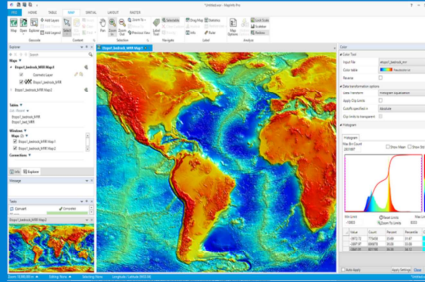


Product Roadmap Planning



Just to be clear, this discussion is about ***planning*** the roadmap, not presenting it as a finished plan. I'll present the topics that we think are important to the future of the product, but most have not been fully defined and your input is critical to decide what is important and how things should work. Before we get into specific features and services, I'd like to start a discussion about the trends we are seeing in the way people are using geospatial analytics in their organizations.

The Changing Role of the GIS Analyst



MapInfo Pro is a tool that is primarily designed for a role that most people refer to as a GIS Analyst. The growing adoption of enterprise analytics is causing changes in this traditional role that are important to consider in the future of MapInfo Pro.

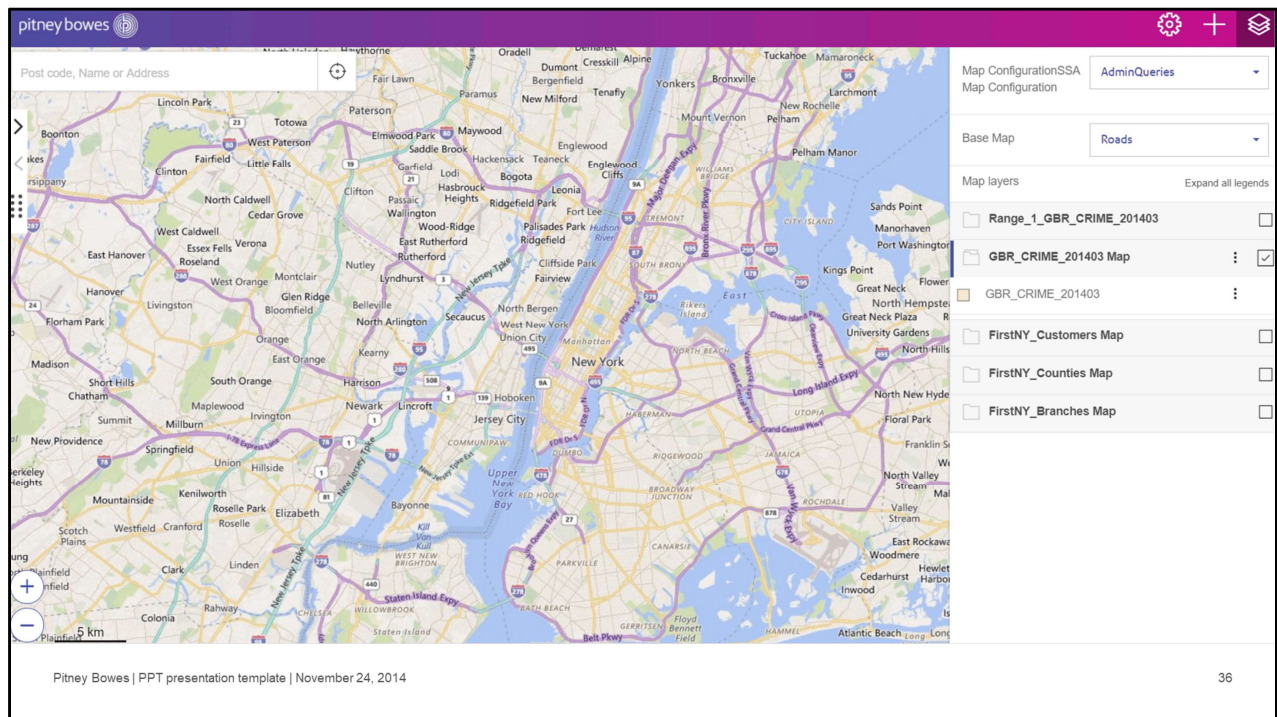
The GIS Super-Hero is a long-standing tradition...

But wait, maybe there's a better way...self-service GIS?

Most of the people in this room know what it's like to be the GIS superhero. We start with large, dirty data sets and magically transform them into beautiful maps that dazzle everyone with their brilliant insights. "A picture is worth a thousand words!" they love to say as they think of more and more ways to use them.

