Crow Canyon Software

presents

Building a Successful Request Management System in SharePoint and Office 365

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crowcanyon.com

Helping businesses succeed
with Office 365 & SharePoint!

BUSINESS APPLICATIONS

NITRO STUDIO™

CUSTOM SOLUTIONS

BUSINESS APPLICATIONS

- IT Help Desk
- Asset Management
- Customer Service
- Facilities Requests
- Equipment Tracking
- HR Requests
- Security Access Requests
- Onboarding
- Contract Renewals
- Document Management
- Marketing
- Purchasing Requests

NITRO STUDIO™
Crow Canyon Software

Application Creation Platform for SharePoint & Office 365

- Suite of enhancements to SharePoint and Office 365.
- Quick development of flexible, easily deployed applications.
- Build simple or complex applications that meet specific needs.

NITRO STUDIO™
Crow Canyon Software

WEBINARS

NITRO Forms and the Power Portal

Wed. May 30, 11 am PDT / 2 pm EDT

NITRO Workflows and Custom Actions

Thurs. May 31, 11 am PDT / 2 pm EDT

https://www.crowcanyon.com/webinars

Issue

Question

How To

Inquiry

Leave

Access

Hardware

Purchase

Fix

Update

Order

Request Management using SharePoint & Office 365

- **IT**
  - Trouble Tickets, Hardware Requests, Change Requests
  - Asset Maintenance, Inventory Tracking, Access requests
- **Facilities**
  - Fixes, Moves, Equipment management
- **Contract/Document Management**
  - Creation, Updates, Renewals
- **Human Resources**
  - Onboarding, Leave Requests, Benefit updates, Travel requests
- **Purchasing**
  - Requesting, ordering, receiving, deploying

… and on and on and on!

Type of Request

- Technical Issue, Bug, Problem, Complaint
  - Needs immediate attention
- Information Request, How-to Question
  - Automation with KB, FAQs, Canned Responses
- Forms-based, Process-driven
  - Set of required information, resolved by pre-determined process

Who is submitting request?

INTERNAL

- Employee
- Staff
- Manager

EXTERNAL

- Customer
- Client
- Member
- Student
- Partner

How is request submitted?

- Phone
- Email
- Web Form
- SharePoint
- Portal

When is Request needed?

- Response Due
- Due Date
- Completion Date
- Priority
- Importance
- SLAs

Categorization of Request

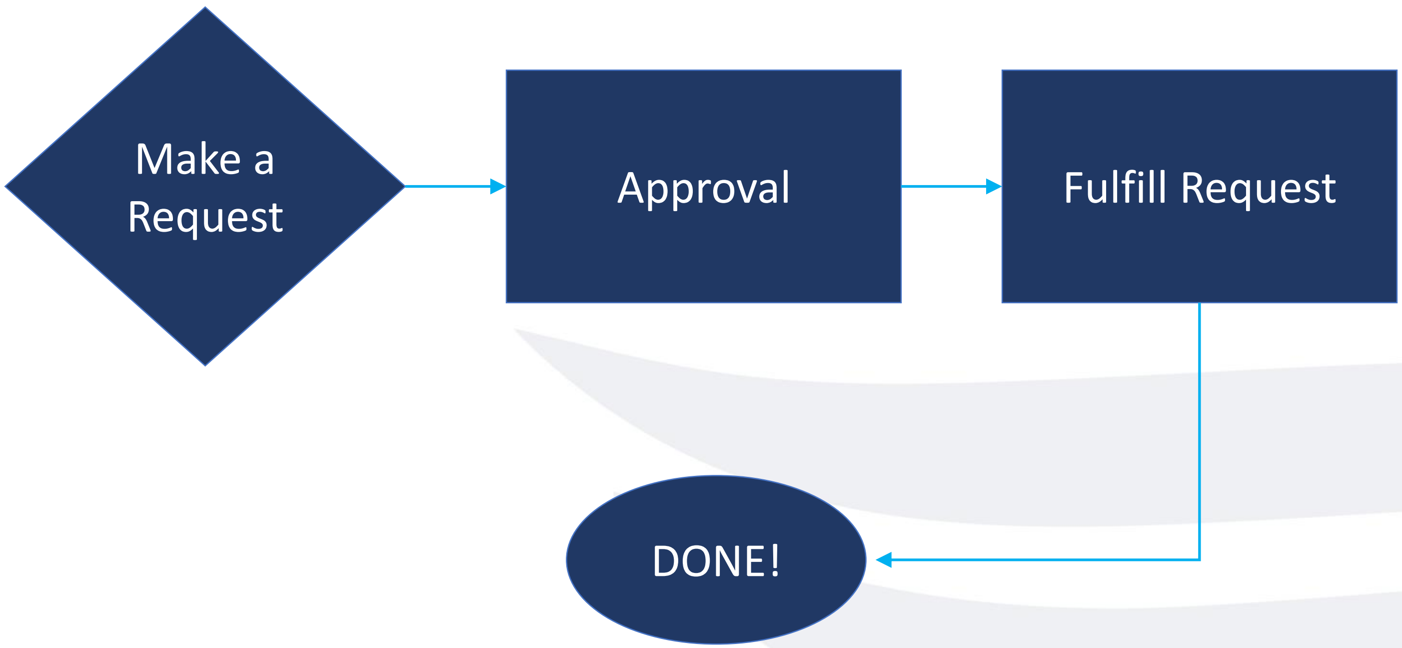
- By Issue: one, two, or three levels
  - Category, Type, Issue

- By Department
- By Location
- By Product

- By any other useful criteria!

- Type of Request
- Who is submitting Request?
- How is it submitted?
- When is it needed?
- Categorization of Request

Request Management–simple workflow



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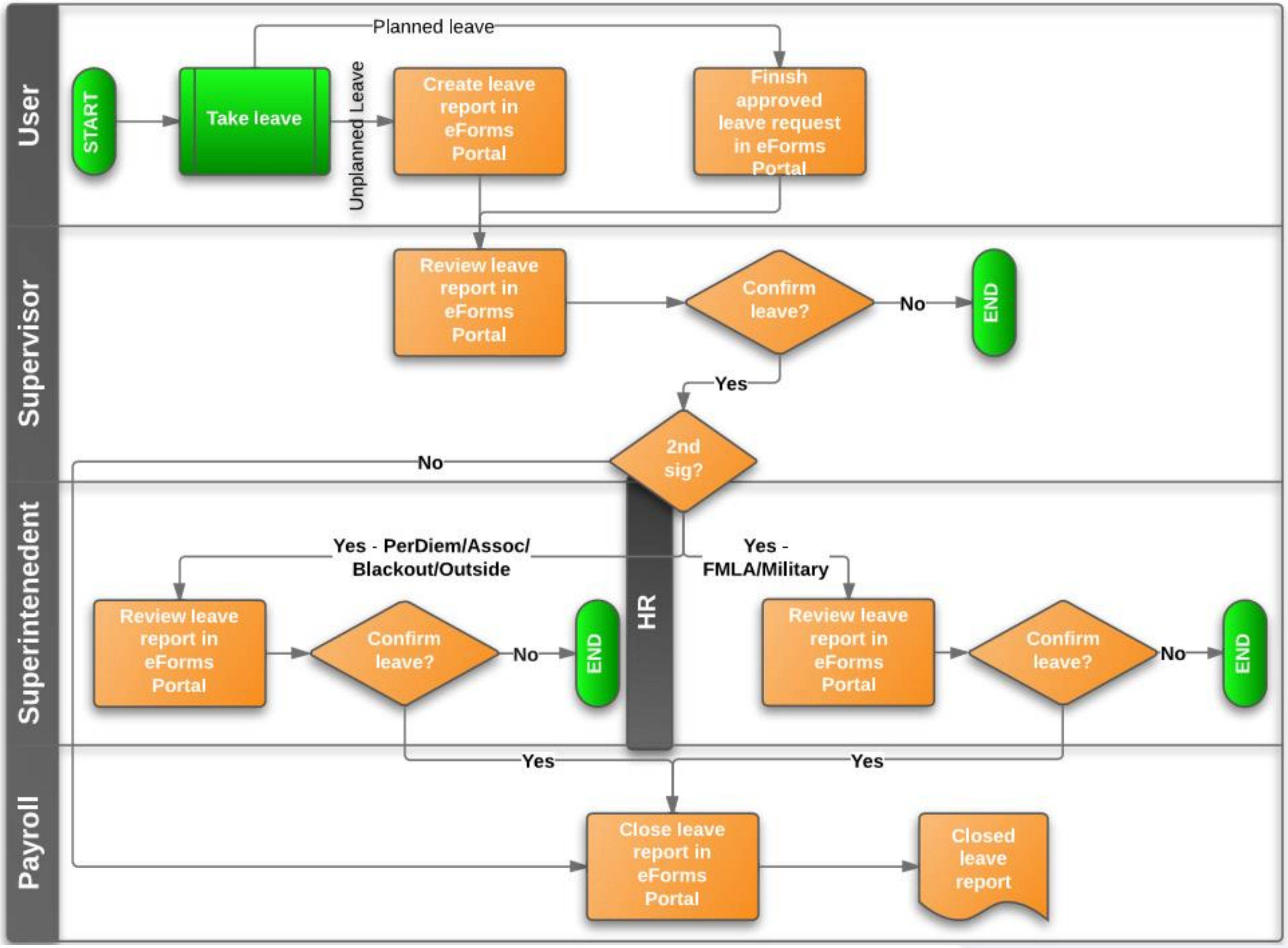
Common workflow – Leave Request



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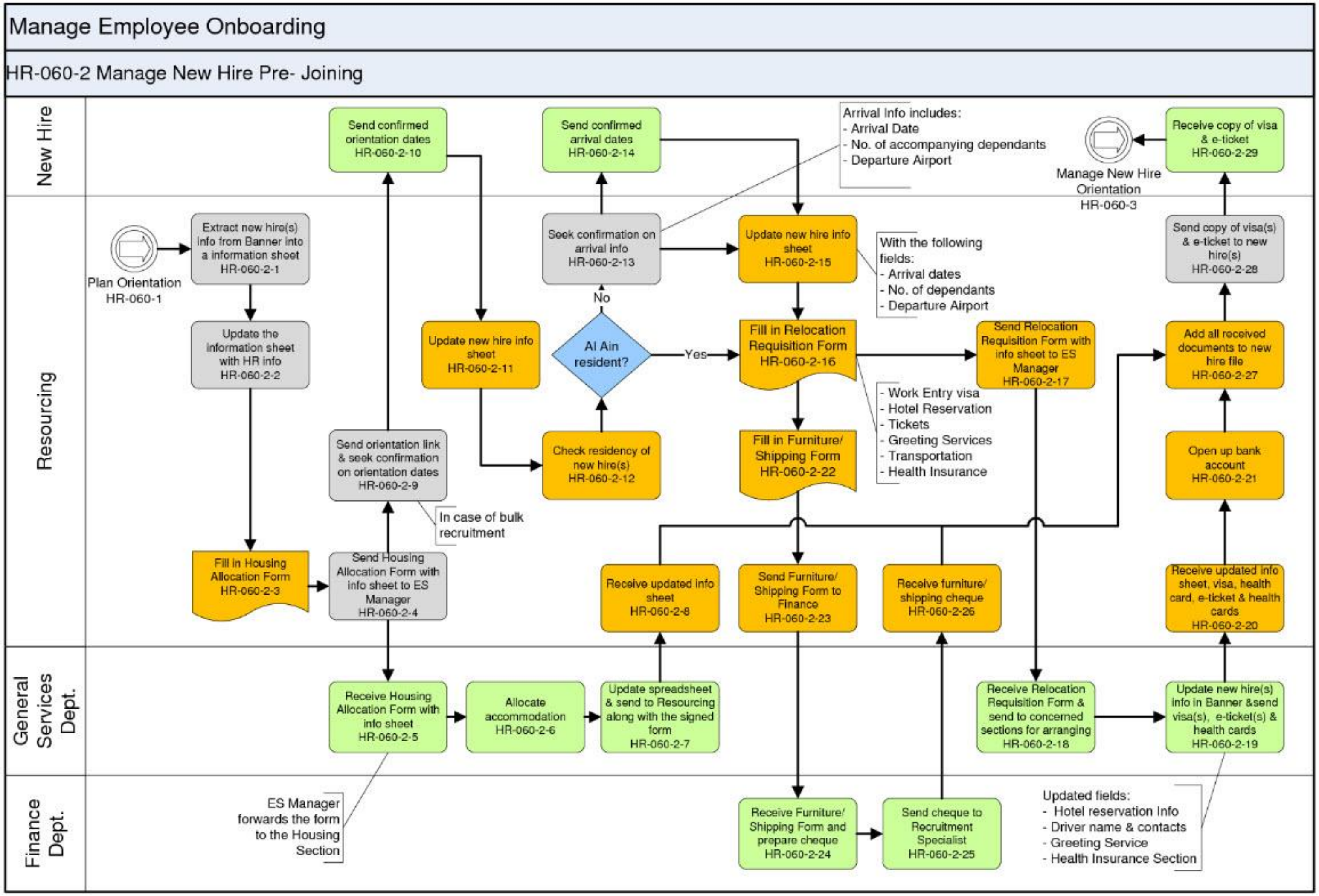
More Complex Workflow - Onboarding



