

# teaching note

## *The P.O.S. Decision: Ray's Place's dilemma*

### Synopsis

This case study examines the issue of Point of Sale (POS) system adoption and implementation in the context of two independent full service restaurants in Northeast Ohio. The main focus is on the restaurant company Ray's Place, which has locations in Fairlawn and Kent, Ohio. Ray's Place Fairlawn (opened in 2014) adopted a POS system prior to opening. However, some of the beneficial POS data have not been regularly tracked. Ray's Place Kent (Est. 1937) has historically, and still currently utilizes a manual guest check system. The owner and senior management team are now facing the difficult decision of whether Ray's Place Kent should adopt a similar POS system as the one installed at Ray's Place Fairlawn or continue with manual operation.

This is a common dilemma in many independent restaurant operations. According to the National Restaurant Association (2017), more than 7 in 10 restaurants are single-unit operations and more than 9 in 10 restaurants have fewer than 50 employees. Unlike large corporations, independent restaurant businesses are usually more hesitant of allocating limited resources to technology projects/solutions. The purpose of this case is to demonstrate the nature and scope of the decisions related to technology solutions adoption and implementation in independent restaurants. This case encourages students to take a holistic approach and consider the many diverse factors (e.g., cost, communication, employees, timing, etc...) involved in the strategic decision making process.

### Learning Outcomes

Case learning objectives include the following:

- Compare a manual guest check system and POS system in terms of return on investment (ROI) for independent restaurant operators.
- Discuss why manual guest check systems are still popular among independent restaurant owners in spite of the growing popularity of POS systems.
- Discuss the benefits of information systems in general and of a POS system for restaurants in particular.
- Evaluate the barriers to adoption of an information system from staff members, managers, and owners.
- Describe how a POS system and the data generated from it, can be used to increase sales and reduce costs.
- Analyze how POS data can be utilized to manage labor costs and improve employee productivity.

This case study can be used in a variety of ways. It is suitable for use in a hospitality information technology course, a business strategy

course, or a foodservice cost control course. In particular, it will be useful for instructors to show actual POS data files to demonstrate how POS data can be used to increase sales and improve operational efficiency. Further, instructors may wish to use this case when the topic of management control tools are discussed. Instructors may assign the case and the discussion questions listed below prior to class, and then use the questions during a class session to guide student analysis and discussion. There are four sets of discussion questions provided: (1) general questions related to POS systems; (2) questions related to Ray's Place Kent's decision regarding POS adoption; (3) questions related to Ray's Place Fairlawn's usage of its POS system; and (4) business strategy questions relating to technology adoption.

### Discussion Questions

#### *1) General questions (10min):*

**What are your own experiences while using a POS system in restaurants where you have worked? Please share positive and negative aspects.**

Students' responses will vary depending on the type of foodservice operations they have worked with, as well as their familiarity with using different types of POS systems. Instructors can use this question to invite students to share their work experiences. It may be interesting for instructors to start by asking students about their experience regarding a manual guest check system first. Next, students could be asked if they have experience using an iPad POS or other mobile POS systems. Beyond processing transactions, students can be asked about the various functions within the POS systems they have used. It would be beneficial to get responses about different POS system features including inventory management, labor analysis, marketing functions, and customer data gathering.

**What are some of the benefits and drawbacks of using a POS system as compared to a manual system?**

Ask students to list benefits and drawbacks of having a POS system as compared to a manual guest check system. Generally speaking, a POS system can enhance decision making, increase operational efficiency, improve guest service, and increase revenue. However, in the case study, managers at Fairlawn cited: (1) less communication; (2) less empowerment; and (3) less knowledge of the menu and pricing as some disadvantages of using a POS system. The instructor may ask students to come up with some examples of these issues, and ask them how they could be addressed. (Example: the issue of less knowledge of the menu and its prices can be easily resolved by providing more training for the servers.)

