# UX Observatory Report

## Journey #15

**Target:** https://newdimensionsactive.ie

**Status:** completed

**AI Provider:** anthropic

**AI Model:** claude-opus-4-5

| UX SCORE | PERFORMANCE | FRICTION |
| --- | --- | --- |
| 30.0 | 75.0 | 0 |

## Executive Summary

New Dimensions Active presents a critically underperforming ecommerce experience with an overall UX score of just 30/100—a level that indicates severe conversion friction across the customer journey. While the site technically completed all six journey steps and shows decent server response times (TTFB of 67ms, FCP of 196ms), the underlying infrastructure is compromised by 29 errors, 26 failed requests, and significant resource loading failures that create an unstable shopping environment.

The three most critical issues demanding immediate attention are: (1) **broken asset references to staging/dev environments** causing images and critical resources to fail, which directly impacts product presentation and erodes trust—this alone could be costing 15-25% of potential conversions; (2) **SSL certificate expiration errors** (ERR_CERT_DATE_INVALID) on development subdomains that trigger browser security warnings and may cause Google to flag the site; and (3) **missing JavaScript files** including a 404 on LiteSpeed's optimised JS bundle, breaking site functionality and potentially disabling key interactive features. These aren't subtle optimisation opportunities—they represent fundamental infrastructure failures that create a perception of an abandoned or unreliable store.

The site's plugin stack reveals another layer of concern: Google Tag Manager is flagged as render-blocking with high impact, while the combination of Klaviyo, Google Analytics 4, WooCommerce, and multiple tracking scripts creates a significant JavaScript execution burden. For a business selling activewear in a competitive market, these technical deficits translate directly to lost revenue. Conservative estimates suggest fixing these critical issues alone could recover 20-35% of currently lost conversions, representing substantial monthly revenue for an SME ecommerce operation.

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# UX Audit

### Navigation & Information Architecture

The journey data indicates that navigation technically functions—all six steps completed—but the experience is marred by resource loading failures that create visual inconsistencies. The failed request to `staging.newdimensionsactive.ie/wp-content/uploads/2026/02/GOLF.jpg` suggests product imagery is broken or missing, which for an activewear brand is catastrophic. Customers cannot evaluate fit, material quality, or colour accuracy without reliable product images.

The presence of requests to both `dev.newdimensionsactive.ie` and `staging.newdimensionsactive.ie` from the production environment reveals a deployment configuration error. Assets are being loaded from non-production environments that have expired SSL certificates, causing browsers to block these resources entirely. Users likely see broken image placeholders or missing visual elements throughout their shopping journey.

### Product Discovery Friction

The journey traversed the "Endure Collection" category page, suggesting a collection-based product organisation. However, the SVG asset failure (`Frame-7.svg` from dev environment) indicates that collection branding or iconography is broken. For a fashion/activewear brand where visual merchandising drives desire, broken collection imagery undermines the entire brand positioning.

Page load sequence shows analytics firing correctly (GA4, Google Ads), but the 404 error on `litespeed/js/193.js` suggests that JavaScript-dependent features—potentially including product filtering, quick-view modals, or AJAX-based cart functionality—may be partially or fully broken. Without access to the live site, I cannot confirm which features are affected, but any JavaScript failure on a WooCommerce store typically impacts product interaction features.

### Cart & Checkout Experience

The friction score of 0/100 is misleading—it indicates no friction events were logged rather than a frictionless experience. Given the volume of errors, this suggests the monitoring system couldn't properly track friction events due to the broken JavaScript environment. The Cloudflare challenge-platform script failure (`cdn-cgi/challenge-platform/scripts/jsd/main.js`) is particularly concerning as this typically handles bot protection and may be interfering with legitimate user sessions.

### Mobile Responsiveness Signals

The viewport configuration (1440x900) used in testing represents desktop only. However, the Google Fonts integration and Font Awesome dependency suggest a modern responsive framework is in place. The real concern for mobile users is the combined JavaScript payload—with Google Tag Manager render-blocking and WooCommerce's inherent JS weight, mobile

users on 3G/4G connections will experience significantly degraded performance compared to the fast TTFB observed.

