## WORCESTER POLYTECHNIC INSTITUTE

# **Tudor Kitchen Evaluation**

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## **Tudor Kitchen Evaluation**

An Interactive Qualifying Project submitted to the Faculty of WORCESTER POLYTECHNIC INSTITUTE in partial fulfilment of the requirements for the degree of Bachelor of Science

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Report Submitted to:

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#### Abstract

Historic Royal Palaces recently put a lot of time and money into improving interpretation methods at Hampton Court Palace, and plan to continue these efforts for the following four years. Using surveys, guest tracking, and staff interviews, our study evaluated guest opinions of the recent renovations, as well as inquiring into heritage interpretation in general. The research team traveled to competition heritage sites to evaluate how they draw in visitors, as well as interviewed HCP staff on interpretation methods and the Core Story Project. A combination of mobile technology, interviews, and pen and paper tracking was employed in order to evaluate the guest experience at Hampton Court. Upon completion of the research, guests were found to have overwhelmingly positive views towards the re-presentations of the Tudor Kitchens, particularly towards certain interpretation methods. Guests had the most positive responses to the actors and live interpreters, while certain age groups in particular reacted positively to technology.

Additionally, tracks were very telling of how popular certain stations were, based on dwell time.

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#### **Executive Summary**

As a country with a rich history dating back thousands of years, the United Kingdom has one of the largest and most popular heritage sectors in the world. One of the leading organizations in this popular sector is the sponsor of this project, Historic Royal Palaces (HRP).

One of the palaces in HRP's care, Hampton Court Palace (HCP), recently re-presented their Tudor Kitchens, implementing more boundary-pushing methods such as modern technology and live interpretation. This is part of HCP's Core Story Project, a multi-year plan to "create a world-class, coherent visitor experience at Hampton Court Palace ("Core Story" 2017). The goal of this research project was to evaluate the re-presentation of the Tudor Kitchens and identify the implications for the Core Story Project and the planned re-presentation of the Tudor State Apartments at Hampton Court Palace.

#### Literature Review

Hampton Court Palace is just one small part of the UK's enormous heritage sector. This sector attracts an abundance of visitors on a yearly basis, and plays a huge role in the United Kingdom's tourist economy. Nearly 4.5 million people visit HRP's six properties on an annual basis ("2016/17 Annual Review" 2017), while 40 million people visit the UK heritages sites in total each year (Press Association 2016). The mission of the heritage industry is to preserve the world's history, while conveying relevant information in an interesting and educational manner. Thus, in order to stay relevant, studying the behaviors, wants, and needs of industry guests is imperative.

Heritage sector sites, in an effort to preserve history, used plain and didactic methods; these included but were not limited to static signage, plaques, and maps. However, growing competition in the sector and changing guest expectations has caused reevaluation in the heritage sector, and a shift in focus towards innovative interpretation. Common practices in museum (and now heritage sector) evaluation include but are not limited to different forms of guest surveying and guest tracking (Bitgood & Shettel 1996).

#### Methodology

The project implemented evaluative methods in order to fully understand the guest experience, in an effort to achieve our goal. There were three main objectives in reaching said goal:

1. Identify best practices and standards for interpretation in the heritage sector.

- 2. Identify the goals and intended outcomes for the Core Story Project through on-site staff interviews.
- 3. Assess visitor responses to the re-presentation and interpretation of the Tudor Kitchens.

The first objective led us to go to heritage sites that are similar to Hampton Court Palace, in order to study their methods of interpretations; the sites were Ham House, Fulham Palace, and Windsor Castle. Additionally, we visited the National Gallery, in order to experience a different kind of museum. We observed primarily traditional interpretation methods at these locations, including costumeless docents instead of actors and signs instead of technology.

For the second objective, we first recorded what interpretation methods are being used at HCP, so we could compare them to what we found at other heritage sites. Additionally, in order to understand the hopes and expectations surrounding the Core Story Project, we conducted semi-structured interviews with HCP staff members. We were in extensive contact with two liaisons from Historic Royal Palaces: Catherine Buffrey, who is Head of Arts and Cultural Programming, and Aaron Manning, who is Creative Programming and Interpretation Manager.. We also interviewed Liam Stanley, an Operations Manager, and Richard Fitch, Historic Royal Palace's Kitchen Interpretation Coordinator.

