The University of Chicago Booth School of Business
34106: Commercializing Innovation, Tools to Research & Analyze Private Enterprises
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<u>Case: Pay-Ease</u>

Pay-Ease provides a network of bill payment and transaction processing kiosks designed to serve convenience-driven and cash-centric customers in retail venues with high foot traffic such as drug stores, grocery stores, and wholesale clubs (location "hosts") in the US market. Kiosk customers may use any form of payment including credit/debit cards, but gravitate toward analog bill payment methods like cash or check instead of digital methods (online or mobile app) for a variety of reasons including:

- Availability and convenience of paying bills while shopping / completing other errands
- Unfamiliarity or discomfort with safety and/or usability of digital transactions
- Necessity due to lower access to traditional banking services and debit/credit cards ("underbanked" or "unbanked" status)

Pay-Ease provides these customers, who would otherwise risk sending payment by mail or spend significant time waiting to pay cash in person, with a simple and secure self-service machine to pay recurring service bills like utilities, phone, cable, or credit card statements at the same time as other planned, regular expenses. Customers can select from one of several languages, with more languages to be added later and will in the future be able to access a variety of other services through the kiosks.

Merchants ("subscribers") such as Commonwealth Edison (ComEd), People's Gas, and SBC have recently signed on to the Pay-Ease network and will receive customers' kiosk payments electronically via ACH. Pay-Ease charges a $1.00 convenience fee per payment, and also benefits from a brief 2-day float (ability to earn a monetary return on retained funds) between the time of consumer payment and final funds transfer to the merchant. When kiosks are operated directly by Pay-Ease, each transaction incurs COGS of only 10-20 cents in fees to the location host (80-90% gross margin); an alternate model could see the outsourcing of kiosk operations to Independent Service Operators (ISOs) who would earn 40 cents per transaction on machines under their supervision (for a total gross margin of 40-50% on those machines operated by ISOs when also including the location hosting fees incurred by Pay-Ease). In the long-run, leveraging ISOs and other operational partners can be an important part of helping the company to scale.

Pay-Ease offers benefits to customers, subscribers, and hosts. Customers benefit from the ability to utilize multiple types of payments, receive immediate credit for payments, and/or make partial payments, all at a low transaction cost. Subscribers (merchants) receive ongoing updates about which customers have made payments (hourly), will experience improving bill collection cost economies as the Pay-Ease network expands, and may be less exposed to "bad" checks, while only requiring a small integration investment to get started with Pay-Ease. Finally, hosts (such as drug stores) benefit from increased store traffic, per transaction fees as described above, and possible promotion, partnering, and/or in-store coupon opportunities.

Kiosks are currently only in a small portion of the Chicago market (Pay-Ease owns and operates 7 kiosks, each with 800 transactions per month from ComEd alone) and is now raising $1.5-$4M in funding to grow its business by further penetrating the core Chicago market (more kiosks and more merchant partners both in Chicago and nationally) and by expanding into other cities. The company also plans to continue improving its kiosk software offering and to build out its internal corporate infrastructure.

Market size is not expected to be an issue: Pay-Ease estimates that the total monthly walk-in payment collection market across the Chicago Metropolitan area for major utilities (electric, gas, water, and telephone) exceeds 1,400,000 payments per month (16.8 million payments annually). Although customers come from a variety of walks of life, a core market of customers have been seen to: come from households with total income less than $70,000, prefer cash payments, be more frequent users of services like money exchanges, have fewer existing checking/banking relationships ("underbanked" or "unbanked"), and live in culturally and ethnically homogenous neighborhoods within the city. These customer demographics and the corresponding subscriber base that can best match with their bill-paying needs will drive the location selection of Pay-Ease kiosks.

Although certain barriers to entry (e.g. regulations) are low, Pay-Ease believes that it is the first to offer a multi-subscriber kiosk-based network. Future opportunities include person-to-person money transfer capabilities, account information inquiries, cell phone account top-off, check cashing, transit fare card replenishment, parking permit purchases, and a wide variety of other combined functionalities. The company has projected the following financials through Year 5 of operations (in millions of dollars):

Year	1	2	3	4	5
Transaction fees	0.8	12.7	27.3	41.3	58.1
Equipment sales	5.2	14.5	15.7	17.8	20.3
Other revenues	0.3	2.9	8.1	13.6	19.4
Total revenue	6.3	30.2	51.1	72.6	97.8
Gross profit	1.7	12.7	24.8	37.5	52.5
Net profit	0.2	5.3	11.4	17.6	25.8
EBITDA	0.2	8.8	18.9	29.4	43.0

Case Materials

Use the above case material as an introduction to the product, business model, target market/customer, competition, and plan for growth. As you review the financials, try to understand how Pay Ease's business model is impacted by its target market and the various partners it must engage with. Evaluate whether you would approach the commercialization of this business in a similar or different way to how the company has outlined it. You may consider the corresponding Excel file as a preliminary operating model received as part of an initial diligence process.

