



# Liberty Alliance Project

**Federated Identity - solutions to real world issues**

**4 October 2006**

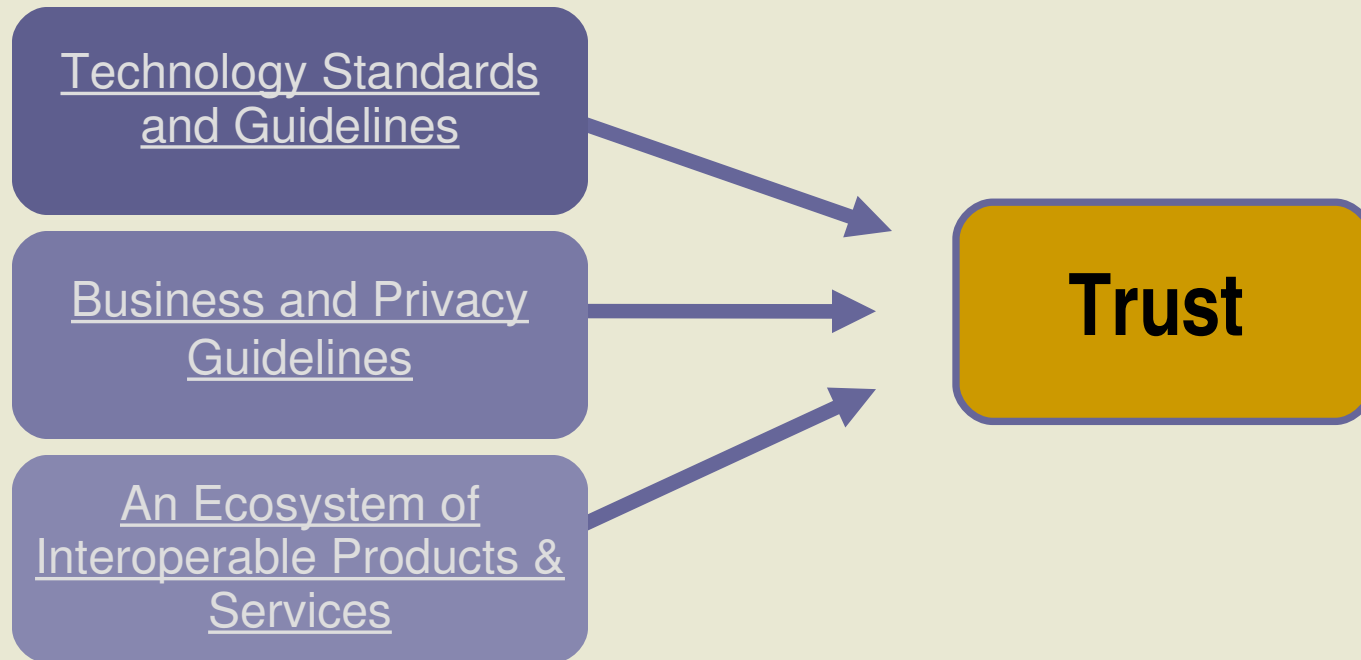
**Timo Skyttä, Nokia Corporation  
Director, Internet and Consumer Standardization**

# What is the Liberty Alliance?

*The Liberty Alliance is the **only** global body working to define and drive open technology standards, privacy and business guidelines for digital identity management*

# Liberty's Focus

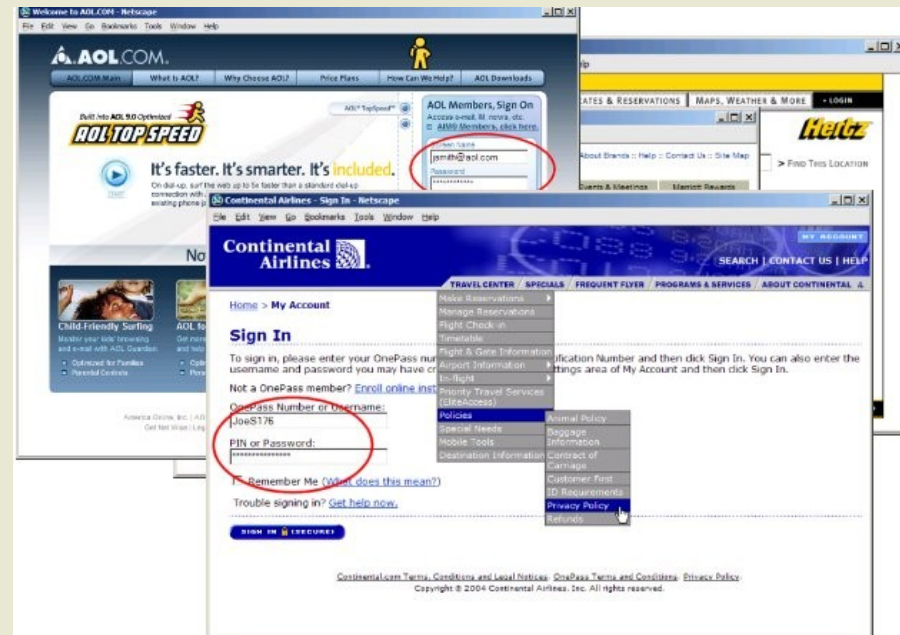
**Liberty Alliance delivers real world solutions to solve  
real world identity problems**