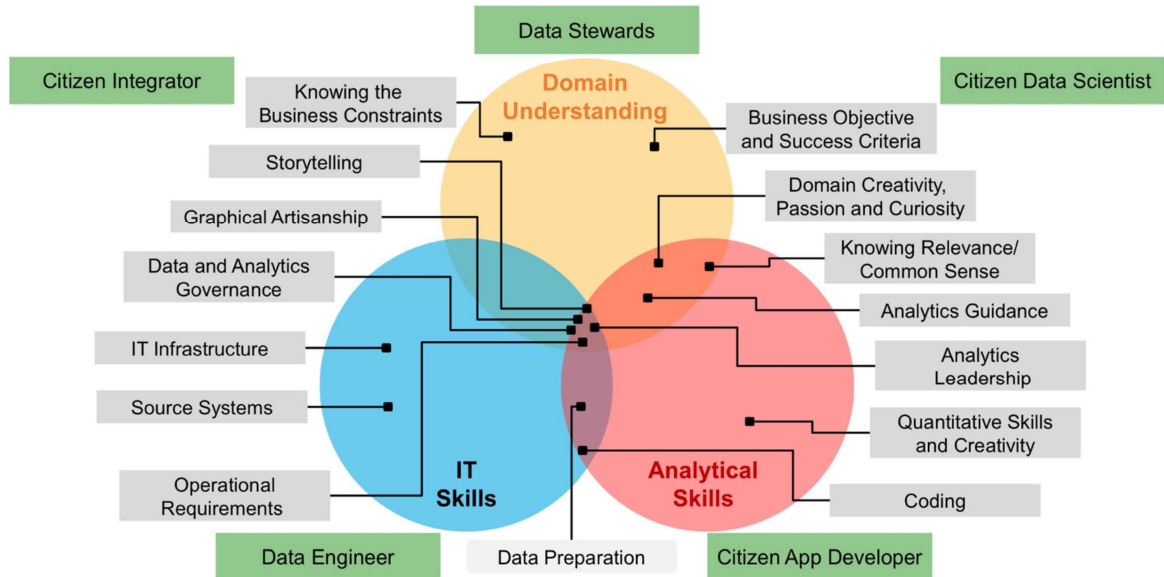
The problem is, there are never enough GIS men and women to satisfy the requests, and people want immediate gratification, whether they are business analysts, senior executives, or even customers.

<click> Business Intelligence software has expanded into "self-service" BI, where tools like Tableau and PowerBI enable large numbers of people to perform tasks that used to require an analyst. Given the power of maps and the large amount of geospatial data, it's beginning to affect the GIS Analyst as well.



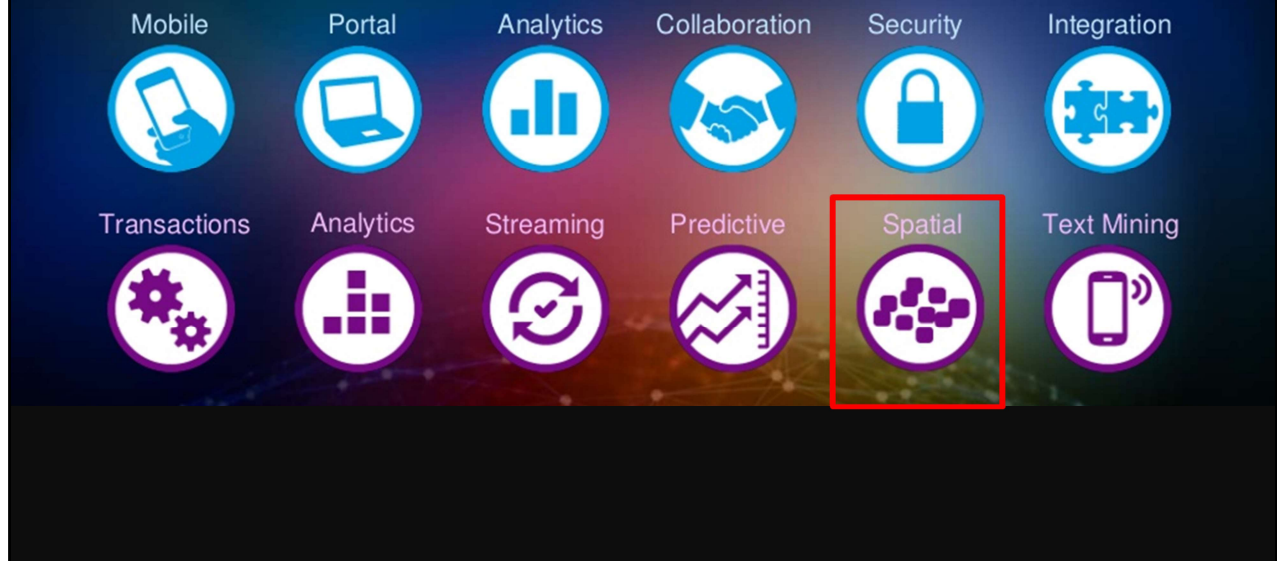
Pitney Bowes has responded to this trend with new products such as Spectrum Spatial Analyst, which makes it possible to give non-technical users the ability to visualize their data on maps and perform queries without asking for help from the GIS Analysts. The GIS Analyst is still necessary in the development of the maps and data that form the foundation of the system, but once it is deployed, they are free to work on more complex projects that require their advanced training and experience.