Think carefully about how to model the growth of the business and the best way to invest productively. There are a variety of factors (end consumers, base of merchant subscribers, available retail locations) that may influence the speed at which Pay-Ease is able to penetrate individual regions, as well as how quickly it can expand to adjacent geographies. Evaluating unit model profitability in a network effect business (that has multiple unit models in it) is complex, and should receive the bulk of your attention.

Key Considerations

Target market

1. How can you determine which customers will be most likely to use this service? By narrowing down your initial target market, you can be more efficient with your go-to market strategy and available resources.
2. Market research has shown that the most likely Pay-Ease customers live in culturally and ethnically homogenous neighborhoods within the city. It is important to think critically as to how the Pay-Ease management team can best segment the market and pursue an efficient roll-out of kiosks. This will enable them to optimize the initial investment requirement and maximize kiosk adoption.
3. By taking an extremely targeted approach, a young company can turbo-charge its expansion. *For example: Facebook was extremely targeted in its approach by first offering its product to Ivy League college students. Once it gained acceptance and traction it expanded to other colleges and students to continue gaining momentum and expansion. This allowed Facebook to gain the adoption and virality it needed within a small segment that enabled it to reach the success it achieved.*

Unit Model: This case entails use of more than one type of unit model. Which unit models are relevant and how do they come together?

1. Physical location model
   a. What types of stores/locations should the kiosks be placed in?
   b. What are the key demographics Pay-Ease is targeting? What are the best channels to reach this target market?
   c. From the standpoint of store layout, which types of stores have the requisite space and store design to host a Pay-Ease kiosk?
   d. Which stores might be most amenable to a partnership with Pay-Ease? Why? Can Pay-Ease help attract customers to these locations?
   e. *Example: Staples started as a single store and then expanded to other locations. By doing so, the Management team learned what worked and what didn't. They picked the locations strategically based-off of their target customers and expanded accordingly.*
2. Geographic model
   a. What neighborhoods/cities should this be rolled out to?
   b. What regions have high concentrations of people in Pay-Ease's target demographics?
   c. What costs can be shared across multiple locations in a region?
   d. Are there revenue benefits across a region? How can these be modeled?
   e. How should you think about adding kiosk locations within a region?
      i. What is the appropriate pace to do so? Are there analogs that demonstrate this?
      ii. Does this pace change as a region approaches saturation?
   f. Similarly, how quickly should new regions be entered?
      i. What are the pros and cons of rapid expansion within one region vs. expansion into multiple regions (with slower penetration of each individual one)?

        ii. Again, are there analogs that you can use for regional expansion?
    g. *Example: When Mars Inc. decided to sell Dove chocolate bars, they first launched the candy in Milwaukee and Minneapolis, testing their popularity before rolling out to more regions. In doing so, they could concentrate their advertising and distribution efforts in specific locations.*
3. Account-based model
    a. What are the key pieces of common cost across the entire business, regardless of number of locations or regions? How can these costs be allocated to regional and location-based unit models?
    b. How does the requirement to continue to develop software up-front (at least to a minimum viable product level given the initial functionality the company seeks) impact Pay-Ease's cash needs?
    c. How do you anticipate business development / retail partnerships working – more on a local / regional basis or at the national level? (how does the type of store in which kiosks are placed influence this?)
    d. *Example: Software companies have no marginal cost of goods sold, thus development costs must be allocated over a set of accounts, defined as the customer base for a single version of the software.*
4. Single purpose asset model
    a. How should you account for the value of the main hardware assets in this business, the kiosks?
    b. How does the value of the kiosks change over time as the business goes through its first few years of operation? What drives the change?
    c. What are some creative ways to generate cash to fund expansion as the business matures?
    d. *Example: Businesses such as pharmaceutical start-ups require a large investment over a period of time to develop intellectual property (patents). The terminal value of this intellectual property comprises the vast majority of the returns at exit. While Pay-Ease should generate some cash throughout the duration of the investment, the kiosks could represent a single purpose asset which must be valued accordingly in the unit model.*