**Liberty helps organizations build a foundation for trust -- critical for the overall success of identity-based services and efficiencies**

# Issues with Digital Identity Today

- Users have a proliferation of logins and passwords
- Redundantly stored attributes get out of synchronization
- Security, privacy, and cost are concerns
- When identity is not as “distributed” as the applications that need to use it, business opportunities are missed
- Virtual organizations and business/other relationships are emerging



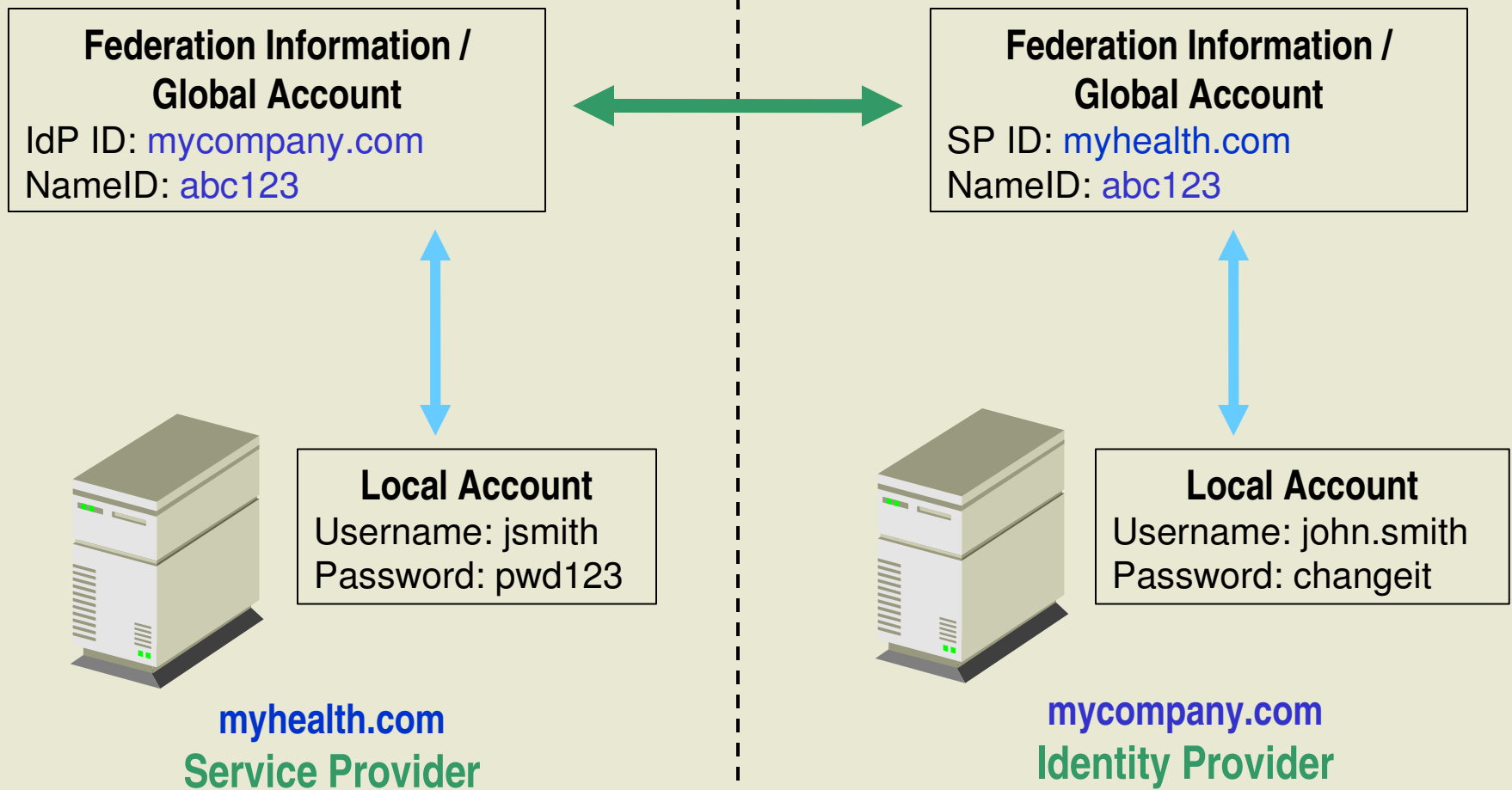
# Identity Federation

- What is Identity Federation?
  - Agreement between providers concerning data used to identify users
    - User-specific attributes:
      - E-mail address?
      - Office number and Employee Id?
      - Role or membership in certain groups?
    - Unique, privacy-preserving identifiers known only to the providers?
  - Federated identifiers can be created in different ways
    - Dynamic assignment based on business agreements
    - Dynamic creation based on user consent
    - Out-of-band bulk synchronization or update at both parties

# Requirements for Federated Identity

- Standard **formats** for identity information
  - > Able to represent all existing authentication and attribute technologies
- Standard, secure, privacy-enabled **protocols** for exchanging identity information between components of distributed applications
  - > Technology-neutral
  - > Well-specified and interoperable
- A way to set up **trust relationships** between applications that share identity information
  - > Within technical, business, and legal frameworks