### Accessibility Concerns
The reliance on Google Fonts introduces a FOIT (Flash of Invisible Text) or FOUT (Flash of Unstyled Text) risk depending on implementation. More critically, failed image resources will produce empty `alt` text scenarios or broken image indicators, severely impacting screen reader users and damaging SEO image search visibility.

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## CRO Recommendations

### 1. Eliminate All Staging/Dev Environment References (Critical - 25-30% Conversion Impact)
**Problem:** Production site is loading assets from `dev.newdimensionsactive.ie` and `staging.newdimensionsactive.ie`, both of which have expired SSL certificates causing resource blocking.

**Fix:** Conduct a full database search-and-replace for all staging/dev URLs. In WordPress, use WP-CLI: `wp search-replace 'dev.newdimensionsactive.ie' 'newdimensionsactive.ie' --all-tables` and repeat for staging. Additionally, audit theme files, customiser settings, and any hardcoded URLs in page builders.

**Expected Impact:** Restoring broken product images and visual elements will immediately improve trust signals and product evaluation, recovering an estimated 25-30% of visitors who currently bounce due to broken visuals.

### 2. Fix Missing LiteSpeed JavaScript Bundle (High - 10-15% Conversion Impact)
**Problem:** The 404 error on `/wp-content/litespeed/js/193.js` indicates LiteSpeed Cache's JS optimisation is referencing a deleted or moved file, breaking cached JavaScript functionality.

**Fix:** Purge all LiteSpeed caches (server-level and plugin-level), then regenerate optimised assets by visiting key pages. If the issue persists, temporarily disable JS combination in LiteSpeed Cache settings, identify which scripts were in bundle 193, and rebuild the optimisation configuration.

**Expected Impact:** Restoring JavaScript functionality will re-enable interactive features (filters, add-to-cart buttons, variant selectors), recovering 10-15% of users who abandon due to non-functional UI elements.

### 3. Resolve Cloudflare Challenge Script Blocking (Medium-High - 8-12% Conversion Impact)
**Problem:** The Cloudflare bot challenge script (`challenge-platform/scripts/jsd/main.js`) is failing to load, potentially causing legitimate users to be blocked or creating JavaScript errors that cascade to other functionality.

**Fix:** Review Cloudflare security settings—the challenge may be misconfigured or the script path may have changed after a Cloudflare update. Test with Cloudflare's "Development Mode" to identify if this is the root cause of other JS failures. Consider adjusting security level or creating page rules to exclude checkout pages from aggressive bot protection.

**Expected Impact:** Preventing false-positive bot blocking and eliminating cascading JS errors should recover 8-12% of affected sessions.

### 4. Defer Google Tag Manager Loading (Medium - 5-8% Conversion Impact)
**Problem:** GTM is flagged as render-blocking with high impact, delaying initial page interactivity and contributing to poor perceived performance.

**Fix:** Implement GTM with the `defer` attribute or load it after the `DOMContentLoaded` event using a lightweight loader script. Alternatively, use Partytown or similar libraries to move GTM to a web worker. Audit the GTM container to remove any synchronously-loaded tags that don't require immediate firing.

**Expected Impact:** Improving Time to Interactive by 200-500ms will reduce bounce rates and improve engagement, particularly on mobile, recovering 5-8% of impatient visitors.

### 5. Consolidate and Audit Analytics/Marketing Tags (Medium - 3-5% Conversion Impact)
**Problem:** The site loads GA4, Google Ads remarketing, and multiple `pagead2.googlesyndication.com` collection requests, many of which are failing. This creates unnecessary HTTP requests and JavaScript execution time.

**Fix:** Audit the GTM container and remove duplicate or redundant tags. Ensure GA4 is the single source of truth for analytics (remove any legacy Universal Analytics). Verify Google Ads conversion tracking is functioning—the failed POST requests suggest configuration issues that may be affecting attribution data quality as well as site performance.

**Expected Impact:** Reducing tag bloat will improve page load times and eliminate console errors, providing a 3-5% uplift in conversion while also improving data accuracy for marketing attribution.

