



SDEC11

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User Experience Design in Agile Development

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What is User Experience?

“User experience encompasses all aspects of the end-user's interaction with the **company**, its **services**, and its **products**...”

- Nielsen Norman Group

www.nngroup.com/about/userexperience.html

“The user experience for *applications* encompasses the **visual appearance**, **interactive behavior**, and **assistive capabilities** of software...”

- Apple

<http://developer.apple.com/ue/>

What does User Experience do?



User Research - Uncover insights about users and their tasks

UI Design - defining the behavior of products and systems that a user can interact

Usability Testing - ensures it is easy for people to achieve their goals

Heuristic Review - competitor or current solution

Contextual Inquiry - field observations

Workflow and Task Analysis - user flows

Personas - user profiles

“Low-fidelity” prototypes (wireframes) – define the information architecture

“Medium-fidelity” prototypes (color, icons, graphics, etc.) – define the visual designs

“High-fidelity” prototypes (HTML prototypes) – define the interactive design

Usability Testing



Internal Evaluations - stakeholders, subject matter experts, and/or end-user proxies

Remote Evaluations – with external users

Lab Evaluations – formal evaluation

Site Visit Evaluations – with “Design Partners”

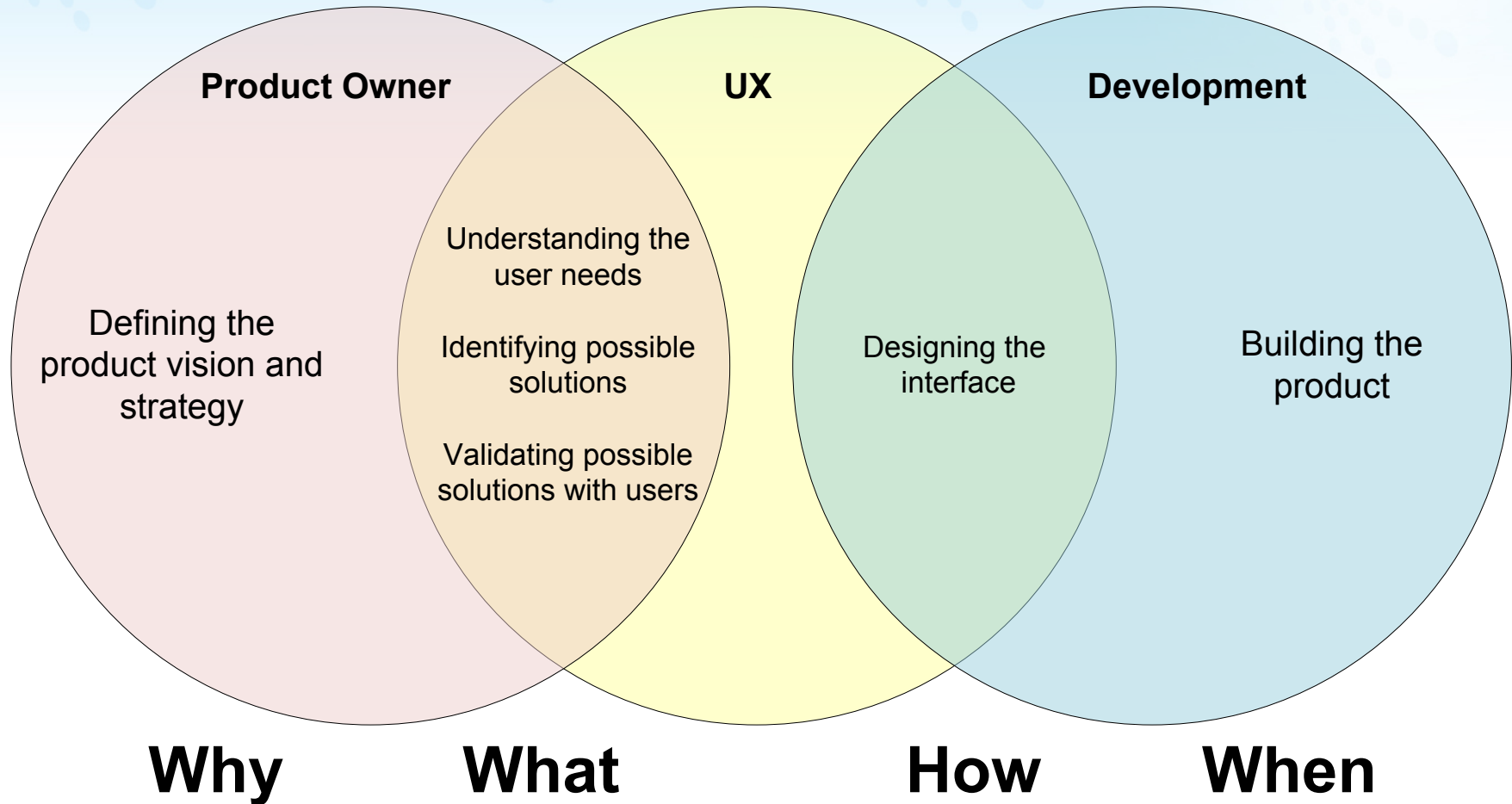
Five Trends in Most Successful Organizations