Diverse Roles Expedite New Information Capabilities



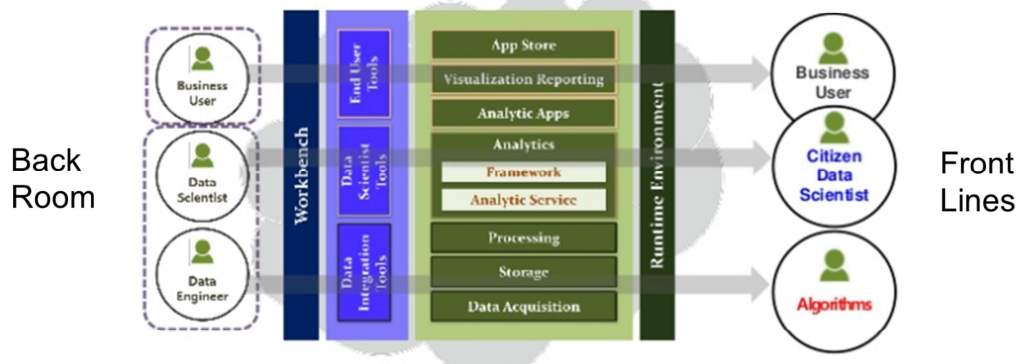
A wide range of knowledge and experience was required in the traditional role of the GIS Analyst. He or she had to understand the business, deal with complicated IT issues to get at the data, use statistics and cartographic skills to perform the analysis, and finally present everything with the skill of a graphic artist. As analytics become integrated across organizations, roles are becoming more specialized, so that everyone can contribute based on their expertise. However, this requires a new deployment model that allows collaboration among people and systems.