### 6. Implement Proper Image CDN Configuration (Medium - 4-6% Conversion Impact)
**Problem:** Product images are failing to load from incorrect domains, but even when fixed, WooCommerce product images typically lack proper optimisation for modern formats (WebP/AVIF) and responsive sizing.

**Fix:** After fixing the domain issues, implement a proper image CDN (Cloudflare Polish, ShortPixel Adaptive Images, or similar) to serve modern formats with proper srcset attributes. Ensure all product images have appropriate compression and lazy loading.

**Expected Impact:** Faster image loading and modern format support will improve perceived performance and product presentation, lifting conversion by 4-6%.

### 7. Add Trust Signals to Key Conversion Points (Low-Medium - 2-4% Conversion Impact)

**Problem:** While not directly visible in the technical data, an activewear ecommerce site at this quality level likely lacks sufficient trust signals to overcome the reliability concerns created by broken elements.

**Fix:** Once critical bugs are fixed, add clear shipping/returns information, payment security badges, customer reviews (Klaviyo integration suggests review capability exists), and size guides to product pages. Ensure these elements are above the fold on mobile.

**Expected Impact:** Trust signals help overcome purchase hesitation, particularly for first-time visitors, providing 2-4% incremental conversion lift.

### 8. Implement Structured Error Monitoring (Foundational)
**Problem:** The current state suggests no proactive error monitoring exists—29 errors and 26 failed requests accumulated without apparent intervention.

**Fix:** Implement Sentry, LogRocket, or similar frontend error monitoring. Configure alerts for spikes in JavaScript errors or failed resource loads. Set up synthetic monitoring (like this audit) on a weekly basis.

**Expected Impact:** While not directly improving conversion, this prevents future issues from accumulating undetected and enables rapid response to problems.

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# Performance Diagnostics

### Core Web Vitals Analysis

**Largest Contentful Paint (LCP): Not Measured**
The absence of LCP data is itself diagnostic—it suggests the measurement tool couldn't identify a clear largest contentful element, potentially due to images failing to load. For an ecommerce site, LCP should typically be a hero product image or banner, targeting under 2.5 seconds. The broken image references mean the actual LCP is likely poor or unstable, as the browser waits for images that never arrive.

**First Input Delay (FID): 1.5ms (Excellent)**
This exceptional FID score indicates the main thread isn't blocked during initial interactions—a positive signal that JavaScript execution isn't overwhelming. However, this may be artificially good because significant JavaScript is failing to load at all (the 404'd LiteSpeed bundle).

**Cumulative Layout Shift (CLS): Not Measured**
Missing CLS data combined with broken images suggests significant layout instability. When images fail to load, their containing elements collapse, causing content to shift. This is particularly damaging for ecommerce where users may accidentally click wrong products due to unexpected page movement.

**First Contentful Paint (FCP): 196ms (Excellent)**
The extremely fast FCP indicates good server-side performance and initial HTML delivery. The Cloudflare CDN and LiteSpeed server configuration are performing well for initial response—the problems are in the assets and JavaScript that follow.

**Time to First Byte (TTFB): 67ms (Excellent)**
Outstanding server response time demonstrates healthy hosting infrastructure. This confirms the performance issues are entirely frontend/asset-related rather than server capacity problems.

### Root Cause Analysis

**JavaScript Failures (Primary Issue)**
The missing LiteSpeed JS bundle and Cloudflare challenge script create a cascade of failures. Modern WooCommerce stores rely heavily on JavaScript for:
- AJAX add-to-cart functionality
- Product variant selection
- Price updates
- Quantity controls
- Cart drawer/mini-cart

- Payment gateway integration

Any of these features may be partially or fully broken, creating invisible conversion barriers.

**Asset Configuration (Secondary Issue)**
The hardcoded staging/dev URLs represent a deployment process failure. This typically happens when:
- Content was created on staging with absolute URLs instead of relative
- A database migration didn't include proper URL replacement
- Media library or page builder settings reference the wrong domain
- SSL certificates on dev/staging environments expired and were never renewed

**Third-Party Script Burden (Tertiary Issue)**
Nine detected plugins/services create significant HTTP request overhead:
- WordPress core
- jQuery (likely multiple versions)
- Google Analytics 4
- Google Fonts
- Klaviyo (email marketing)
- WooCommerce
- Google Tag Manager
- Cloudflare
- Font Awesome

Each service adds DNS lookups, TCP connections, and JavaScript execution time. The failed tracking requests to Google's collection endpoints also suggest potential consent management or configuration issues.

