CASE STUDY

# Incentive Compensation Analytics & Bonus Accrual Architecture

From Performance Platform Design to Workday-Native Implementation


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|---|---|
| **Platform** | Microsoft Power Apps · Power Automate · Dataverse · Power BI · BQE Core |
| **Workday Modules** | Time Tracking · Project Billing · HCM · Financial Accounting · Adaptive Planning |

This document describes an incentive compensation and bonus accrual system designed, built, and delivered at a mid-size professional services consulting firm. Section I covers the business problem and the platform I built using Microsoft Power Apps, Power Automate, and Dataverse. Section II documents how the same architecture maps to Workday's native configuration model. Section III provides a complete technical specification of the Power Platform implementation.

SECTION I

## Background & Business Problem

Finance and HR leadership at the firm faced a recurring challenge: there was no reliable, automated way to estimate bonus liability month to month. Performance data lived in disconnected systems, the calculation logic was embedded in spreadsheets owned by individuals, and Finance was routinely making end-of-year corrections to the accrual because in-year estimates were inaccurate. The downstream effect was that the P&L; understated compensation expenses during the year and then absorbed a large adjustment at period close.

I was asked to design and build the operational platform to fix this. The solution — an incentive compensation and employee lifecycle platform using Power Apps, Power Automate, and Dataverse — addressed the problem at the data and process layer. What follows documents what was built, how it worked, and how the same architecture maps to Workday's native modules.

| Before | After |
| --- | --- |
| • Accruals calculated manually in individual spreadsheets • No consistent composite productivity metric • Performance data siloed across systems • Year-end P&L corrections required annually • No visibility into running liability during the year | • Automated monthly calculation with consistent logic • Composite productivity score from live BQE Core data • Structured Finance reporting extract each period • Live Power BI dashboard for leadership • Year-end correction requirement eliminated |

### Platform Components Built

| Component | Description |
| --- | --- |
| Performance Review Routing | Multi-stage approval workflow with manager, HR, and Finance sign-off gates |
| Compensation Calculation Engine | Monthly composite score calculation with tier lookup and bonus multiplier application |
| PTO & Absence Tracking | Leave request routing and available-hours denominator governance |
| Work Anniversary Automation | Triggered notifications and compensation review scheduling |
| Contractor Onboarding Workflow | Structured intake and system provisioning routing |
| Project Allocation System | Consultant-to-project assignment with capacity visibility |

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|---|---|
| Finance Reporting Extract | Period-end accrual output for journal entry and budget comparison |
| Executive Power BI Dashboard | Live composite productivity trends against budget by team and period |

Technologies: Microsoft Power Apps (forms and workflow UI) · Power Automate (routing logic and notifications) · Dataverse (structured data model) · Power BI (executive reporting) · Excel with Power Query (Finance reconciliation) · BQE Core via ODBC (utilization and realization source data)

## The Composite Productivity Metric

The metric at the center of the accrual model combined two consulting performance signals into a single productivity score that drove all downstream tier assignment and bonus calculation.

### Metric Definitions

| Metric | Formula | Target | What It Measures |
|---|---|---|---|
| Utilization Rate | Billable Hrs ÷ Available Hrs | 75–80% | How much of a consultant's time is charged to clients |
| Realization Rate | Client-Approved Hrs ÷ Submitted Billable Hrs | Firm-defined | How much of billed time converts to recognized revenue |
| Composite Score | Utilization Index × Realization Index | Tier input | Effective revenue conversion of available capacity |

**Example:** 0.80 utilization × 0.875 realization = 0.70 composite score. This means 70% of available time is effectively converting to revenue. A consultant can be highly utilized but low-realization if hours are written off by clients.

### Performance Tier Structure

| Composite Score | Performance Tier | Bonus Multiplier | % of Target Paid |
|---|---|---|---|
| 0.90 and above | Exceeds | 1.20x | 120% of target |
| 0.75 – 0.89 | At Plan | 1.00x | 100% of target |
| 0.60 – 0.74 | Below Plan | 0.75x | 75% of target |
| Below 0.60 | Not Eligible | 0x | No accrual |

SECTION II

## How This Maps to Workday Configuration

The platform was built outside of Workday — the firm was not on Workday at the time. However, the business logic, data flow, and accrual output are architecturally identical to how Workday handles this natively. Below is how each component maps to Workday's configuration model, including specific objects, navigation paths, and design decisions.