Some ways (other than SharePoint) to manage requests

EMAIL/SPREADSHEETS

Limited collaboration

No tracking & reporting

Lack of accountability

Limited access & scalability

LEGACY SYSTEMS

Outdated technology

Discontinued support

PAPER FORMS

Manual processing

Non-searchable

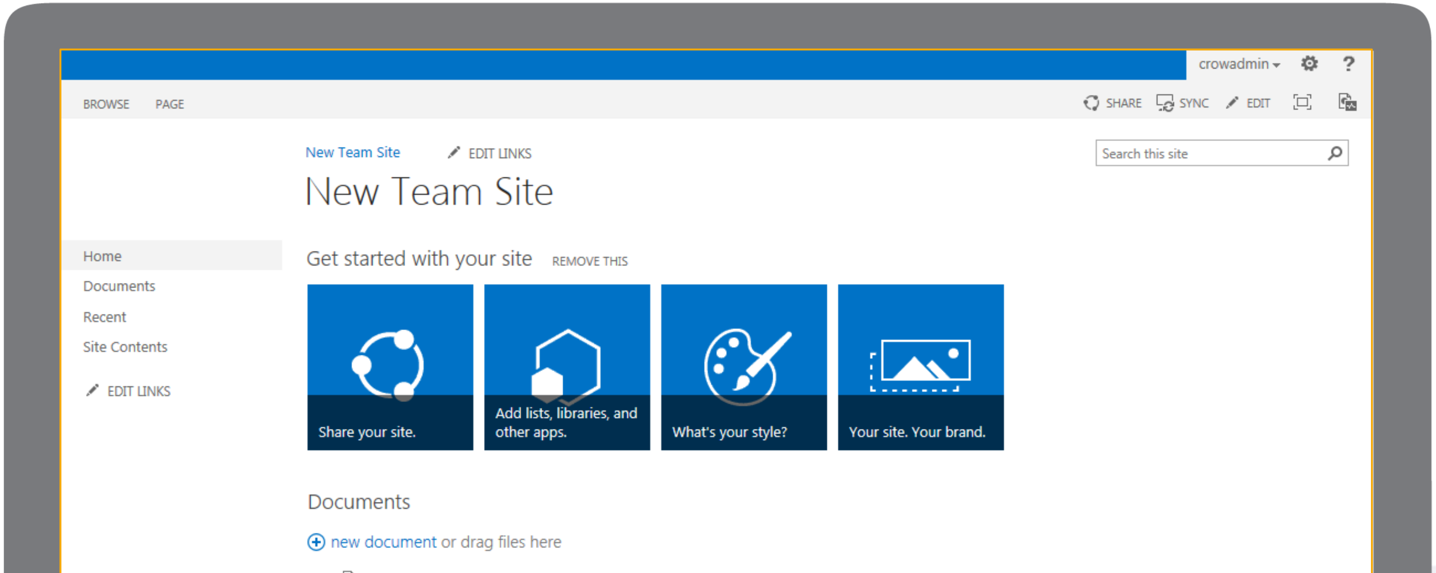
Hard to revise

ENTERPRISE SOFTWARE

Expensive

Feature overkill

Lack of customization



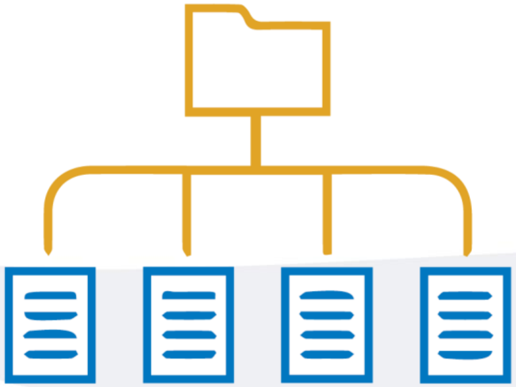
SharePoint Out-of-the-Box

- Sites, Site Collections
- Lists & Libraries
- Permissions
- Views/Filters on lists
- Columns
- Integration with AD

But SharePoint Needs More

What about:

- Forms?
- Workflows?
- Custom columns?
- Email sync?
- Reporting?
- Database integration?



Custom Development using outside firm

- Means hiring company skilled in development and project management
- Usually involves RFP’s, vendor selection, contract negotiation.
- Appropriate for specialized projects

Concerns/Issues

- Finding reliable, known firm
- Keeping costs under control
- Keeping project on track
- Change management

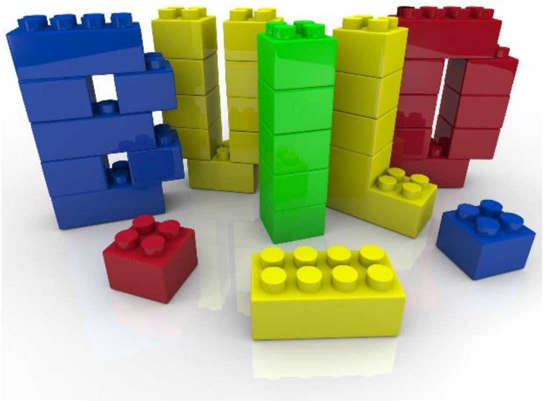
Third-Party Applications

- Fully supported
- Regular upgrades
- QA / Tested
- Quick to implement
- “Battle-hardened” – mature, in use at multiple locations
- Configurable without coding using utilities built into the application

Concerns/Issues

- Reliable, known vendor?
- Reasonable support/maintenance fees?
- Is there a suitable application out there?
- Time and effort of trials and selection

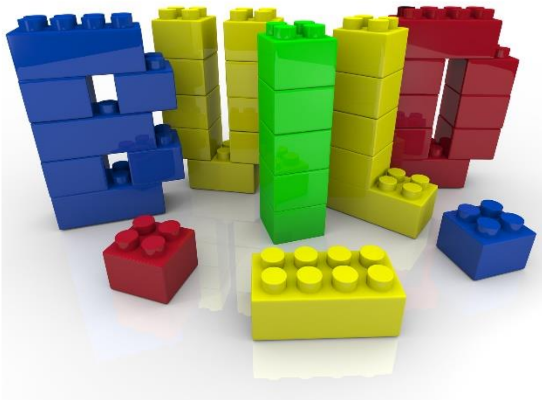
Build-Your-Own using components/platforms



SharePoint/Office 365 native tools

- Standard lists and libraries
- SharePoint Workflows
- SharePoint Designer
- Visual Studio
- InfoPath Forms
- Microsoft Flow/Power Apps

Build-Your-Own using components/platforms



- Apps & Web Parts
  - available in Office Store and from vendors
- Platforms (Nintex, K2, NITRO Studio)

Build-Your-Own using components/platforms

- SharePoint/Office 365 native capabilities
  - Standard lists and libraries
  - SharePoint Workflows
  - SharePoint Designer
  - Visual Studio
  - InfoPath Forms
  - Microsoft Flow/Power Apps
- Apps & Web Parts (available in Office Store and from vendors)
- Platforms (Nintex, K2, NITRO Studio)

Concerns/Issues

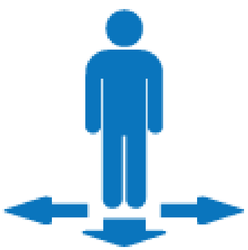
- Need to know the tools and how to use them
- More important: need to know how to design and build an application.
- Costs in time and fees
- Often requires hiring a consultant or developer
- Support is an issue when that person or group moves on

Three Pillars of Application Design

Crow Canyon's Approach

Crow Canyon Software

Three Pillars of Application Design



UI/UX

Engage & Empower Users

Workflow & Business Processes

Streamline & Automate Processes

Reporting

Drive Continuous Improvement

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Why is UI/UX important?

DRIVE USER ADOPTION and ENGAGE USERS

- Ease-of-use
- Simplicity
- Information at your fingertips
- Attractive visual elements

POWER UP USER ADOPTION WITH:

- Dynamic Forms
- Custom Columns
- Application Portals
- Configurable Workspaces
- Dashboards
- Branding
- Responsive Design

UI drives Workflows and Reporting

Type of Request? Who is submitting it? How is it submitted? When is it needed? Categorization of Request?

Crucial to:

