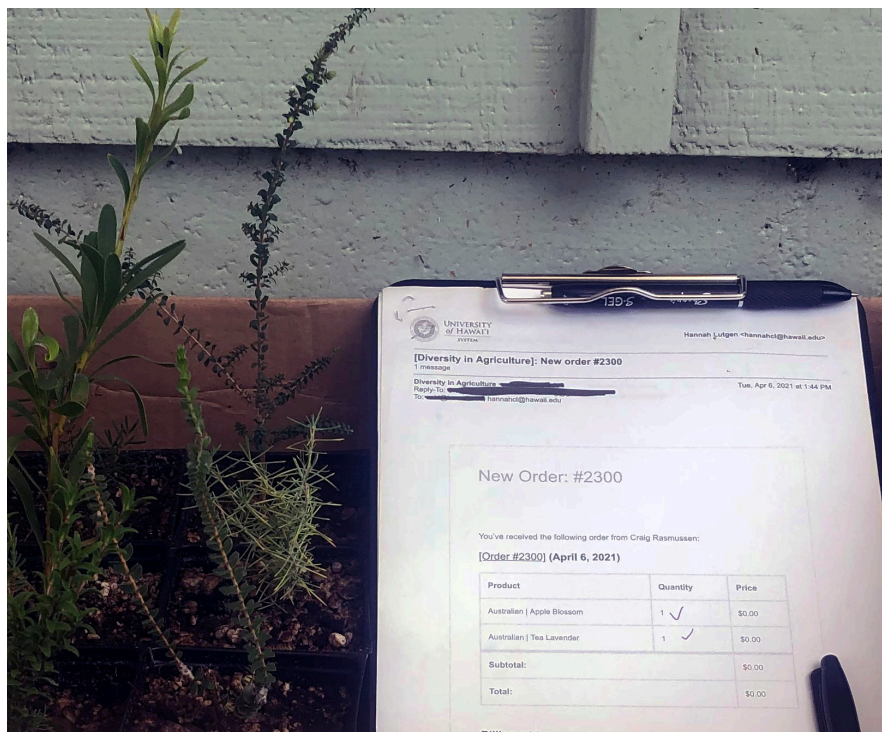


Want Fewer Emails?

Use an Online Tool to Plan Extension Distribution Events

At A Glance: Planning a complex distribution of educational materials can require a significant amount of additional work and time, involving detailed organization and coordination between the coordinator and recipients.

This article discusses an online tool created to support Extension agents in the efficient organization and distribution of educational items to the community. The explanation of the process and lessons learned will provide Extension agents with a template for setting up their own system in order to save time and execute the well-organized dissemination of goods and products.



Introduction

The distribution of educational materials, public giveaways, research data, and variety trial products to support program requirements can be a major time commitment that requires fulfilling participant orders, organizing logistics, and managing distribution (Table 1).

While traditional processing (emails, phone calls, data entry) can support coordination, continual updates and response times can decrease productivity. This article discusses coordinating a plant distribution event with the development of an online marketplace tool (shopping site) that requires minimal data entry and email responses to organize events or manage other clientele needs, resulting in significant time savings.

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Table 1. Comparison of Tools for Time Saving: Manual vs E-commerce

While email is an effective form of communication, a workplace study (Mark et al., 2016) indicated that people spend an average of 83 minutes each day on email, while 1998 research conducted by Solingen et al., (as cited in Jackson et al., 2002) suggested it takes 15-20 minutes to resume normal work activities after each “interruption” of email, phone call, or in-person discussion.

The table below compares the approximate amount of time to coordinate and host one Extension event using email and manual data entry, compared to using the WooCommerce® tool. For this comparison, both Extension events were held in person and provided materials to approximately 12 clients.

Task	Time Spent on Extension event coordinated manually (in minutes)	Time Spent on Extension event using tool (in minutes)
Sending and Responding to Emails (Announcing event and distribution process to clientele, replying to individual emails)	300	30
Processing Orders (Organizing materials, tracking orders and entering data into spreadsheet)	480	0
Planning Event and Distributing Materials (Pre-event organization, set-up, distribution of materials to clients and break down)	960	960
Total Time	1740	990
Time Saved		750

The times shown are for a 12-person event. Increases in the time needed for larger events (120 people, for example) would not increase proportionately with the tool due to the automation of tasks and decrease in personal communication and data entry. Table does not include set up of e-commerce tool or comparative set up of alternative manual spreadsheet and manual plant ordering information.