# Federation Key Concepts



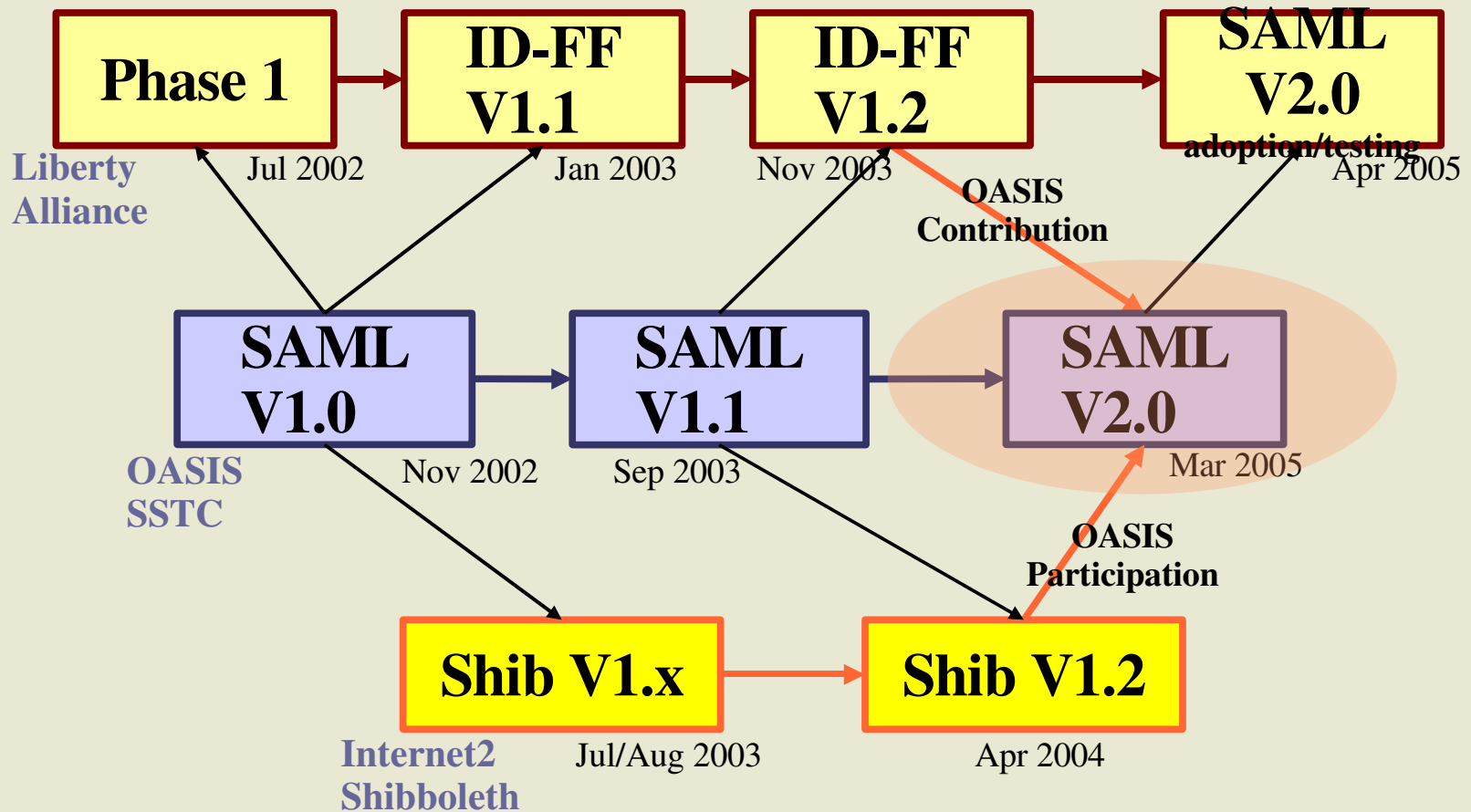
# SAML and Liberty Provide the Solution

- Security Assertion Markup Language (SAML) first solved the **format** problem and provided a few **protocols** for common patterns
- Liberty developed more sophisticated **formats** and **protocols** based on SAML, provides **guidelines** for trust relationships, and performs **interoperability testing**
- Then SAML and (part of) Liberty converged!
  - > Learning lessons from others who have used and adapted them
  - > Particularly the Internet2 Shibboleth project



# A Grand Convergence

- ID-FF = Liberty's Identity Federation Framework
- SSTC = Security Services Technical Committee



# SAML Components

## Profiles

Combinations of assertions, protocols, and bindings to support interoperability for particular use cases

## Bindings

Mappings of SAML protocols onto standard messaging and communication protocols

## Protocols

Request/response message pairs for obtaining

asserti

ement

## Assertions

Authentication, attribute, and entitlement information

## Authentication context

Detailed data on types and strengths of authentication