-- Assign and route request

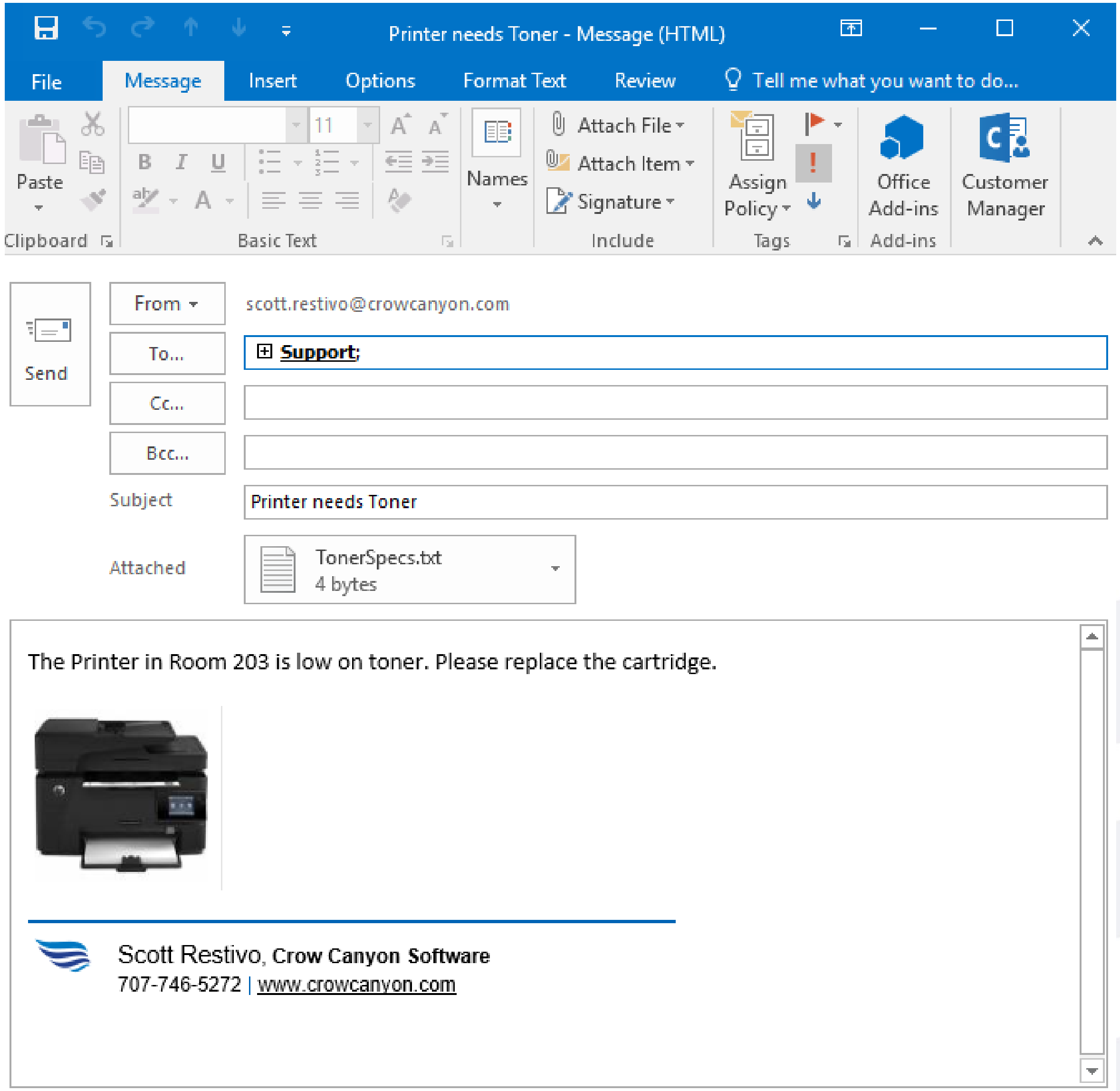
-- Set priority and due date

-- Determine if approvals are needed

-- Set up sub-tasks, if needed

-- Reporting

Email



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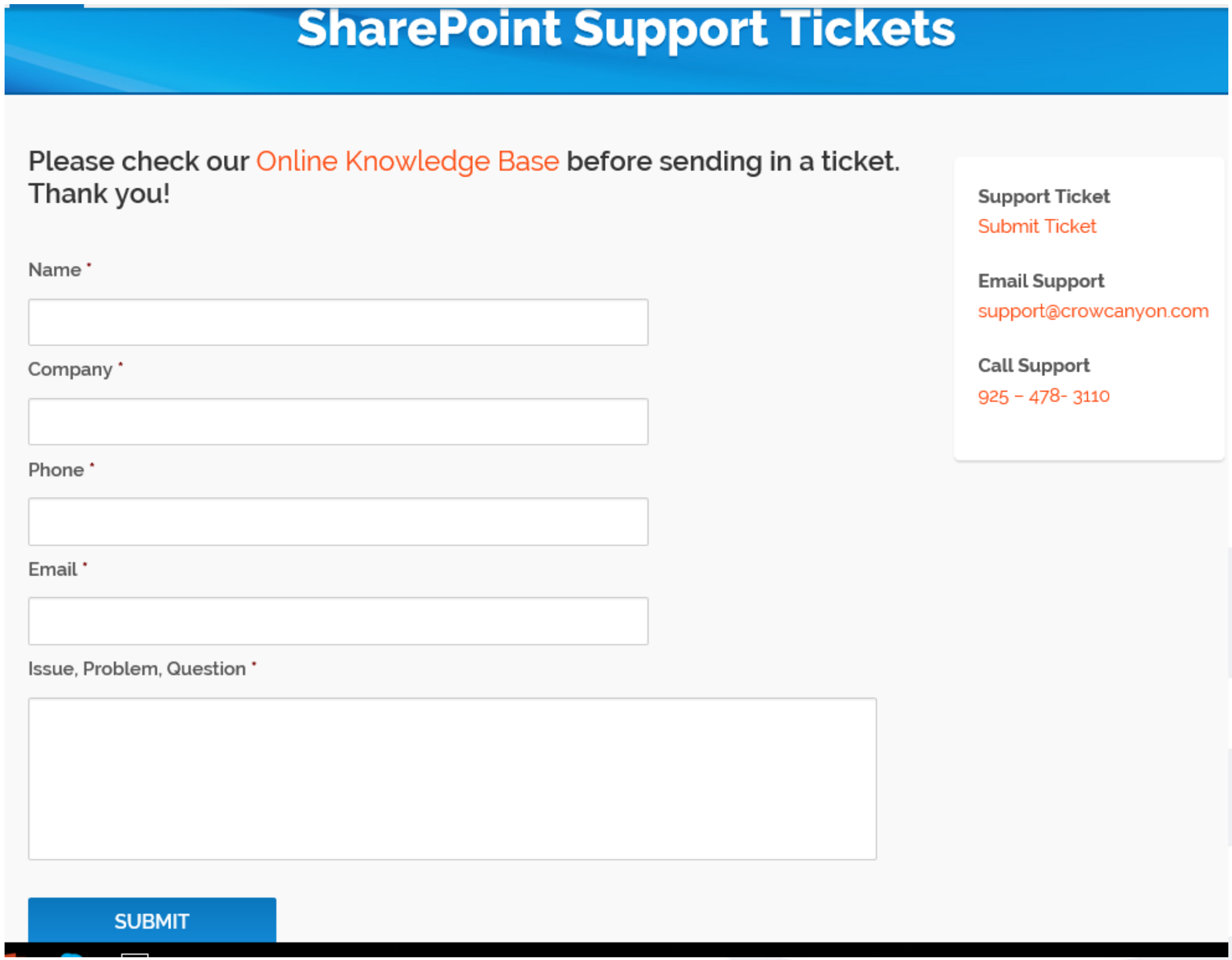
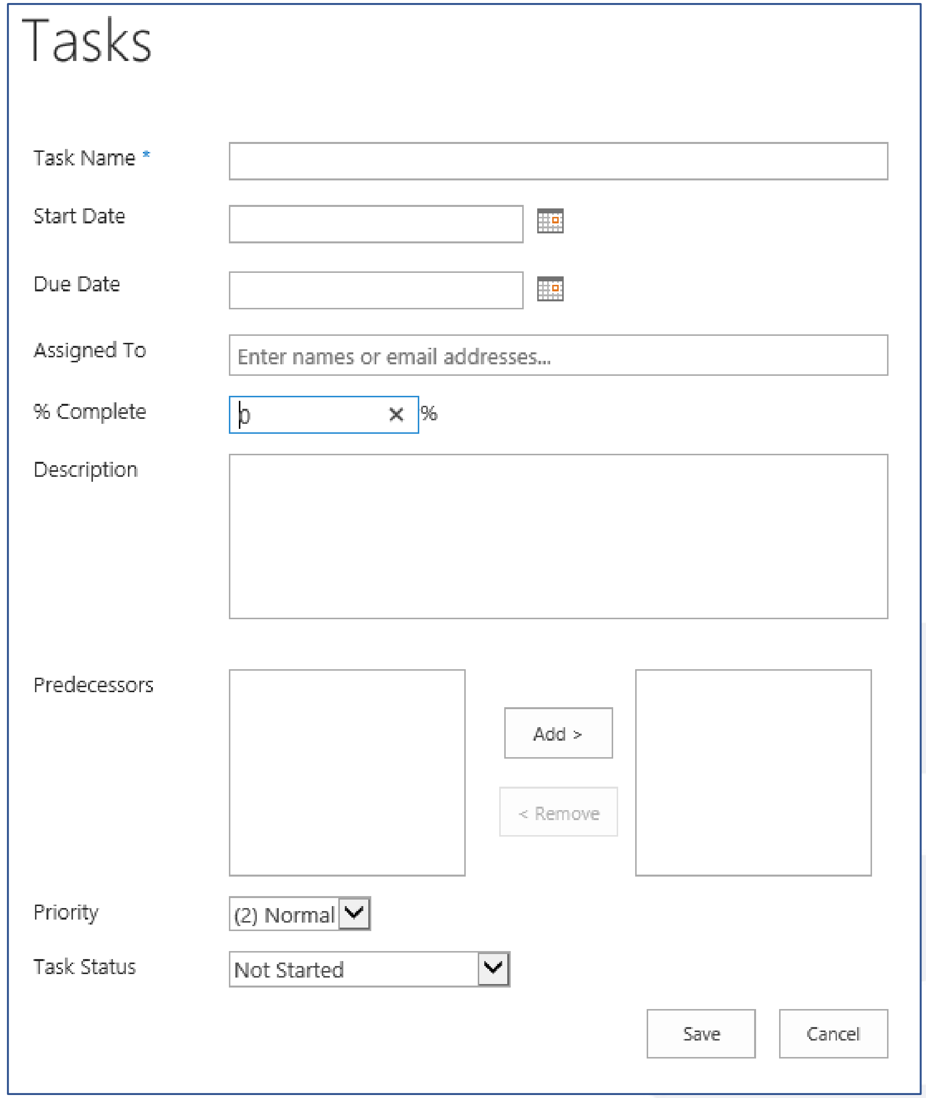
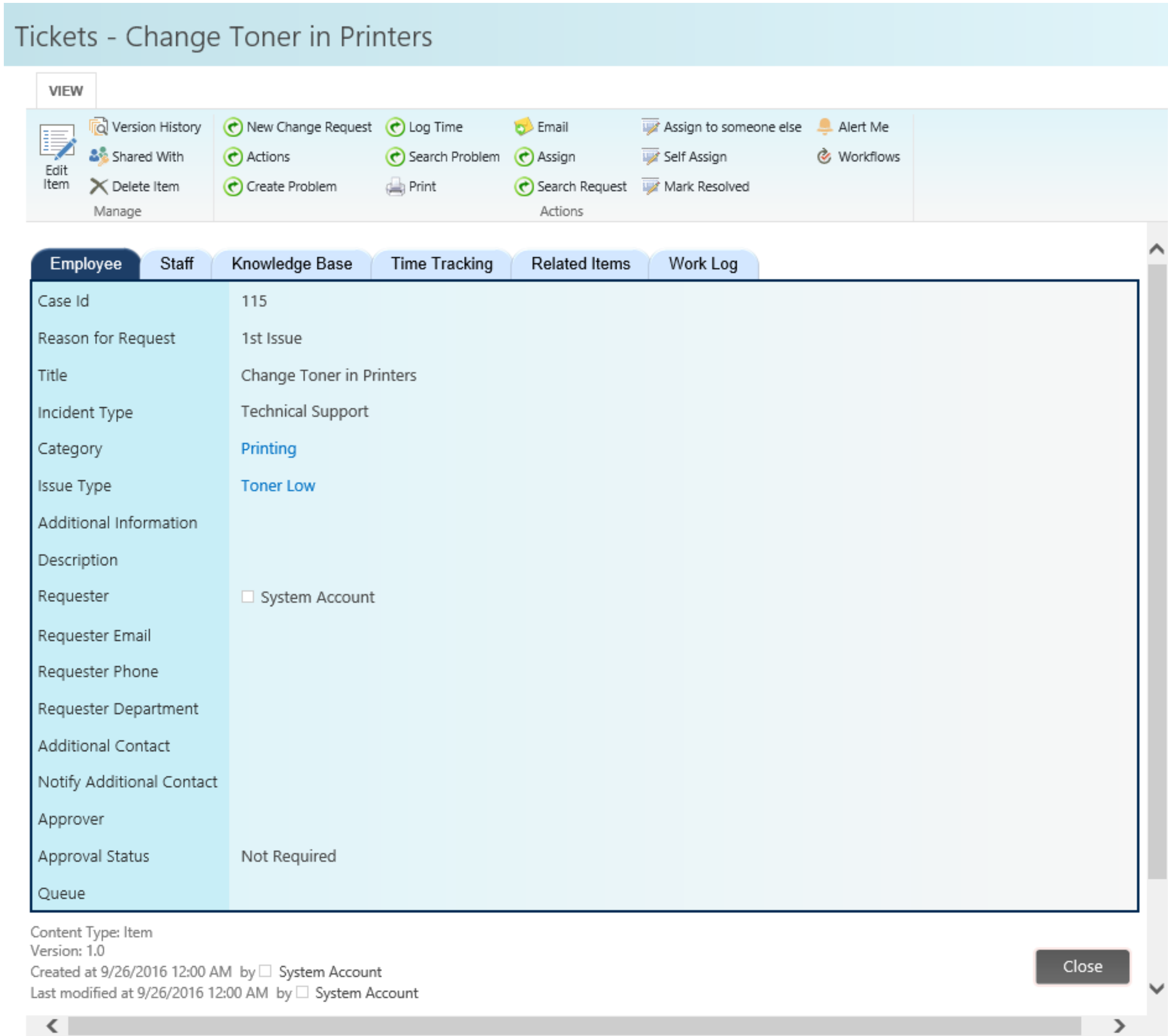
Web Form


SharePoint Support Tickets
Please check our Online Knowledge Base before sending in a ticket. Thank you!
Name *
Company *
Phone *
Email *
Issue, Problem, Question *
SUBMIT
Support Ticket
Submit Ticket
Email Support
support@crowcanyon.com
Call Support
925 – 478- 3110