Setting Up the Tool

Step 1: Set up an Online Marketplace and Add Products.

A WordPress site with a WooCommerce® plugin hosted the marketplace for a plant distribution event on Maui, however Extension agents can create their own online marketplace using different configurations (Table 3). The free plugin that was used did not allow the planner to set numerical limits on per-item purchases (Figure 1). If a planner needs to limit the stock quantity to prevent

customer over-ordering, they may need to pay for an upgraded version.

The distribution for this event was at no charge to the stakeholders, but items with costs will require the development of a payment gateway. Once the marketplace is created, users can upload photos of their product inventory, set stock quantities, and categorize items through the customer interface.













Products Add New Import Export						
All (54) Published (40) Drafts (14) Sorting						
Bulk actions Apply Select a category Filter by product type Filter by stock status Filter						
<input type="checkbox"/>		Name	SKU	Stock	Price	Categories
<input type="checkbox"/>		Scott River Jug Flower	–	Out of stock (0)	\$0.00	CTAHR
<input type="checkbox"/>		Silky Net Bush Calothamnus	–	Out of stock (0)	\$0.00	CTAHR
<input type="checkbox"/>		One-sided Bottlebrush	–	Out of stock (0)	\$0.00	CTAHR
<input type="checkbox"/>		Common Fringe Myrtle	–	Out of stock (0)	\$0.00	CTAHR
<input type="checkbox"/>		Myrtle Swan River — Draft	–	Out of stock (0)	\$0.00	CTAHR
<input type="checkbox"/>		Regalia Megacephala	–	Out of stock (0)	\$0.00	CTAHR
<input type="checkbox"/>		Myrtle Desert Honey — Draft	–	Out of stock (0)	\$0.00	CTAHR
<input type="checkbox"/>		Phyllica Purpurea — Draft	–	Out of stock (0)	\$0.00	CTAHR
<input type="checkbox"/>		Lemon Bottlebrush — Draft	–	Out of stock (0)	\$0.00	CTAHR
<input type="checkbox"/>		Baeckea Virgata — Draft	–	Out of stock (0)	\$0.00	CTAHR
<input type="checkbox"/>		Heath Erica Canaliculata — Draft	–	Out of stock (0)	\$0.00	CTAHR

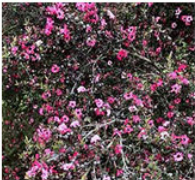
Figure 1. Plant Inventory Options

Step 2: Build the Customer Interface

The customer marketplace was automatically generated by the software but allowed for some customization, such as the number of products per row, stock availability, photo size, and descriptions. For a cleaner look,

planners can include a “Read more” button (Figure 2) to hide long descriptions while still making the information accessible to the customer or display the longer descriptions as needed.

CTAHR Distribution




Australian Tea
Ruby Glow

\$0.00

Read more

Out of stock




Australian
Apple Blossom

\$0.00

Read more

Out of stock




Australian
Tea Lavender

\$0.00

Read more

Out of stock




Broad
Leaf Featherbush

\$0.00

Read more

Out of stock




Common Fringe
Myrtle

\$0.00

Read more

Out of stock




Feather
Flower

\$0.00

Read more

Out of stock




Grevillea
Moonlight

\$0.00

Read more

Out of stock




Grevillea
Red Hooks

\$0.00

Read more

Out of stock




Kunzea Green
and Gold

\$0.00

Read more

Out of stock




Kunzea
Affinis Pink

\$0.00

Read more

Out of stock




Myrtle
Densa

\$0.00

Read more

Out of stock



One-sided
Bottlebrush

\$0.00

Read more

Out of stock

Figure 2. Customer Marketplace

Step 3: Design Checkout and Cart

The design of the shopping cart was simplified to only include one line per item with a photo, product name, price, quantity, subtotal, and total. If selling tickets to an event, or distributing products on a specific day, the Checkout page can be modified to include additional details as needed such as date, time, location, etc. (Figure 3). Customized notes were added to communicate directly to the clients to facilitate the pickup.

This marketplace was designed for a simple distribution event, however, it can be customized to fit the requirements of the planner and Extension situation, as outlined in Table 2.

Checkout

Note: Although there is no charge for the plants, the information below is required to process your order.