**Table 1**

**Identify the barriers**

Barriers	Ratings 1 = not a barrier 2 = a minor barrier 3 = a major barrier	Why is it a Barrier?
Cost	1	Cost is not a major issue in this case.
Employees	3	On average, managers at Kent are in their 60s and senior servers have worked at the establishment since their 20s. Staff training might be a major challenge.
Kitchen/Bar space	3	Kitchen and bar areas are already overcrowded with wares and equipment needed in the operation of the business.
NCR Registers	2	The antique NCR cash registers are a defining feature of Ray's Kent. Customers enjoy the classic charm! However, with register repair being an issue, it may be best for the owner to consider keeping one NCR for marketing purposes while implementing a POS system.

The following items are common benefits associated with having a POS system: (1) eliminate arithmetic errors; (2) improve guest check control; (3) increase of the average guest check amount; (4) allow faster reaction to trends; and (5) reduce labor costs (Collins, 1991). In addition, Fairlawn employees cited the following as benefits of having a POS system: (1) quicker calculation and print outs; (2) consistent formatting; (3) increased accountability; and (4) a shorter learning curve.

**2) Kent (20min):**

**What are some of the barriers that prevent the adoption of a POS system at Ray's Place Kent?**

It may be interesting for instructors to discuss why many restaurant operators are satisfied with using a manual guest check system despite the popularity of POS systems. To answer this particular question, the instructor could assign students into groups (3-5 students per group) and ask them to identify the barriers first, followed by an evaluation of the current system (a manual based system) using the factors identified above. By the end of the exercise, each team should have a table as shown above (Note that depending on the factors identified, teams' tables might be different from this example):

While discussing employees as a barrier, the instructor may introduce the TAM model (Technology Acceptance Model) as a theoretical framework which can help small business owners understand their employees' acceptance level and intention of using a POS system. The TAM model, originally proposed by Davis (1989), has been widely adopted by researchers in hospitality education (e.g., Kim et al., 2008; Kucukusta et al., 2015). To measure employees' acceptance level, small business owners should focus on two main variables - perceived usefulness and perceived ease of use. Perceived usefulness is defined as the degree to which a person believes that using a particular system would enhance his or her job performance, whereas perceived ease of

use is defined as the degree to which a person believes that using this system would be free of effort (Wang et al., 2011). These two variables are the fundamental determinants of system acceptance and use (Davis, 1989). A list of sample questions that can be used to measure perceived usefulness and perceived ease of use is provided here:

**Perceived usefulness**

1. Using this system improves my performance in my job.
2. Using this system in my job increases my productivity.
3. Using this system enhances my effectiveness in my job.
4. I find this system to be useful in my job.

**Perceived ease of use**

1. My interaction with this system is clear and understandable.
2. Interacting with this system does not require a lot of my mental effort.
3. I find this system to be easy to use.
4. I find it easy to get the system to do what I want it to do.

As an alternative to the technology acceptance model, the theoretical framework of diffusion of innovation (Rogers, 2003) can be applied to explore the POS decision at Ray's Place. Although the POS system may not be an innovative system in the restaurant industry, it may be considered as an innovation among non-adopters, since adoption of a POS system certainly changes the way a business operates and processes information. This framework has been widely used to understand factors influencing the adoption intention of new technologies. Rogers (2003) explained that the potential adopters' perceived characteristics of innovation is one of the important factors influencing the rate of adoption.