SharePoint Form



Tabbed SharePoint List Form



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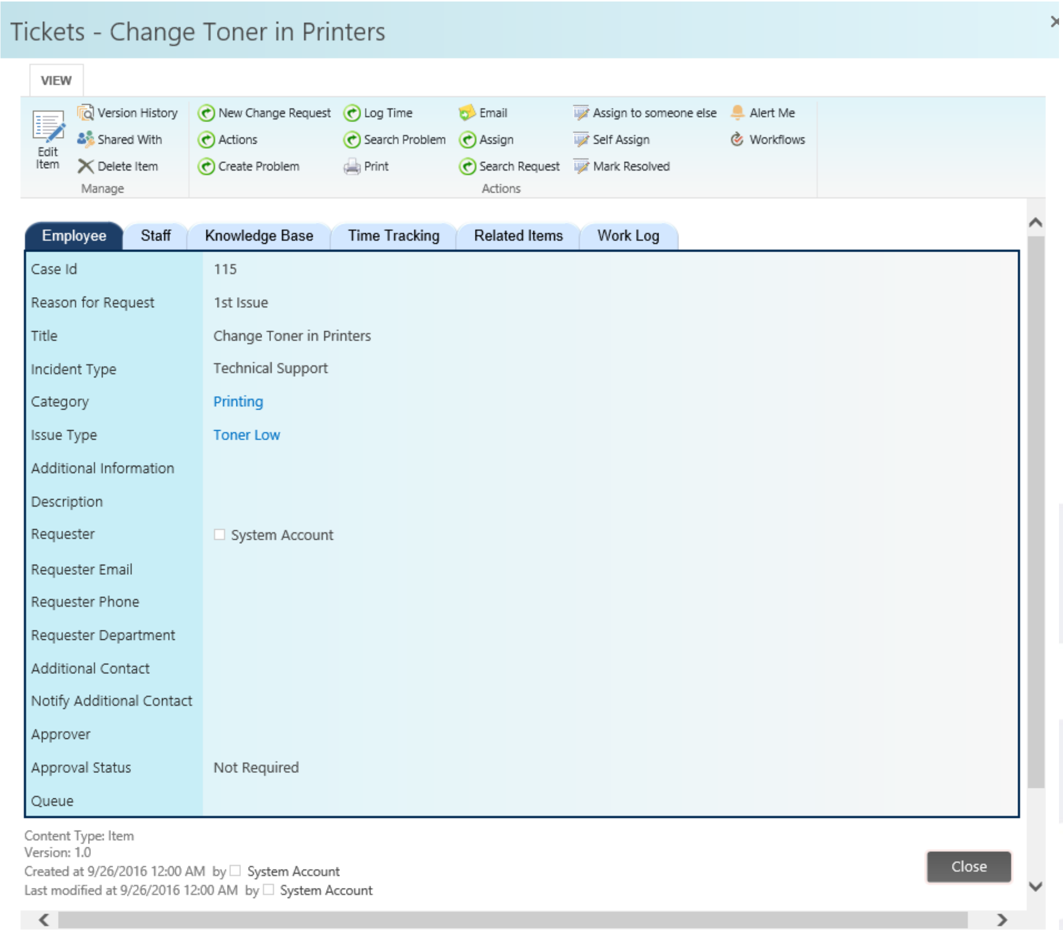
Tabbed SharePoint List Form

- Tabs / Sections
- Dynamic
- Tab permissions
- Column permissions
- Mandatory fields
- Field validation
- Custom fields
- Related Items
- Database Integration



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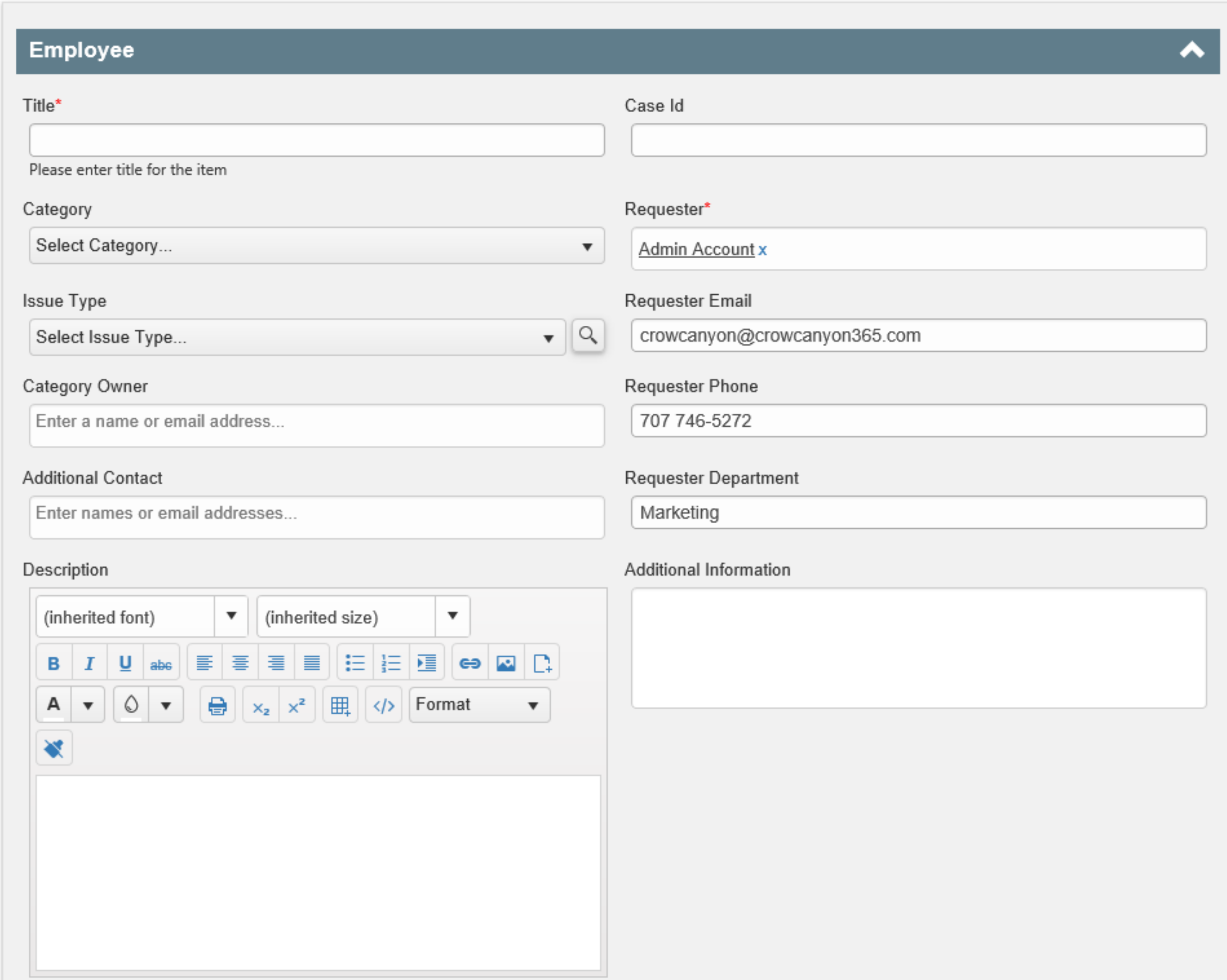
Custom Form using Forms Designer tool



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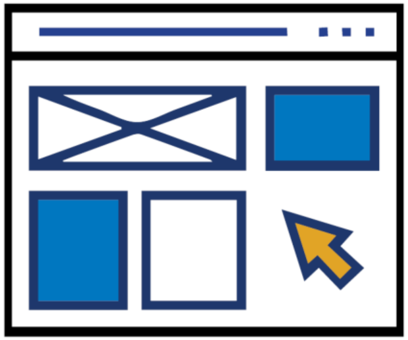
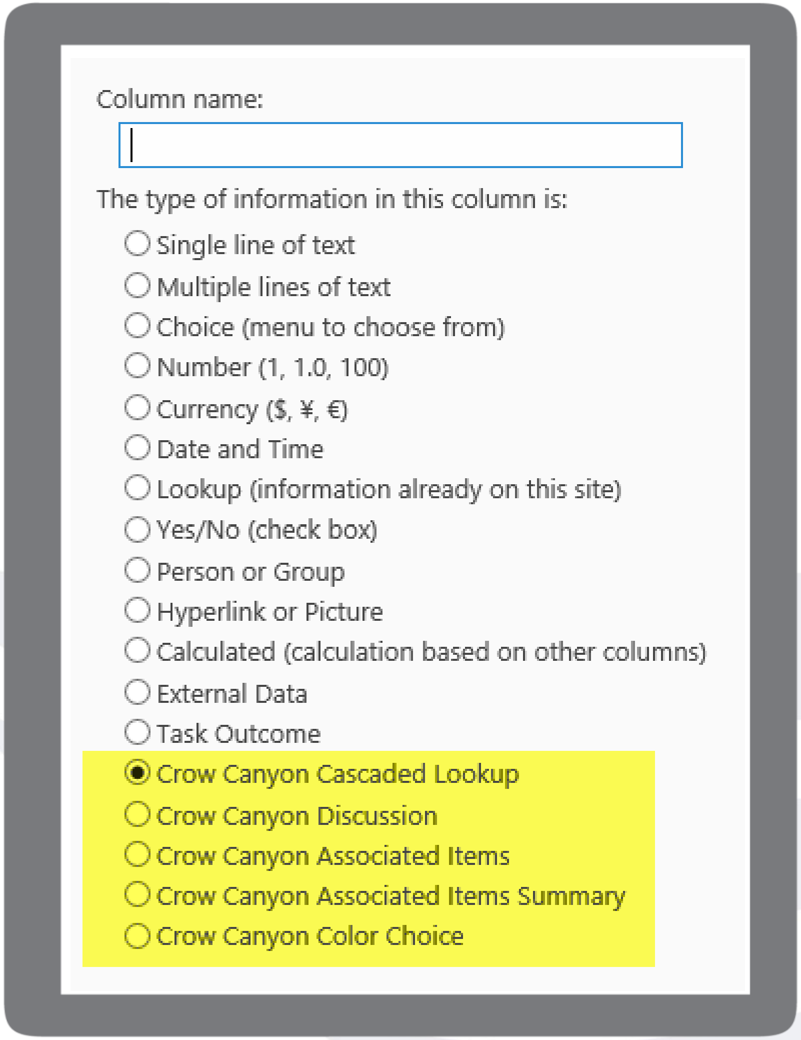
Good Forms



- Are Interactive
- Are Dynamic (show/hide fields)
- Validate inputs / Have required fields
- Pull information from other data sources
- Initiate workflows & business processes

Custom Columns

- Cascaded Lookup
- Cross-site Lookup
- Color Choice
- Associated Items
- Discussion Column
- User Profile Info (AD)
- Database Connections



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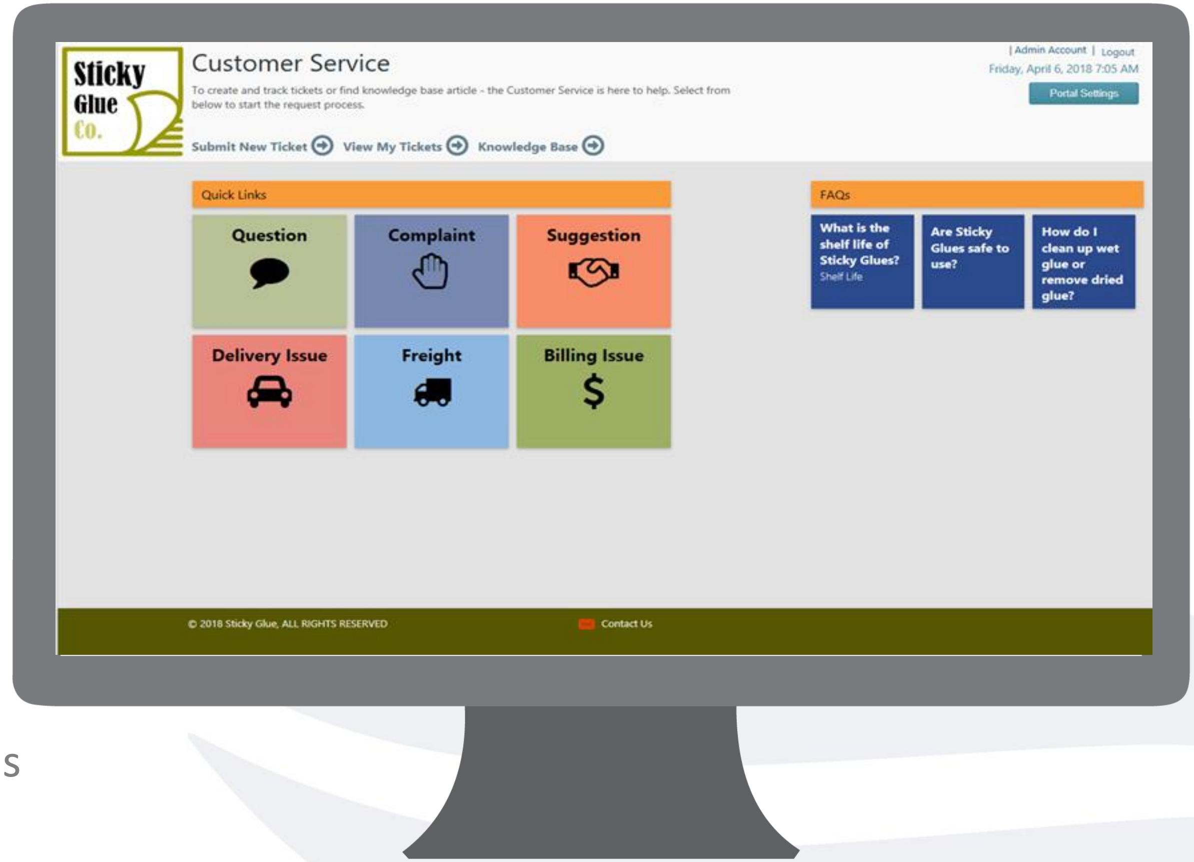
Portals