In the **Additional Information** area, please type in time of pick up (in 15 minute increments, ex. 12:30 or 2:45) on **April 7, 2021** between 12:00pm – 5:00pm. If you are off-island be sure your shipping address is correct. Feel free to include any additional information or comments on how best to meet your needs.

Print or take a photo of your receipt at check and bring it with you to the site on the day of pick up.

Billing details

First name *

Test

Last name *

Account

Company name (optional)

Name

Country / Region *

United States (US)

Street address *

310 Kaahumanu Avenue

Building 214

Town / City *

Kahului

Additional information

Order notes (optional)

Notes about your order, e.g. special notes for delivery.

Figure 3. Checkout Page Details

Table 2. Tool Customization Suggestions by Situation

Situation	Step 1 Marketplace / Products	Step 2 Customer Interface	Step 3 eCommerce	Example
Event Planning	Each event can be entered as a product	Scheduling plugin may be needed for RSVP. Instructions, location, other information can be included in the description.	Yes. E-commerce payment gateway needed if charging for the event.	Extension workshop
Educational Kits	Each kit can be entered as a product for purchase or loan at no cost.	Items in the kit can be shown via photos and the description can include a packing list. Instructions for the kit can be included in the physical kit and/or available via link to a PDF after the purchase.	Yes. E-commerce payment gateway needed if charging for kit but loaned materials can be set up with no cost with no payment process needed.	Curriculum, supplies, and instruction bundles
Public Giveaways	Each item can be entered as a product and the price set at \$0.	Items can be shown via photos and descriptions. Customer requests can be sorted to frame a snapshot of community needs.	No e-commerce payment gateway is needed for no charge items.	Extension educational resources, consumer or grower tools, grant-funded resources, grant-funded resources
Research - variety trials	Each variety can be entered as a product and the price set based on planner needs.	Accompanying research data for each variety can be included in the description, which would give this a dual purpose of informing viewers/customers who don't necessarily purchase items.	E-commerce payment gateway is only needed if the planner intends on charging customers a fee for the variety samples	Post research plant material, Extension materials produced from research (grass seeds, vegetable or flower cultivars, etc.) software or tools
Inventory management	Inventory can be entered as acquired and access given to all users that use the inventory rather than making it a public website.	Photos are optional, but as users use inventory the quantities would automatically be updated. Stock level alerts can be added.	No e-commerce needed for internal inventory management.	Curriculum, educational supplies, plant germplasm, livestock genetics
Publication catalog	Each publication PDF would be one product with or without cost.	Excerpts can be included in the description along with the title.	E-commerce payment gateway is only needed if the planner intends on charging customers a fee for the publication.	Research data, consumer information, fact sheets

Using the Tool

Communicate with Clientele

After the tool is developed, planners can provide instructions to their customers (e.g. email, handouts, phone, etc.) on using the tool to order or purchase products, event tickets, etc.

Finalize Orders

During preparation, planners can easily locate, organize, and sort orders by person or product, which allows for an efficient compilation of all information needed for packaging items or final event coordination. For the experience outlined in this article, the most useful function of the tool was the ability to organize the plants by variety (Figure 4).

Distribute Products

Printing automatically generated orders from the software prior to the event greatly simplified the packaging process (Figure 5), compared to working with a large spreadsheet that would need constant re-sorting and printing. The response to the new process by customers who participated in the pickup was overwhelmingly positive (99% of participants, n=9).


Products Compare <input type="text"/>								 Dow
<input type="checkbox"/>	Product Title	SKU	Items Sold	Net Sales	Orders	Category	Variations	Status
<input type="checkbox"/>	Waxflower Sweet 16		18	\$0.00	4	CTAHR	0	Out of stock
<input type="checkbox"/>	Scott River Jug Flower		10	\$0.00	6	CTAHR	0	Out of stock
<input type="checkbox"/>	Australian Tea Ruby Glow		9	\$0.00	4	CTAHR	0	Out of stock
<input type="checkbox"/>	Australian Apple Blossom		9	\$0.00	6	CTAHR	0	Out of stock
<input type="checkbox"/>	Australian Tea Lavender		9	\$0.00	5	CTAHR	0	Out of stock
<input type="checkbox"/>	Broad Leaf Featherbush		8	\$0.00	3	CTAHR	0	Out of stock
<input type="checkbox"/>	Common Fringe Myrtle		7	\$0.00	4	CTAHR	0	Out of stock
<input type="checkbox"/>	Swamp Bottlebrush		6	\$0.00	4	CTAHR	0	Out of stock
<input type="checkbox"/>	Grevillea Red Hooks		5	\$0.00	2	CTAHR	0	Out of stock
<input type="checkbox"/>	Kunzea Green and Gold		5	\$0.00	3	CTAHR	0	Out of stock
<input type="checkbox"/>	Regalia Megacephala		5	\$0.00	4	CTAHR	0	Out of stock
<input type="checkbox"/>	One-sided Bottlebrush		5	\$0.00	4	CTAHR	0	Out of stock