We Need One Platform With Many Workloads

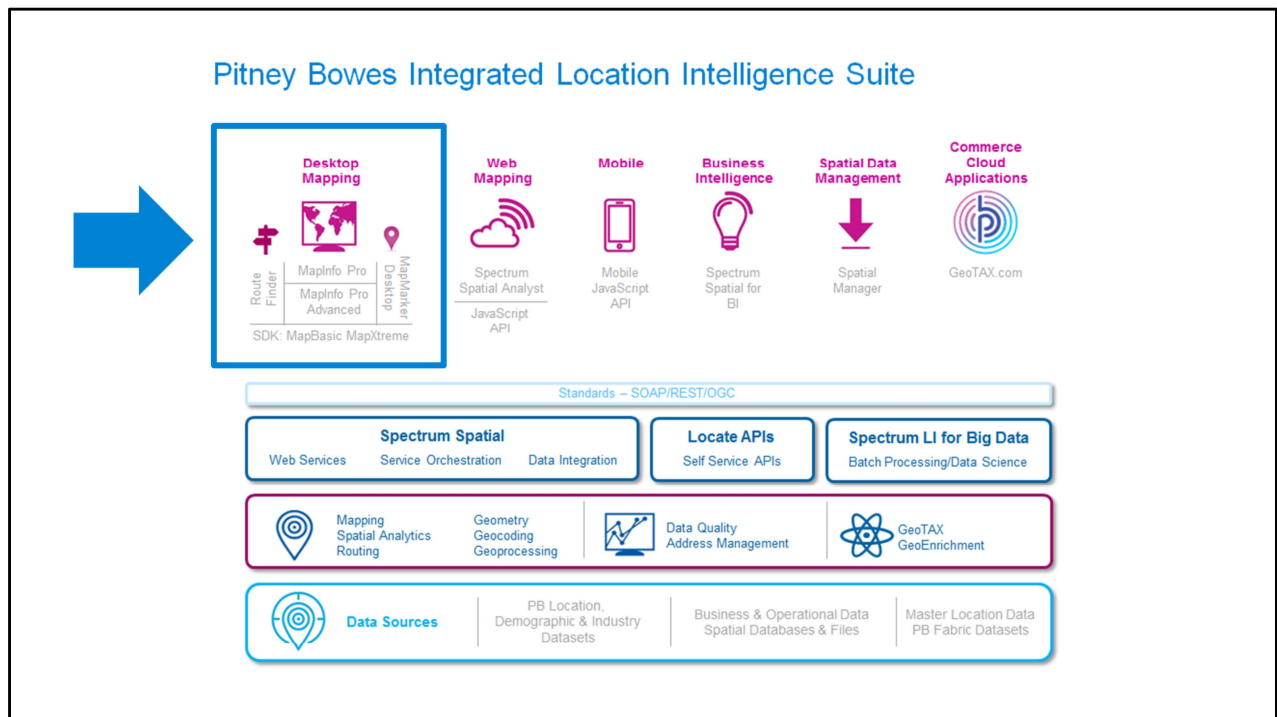


This slide is taken from a presentation on the growth of Enterprise Analytics. The GIS superhero, now appearing as a work area within the enterprise platform, must be much more tightly integrated with all of the work flows in order to make sure that the geospatial dimension is handled properly in database management, analytics, and visualization.

Pushing Analytics to the Front Lines



The GIS superhero is more important than ever in this role. He or she is part of a team working in the “back room” with data scientists, developers, IT administrators, and business experts to craft the tools that will be distributed across the enterprise to the front lines. In some organizations these tools will extend outside their walls to people such as citizens who want to view land use and parcel maps, shoppers looking for the closest store with the product they want, or travelers trying to find a cab. In addition, there will always be special projects that require a combination of data manipulation and visualization that is the unique domain of the GIS Analyst, to enable the “aha” moments that create competitive advantage and social good.



As we work together to develop the Product Roadmap for MapInfo Pro, we are doing this in the context of the ***new enterprise analytics paradigm***. We want to make sure that our products work the way our users work. We also want to make sure that they work together and with other data and systems that are part of the analytics ecosystems that are appearing across most industries, including local government, retail, telco, financial services, and every other organization that finds value in geospatial data. I'd like to pause here and ask if any of you are seeing this trend in your organizations or others that you work with. What kind of changes have you seen? Is it happening fast or slowly? Any examples would be very useful to this group and all of us at PB who are trying to shape our products to meet the current and future needs of customers.

The Way Forward

“It’s not just about the software...”

1. Customer Experience
2. Digital Transformation
3. Interoperability
4. The Secret Weapon

Now we’re going to present our thinking about the ways that MapInfo Pro can be improved to enable our customers to be more successful in the short term and as the role of the GIS Analyst changes going forward.

As we have learned in the transition from the 32 bit to the 64 bit version, a product roadmap is not just about changes in the software. We are now focusing on the complete customer experience, from researching software and data to purchase and installation, to learning how to use it, to interacting with other data and systems. We’ll go through each of these areas, and as we proceed we invite you to share any thoughts you have. Feel free to suggest specific ideas as well as the priority of doing these things.

And after the coffee break I’ll present a tool that will take the productivity of the GIS Analyst to another level.

Customer Experience

Customer experience sets your company apart. By 2020:



Customer experience will overtake price and product as the most important brand differentiator.

Source: Walkerinfo Customers: The future of B2B Customer Experience 2020, 2013



of product investment projects will be driven towards customer experience innovations.

Source: Gartner brochure: Gartner Customer 360 Summit, 2017

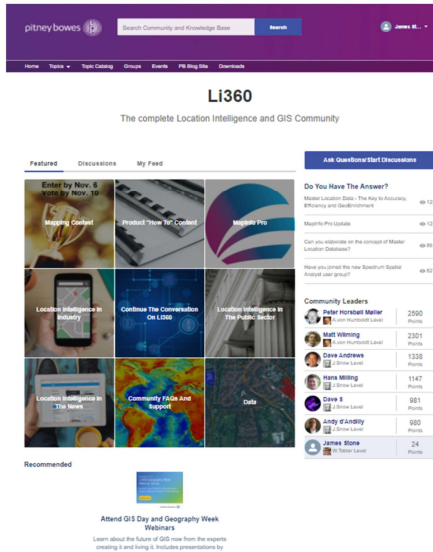


of customers will manage their relationships without interacting with a human.