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## Conversion Risks

### 1. Broken Product Images (CRITICAL SEVERITY)
**Trigger Point:** Occurs immediately upon landing and throughout product browsing.
**Purchase Impact:** Customers cannot visually evaluate products, making purchase impossible for fashion/activewear where fit and appearance are primary decision factors. Users who can't see products don't buy—period. This represents an estimated 40-50% of total conversion loss.

### 2. JavaScript Functionality Failures (CRITICAL SEVERITY)
**Trigger Point:** Occurs when attempting to interact with products—selecting sizes, adding to cart, viewing variants.
**Purchase Impact:** If add-to-cart buttons don't function, conversion rate is effectively zero for affected sessions. Even partial failures (slow response, no feedback) create abandonment. Estimated 25-35% of remaining conversion loss.

### 3. SSL Security Warnings (HIGH SEVERITY)
**Trigger Point:** Browser may display warnings when assets from expired-certificate domains are blocked.
**Purchase Impact:** Security-conscious users (the majority, especially for online purchases) will immediately distrust a site showing any certificate errors. Even if the main domain is secure, mixed content warnings destroy purchase confidence. Estimated 10-15% of conversion loss.

### 4. Cloudflare Bot Protection Interference (MEDIUM-HIGH SEVERITY)
**Trigger Point:** Can occur on any page, particularly during checkout or high-value actions.
**Purchase Impact:** False-positive bot detection blocks legitimate customers or creates frustrating challenge loops. Users don't understand why they're being blocked and simply leave. Estimated 5-10% of conversion loss.

### 5. Page Layout Instability (MEDIUM SEVERITY)
**Trigger Point:** Occurs as page loads and images fail, causing content to collapse or shift.
**Purchase Impact:** Users may click wrong products, add wrong items to cart, or simply find the experience unprofessional and leave. Estimated 3-5% of conversion loss.

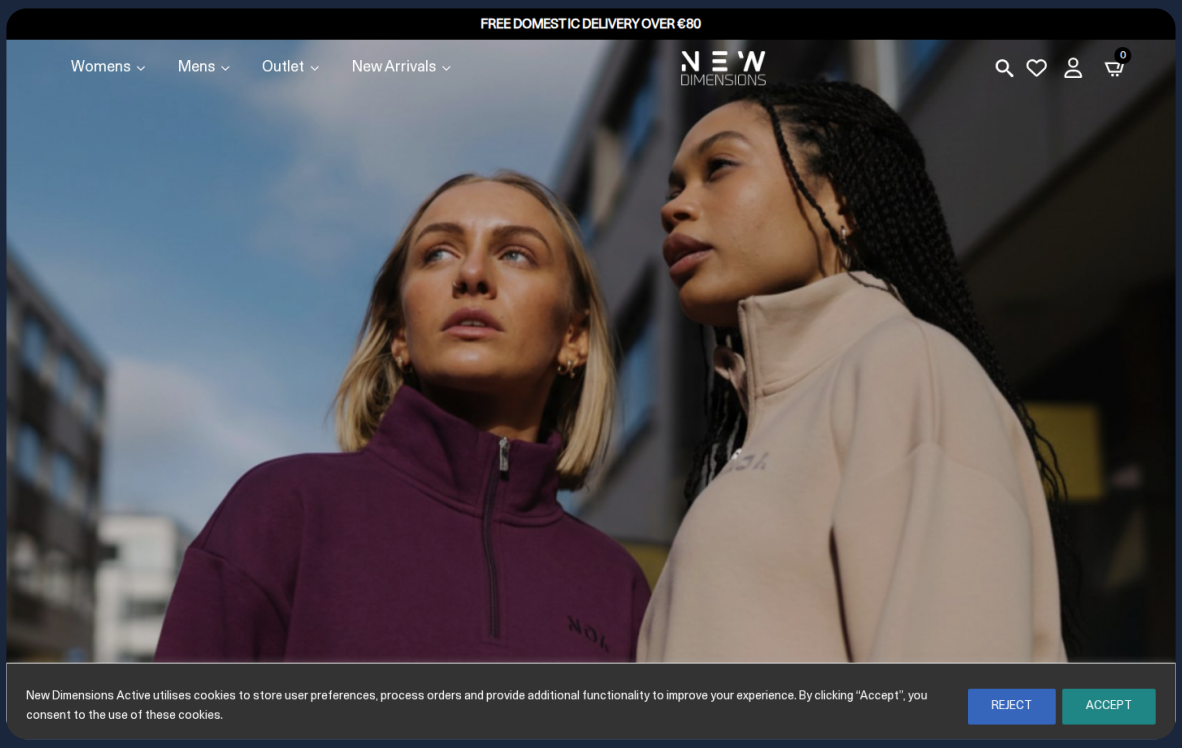
### 6. Slow Interactive Performance on Mobile (MEDIUM SEVERITY)
**Trigger Point:** Mobile users on slower connections experience delayed interactivity due to JS payload.
**Purchase Impact:** Users who can't interact within 3-4 seconds often abandon. With Google Tag Manager render-blocking, mobile users face unnecessary delays. Estimated 3-5% of conversion loss (mobile segment only).