1. **UX people are bridges:** embedded with the team but also involved in high level/early planning
2. **UX work is early, flexible:** done up-front to storyboard level
3. **Low-fi prototype is the ongoing spec:** owned by UX, agreed by stakeholders
4. **UX work happens in a parallel track:** pair complex back-end sprints with UX intensive work
5. **Guerilla style UX validation:** fast, discount methods run frequently and regularly on early code

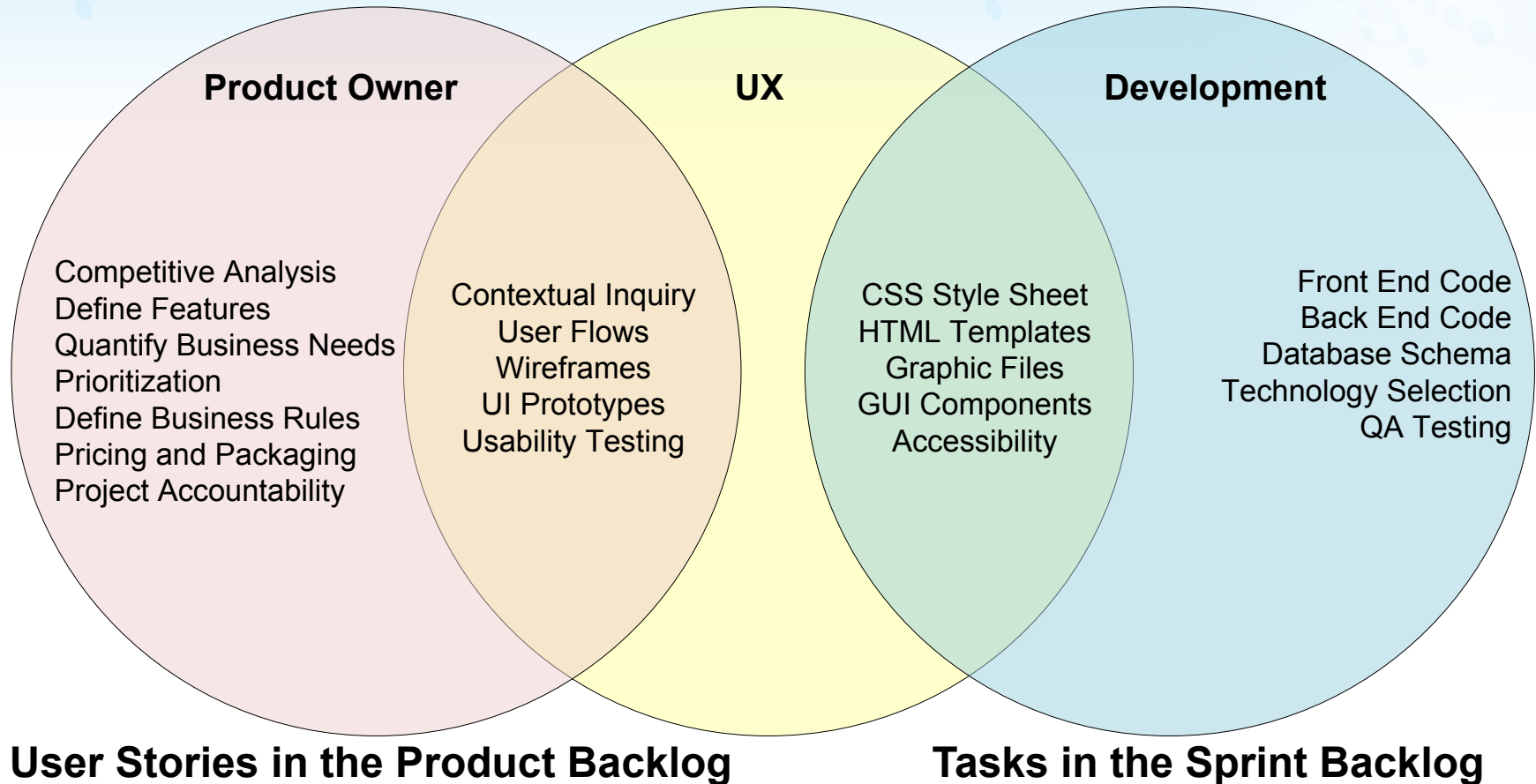
Source: Nielsen Norman Group. Agile Usability: Best Practices for User Experience on Agile Development Projects