Figure 4. Analytics Product Page



Figure 5. Packaged Products at Distribution Day

What Worked Well for This Event

- The order automatically recorded a timestamp, then triggered immediate order and inventory updates, allowing for quick adjustments to inventory levels on limited items.
- The tool simplified the ability to run reports by product compared to manually entering and sorting data from emails.
- A confirmation email was automatically sent to clients when the order was placed, making it easier for them to access and manage their order documentation.
- Clients had 24-hour access to ordering materials and received immediate responses, which provided on-demand client support.

Ways To Improve Tool Usage

- Users asked for more descriptive information about plants or products on the user interface page.
- Consider automatic per-customer order limits to manage stock quantity (may be an additional cost).
- Incorporate the ability for clients to schedule pickup time as part of the ordering process (may be an additional cost).

- This tool requires client internet service and some technical knowledge, and may not apply to clients without technology skills or access.

Recommendations

- Research options to meet the allotted amount of funds but still have flexibility in design and function.
- Prepare and organize project objectives and inputs (photos, names, quantities) prior to the development of the tool.
- Have the necessary technical skills required or have access to someone with technical expertise for the backend setup.
- Ensure all necessary equipment is working and meets the requirements of the tool (internet, printer access, website hosting location, etc.).
- Check the requirements of the university regarding payment options (i.e. credit card, direct deposit, check, third-party payment handlers).
- Have a backup plan for stakeholders uncomfortable or unable to use the process (e.g. paper forms, phone orders, checks via mail).

**Table 3. Comparison of Platform Options for Online Marketplace**

Platform Name	Plan / tier name	Price / year	Ability to customize	Technical expertise needed	Inventory management
<u>DigitalOcean App Platform</u>	<u>Basic</u>	\$60	High	High	add-on or coding needed
<u>GoDaddy Website Builder</u>	<u>Basic</u>	\$119.88	Medium	Low	built-in
	<u>Free</u>	\$0	Low	Low	none
<u>Squarespace</u>	<u>Business</u>	\$276	Medium	Low	built-in
<u>Wix</u>	<u>Business Basic</u>	\$324	Medium	Low	built-in
	<u>Free</u>	\$0	Low	Low	none
<u>Weebly</u>	<u>Personal</u>	\$72	Medium	Low	built-in
	<u>Free</u>	\$0	Low	Low	built-in
<u>Wordpress.com</u>	<u>Personal</u>	\$48	Medium	Medium	add-on or coding needed
	<u>Free</u>	\$0	Low	Low	none

Plan/tier name: The pricing package containing relevant customization features.

Ability to customize: Low: Limited options, Medium: Some flexibility, High: Install or create anything from scratch.

Technical expertise needed: Low: Drag and drop, coding limited and optional

Medium: Drag and drop, occasional coding and configuration needed, High: Coding / command line skills required.

Inventory management: Add-on or coding needed = user needs to set up inventory by installing a plugin or adding their own code, Automatic = user can start adding products immediately, None = inventory management and online shopping not possible.

- Allow enough time to become familiar and confident with the tool.
- Conduct a trial run of the tool prior to launching by specifying key stakeholders and/or colleagues to act as mock users to identify any issues.

Conclusion

Organizing a large distribution event with the use of an online platform substantially reduces the amount of time spent on emails, coordinating orders, and data entry. Stakeholders also benefit from an experience that is more efficient and convenient. Beyond plant distribution, this tool is easily adapted for other Extension situations such as the dissemination of curriculum or non-agricultural educational materials; field day events and workshops; variety trial research data sharing; inventory management; publications catalog; and equipment rentals.

Using a technology-based tool that supports a minimum effort to maximum efficiency ratio allows for a greater effi-

ciency impact when scaled for more clients and increased quantities of inventory. Through automation, Extension agents gain valuable time that can be refocused on other client needs and projects, allowing for a greater impact in the community and professional growth advancements.

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