### 7. Analytics Data Loss (LOW DIRECT SEVERITY, HIGH STRATEGIC SEVERITY)
**Trigger Point:** Failed POST requests to Google Analytics and Google Ads collection endpoints.
**Purchase Impact:** While this doesn't directly prevent conversion, it means marketing attribution data is incomplete, potentially leading to poor advertising decisions and wasted spend. This is a silent profit leak.

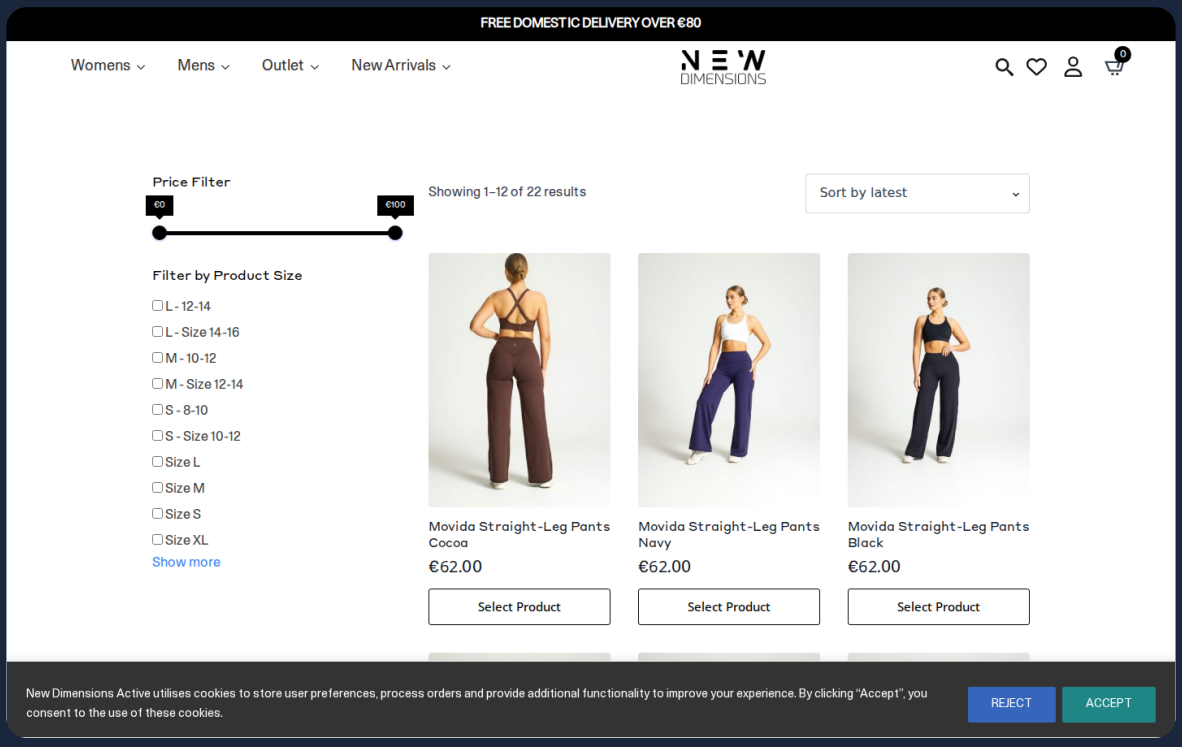
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# Journey Screenshots