- Submit or view requests
- Search FAQs
- Configurable
- Secure
- One or more sites
- For Customers or Employees
- Can drive self-service



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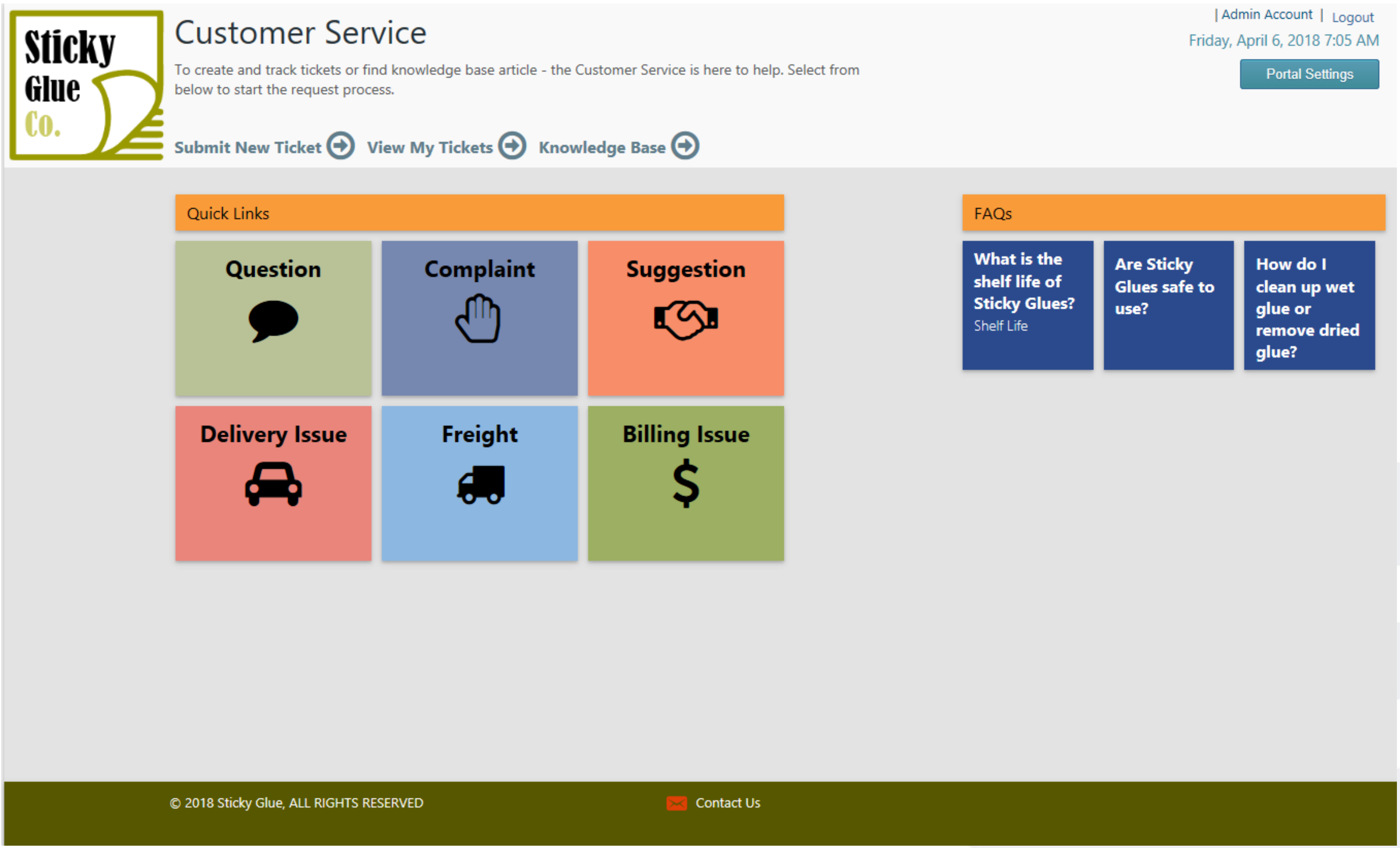
Sticky Glue Co.
Customer Service
To create and track tickets or find knowledge base article - the Customer Service is here to help. Select from below to start the request process.
| Admin Account | Logout
Friday, April 6, 2018 7:05 AM
Portal Settings
Submit New Ticket
View My Tickets
Knowledge Base
Quick Links
Question
Complaint
Suggestion
Delivery Issue
Freight
Billing Issue
$
FAQs
What is the shelf life of Sticky Glues?
Shelf Life
Are Sticky Glues safe to use?
How do I clean up wet glue or remove dried glue?
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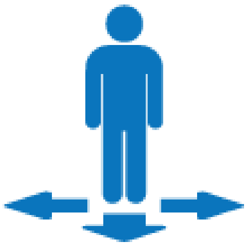
Mobile / Responsive Design

- Growing use of mobile devices
- Flexible, anywhere access to data

Three Pillars of Application Design



UI/UX

Workflow & Business Processes

Streamline & Automate Processes

Reporting

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Workflows, Workflows, Workflows

- Request Creation
  - Auto-reply, Auto-assign, Notify staff, Create Sub-tasks, Approvals
- Request Progression
  - Re-assign, Escalate, Update, Logging
  - Sub-tasks, Linked Items, Email History, Time Tracking
- Request Completion
  - Ask user to verify, Surveys

Workflow functions

- Routing
- Approvals
- Alerts/Notifications
- Service Level Agreements
- Auto Assignment/Escalation
- Recurring Items - Tickets/Tasks
- Sub-tasks & linked Items
- Printing of lists or items
- Email synchronization
- Database integration

What triggers a workflow?

- Item created
- Item modified
- Item deleted
- Date/Time field on Item

- Absolute time
- Manual kickoff
  (button on form or ribbon)
- Other actions can trigger workflow

Could also be based on meeting certain conditions

Field(s) equals/not equals/contains/is greater or less than/begins with/etc.

Multiple Conditions may apply

What actions take place?
In what order?
Are they dependent on each other?

- Create Item
- Delete Item
- Update Item
- Send Email
- Print Item
- Run Web services
- Run Stored Procedures
- Update database
- Run another workflow

For example:

When an Item is created:

If the Priority is “High” and the Category is “Network”:

Notify Director

Set Due Date to 4 hours

Assign to Team One

TRIGGER: When an Item is created:

CONDITIONS: If the Priority is “High” and the Category is “Network”:

ACTIONS:

Notify Director [Send Email action]

Set Due Date to 4 hours [Update Item action]

Assign to Team One [Update Item action]

-- Notify Team One [Another workflow kicked off by this action]

Mapping out the process

Important to understand the process and have it mapped out– before building the workflow.

What business need(s) are you trying to solve?

What is the current work process -- highlights, pain points, bottlenecks?

- What key steps in the current process can be automated using SharePoint.
- What key pain points and bottlenecks can the SharePoint solution overcome?
- What "soul-crushing" work can be eliminated or automated?
- As a rough estimate, how much time can be shaved off the existing work process? This will help determine a return on investment (ROI).

What would users/business owners like to see happen? Ideally, how should things work?

What improvements can SharePoint workflows/automation bring?

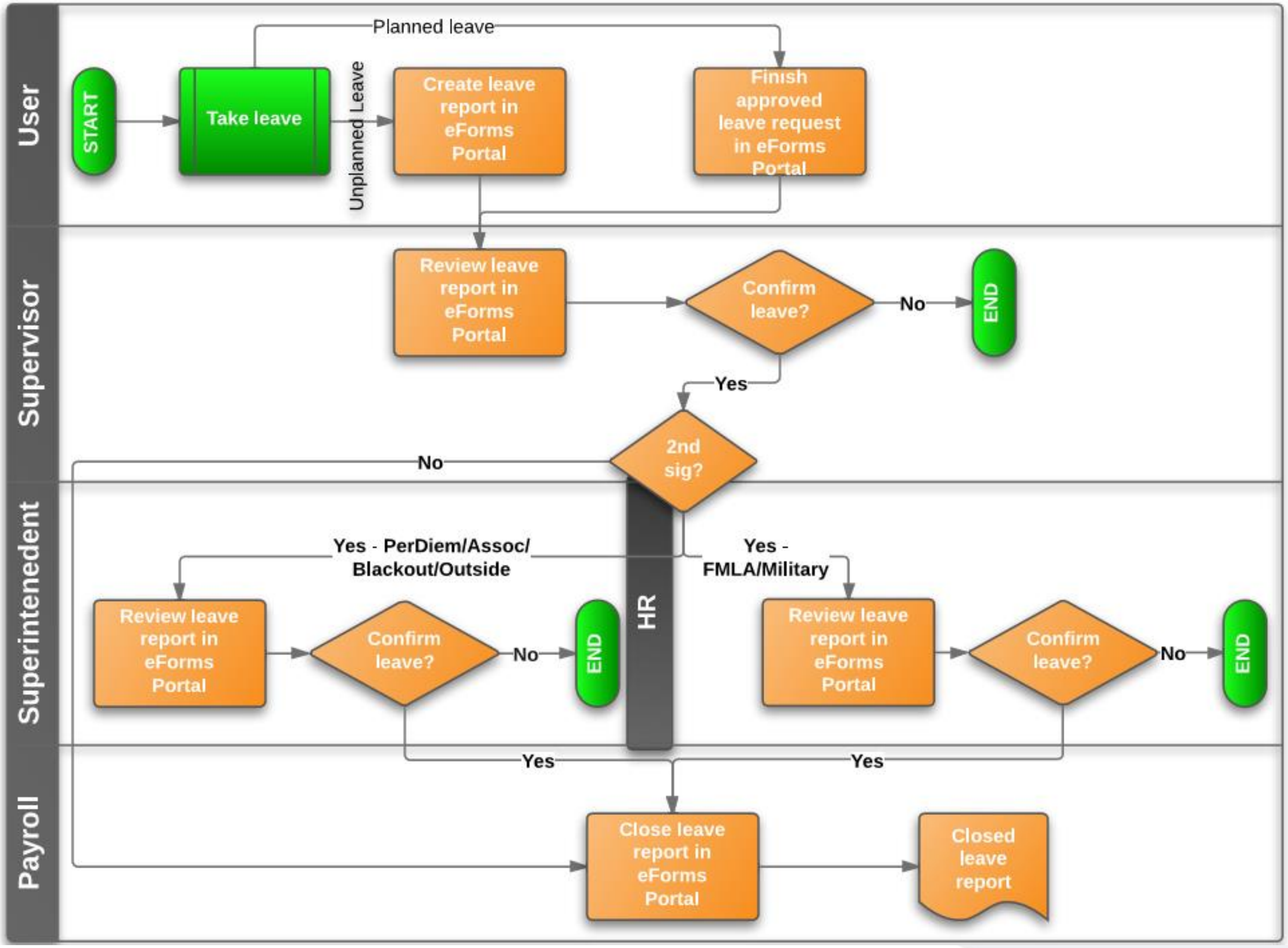
Mapping out the process - *diagrams/presentations*

- **Pen and paper**
- **Word or Excel**
- **Whiteboard for simple presentations**

- **Mockups in the tools themselves**
  - Create some proof-of-concepts

- **Wireframes - for more elaborate workflows and for executive sign-off**
  - Microsoft Visio
  - Microsoft PowerPoint
  - Balsamiq (http://www.balsamiq.com/)
  - Many other workflow design tools

Common workflow – Leave Request



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NITRO™ Workflows

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Site: Customer Service

Configured Workflows

Show Workflows for Site: Customer Service (/sites/demo3/CS)

+ New Workflow

Workflow Name	List Name	Event Type	Actions
Send mails/item creation	Send Mails	Item Added	
Send Mails/Item updated	Send Mails	Item Updated	
Process missed send mails list items	Send Mails	Timer Based	
Delete old send mails list items	Send Mails	Timer Based	
Update Ticket	Tickets	Item Added	
Notify Account Rep	Tickets	Item Added	

Page 1 of 1 10 items per page 1 - 6 of 6 items

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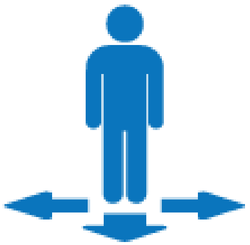
Three Pillars of Application Design



UI/UX

Workflow & Business Processes

Reporting

Drive Continuous Improvement

Why are Reporting & Analytics important?