Agile Roles



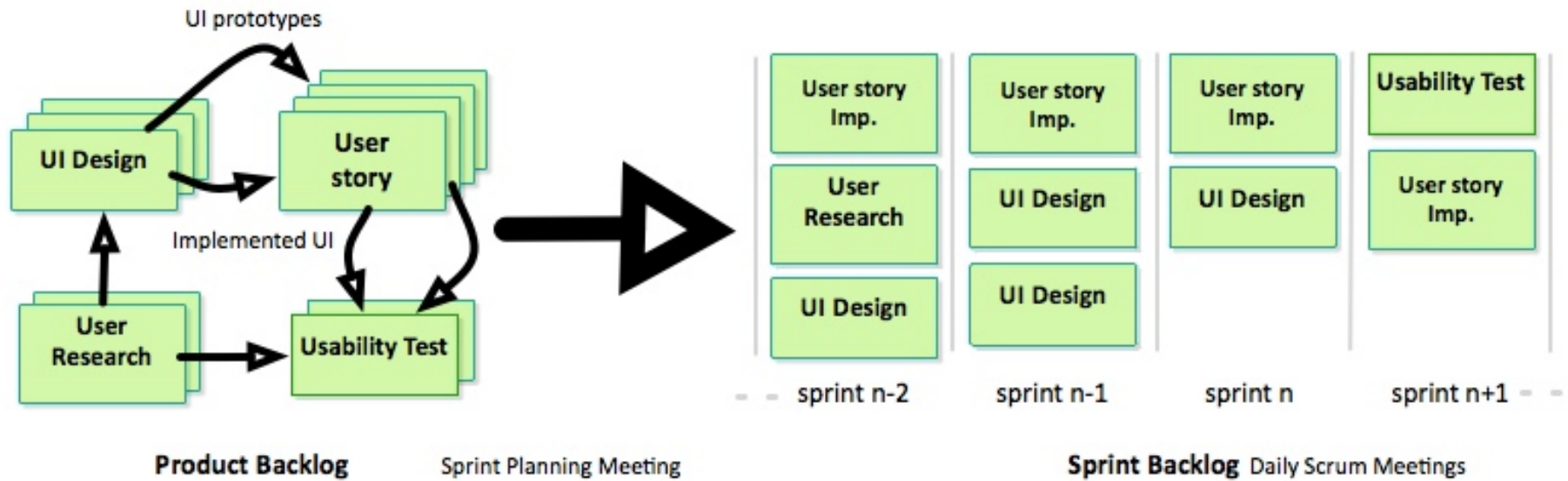
Source: Johnson, Jeremy. Agile UX Retreat