Source: Gartner: Gartner Survey Confirms Customer Experience is New Battlefield Blog by John Smallman, October 23, 2014

Everyone's talking about customer experience these days. This is a graphic that Pitney Bowes uses to promote our Customer Engagement Software tools. So it's only right that we should focus on this as we plan the future of MapInfo Pro.

The Connected Experience



Li360 Online Community

- Hub for problem-solving, tips, learning resources, and networking
- Powerful supplement to face-to-face meetings (but not a substitute!)

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Most of you are familiar with the new Li360 Community, which launched this year and has grown very quickly. We will continue to support this with content and support to help our customers maximize the value of MapInfo Pro and other Pitney Bowes software products and data. However, there is no substitute for face-to-face meetings such as this, and we plan to use Li360 to help customers organize meetings in their local areas.

The Supported Experience

Partner Enablement Program

- Major corporate emphasis on supporting partners to help customers
- Based on recognition that partners are “closer to the ground” and best able to support customers

New PB Learning Needs Assessment Research Study

- Broad assessment of best way to deliver learning opportunities:
 - **Industry focus** to ensure context
 - **Format:** online, virtual classroom, on site
 - Offered by PB, partners, and user community



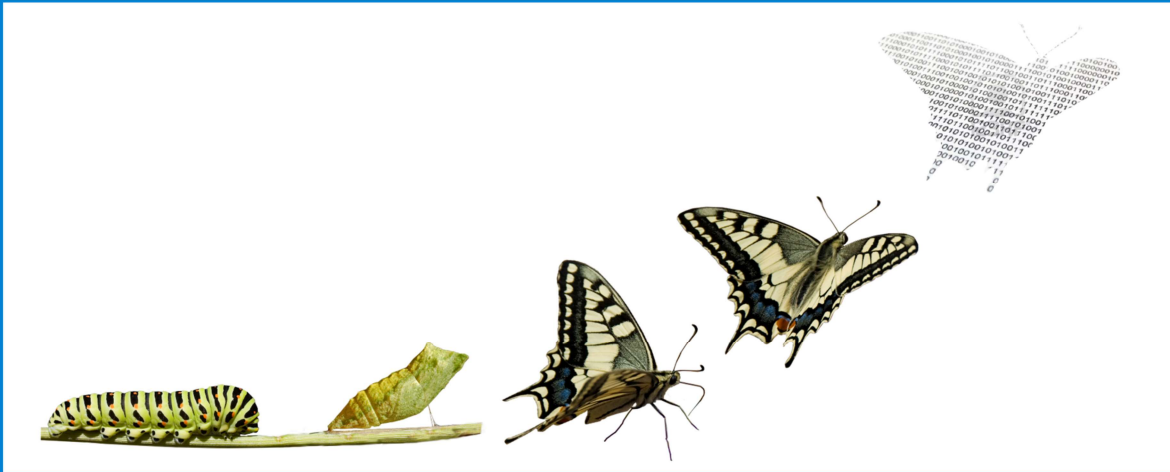
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The new analytics ecosystem will increase the need for support for new Pro users as well as experienced users who find themselves performing new tasks. Pitney Bowes has dramatically increased our commitment to enabling partners in the past couple of years and we will continue to do this because partners are in the best position to support customers.

We are also starting a research project to determine the best way to help customers learn about MI Pro. The challenge is to maximize the impact of learning resources by tailoring content to specific industries, using a variety of formats such as online video and virtual classroom as well as traditional instructor-led courses.