| What I Built (Power Platform) | Workday Native Equivalent |
|---|---|
| Target bonus % field in Dataverse | Compensation Plan → Compensation Basis (% of annualized salary) |
| Conditional routing in Power Automate | Eligibility Rules (declarative, dynamic per worker profile) |
| Tier lookup table in Dataverse | Compensation Grade Profiles (multiplier per grade level) |
| Scheduled monthly Power Automate flow | Compensation Review (period process with auditable worksheet) |
| Finance Excel reporting extract | Workday Report Writer or Office Connect output |
| Manual journal entry from extract | Period End Accrual Journal (Financial Accounting module) |
| Excel Power Query forecast model | Workday Adaptive Planning (governed, auto-refreshed from Financials) |

### Step 1 — Bonus Plan Setup

```
Menu → Compensation → Compensation Plans → Create Compensation Plan (Type: Bonus)
```

The Bonus Plan is the container object. You define plan name, currency, plan period (annual or quarterly), and whether the plan is discretionary or formula-driven. The Compensation Basis — percentage of annualized base salary or flat dollar — maps directly to the target bonus percentage field I configured in the Dataverse data model.

### Step 2 — Eligibility Rules

```
Compensation Plan → Eligibility Rules tab → Add Rule (Boolean AND/OR conditions)
```

Eligibility Rules evaluate dynamically against each worker's profile when the Compensation Review runs. Rules can reference job profile, supervisory org, employment type, hire date, compensation grade, or custom field. At the firm this was conditional routing logic built in Power Automate. In Workday it is declarative configuration. Example: Employment Type = Full Time AND Job Profile = Consultant or Senior Consultant AND Hire Date before plan period start AND Status = Active.

### Step 3 — Compensation Grade Profiles & Tier Multipliers

```
Menu → Compensation → Compensation Grades → Create Grade Profile
```

Compensation Grade Profiles are where the tiered multiplier logic lives in Workday. The composite productivity score serves as the input variable that determines which grade profile — and therefore which multiplier — applies to a worker for the period. This is Workday's native implementation of the lookup table I built in Dataverse.

### Step 4 — Compensation Review (Accrual Calculation Run)

```
Menu → Compensation → Compensation Review → Launch Compensation Review
```

The Compensation Review aggregates worker performance data, evaluates eligibility, and calculates estimated bonus payout per worker. At the firm this was a scheduled Power Automate flow that ran monthly and wrote outputs to Dataverse before generating the Finance extract. In Workday, the Compensation Review does the same job natively — the worksheet is auditable and every change to a recommendation is tracked. Finance extracts output via Report Writer or Office Connect.

### Step 5 — Period End Accrual Journal Entry

```
Menu → Financial Accounting → Journal Entries → Create Journal Entry
```

Once Finance has the estimated liability from the Compensation Review, they post a Period End Accrual Journal. This records compensation expense in the current period — ensuring the P&L; reflects true cost before the cash payout at year end. Worktags applied for Cost Center, Supervisory Org, and Practice Area ensure the expense allocates correctly for management reporting.

### Step 6 — Forward Forecast in Workday Adaptive Planning

```
Workday Adaptive Planning → Compensation Planning or People Planning module
```

Adaptive Planning is where Finance builds the forward-looking liability view. Actuals from the Workday Financials Ledger feed automatically into Adaptive via native integration — no manual export required. Finance builds scenario models projecting full-year bonus liability based on current utilization trends and headcount assumptions. At the firm, this view was built manually in Excel using Power Query. Workday Adaptive replaces it with a governed, refreshable planning environment.

SECTION III

# Power Platform Technical Specification

This section documents the full technical architecture of the implementation built using Microsoft Power Apps, Dataverse, Power Automate, and Power BI. Each component is specified with its data model, logic flow, and integration points. The architecture is designed to be fully reproducible in any Microsoft 365 environment with a Power Platform license.