The third objective included visitor tracking, exit surveys, and data analysis. We used the "pen-and-paper" method of tracking; the team had copies of the kitchen area blueprint, on which we traced the selected guest's path and recorded dwell times. Additionally, upon a guest's exit, a team member approached them with a mobile phone and asked them to take the exit survey upon the device. Questions were broken down into three sections: demographics, prior knowledge, and current experience. Following completion of data collection, Microsoft Excel and Qualtrics were employed for survey number analysis and dwell time analysis of tracks, respectively.

Findings & Analysis

#### **Live Interpretation**

We collected 160 tracks and 160 on-site surveys. Additionally, due to our staggered approach of collecting data in the morning, lunchtime, and late afternoon hours, we had sufficient sample representation from each day of the week and different times of day.

We found that guests enjoyed actors and live interpreters the most out of any method. For instance, 72.9% of survey-takers ranked the actors and live interpreters combined "effective" at conveying information, whereas the percentage of that answer for the other four categories of interpretation methods combined was only 50.9% (Figure 4.1).

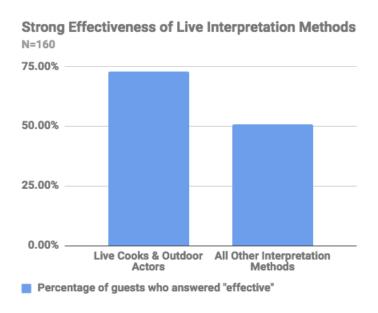


Figure 4.1 Percentage of surveyed HCP guests who ranked live cookery team and outdoor actors combined "effective", versus the percentage of guests who ranked all other methods combined "effective" (Campolieta, Galvan, Johnson, & Wu 2018)

Once we broke down specific responses to how interesting people found cooks vs. actors, we did find some discrepancies in guest opinion between the two interpretation methods. 61.8% of surveyed guests ranked the live cookery team "extremely interesting", while only 50% of guests gave the outdoor actors this rank. Additionally, 17.4% of surveyed guests ranked the outdoor actors only "moderately interesting", while only 11.8% of responses for the live cookery team were this (Figure 4.3). This is likely because the live cookery team, though they are dressed in period costume, are not actors and speak to guests in approachable modern English.

#### **Technology**

Though live interpretation had the vast majority of reviews in one answer, technology did not; technological interpretation garnered the most difference in reviews out of any method. Though 29.5% of surveyed guests answered that they found technology extremely interesting, a close 26.9% of guests were only moderately interested by the technology. This was discovered to be an age discrepancy; all guests who ranked technology "ineffective" came from those in the 55 and older category, while over half of guests younger than 55 ranked technology effective, the highest rank possible (Figure 4.6).

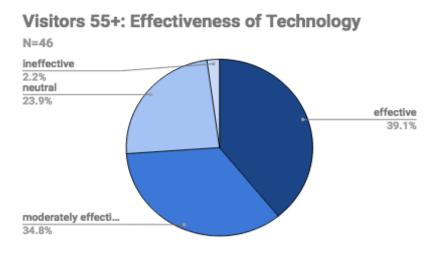


Figure 4.6: Effectiveness of technology in guests 55+ (Campolieta, Galvan, Johnson, & Wu 2018)

Tracking Patterns

Tracking data unearthed a lot of similar trends among guests, such as dwell times. Visitors who entered from the back and front entrances spent approximately 9 minutes in the kitchens in total. Average time for visitors who used the side entrance was about 12 minutes. Audio guides also had an effect on the distribution of dwell times of guests. Visitors that entered from the side, 83.3% of whom had an audio guide with them, spent about 15% of their total time in the boiling house while visitors that used the other two entrances spent only 3% to 4% of their time in the same room. However, we did not find a clear distinction in overall dwell time between visitors who used audio guides in comparison to those who did not. There was only a 1% difference between the two in terms of total time spent in the kitchen. The most popular place for visitors is undoubtedly the fourth room (the final room in the great kitchens) which takes up around 40% of the total time, especially station 13 -- the fireplace that single-handedly takes up 15% of the total time. Additionally, based on our exit surveys, this is the place where visitors most feel "they stepped back in time".