Key business questions:

- Are we meeting our service level goals?
- Is the staff performing optimally?
- What are the most common issues?
- What is blocking better performance?
- How can we improve?

Tools that help answer these questions:

- Report Center
- Dashboards
- Tiles & Dials
- Data Integrations (Excel, SSRS)
- Power BI

Reporting & Analytics:
Continuous Cycle of Improvement

Find root causes and fix them:

- Hardware
- Software
- Procedures
- People

Good Data = Good Reports

Good Reports = Good Decisions

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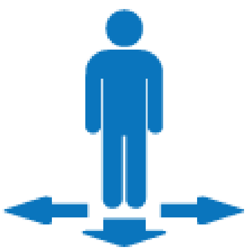


UI/UX

Workflow & Business Processes

Reporting

Where does the data come from?

- Forms users or customers fill in
- Outside sources -- Active Directory, databases
- System events -- Time created, modified
- Worker-initiated events – reassign, escalate, closed
- Worker input – change fields, add to Log
- Surveys of users

Be sure to gather the data points you need for reporting.

Classic Questions:
who, what, when, where, how

The tools we describe later can generate many, many types of reports.
But these questions need to be asked first:

- WHO should be able to view them?
- WHAT reports do you need?
- WHEN are the reports needed?
- WHERE should they be viewed?
- HOW should they be displayed?

TYPES OF REPORTS

- Immediate, real-time views
  - Dashboards
  - List Views
  - Configurable workspaces

Service Desk Staff

- Historical views, trends
  - Charts – pie, line, bar, column, etc.
  - Tables
  - Graphs
  - Comparison

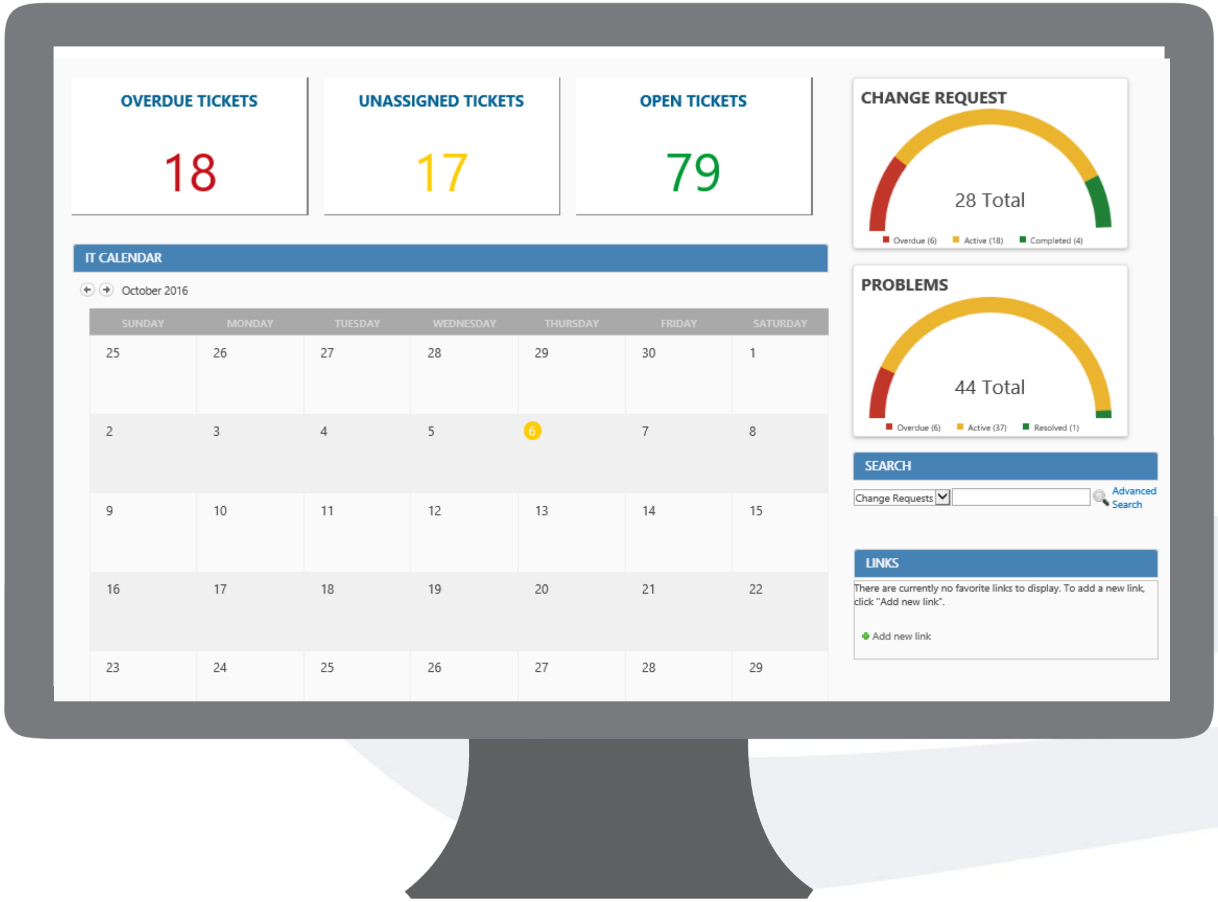
Managers

Dashboards

Current information

shown graphically

- Visual displays
- Counters
- Gauges
- Meters
- Drill-down



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List Views

Features of SharePoint lists

- Filtering
- Grouping
- Sorting
- Choice of Views

Enhancement of lists

- Highlighting
- Color Indicators
- Bolding

ALL TICKETS

Case Id	Title	Request Status	Assigned Staff	Due Date	Priority
113	**Software Update**	In Progress	Jeff W. Preece		Normal
112	**Change Toner in Printers**	In Progress	Scott Restivo		Normal
111	**Password problem**	In Progress	Jeff W. Preece		High
110	**Change Toner in Printers**	In Progress	Scott Restivo		Normal
106	**Can't connect to printer**	Not Started			Normal
105	**Can't use address book in emails**	In Progress	James Restivo		Normal
104	**Change Toner in Printers**	In Progress	Scott Restivo		Normal
103	**Laptop issue**	In Progress	James Restivo		Normal
102	**I can't connect to the network. Please help me.**	Not Started			Normal
101	**Do you know who I am?!?!?!? Fix this NOW**	Not Started			Normal
100	**I Need Printer Ink**	In Progress	James Watts		Normal
99	**Keyboard not working**	In Progress	James Watts	12/30/2016 12:00 AM	Normal
98	**I need a laptop now!**	In Progress	Scott Restivo James Restivo Jeff W. Preece	8/26/2016 2:33 PM	High
96	**Change Toner in Printers**	In Progress	Scott Restivo		Normal

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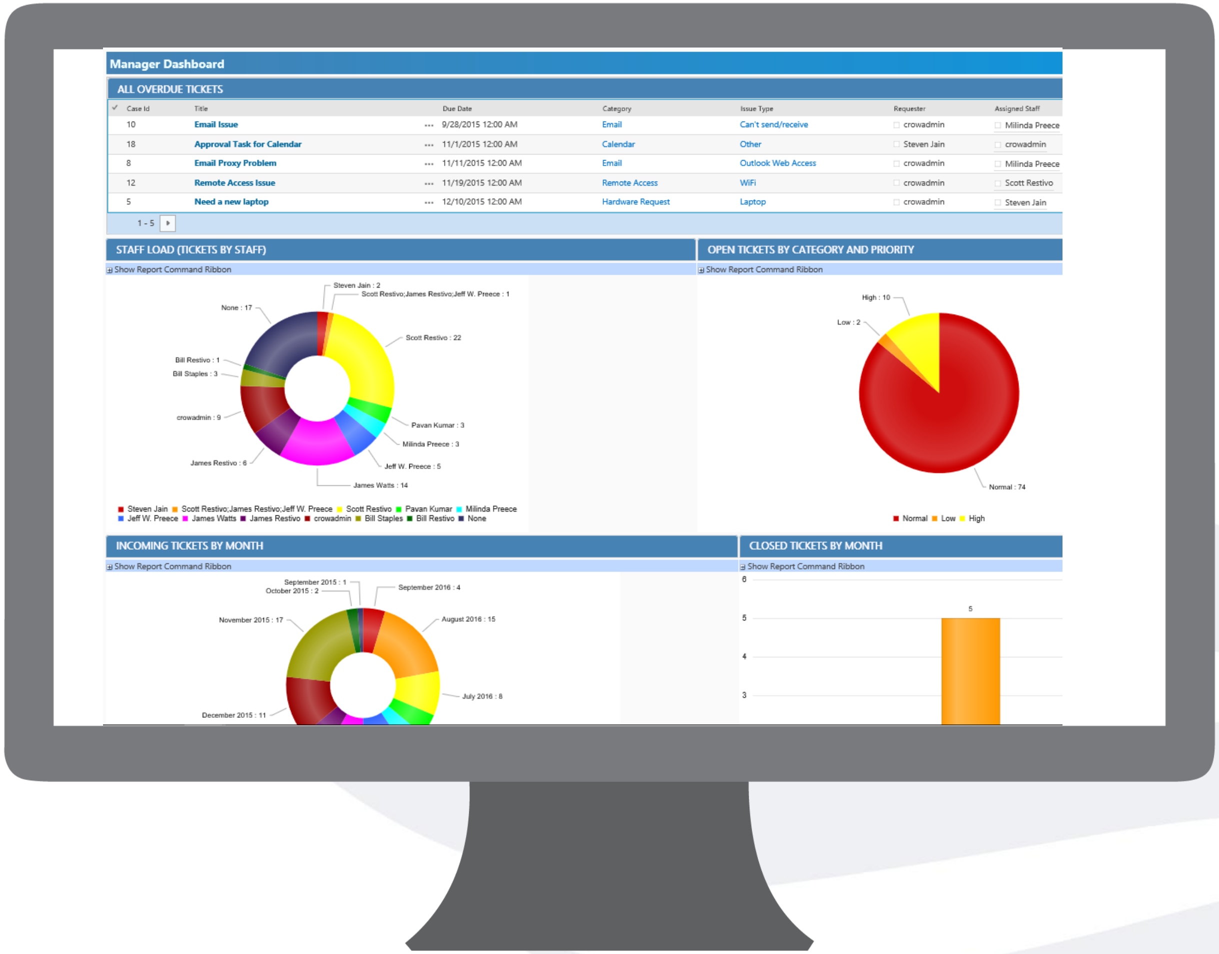
Configurable Workspaces

- Role-based
- Easy to configure
- Many web parts available
- Visual displays
- Pertinent information is readily available