Five perceived characteristics include 1) relative advantage; 2) compatibility; 3) complexity; 4) observability; and 5) trialability. According to Rogers (2003), relative advantage is defined as the degree to which an innovation is perceived to be more advantageous than

its alternatives. The management team at Ray's Place Kent is weighing the pros and cons of adopting a P.O.S system. When making this decision they must evaluate whether or not a POS system is perceived as being better suited for and more efficient than the manual guest check system already in place at the establishment. More specifically, students can review the arguments for POS at Ray's Place Kent (management's arguments for & against POS adoption). These items are related to the relative advantage/disadvantage component. Compatibility refers to the degree to which the innovation fits with the potential adopters' existing values, previous experiences, and current needs. Instructors can ask students about how the experience using the POS system at Ray's Place Fairlawn may influence the management team's perceived compatibility of the POS system. Complexity (ease of use) is the degree to which the innovation is perceived as relatively difficult (easy) to understand and use. Observability is defined as the degree to which the results of the innovation are visible to others. Lastly, trialability is the degree to which the innovation may be experimented with on a limited basis. Based on these criteria, the P.O.S. system will be likely to be adopted and implemented quickly if potential adopters perceive this system as more advantageous, compatible, complex, observable, and triable compared to the manual guest check system. Otherwise, if these criteria are not met, the operators at Ray's Place Kent may perceive continuing with the manual guest check system as the preferred option.

**What do you think the management team should do toward adoption in Kent? Please justify your answer.**

This is an open-ended question and the student responses are expected to vary depending on their own experience using a POS system. This question helps students to think critically and analyze the reality of the situation at Kent. Once students finalize their decision, the instructor can ask follow-up questions such as "why did you make this decision?". For teams who decide they would recommend Ray's Kent to implement a POS system, the instructor can ask them to think about how to address the issues/barriers identified above. Suggested responses to Questions II and III (how Fairlawn can effectively utilize the POS as the management and control tools) can be applied to this particular question if students recommend Kent to adopt the POS system. On the other hand, some teams might decide to keep the current manual system. The instructor could then ask "what are the concerns with a manual system?".

**Could you convince the different generations of employees to adopt or more fully use a POS system? How?**

It is easy for students to embrace technology, but the bigger concern is convincing older staff members to adopt a new POS system. Some issues that students may discuss include resistance of the installation, disruption during the training process, and the system interfering with actual operations. This is a good time to discuss with

students how implementation of new processes and technologies require a 'group effort' with input from all of the stakeholders who will be affected by the adoption of the system.

### **3) Fairlawn (20min):**

**What are some of the current barriers to adoption by the Fairlawn Kitchen Staff? How are the adoption barriers different between the kitchen staff and management?**

The answer to this question could be based on the staff members themselves. The fact that the kitchen manager and chef came up through a non-automated system, could be part of the reason for using a manual approach for ordering and food cost calculations. There may be a lack of trust on the part of the kitchen staff for using the POS system for accounting purposes, as doing things manually may help staff to understand inflows and outflows that utilizing another system would not allow them to do.

**Why do you think Fairlawn uses liquor control, but not food control, when utilizing the POS system information?**

This could be tied to the earlier question related to POS adoption in the kitchen. A few considerations to discuss: 1) Bar staff tends to be more transient; 2) There are more transactions that take place in the bar; and 3) Loss of revenue through over pours, free drinks to friends, and theft. These types of occurrences may be easier to uncover/control by way of utilizing a POS system. Furthermore, with the many different types of liquors and beers offered, using a more automated system allows for better inventory control. The Instructor may wish to focus student thinking on management and control issues.

**After reading this case study, what are other ways to utilize the POS data by the Fairlawn managers and employees to improve the business through increased sales or reduced costs?**

According to Hudson Riehle, SVP of Research at the National Restaurant Association, "savvy restaurant operators leverage today's technology to turn POS and marketing data into actionable knowledge that can yield positive business results". In many foodservice operations, the POS system is rarely used beyond its basic cash register functions. At Ray's Place Fairlawn; the cash register function, alcohol costing, and beverage menu mix functions are the main functions being utilized with the POS system. Some important areas that are not being utilized at Ray's Fairlawn are the sales mix analysis and sales exception report functions. Managers at the Fairlawn location seem to miss an opportunity to evaluate how menu items are performing and affecting sales. According to the case study, Fairlawn's menu is fairly large, so it may be beneficial to perform a menu analysis. The sales mix analysis is a valuable analysis for restaurant operators, as it details how many items are sold during a specific time period, which managers can analyze by breaking down the information by: day of week, time of day, and by individual server.