#### Recommendations and Conclusion

The largest trend in our data was the extreme popularity of actors and live interpreters, amongst all different groups of guests. Therefore, we suggest HRP take this into account when making changes to methods at the Tudor apartments, and even in further improving the kitchens. Though the palace begins admitting visitors at 10am, the live cookery staff does not begin work until 11am. We suggest that the live cookery staff begin working at 10am, right when doors open, since they have such a big impact on the positivity of visitors about their time at HCP. Additionally, from our analysis of interpretation methods, we suggest that there be an actor with guests at all times on actor tours. The lack of guidance in the actor tour seemed to assume some semblance of guest familiarity with the palace, which many visitors do not have.

As for the Tudor apartments, we recommend that HCP have a mix of the in-character actors and the more approachable live interpreters. Though some guests have more open personalities suited for interacting with full-on actors, easy-to-talk-to costumed interpreters ensure that there is somebody that nearly every guest is comfortable speaking with. These people (the live interpreters in particular) should be present for the entire time Hampton Court is open to the public (10am-6pm), since they have proven to be such a crucial part of the HCP experience. Additionally, we suggest that HCP be strategic about where they place their actors and live interpreters, since our tracking data shows that people are often drawn to them and will walk in their direction.

A common comment that we got from the visitor survey were that people often "felt hungry" throughout the Kitchens. Since the cooks are already trained, we would recommend HRP to have the actors give out the made food to others through samples to bring the experience more to life. Additionally, throughout the kitchens there is a distinct lack of signage, to not take away from the authenticity. This, however, can lead to some confusion about what is allowed. We would like to recommend HCP to put up one or two signs before going into the kitchen that remind visitors that all objects are touchable and live interpreters are there for them to talk to.

Overall, the re-presentations of the Tudor Kitchens have proven to be a success for Historic Royal Palaces. The artful implementation of technology, coupled with engaging live interpreters and actors, captivated guests and truly brought their experience to life. We hope that our visitor evaluation only goes to improve guest experience at Hampton Court Palace for years to come.

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2.1.2 Tudor Kitchens	Kit Campolieta, Chang Wu	Alex Galvan
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4.3.3 Effect of Interpretation Methods on Guest Tracks	Kit Campolieta, Alex Galvan	Kit Campolieta, Rebecca Johnson
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# **Chapter 1: Introduction**

The concept of heritage is defined as a society or social group's legacy, the culture and the stories of its history that are passed down and preserved (Hofstede 1997). The purpose of the heritage industry is to manage and maintain historical sites, educate the public, and promote tourism. Through many interpretive methods, ranging from traditional to technologically advanced, the industry aims to convey cultural and historical information in a guest-friendly and engaging way.

As a country with a rich history dating back thousands of years, the United Kingdom has one of the largest and most popular heritage sectors in the world. Though historical sites include gardens, cathedrals, and landscapes, the UK's lavish palaces and stately homes are a major part of the heritage sector. For example, one of the queen's residences, Windsor Castle, drew over 1.35 million visitors in 2016 alone (Royal Collection Trust 2017). The palaces and stately homes were once the opulent residences of past monarchs and the wealthy nobility, and are now open for public viewing and enjoyment. With their priceless artifacts and deep cultural and historical ties, the buildings and associated grounds are a crucial part of the heritage industry. Most palaces and stately homes are under the diligent maintenance of either the British government or heritage not-for-profit organizations, such as Historic Royal Palaces.

Historic Royal Palaces is tasked with managing several palaces in London, including Hampton Court Palace (Appendix A). Though they are a charity organization, their aim is still to draw as many guests as possible to the various palaces under their care. In fact, visitation to HCP has grown from 524,000 in the 2012/13 season to 934,000 in the 2016/17 season ("2016/17 Annual Review" 2017). In general, Historic Royal Palaces strives to attract visitors in an increasingly competitive sector by enhancing its exhibits, programs, and activities. Most recently, the organization refurbished the Tudor Kitchens and Base Court Area at HCP as part of a four-year plan to better present the Core Story. Though the project is underway, HRP would like to better understand what visitors, as well as heritage consumers in general, are looking for in their visits. Visitor evaluation studies play a key role in understanding this.