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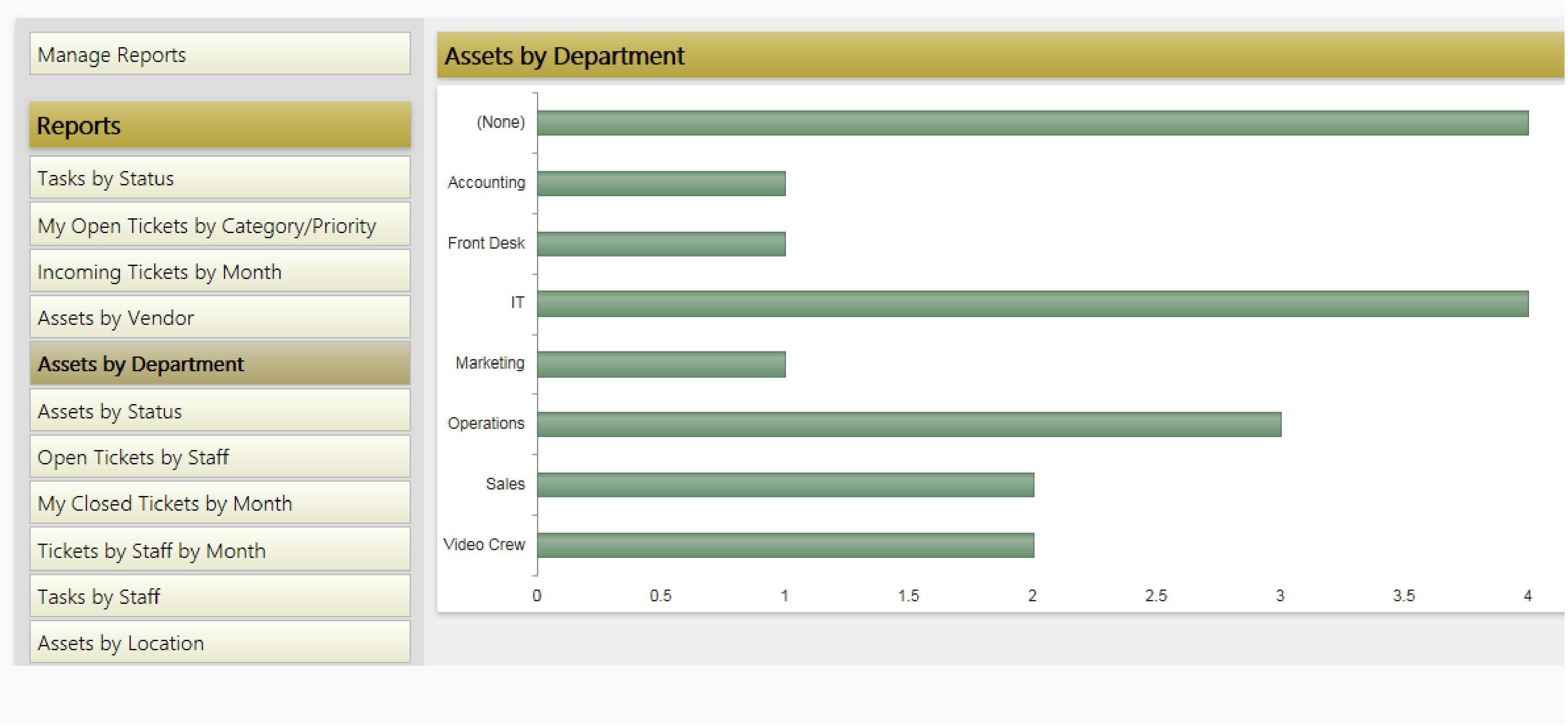
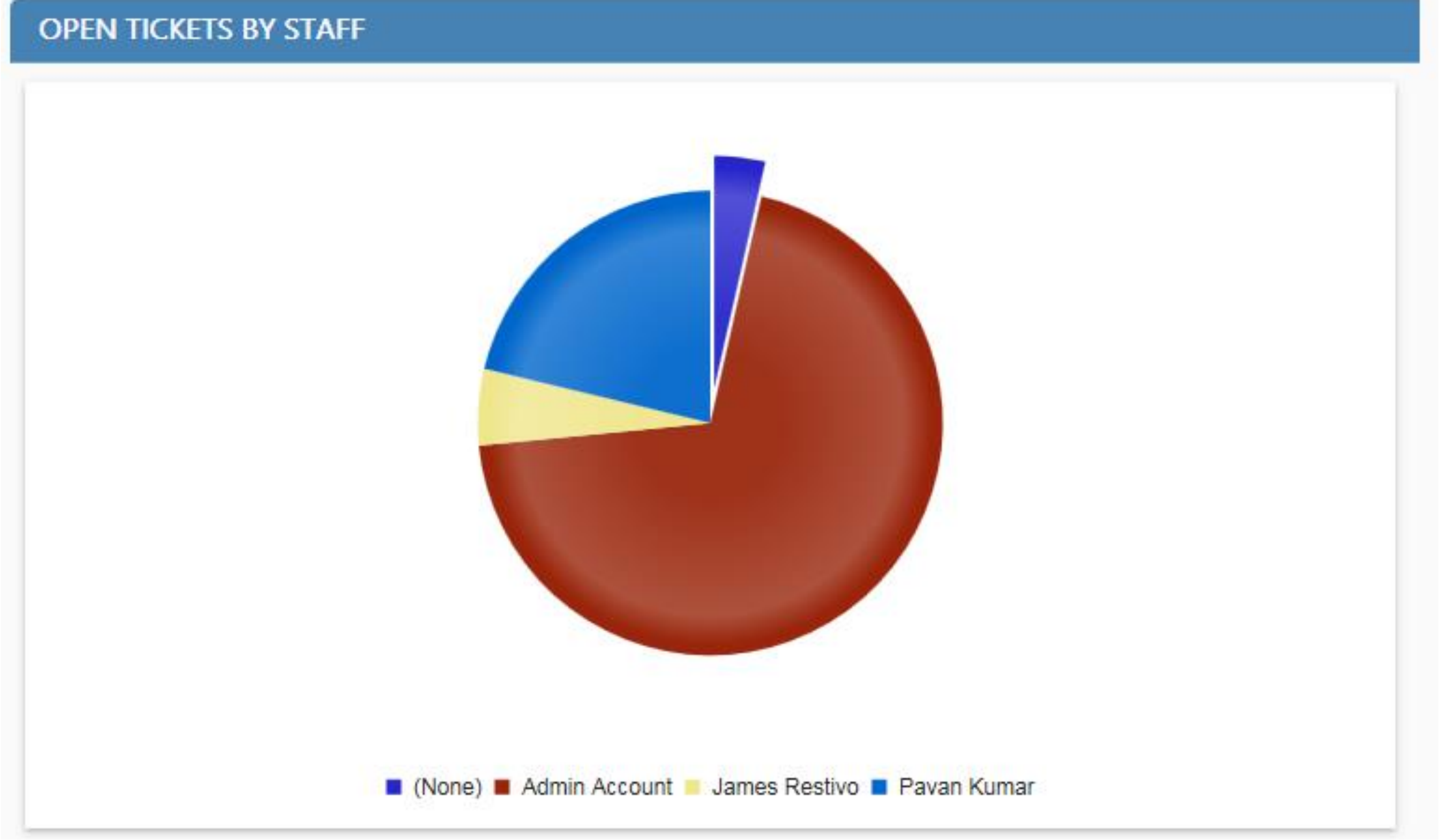
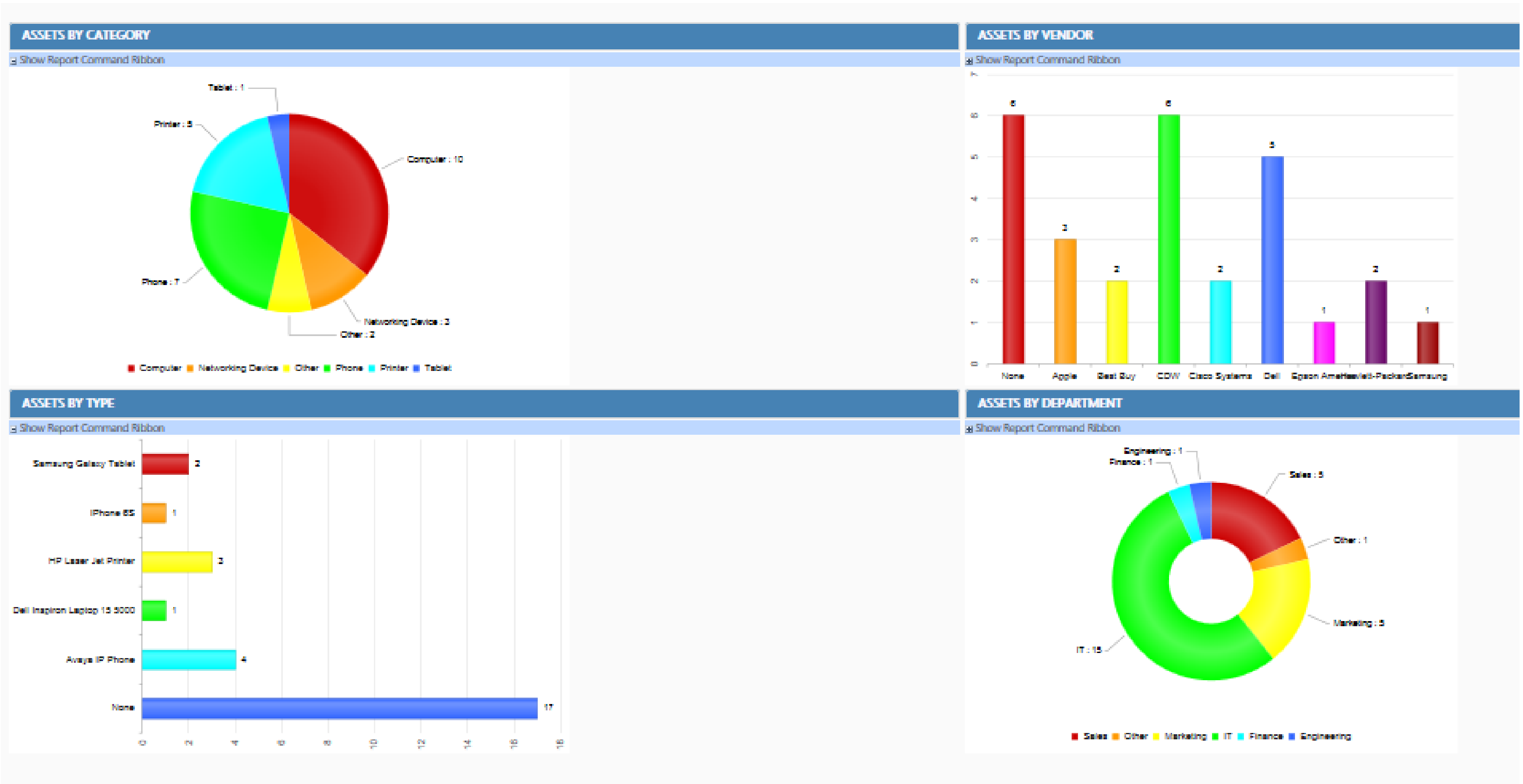