Furthermore, restaurant managers can analyze the sales exception reports such as voided food tickets, discounted food, and offered refunds. Instructors can also ask whether or not the sales exception report can be useful at Ray's Place Fairlawn. To enhance revenues, managers at Ray's Place Fairlawn could choose one or two products to target with their upselling efforts during specific time periods. After training their employees about how to promote those items, managers at Ray's Place Fairlawn can track and reward their employees' upselling efforts by recognizing their achievements.

Also, Instructors can point to the issue of increasing labor expenses in the restaurant industry and discuss how a POS system can streamline management and staffing responsibilities, in order to save time and reduce labor expenses. The data from a POS system can potentially be used to schedule the right number of employees for each shift and monitor each server's efficiency (sales per hour; table turns per shift). (Note that the discussion above can also be applied to the Kent location. For example, instructors may wish to ask students to discuss how Kent location can use POS system for control purposes.)

While we did not obtain permission to include a live demo of POS functions such as sales analysis, inventory control, cost analysis, instructors can get permission from restaurant POS vendors to share sample POS outputs or even live demos. Here are a few examples that instructors can direct students for their attentions:

\* Toast POS knowledge base: Reports (examples)

<https://toastpos.zendesk.com/hc/en-us/categories/200182064-Reports>

\*Restaurant POS features by LightSpeed

<https://www.lightspeedhq.com/pos/restaurant/features/>

**Are there any operational limitations to sharing a team ID in the manner currently practiced?**

It is important for instructors to point out that employees at Ray's Fairlawn currently use one "team ID number" to access the POS system. While this approach has been successful in creating team morale, this limits monitoring each employee's productivity and performance. Given the size of the Fairlawn location, it may not be necessary to use individual IDs to monitor clock-in and clock-out, however there are other useful employee productivity reports that can be applied to the Fairlawn location. If the Fairlawn location switches from a team ID to an individual ID, managers can access a detailed summary for each server, listing average guest check, total items sold, and total sales generated. However, it is important for instructors to emphasize that no single measure should be used to evaluate employee productivity.

Instructors should seek to uncover other operational limitations to sharing the ID number across all servers. One of the largest concerns of the team ID concept relates to tip reporting for IRS purposes. The instructor may wish to discuss how payroll accounting practices

for tipped employees is handled. In this specific case, there is a lack of accuracy in recordkeeping; if a server were to complain that they were not achieving minimum wage based on wage and tips, it would be hard to audit the individual's tip allocation. Proponents of POS systems argue that keeping track of tip allocation is one of the benefits of the system. The instructor may wish to go into more detail of the benefits of a POS system (see earlier questions).

#### **4) Strategy (20min):**

**Would you say it is important for restaurant owners or managers to share POS data with their employees? Why or why not?**

At Ray's Place Fairlawn, restaurant financial performance has not been shared with all employees. Some restaurant operators may allow each server to review his or her own sales' data and compare it to total restaurant sales or other server's sales. On the other hand, some restaurant operators limit access to sales reports and other financial data to only the management team. Some restaurant operators may be hesitant to share their financial information because they believe that some of their employees may not understand what those numbers mean or it may discourage employees if their performance (sales generated) compares poorly to other employees. While there is not a "right or wrong answer", this question may be useful for starting a class dialogue about the pros and cons of sharing these types of information with employees.

Instructors may also use this question to introduce the concept of open book finance/management (Case, 1996; Weinzweig, 2010) in order to explore the pros and cons of sharing financial data with all employees. For example, Ari Weinzweig and Paul Saginaw, co-founders of Zingerman's (located in Ann Arbor, Michigan) have advocated for implementing an open-book finance methodology as a way to build commitment with employees by creating a greater sense of ownership among all employees. They argue that sharing the financial information (sales, margins, profits/losses, service scores, cash flows, etc.) of the operation can generate better business outcomes, since the staff will better understand their impact on the operation's financial performance.