In order to help Hampton Court Palace remain competitive and cater to the wants of their audience, our project team conducted visitor studies of guests experiencing the re-presentation of the Tudor Kitchens in the palace. Our overall goal was to collect information regarding thoughts

and reactions to HCP interpretation methods from varying fronts, including current staff members, as well as visitors who have just experienced said methods.

We used a mixed methods approach that entails staff interviews, visitor surveys, and visitor tracking and observation in the Tudor Kitchens. On-site, we administered surveys as well as tracked guests to see their reactions to the new interpretation methods that HCP has implemented. We directly interviewed HCP staff members to better understand the site as a whole, and to get a more in-depth view of how the Tudor Kitchens differed before and after the recent renovation. Also, through visits to other heritage sites using similar approaches, we garnered information to broaden our horizons on the industry as a whole. Using and analyzing data collected from both before and after arrival in London, this work should aid HCP in staying competitive in the active and changing museum sector through use and analysis of guest opinions.

Through this analysis, surveys in particular revealed a lot of positivity coming from both guests and staff. Many other similar heritage sites used only traditional methods (i.e. plaques for reading, etc.), and lacked the immersive experience of HCP's actors, food, and technology; guests' enjoyment of this was strongly reflected in the surveys and tracks. Using these comments, we provided feedback regarding the best practices for HCP to take on in the kitchens, as well as in future re-presentations.

# **Chapter 2: Background**

Before deciding on what methods to use in order to best execute our project, we made sure to educate ourselves on our site and the history of what we would be doing (museum evaluation and visitor studies). Hampton Court, as a hundreds-year-old palace and not a building constructed specifically for exhibits, makes for a special example when it comes to this sort of evaluation. Thus, we thoroughly informed ourselves on its rich history, and subsequently studied different forms and methods of guest and museum evaluation.

#### **2.1 Hampton Court Palace**

The 500-year-old Hampton Court Palace has served as the luxurious home for a succession of royals, from Henry VIII to the Georgian Kings and Princes who resided there toward the end of its occupancy. Cardinal Thomas Wolsey built and enjoyed the original palace during the height of his power from 1514 to 1530. A favorite of King Henry VIII, Cardinal Wolsey drew the young king out to the palace; Woolsey wisely gave the palace to Henry VIII who resided there for the remainder of his reign (Henry VIII 2018). From the very beginning, the palace not only housed the king's court, but also served as a grandiose destination for significant events with high profile guests. Through the years, the royal occupants modified and expanded the original Tudor palace to create Hampton Court Palace as it is today. Royals occupied the residence until about 1737, when lesser aristocrats moved in, although the palace was still owned by "Right of Crown." In 1838, Queen Victoria opened the palace to the public; the palace has since attracted millions of visitors for its history and grandeur. Beginning in 1851, the U.K. government took over the management of Hampton Court Palace and four other palaces, under the Government Lands Act of 1851. In 1989, Historic Royal Palaces (HRP) assumed management of the five palaces: Tower of London, Kew Palace, Kensington Palace, Banqueting Hall, and Hampton Court Palace (The Story of Hampton Court Palace 2018); they later took on care of a sixth. See Appendix A for more details on HRP's holdings and history.

#### 2.1.1 Overview of the Core Story Project

For the past several years, Historic Royal Palaces has developed and undertaken a significant re-presentation and renovation of Hampton Court Palace. Called the Core Story Project, the project is comprised of two phases. Phase 1 is a re-presentation of the Tudor Kitchens, Service Areas and Base Court, which opened to the public on May 5, 2018. Phase 2 is

a renovation of the Tudor State Apartments, set to launch in either late 2018 or 2019. The goal of the present WPI research project is to evaluate the re-presentation of the Tudor Kitchens and recommend how HRP might improve its approaches to interpretation for the Tudor Kitchens and the Tudor State Apartments.

