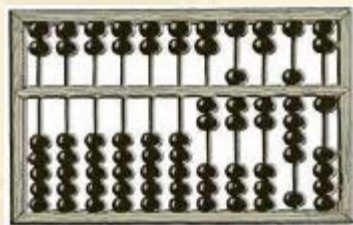
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Regulatory Policy – DOI Perspective

As the NAIC puts it, “The public wants two things from insurance regulators:

They want solvent insurers who are financially able to make good on the promises they have made, and

they want insurers to treat policyholders and claimants fairly.

All regulatory functions will fall under either solvency regulation or market regulation to meet these two objectives.”

Ratemaking Principles – DOI Perspective

In Connecticut, we regulate the rates to ensure that the rates are not excessive, inadequate, or unfairly discriminatory.

We do not regulate the models but whenever there is a significant change in models such as rolling out new rating algorithm, etc., we would require an in-person review session.

Cyber Security: The New Big Threat

Cyber intrusions are becoming more commonplace, more dangerous, and more sophisticated.

Hackers target personal information, financial information, trade secrets

Insurance companies: a one-stop shop.

- Sensitive personal information
- Sensitive financial information
- Sensitive trade secrets

AI Products and Coverage Forms

- Autonomous Vehicles
- Facial Recognition
- Generic - DNA
- NYDFS Cybersecurity Reg. (23 NYCRR 500)
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Thank You