**What does it mean "You can't manage from the back office"? Would your answer be the same at both Kent and Fairlawn?**

"If it ain't broke, don't fix it", what do you think of this strategy?

The entrepreneurial nature of the restaurant industry is a key point to address with this question. The instructor may wish to discuss how many individuals in the restaurant industry have worked their way up through the ranks, and if a process (like calculating food cost manually) has stood the test of time, it then becomes difficult to change. Furthermore, the instructor may wish to cover the ROI of installing a POS system, and how the incremental savings in time, money and data acquisition may not be worth the cost.

Is management an art (intuition-based) or science (data analytics)?

This is a debate about whether instinct is more important than data, or vice versa. We cannot deny the importance of managers' intuition and experiences when it comes to decision-making. Yet making decisions solely based on instinct can be dangerous. Data analytics has been proven to be an effective business tool, and owners of independent restaurants should be looking for quality information when supporting decisions. Therefore, the best response to this question is that it is both an art and a science.

### **In Summary: What Happened?**

The result of the meeting was the determination that the management team will continue operating with the manual guest check system at Ray's Place Kent for the time being, and revisit the POS debate at the next meeting. At this moment, Mr. Thomas and his management team feel that there are more important strategic issues that need to be dealt with in the short term, and that implementing a POS system in Kent is more of a long term concern. Since the building was renovated recently (2006-2008), management has no desire to spend additional money in the short term on a large capital investment of this kind. However, as some of the senior management is coming closer to retirement age, and younger managers are beginning to be developed within the company at the Kent and Fairlawn locations, it seems that the future of Ray's Place is beginning to transfer towards a younger generation. These factors, combined with the increased difficulty of maintaining the NCR cash registers and the proven efficiencies that Ray's Place Fairlawn has seen from the initial use of its POS system, make it very likely that a POS system will be implemented at Ray's Place Kent in the long term.

The meeting also resulted in the determination that the POS system in Fairlawn has been very successful during its first 2.5 years of operation, and that a new maintenance contract will be signed after the expiration of the current 3-year agreement. The management team also feels that using the POS system at Fairlawn has been beneficial in educating general and line level managers at Ray's Place in how to successfully operate a POS system. Although they still have room for learning and improvement in this regard, this trial and error at the Fairlawn location will likely benefit the adoption of a POS system at Ray's Place Kent in the future. Another major takeaway from the meeting was that the price of a technology solution is not necessarily a major factor in technology adoption decisions. People are also an important factor in most technology adoption decisions as well! In short, more technology is not always the answer. As Charlie Thomas was heard saying at the end of the meeting, "We need to prioritize putting the customer first, and doing our jobs properly", in conclusion he stated "It's a Ray's Thing".

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## Appendices (Supplemental)

The following photos are provided as supplemental materials.

1. Old Franklin Hotel circa 1900



2. Ray's Place circa 1937



3. Ray's Place circa 1980



4. Ray's Place Kent circa 1993



5. The "MOFO" Burger



6. Chef Michael Symon



## Appendices (Supplemental), *continued*

7. Patio Area (Fairlawn)



8. Dining Room (Fairlawn)



9. Back of Kitchen (Fairlawn)



10. Front of Kitchen (Kent)



11. Back of Kitchen (Kent)



12. Main Dining Room (Kent)



13. Downstairs Bar Area (Kent)



14. Downstairs Server Window (Kent)



## Appendices (Supplemental), *continued*

15. Upstairs Bar and Dining (Kent)



16. Upstairs Coolers (Kent)



17. Upstairs Cash Register (Kent)



18. Upstairs Back Bar (Kent)



19. Manual Guest Check Boxes in Storage