Similar to other exhibits under the supervision of Historic Royal Palaces, or exhibits at other museums, the goal of the Core Story Project is to attract as many visitors as possible and provide them with a superior visitor experience. Overall, the organization is trying to create an environment where visitors get the chance to learn more about the Tudor Period, whilst enjoying themselves at the same time. By doing so, Historic Royal Palaces succeeds in remaining a strong competitor in the heritage industry and a firm advocate in promoting Tudor history. As one of the most attractive exhibits at Hampton Court Palace, the Tudor Kitchens convey the essence of the palace; by re-presenting the Tudor Kitchens and the Tudor State Apartments the Core Story Project aims to keep Hampton Court Palace "the greatest, most authentic Tudor experience in the world" (Who We Are 2018).

#### 2.1.2 Tudor Kitchens

Hampton Court Palace epitomizes the lavish and grandiose life of Henry VIII, whose reputation for extravagant feasting is unparalleled by any other British monarch. The king's kitchens were the largest of Tudor England and were designed to cater to at least 400 people twice daily. The capacity of this operation had never been seen before, and is large even by today's standards, especially given the absence of modern kitchen technology. The Tudor Kitchens of Hampton Court Palace are a set of vast cooking rooms, located at the north end of the palace's first floor (Figure 2.1). During the reign of Henry VIII, the king would host massive feasts, feeding anywhere from 400 to 1500 people. It was the responsibility of servants in these Tudor Kitchens to provide food for the king and all of his guests.

During the Tudor Period, a Sergeant and a team of yeoman and grooms had the responsibility of supervising a number of departments that made up each of the kitchens. Three Master Cooks were in charge of roasting meat for the King, the Queen, and the rest of the court; in fact, meat preparation had a kitchen all to itself. These staff members were those who determined which of the 1,200-odd members of Henry's court qualified for meals as part of their pay, based on an intricate set of rules enforced by King Henry VIII. In the mid-sixteenth century, the annual supply of meat for the entire Tudor court was at 1,240 oxen, 8,200 sheep, 2,330 deer,

760 calves, 1,870 pigs and 53 wild boars, along with 600,000 gallons of beer (Henry VIII's Kitchens 2018). Though the work was difficult, kitchen workers, to compensate for the hot working environment, were entitled to unlimited supply of beer.

The Tudor Kitchens were not particularly clean or organized even in their day. A Spanish visitor to the Tudor court in 1554 said the kitchens were "veritable hells, such is the stir and bustle in them... there is plenty of beer here, and they drink more than would fill the Valladolid river" (Brears 1999). Henry VIII's kitchens continued to be used for another two hundred years after the king's reign, feeding the tables of Tudor, Stuart, and Georgian monarchy and their many courtiers (Henry VIII's Kitchens 2018). In an effort to bring the Tudor kitchens to life, Historic Royal Palace's team of history cooks strive to offer authentic demonstrations of Tudor roasting and experiment with Tudor recipes, ingredients, and methods; visitors can experience the sights, sounds, and smells of life in King Henry VIII's kitchens.



Image: HCP (2014) photo of Hampton Court Palace Great Kitchen before re-presentation



Image: HCP (2014) photo of Hampton Court Palace cooking area before kitchen re-presentaion (provided by HCP)

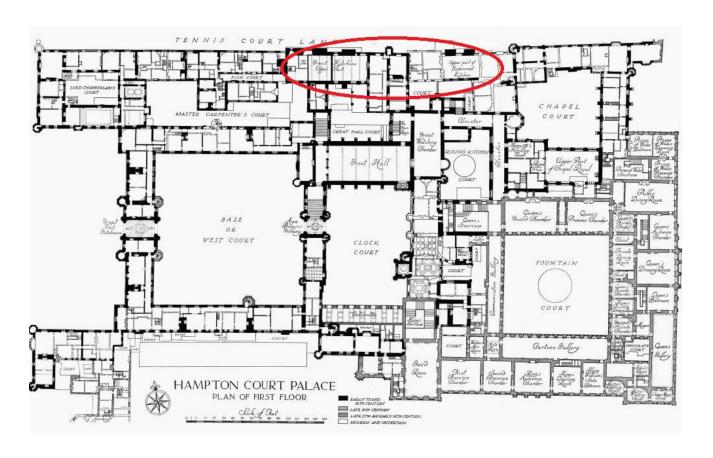


Figure 2.1: HCP (2018) Map of Location of Tudor Kitchens on the First Floor of Hampton Court Palace