Agile Deliverables



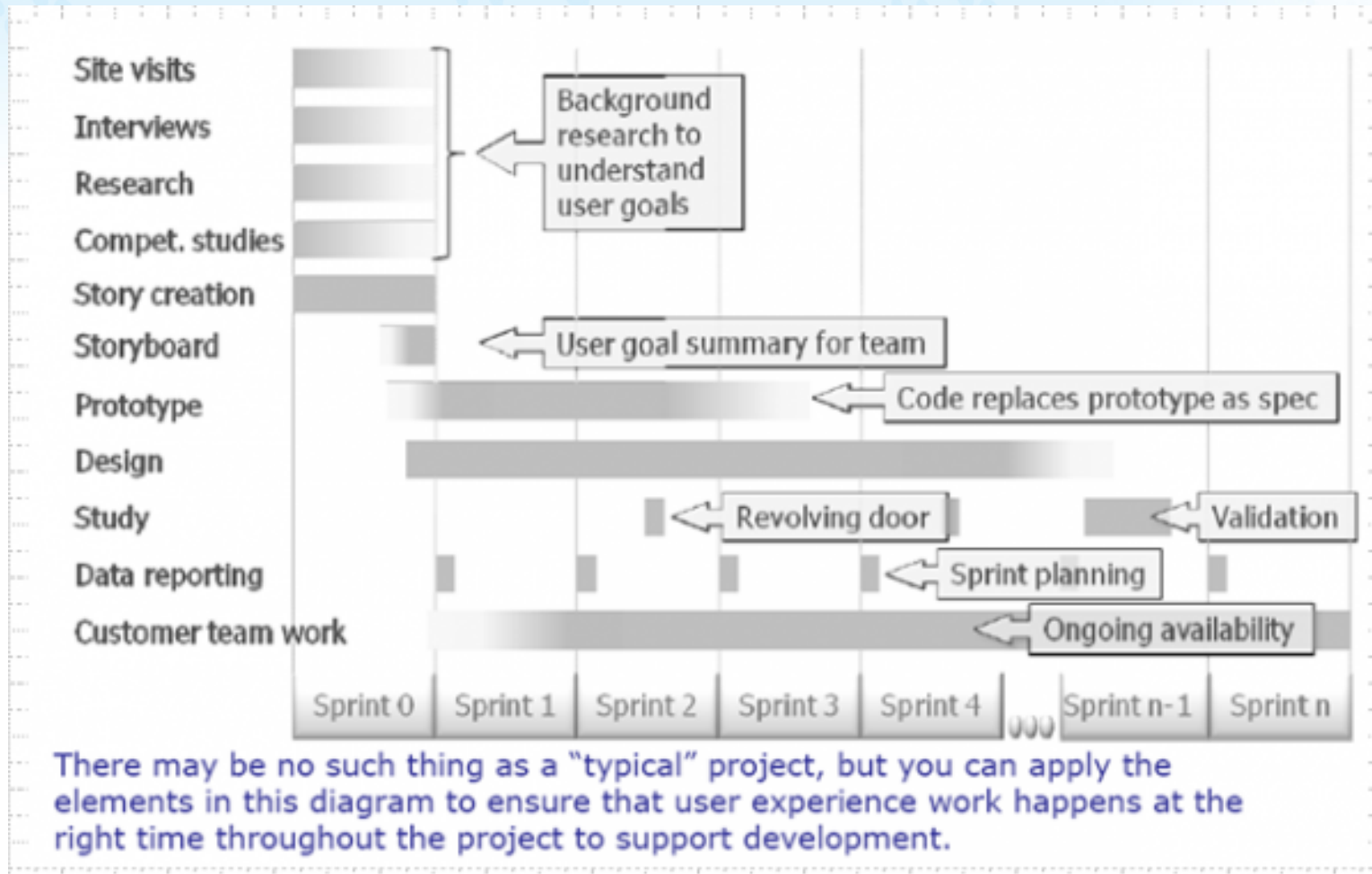
Source: Johnson, Jeremy. Agile UX Retreat