Digital Transformation



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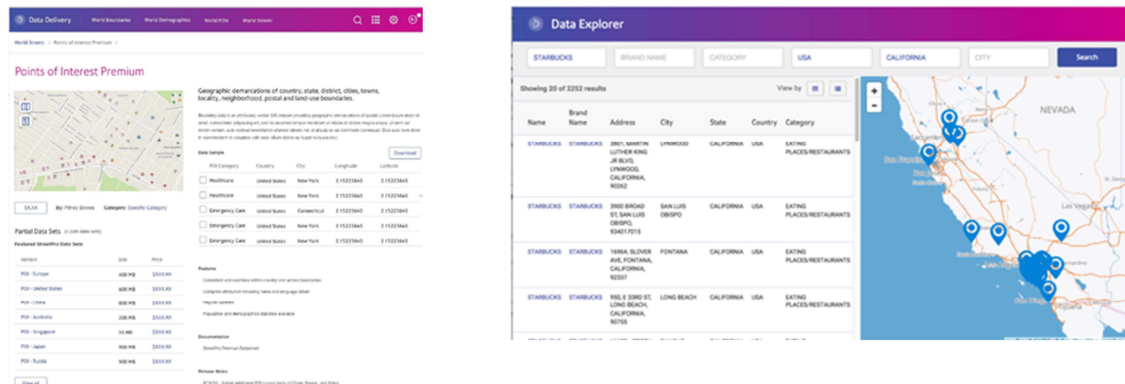
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I'm sure that everyone in this room has had a frustrating experience with a MapInfo Pro license. The time has come to move this process online, and we have a plan to do this, starting as early as the release of version 17 in March of next year. But digital transformation is more than just replicating the current licensing model online. We're open to other changes that we'd like to discuss today.

Digital Marketplace

Digital Data Delivery

- Deployed as pilot in September
- Full deployment in 2018



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Pitney Bowes has a vision for a digital marketplace that would make it possible to find every product or support resource that you will ever need online. That includes software, data, and learning resources, whether free or paid.

The infrastructure for this digital marketplace has been built and is currently deployed as a pilot for data. In 2018 it will be rolled out to everyone, and it's already been designed to support software licensing as well. Here are some mockups of the data delivery, showing the ability to research the data and see products on maps before purchasing.

Digital Marketplace

Digital Software Delivery

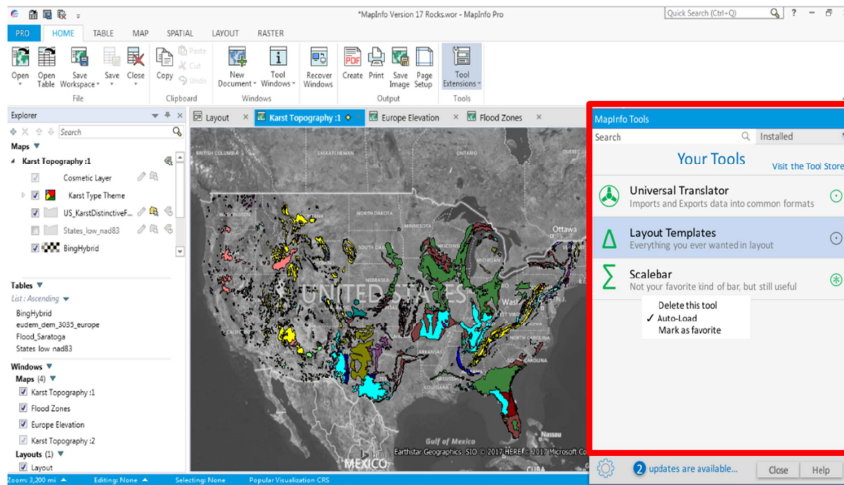
- Phase 1 – “The Tool Store” – Tool Manager goes online
- Phase 2 – All software purchases/updates online
 - Eliminates current fulfillment challenges
 - Rich search capabilities with detailed, updated info
 - Multi-user admins can manage license pools

For MapInfo Pro, the first phase will be moving the “Tool Manager” from the windows application to the web. This will allow us to easily add new tools and provide some search capabilities with better descriptions of what they do. This phase may also allow us to release updates for MapInfo Pro so that users won’t have to wait until annual releases to get the benefit of new features.

The second phase will be to make all software available online including new purchases and management of pools of licenses.

Tool Manager in MiPro

Modeless Docking Panel



- Free or free trial only in this phase
Partners can share tools and preview apps