#### 2.2 The Heritage Sector

Hampton Court Palace is just one small part of the UK's enormous heritage sector. This sector attracts an abundance of visitors on a yearly basis, and plays a huge role in the United Kingdom's tourist economy. Nearly 4.5 million people visit HRP's six properties on an annual basis ("2016/17 Annual Review" 2017), while 40 million people visit the UK heritages sites in total each year (Press Association 2016). Seventy-three percent of all UK adults visited a heritage site at least once in 2015-2016, while 48% of international vacationers or visitors in the UK in 2011 visited a historic home or castle. Additionally, the heritage industry accounted for £11.9 billion gross value added (GVA) to the UK economy in 2017; that same year, the heritage industry accounted for the employment of 278,000 workers (Hayes 2017). Additionally, visitation is only growing; Historic Royal Palaces sites combined saw a growth in one million visitors from the 2012 to 2016 ("2016/17 Annual Review" 2017). To maintain these visitation numbers, heritage sites strive to modify their offerings, in order to remain vibrant and attractive to visitors.

The mission of the heritage industry is to preserve the world's history, while conveying relevant information in an interesting and educational manner. Through many different methods, ranging from plaques on a wall to digital interactivity through modern technology, the heritage sector aims to encourage people of all ages to learn. Evaluation and updating these methods are of the utmost importance to sites that wish to stay relevant and popular in today's society.

Visitor evaluation studies have been used in the museum sector for many years to improve exhibits, but the heritage sector has adopted similar approaches only relatively recently. Museum evaluation studies date back to the early 20<sup>th</sup> century. In the 1920s, two psychologists compiled a series of studies regarding museum visitors that dramatically changed the way curators viewed their galleries and presented artifacts to the public. Edward Robinson and Arthur Melton collected visitor observation data to explain how various factors such as gallery layout and room design can affect guest satisfaction. Moreover, museum experts Harris Shettel and Chan Scriven furthered expert opinion regarding evaluations of exhibits in the late 1960s and early 1970s. The two conducted similar studies to Robinson and Melton; however, they focused more on the behavior of those attending the museum. However, both pairs of researchers successfully proved the importance of evaluation and guest opinion, and also discovered what to look for in an exhibit (Bitgood & Shettel 1996). Visitor evaluation studies have proliferated in

recent years with the growth of competition in the heritage and museum sectors, and sophisticated tools have been developed to help enhance the visitor experience.

# **2.2.1 Traditional Interpretation Methods**

The heritage sector has evolved away from traditional didactic methods of interpretation that promote one-way transmission of information from experts (i.e. curators and lecturers) to visitors. Museum professionals have come to value more visitor-centric methods of interpretation.

For many years, heritage sites have used traditional methods of displaying information, which may appear as "old-fashioned" to younger visitors. In the heritage industry's past, and still at many sites today, interpreters relied heavily on static text, such as signs and plaques with large blocks of writing and few images. For instance, the Civil War battlefield at Gettysburg, Pennsylvania, uses this method, lining its large, open fields with big signs full of words and a few old images. In castles and historic houses, guests would come in, stare at the artifacts, read about them on the wall, and then leave. However, two main factors have caused change: modern technological advancements and increasingly intense competition (Wali 1999).

Modern technology means that many guests, particularly those who are younger, expect to be entertained and engaged; they want to interact with an exhibit, not just look at it and read about it. Additionally, the emergence of new heritage sites and the growing competition in the industry has forced many sites and museums to revamp their approaches to interpretation. Therefore, though traditional interpretation remains dominant throughout the heritage sector, heritage sites are increasingly adopting more innovative approaches. Visitor studies are driving many of the changes. Visitor studies show that visitors have many different interests, levels of knowledge and education, learning styles, and so on (Falk & Dierking 1992). Based on these findings and changes in education and learning theories, museums and heritage sites are redesigning their exhibits, programs, and interpretive materials to be more attractive and engaging. They have found that live interpretations and digital technologies can be especially effective, although they also have limitations.