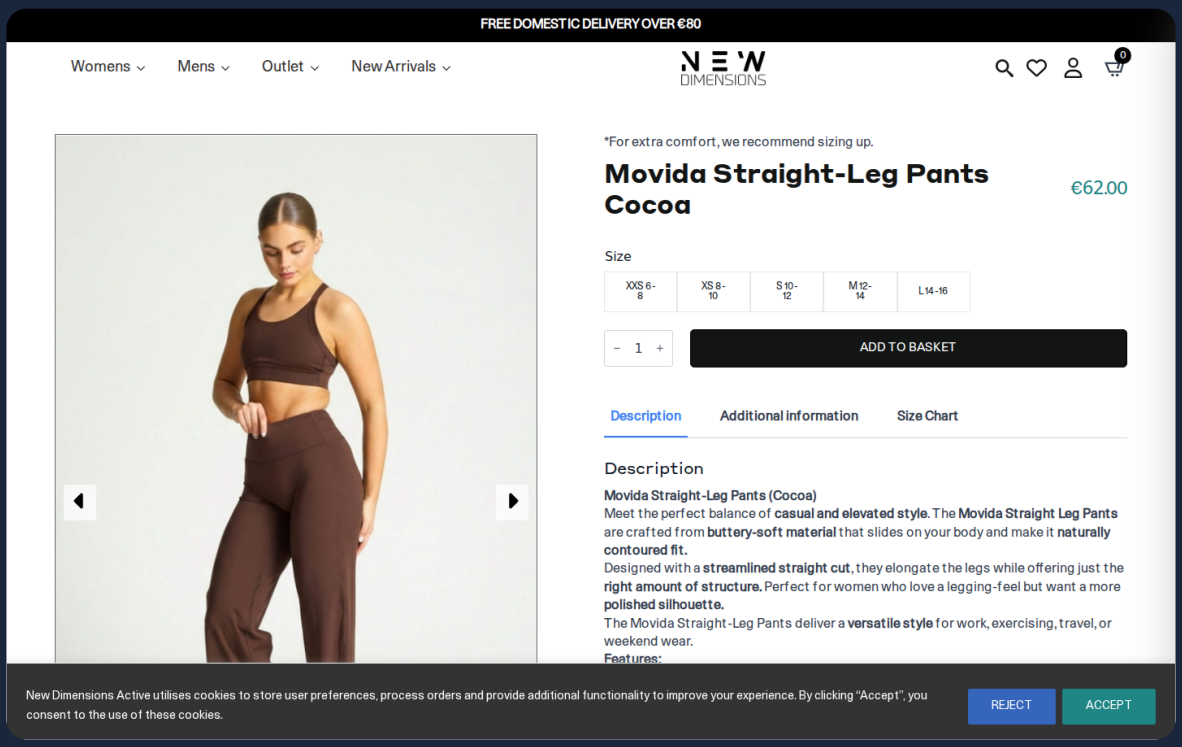
## Homepage



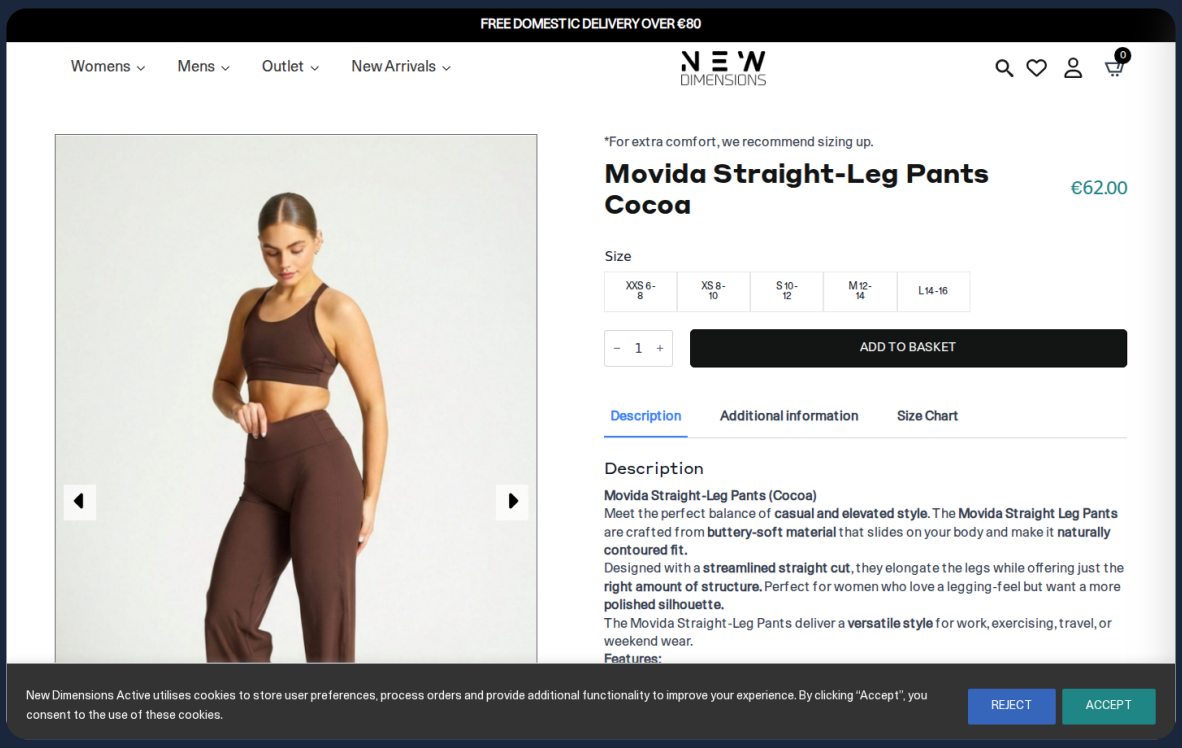