Example of a Report Center in Office 365



Report on Important Stats

Example: Open tickets by staff



Dashboard pages bring visibility

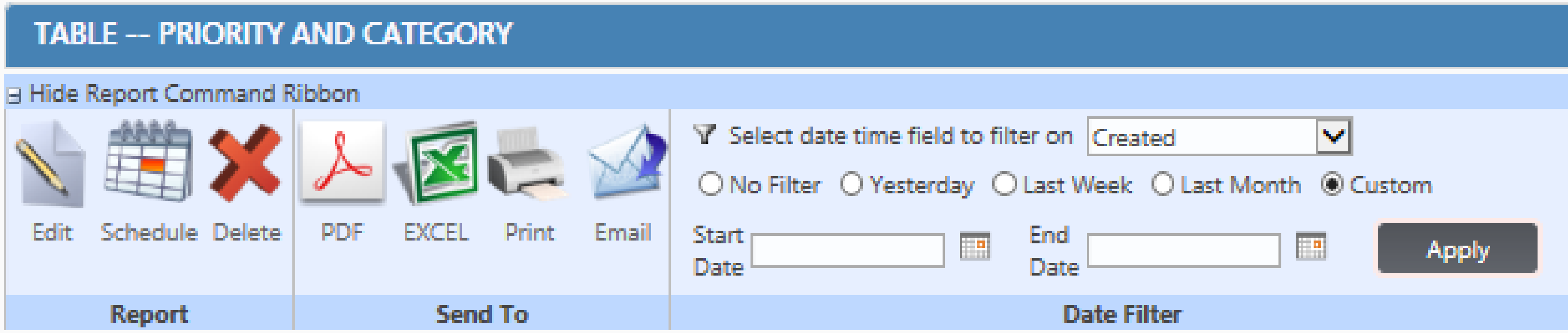
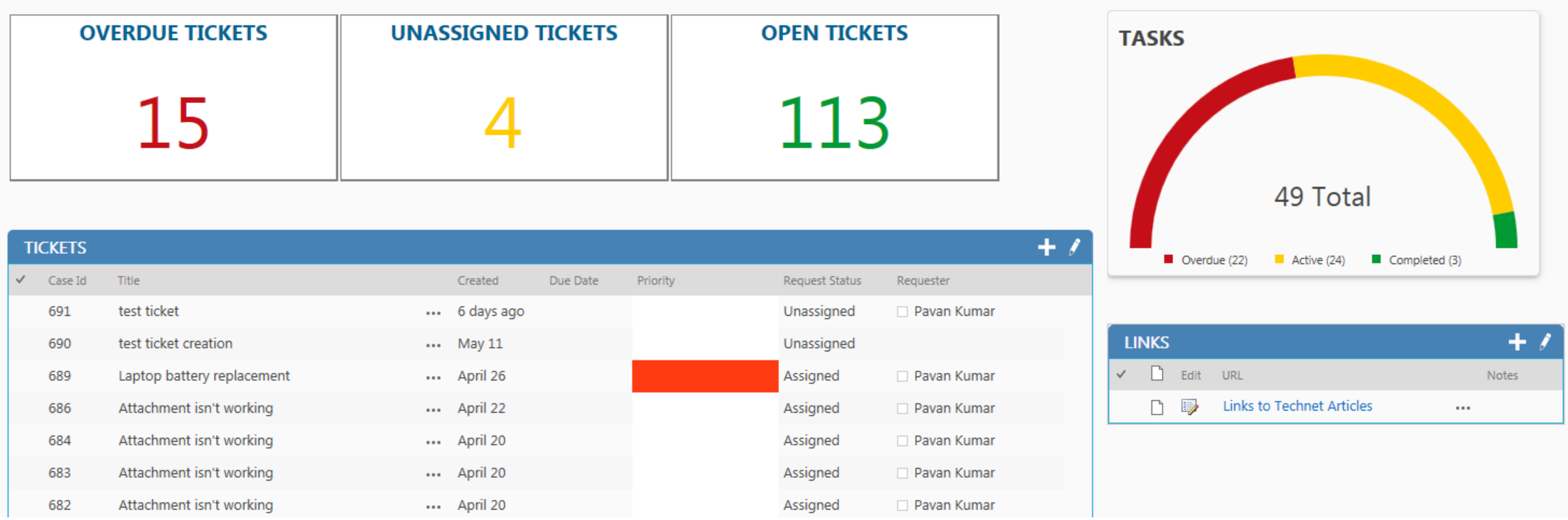
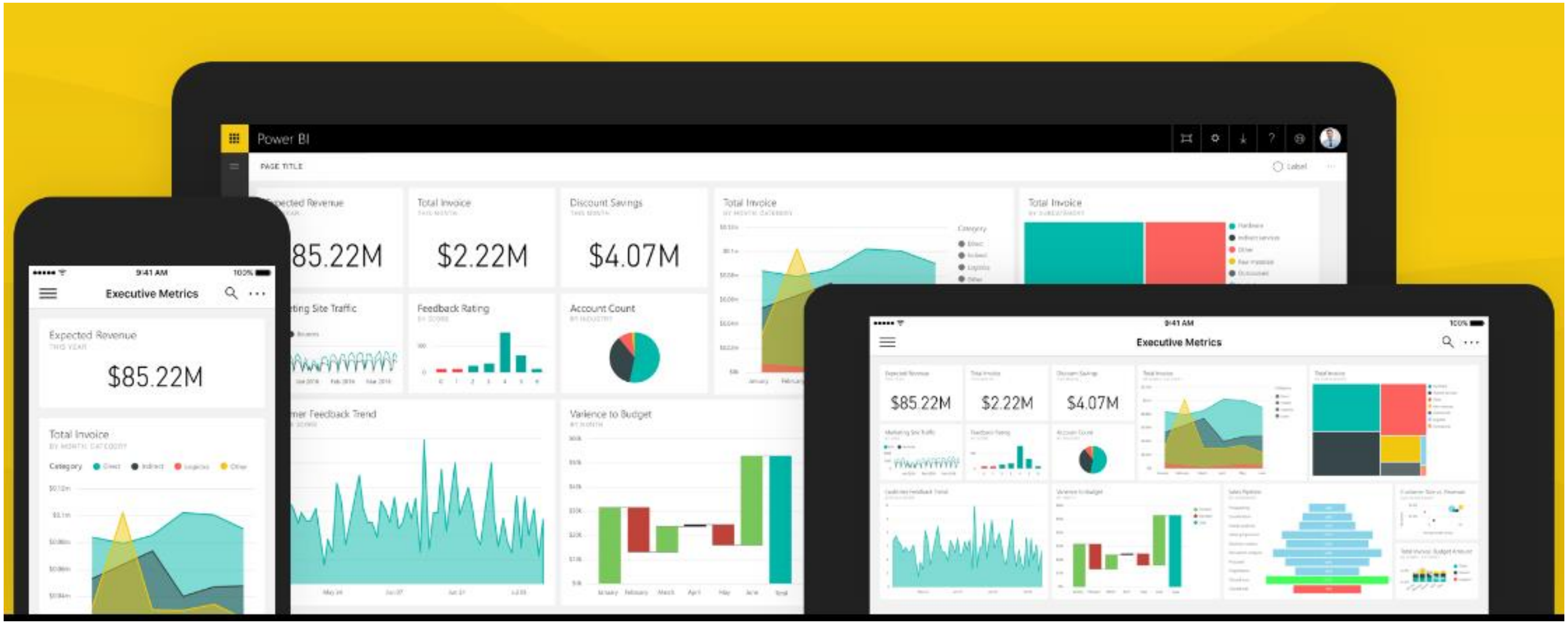


Table -- Priority and Category		Priority			
		High	Low	Normal	Total
Category	None	-	-	12	12
	Calendar	-	-	7	7
	Concierge Deskside Support Request	-	-	1	1
	Email	2	1	4	7
	Hardware Problem	2	-	4	6
	Hardware Request	1	-	2	3
	Internet	1	-	4	5
	Network	-	-	1	1
	Printing	-	-	1	1
	Remote Access	-	-	2	2
	Software	1	1	4	6
	System Access Request	-	-	2	2
	Telephone	-	-	1	1
	Web Site	-	-	1	1
	Total	7	2	46	55

Tables


OVERDUE TICKETS
15
UNASSIGNED TICKETS
4
OPEN TICKETS
113
TASKS
49 Total
Overdue (22)
Active (24)
Completed (3)
TICKETS
Case Id
Title
Created
Due Date
Priority
Request Status
Requester
691 test ticket 6 days ago Unassigned Pavan Kumar
690 test ticket creation May 11 Unassigned
689 Laptop battery replacement April 26 Assigned Pavan Kumar
686 Attachment isn't working April 22 Assigned Pavan Kumar
684 Attachment isn't working April 20 Assigned Pavan Kumar
683 Attachment isn't working April 20 Assigned Pavan Kumar
682 Attachment isn't working April 20 Assigned Pavan Kumar
LINKS
Edit
URL
Notes
Links to Technet Articles

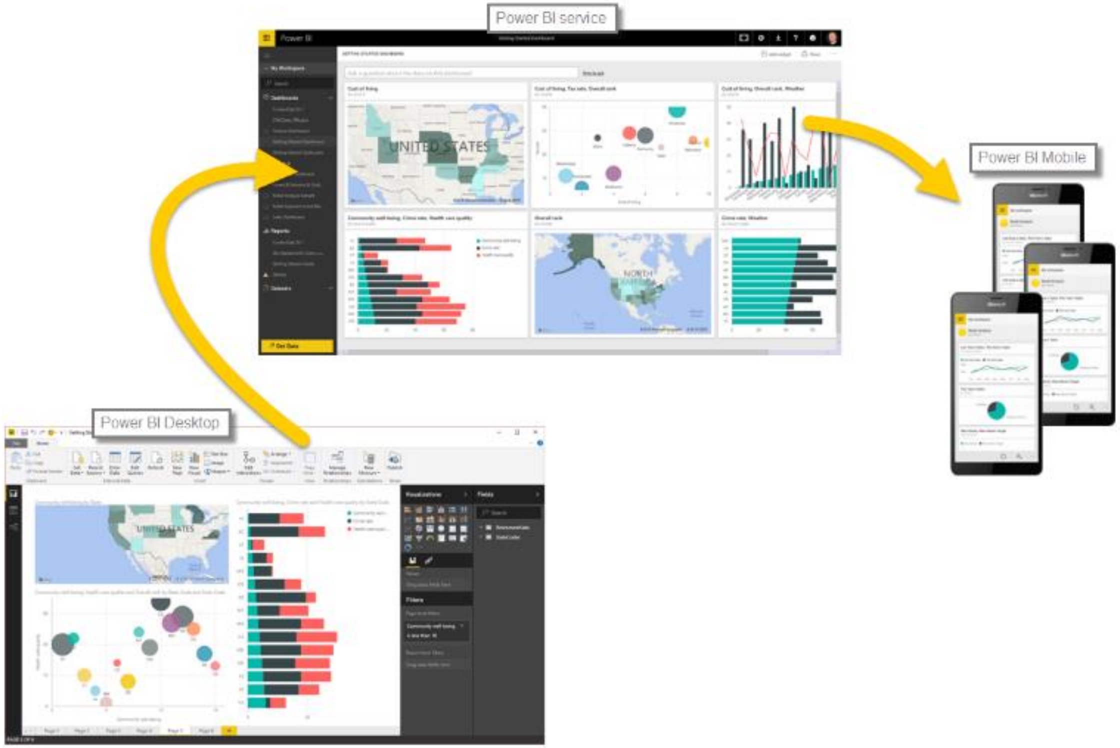
Tiles & Dials


Power BI
PAGE TITLE
Total Invoice
$2.22M
Discount Savings
$4.07M
Feedback Rating
Account Count
Varience to Budget
Executive Metrics
Expected Revenue
$85.22M
Total Invoice
$85.22M
$2.22M
$4.07M

Power BI

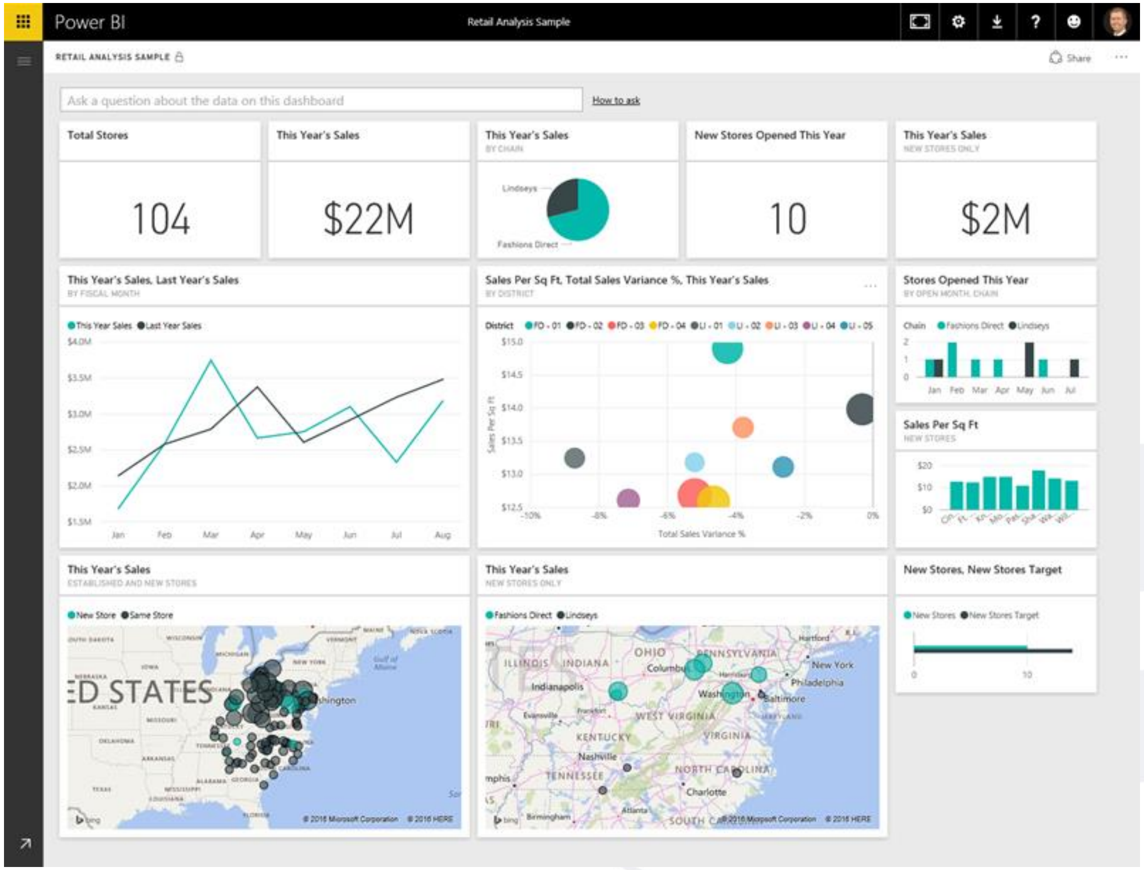
Components of Power BI

- Power BI Desktop
- Power BI Service
- Power BI Mobile

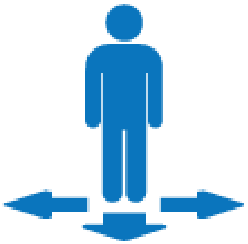


Building Blocks of Power BI

- Visualizations
- Datasets
- Reports
- Dashboards
- Tiles



Three Pillars of Application Design



UI/UX

- Forms Manager
- Dynamic Forms
- Custom Columns
- Employee & Customer Portals
- Configurable Workspaces
- Responsive Design
- Branding

Workflow & Business Processes

- Workflow Manager
- Ticket Routing
- Alerts/Notifications
- Service Level Agreements
- Auto Assignment/Escalation
- Recurring Tickets/Tasks
- Sub-tasks & Linked Items
- Print Manager
- Email Synchronization
- Database Integration

Reporting

- Report Center
- Dashboards
- Tiles & Dials
- Data Integration
- PowerBI

THANK YOU!

Q & A

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