UX Design in the Product and Sprint Backlog



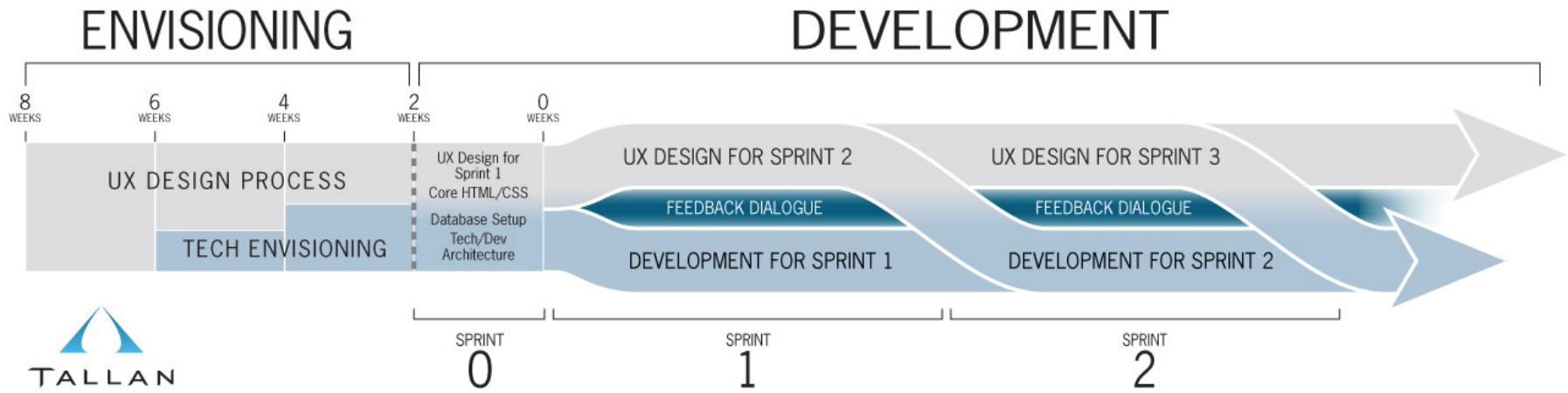
Source: Low, Boon. Enhancing User Interactions in Digital Libraries Notes on UX2.0.

UX Agile Project Schedule



Source: Nielsen Norman Group. Agile Usability: Best Practices for User Experience on Agile Development Projects

UX Design and Dev Process Envisioning and Development



Source: Donahue, Matt. Agile User Experience Design.

- Define a set of re-usable components once
- Create a centralized library for designers and developers
- Provide living documents that evolve
- Focus on the core experience while relegating the repeated patterns to style guides

Source: Gothelf, Jeff. Beyond Staggered Sprints: How TheLadders.com Integrated UX into Agile

UI Prototyping



- Illustrating the experience by showing rather than telling
- Facilitate better estimation at sprint planning meetings
- Have something to compare the working code to when it was ready for user acceptance testing

Source: Gothelf, Jeff. Beyond Staggered Sprints: How TheLadders.com Integrated UX into Agile

- Test every other week (in a 2-week sprint situation) on the same day at the same time.
- Show the participants whatever is ready (this includes paper sketches all the way to working code).
- Schedule the session midway in the sprint leaving enough time to react to the findings.

Source: Gothelf, Jeff. Beyond Staggered Sprints: How TheLadders.com Integrated UX into Agile

Two Design Reviews per Sprint



- The initial review is held midway through the sprint and serves to align the execution team with their product owners and project sponsors on the general direction of the proposed experience.
- The second review, scheduled two days before the end of the sprint, is meant as a final review.
- In between the first and second designs, ad hoc reviews could be held if the designer felt there was a need for more fine-grain alignment.

Source: Gothelf, Jeff. Beyond Staggered Sprints: How TheLadders.com Integrated UX into Agile

Participatory Design Sessions



- **Sketch** ideas
- **Present** ideas to the team
- **Critique** presentation based solution
- This process is repeated three times - each round increasing the fidelity of each sketch
- The sessions create a sense of ownership and alignment from the cross-functional team
- The UX team get dozens of raw ideas to work through, evolve and incorporate into a final design

Source: Gothelf, Jeff. Beyond Staggered Sprints: How TheLadders.com Integrated UX into Agile

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