## Dataverse — Data Model

All tables live in Dataverse and are referenced across Power Apps, Power Automate, and Power BI without any data export or duplication.

| Table | Key Columns | Purpose |
|---|---|---|
| Employees | employee_id, name, grade, emp_type, hire_date, active_flag | Master employee record with compensation parameters |
| TimesheetData | employee_id, period_month, billable_hrs, submitted_hrs, approved_flag | Monthly time data pulled from BQE Core per period |
| PerformanceTiers | tier_name, score_min, score_max, multiplier, pct_target | Configurable tier thresholds — Finance/HR owned |
| MonthlyScores | employee_id, period_month, utilization_rate, realization_rate, composite_score, tier_assigned | Calculated scores written by Power Automate each period |
| AccrualOutput | employee_id, period_month, target_bonus, multiplier_applied, accrual_amount | Period liability per employee — source for Finance extract |
| AccrualSummary | period_month, team, aggregate_liability, ytd_liability, budget_variance | Rolled-up table for Power BI and Finance reporting |

## Power Automate — Calculation Engine

A scheduled cloud flow runs on the first of each month and executes the full accrual calculation sequence. All steps write directly to Dataverse and require no manual intervention once configured.

| Step | Action | Detail |
|---|---|---|
| 1 | Scheduled Trigger | Recurrence: monthly, first day of month, 6:00 AM |
| 2 | Pull Timesheet Data | HTTP connector to BQE Core ODBC endpoint or Excel upload trigger; filter by current period |
| 3 | Loop: Per Employee | Apply to each on active Employees records where active_flag = true |

| | | |
|---|---|---|
| 4 | Calculate Utilization | Compose: divide(billable_hrs, available_hrs) → utilization_rate |
| 5 | Calculate Realization | Compose: divide(approved_hrs, submitted_hrs) → realization_rate |
| 6 | Calculate Composite | Compose: multiply(utilization_rate, realization_rate) → composite_score |
| 7 | Tier Lookup | List Rows from PerformanceTiers; filter where score_min <= composite <= score_max |
| 8 | Calculate Liability | Compose: multiply(target_bonus_pct, base_salary, multiplier) → estimated_liability |
| 9 | Write to Dataverse | Create/update row in MonthlyScores and AccrualOutput for current period |
| 10 | Rollup Summary | Aggregate AccrualOutput by team and period; write to AccrualSummary |
| 11 | Generate Excel Report | Create Excel file from AccrualOutput via Office 365 connector; attach to period folder in SharePoi |
| 12 | Email Distribution | Send email via Outlook connector to Finance distribution list with report attached |

**Integration note:** If BQE Core is accessible via ODBC, the flow pulls data directly using the SQL Server or custom connector. If not, a secondary trigger watches a designated SharePoint folder for an uploaded timesheet export and initiates the calculation sequence on file arrival. Both patterns produce identical Dataverse output.

### Power Apps — User Interface

Two canvas apps handle configuration and review. Both connect directly to Dataverse.

| App | Users | Screens & Functionality |
|---|---|---|
| Compensation Admin App | Finance & HR | Tier threshold configuration, target bonus % by grade, eligibility rule management, |
| Manager Dashboard App | People Managers | Team composite scores by period, individual consultant utilization and realization tr |

### Power BI — Reporting Layer

The Power BI report connects directly to Dataverse via the native connector. No export, no scheduled refresh dependency on files. Data is live.

| Report Page | Visuals | Primary Consumer |
|---|---|---|
| Productivity Overview | Composite score by consultant, period trend line, tier distribution donut | Leadership, HR |

| | | |
|---|---|---|
| Accrual Liability | Period-over-period liability bar, YTD accumulation, budget vs actual variance | CFO, Controller |
| Team Drill-Down | Manager-level rollup, headcount by tier, individual roles | People Managers |
| Scenario View | What-if on threshold adjustments and headcount changes affecting full-year liability | Finance Planning |

### Period End Accrual Journal Structure

| Entry Type | Account | Direction | Impact |
|---|---|---|---|
| Period Accrual | Bonus Compensation Expense | Debit | Reduces operating income (P&L) |
| Period Accrual | Accrued Compensation Liability | Credit | Builds on Balance Sheet until paid |

- Worktags applied: Cost Center, Supervisory Org, Practice Area
- Each period Finance posts a fresh entry or adjusts the prior period accrual up or down as performance data updates
- The Power Platform extract provides the supporting schedule Finance attaches to the journal posting

**Licensing note:** The full stack runs on Microsoft 365 with a Power Apps per-user or per-app license. Dataverse is included with Power Apps. Power Automate premium connectors (for ODBC/HTTP) require a Power Automate Premium license per user running the flow. Power BI Pro is required for report sharing beyond the creator.

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The architecture described in this document reflects a system designed and built from first principles to solve a real finance operations problem. The composite productivity metric, tier structure, calculation engine, and reporting layer were all designed and implemented independently based on requirements gathered directly from Finance and HR leadership. The Workday mapping in Section II and the Power Platform specification in Section III demonstrate that the same business logic translates cleanly across both environments.

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