- MI Pro software updates
v17 will be the last annual release

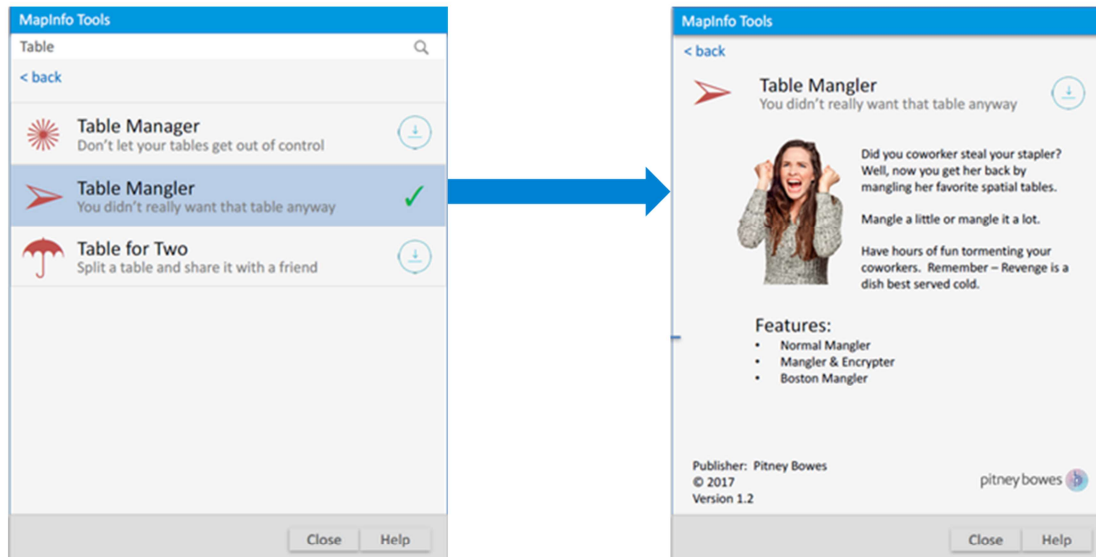
- Updates released when ready
- MATS customers simply download and install when ready

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Here's a mockup of the Tool Manager for v17. In Phase 1, all tools will be free or free trials curated by Pitney Bowes. We'll be encouraging partners to put their apps here to get exposure to the MI Pro user community.
Also Pro updates – no more annual release cycle!

Tool Manager Preview



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One of the major benefits of having this online is the ability to expand the descriptions of the tools as shown in this light-hearted example. After searching for tools that manage tables, a user might get the list on the left and then click on it to see the details of when to use it and some of the features. These updates can happen anytime instead of requiring a patch or other method of delivering them to customers.

Phase 2 – eCommerce Enablement

AUTODESK SEARCH UNITED STATES MENU

AUTOCAD Overview Features Compare Case studies Free trial **Subscribe** Support & learning

AutoCAD (for Windows)
Software for 2D and 3D CAD. Available for Windows and Mac. Includes AutoCAD mobile app.

Operating system
* AutoCAD (for Windows)
@ AutoCAD for Mac

Term

MONTHLY \$185.00	1 YEAR \$1,470.00	3 YEAR \$4,410.00
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Pricing for stand-alone single-user license. See legal disclosures

Quantity
1

AUTOCAD (FOR WINDOWS)
Quantity: 1

\$1,470.00 / YEAR

ADD TO CART

30-day money-back guarantee

VISA Mastercard American Express Discover Norton

+ Subscription benefits

+ System requirements

- Buy what you need when you need it and start using immediately
- For subscriptions, activate and de-activate licenses as needed over time
- Find free and paid software, data, and learning resources in the same catalog with search filters on:
 - Industry
 - Problems to solve
 - Country and local area
 - Cost
 - Compatibility

Considering Different Pricing Models

“Freemium” model

- Basic version free
- Standard version - price of “x”
- Advanced version – price is multiple of “x”

Subscription vs Perpetual License – feedback?

Goals of Updated Pricing Models:

- Match licensing with usage levels (type, level of use)
- Adapt license cost to customer utilization over time

Opportunities to Improve Interoperability

- Within PB Applications

- MI Pro and Spectrum Spatial Analyst – Stay tuned for Andy's presentation
- Locate APIs – e.g. GeoZones and Global Geocoding – more coming