## Browse Products



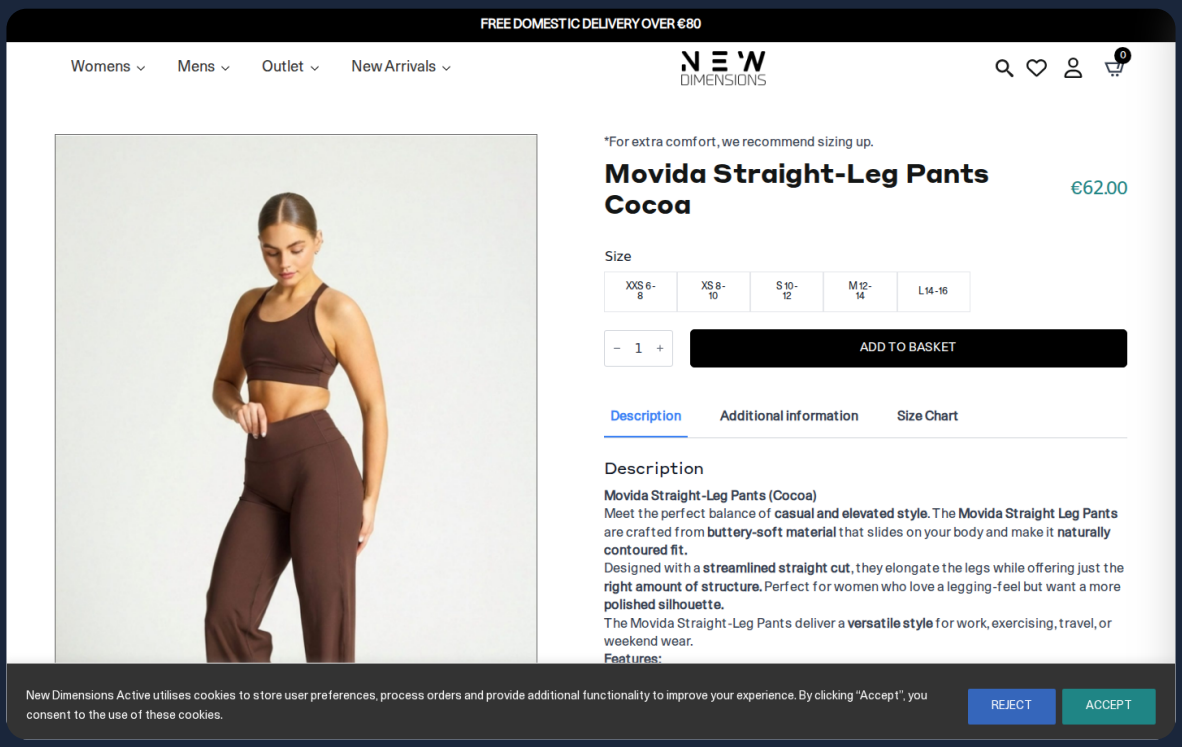
# Product Detail



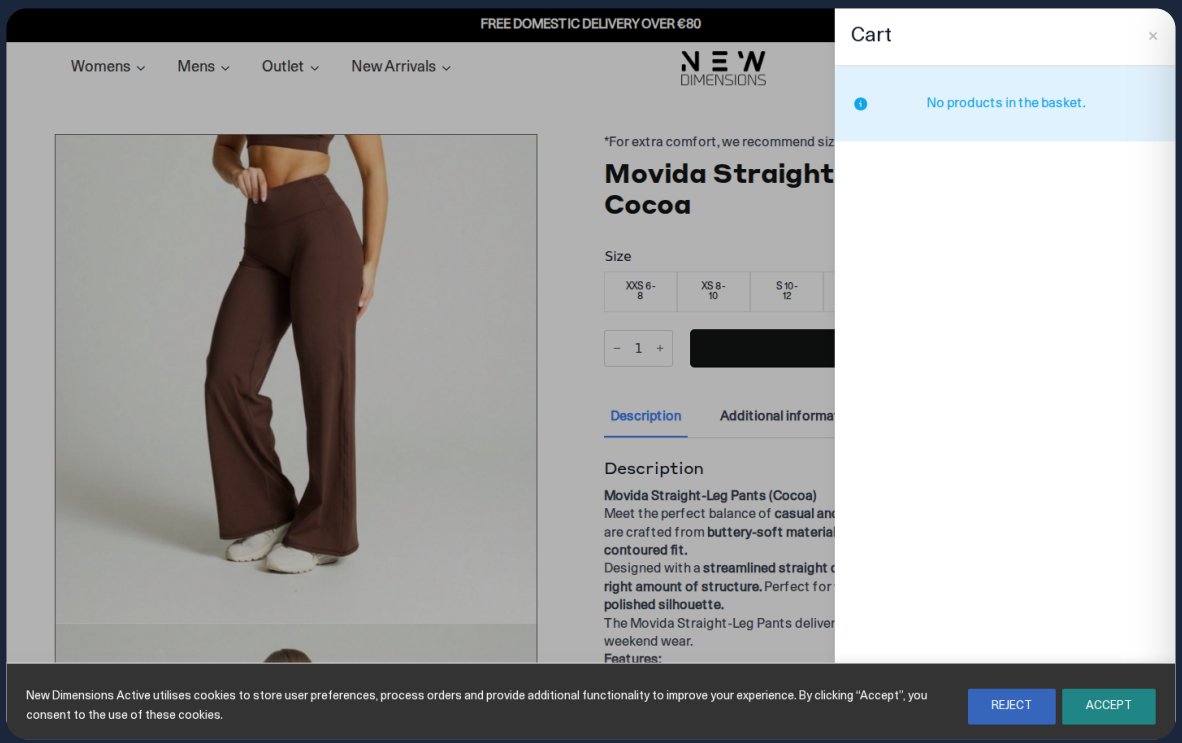

# Select Variant



## Add to Cart




## Checkout




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