## Metadata

Configuration data for assertion-exchanging parties

# Case studies



# Government adoption in EU

- <http://www.projectliberty.org/liberty/adoption/eg>
- Austria, Finland, Norway, Denmark, France, Italy, UK.....

# Typical Corporate Interaction

## Employee Portal

Theta.com Logout | Help

**THETA CORPORATION** Employee Benefits Portal

**WHAT'S NEW**

- ENROLLMENT →
- BENEFITS AT A GLANCE →
- PLAN DETAILS →
- LEGAL NOTICES →
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Home Savings & Retirement Your Profile Annette Slater Tuesday, July 13, 2004

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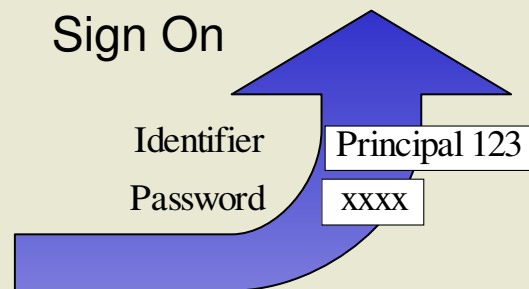
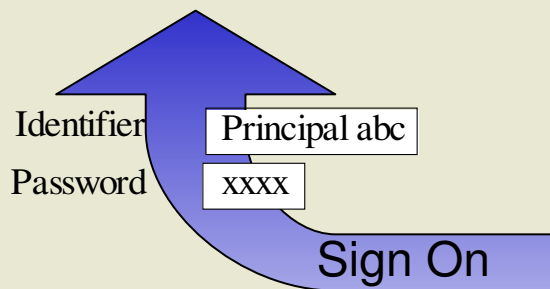
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**Site Highlights**

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- What do you think of the new *netBenefits*? [Tell Us](#)
- [Annual Enrollment](#) ends this month. You can review and change your benefits for 2004 through November 30, 2003.
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# One Emerging Model – Corporate SSO