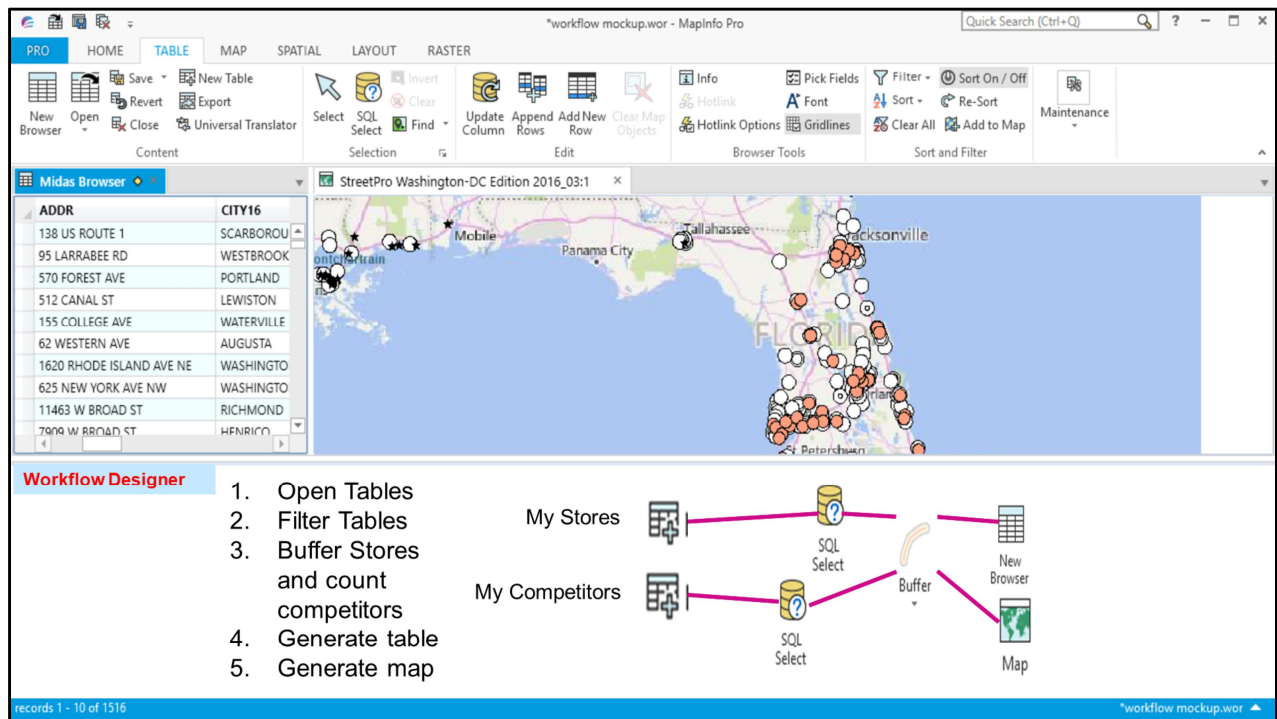
- Outside PB applications

- Connect to more data types?
- Big data (eg Spectrum for Big Data)?
- External web mapping apps (eg Carto, MapBox)?

- Porting 32 bit MBXs to 64 bit

- How many have MBXs that don't work in 64 bit?
- How can we help with this?

The Analyst's Secret Weapon for Productivity



Going back to the changing role of the GIS Analyst, organizations are seeking more transparency and reusability of analytics, including geoprocessing. One of the best ways to achieve this is with a workflow designer that allows a user to drag and drop data sources, processing tools, and outputs to a canvas and connect them. When the user hits “run,” the process executes and generates the outputs, which could be tables, charts, maps, or updates to a database. Each tool has parameters that can be set such as filters and scope values (like drive time sizes). A workflow designer in MI Pro would allow the analyst to experiment with different processes and parameter values and see the results immediately in a browser or map window.

Why is this Important?

- Rerun complex tasks quickly
- Perform “what if” analysis by changing parameters
- Create documentation for processes to be used by others
- Create “self-service” processes that can be executed by non-technical users
- We have this in Spectrum – worth putting in MapInfo Pro?

The screenshot displays the MapInfo Pro interface. On the left, a table named 'Midas Browser' is open, showing a list of addresses and cities. The main map area shows a geographical view with various points of interest. Below the map, a 'Workflow' section is visible, containing a list of steps and a diagram illustrating the process flow.

Workflow Steps:

1. Open Tables
2. Filter Tables
3. Buffer Stores and count competitors
4. Generate table
5. Generate map

Workflow Diagram:

```

graph LR
    A[My Stores] --> B[SQL Select]
    C[My Competitors] --> D[SQL Select]
    B --> E[Buffer]
    D --> E
    E --> F[New Browser]
    F --> G[Map]
  
```

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This feature is not currently in the roadmap for several reasons. First, we need to validate the need for it by talking to customers. Secondly, it might be appropriate to develop this tool elsewhere in the Pitney Bowes Software Suite and then make it available as an extension in Pro.