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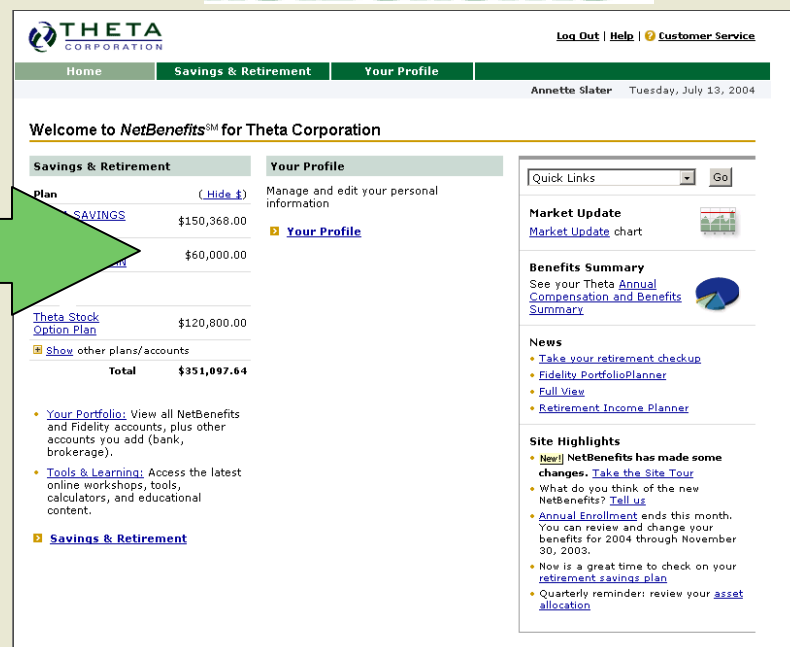
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Federated SSO



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Home **Savings & Retirement** Your Profile

Annette Slater Tuesday, July 13, 2004

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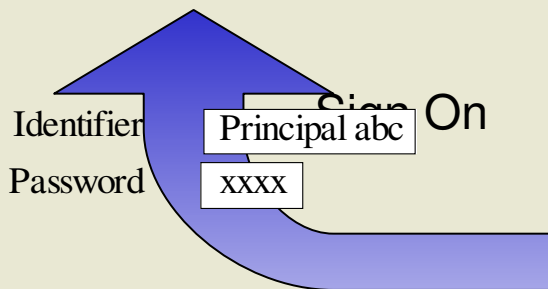
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Employee

# Learnings

- Single Sign On doesn't just change where the login occurs – other things move as well:
  - Responsibilities
  - Potential liabilities
- Service model changes
  - I can't login – who do I call?
  - Limited or full service via federated login?

# Business Issues Matrix

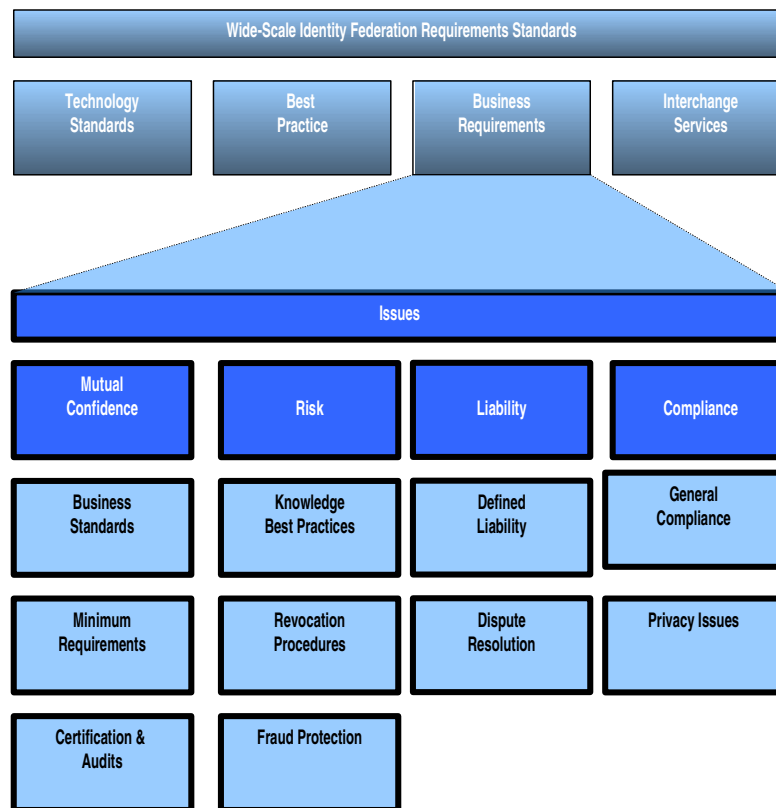


Figure 1: Positioning the Liberty Business Guidelines in the Federated Identity Business Requirement Framework



## For more information:

- <http://www.projectliberty.org/>
- [http://www.projectliberty.org/liberty/resource\\_center](http://www.projectliberty.org/liberty/resource_center)
- [http://www.projectliberty.org/liberty/resource\\_center/case\\_studies](http://www.projectliberty.org/liberty/resource_center/case_studies)
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A decorative graphic consisting of several overlapping, semi-transparent blue squares of various sizes, arranged in a cluster that tapers to the right.

Thank you

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