#### 2.2.2 Modern Technology

In recent years, the heritage sector has made use of modern technology to engage guests in ways that are overall more attractive, innovative and appealing. Most notably, the heritage industry uses computer imaging, video and audio, as well as portable technology to enhance the

visitor experience. For example, Creswell Crags, a Paleolithic limestone gorge in central England, uses 3-D computer generated images of the gorge to give visitors a better understanding of what the area would have looked like almost 12,000 years in the past (Dodge, Bouwman, Pettitt, & Brown 2012). Additionally, Historic Royal Palaces recently implemented a new tour program at Whitehall Palace, under the name 'The Lost Palace'. On the tour, guests make use of original audio-visual devices that inform them on the history of the palace. Not only do the devices act as an audio guide, they create an interactive experience (Lost Palace of Whitehall 2017). This prompts guests to use the device to participate in invisible experiences that get their imagination flowing, as well as pique the interest of the thousands of visitors who flock to the site each year. Recently, using phones to enhance guest experience has been a popular new method in the heritage industry. Much like Whitehall Palace, the Bosworth Battlefield Heritage Centre is making use of an "interactive trail" to engage guests. This interactive audio route implements the use of QR codes, in order to encourage guests walking the 2.2km trail to use their phones to seek out more information about the field (Bosworth Battlefield 2017). Additionally, technology increases accessibility of information and increasing guest intake and understanding. In 2015, the Kendal Museum in Cumbria "digitised its natural history collection" through a new website, allowing access of information to anyone with a computer (Murphy 2015).

Modern technology is integrated into so many aspects of life that visitors to heritage sites often expect interactivity; this is what makes modern technology one of the most intriguing new interpretation methods to the heritage sector. In fact, many museums see an increase in popularity and attendance when using updated technological displays (McClafferty & Rennie 1995). The incorporation of modern technology in exhibits is particularly attractive to school groups, summer camps, and other groups of children (McClafferty & Rennie 1995). Interactive technological displays allow visitors to engage themselves in a youth-friendly way, while also gaining the same information that could simply be read from a plaque on the wall (McClafferty & Rennie 1995). Additionally, software within technology can be more easily and swiftly updated than a fixed display and regularly changing the interpretive content increases the likelihood of return visits (McClafferty & Rennie 1995).

Through their extensive studies on gallery engagement, museum experts John Falk and Lynn Dierking discovered that "visitors construct their own unique meaning for the visit

experience according to personal background and interaction with the ... physical environment" (Falk & Dierking 1992). Falk and Dierking found that youths who grew up with technology will bring that personal background to a museum and expect a hands-on, interactive experience. Thus, it is in the best interest of curators to understand these expectations, particularly of their young guests (Falk & Dierking 1992). Additionally, video images can play a vital role in presenting aspects of history, science, and art in compelling ways. Contemporary videos provide vivid descriptions of social and political environments, while being visually appealing enough to keep visitor attention. For instance, the London Science Museum has a 12-minute-long video about British astronaut Tim Peake's first journey into space; the video even includes Virtual Reality, and has become popular with young visitors (Evans 2017).

Evaluators should ask themselves, if their museum lacks videos and movies, if creating and implementing them is feasible. It makes a considerable difference in guest interest and satisfaction (Heier, Merkt, Schwan, & Weigand 2011).

#### 2.2.3 Live Interpretation and Performance

Live interpreters can make a visitor experience at a heritage site educational and worth remembering, since they can bring a time long past to life. Jenny Kidd, who has done extensive research on live interpretation, explains the roles of interpreters, which range from actors who do not interact with guests to people wearing period costume who explain historical concepts to visitors, bring "authenticity" to the sector. According to Kidd (2011), each guest comes in with their own "perceptions of authenticity", meaning that they believe that a heritage site displaying artifacts and such can only have so much accuracy. However, actors and other live interpreters increase believability, as well as the attention span and interest of guests (Kidd 2011).

One of the most effective methods in engaging guests and improving the heritage experience is use of these live actors and performers. When heritage sites use actors, guests will stay longer at the exhibit where the reenactment is happening, and will pay attention longer than when they are simply observing artifacts or reading text panels (Williams 2013). Also, live interpreters enhance the appreciation and the critical understanding of key concepts the museum portrays. Overall, interactions with actors increase likelihood of information retention and interest. Guests who had experiences with live interpreters were also found to be more likely to recommend the site to family and friends (Jackson & Kidd 2008).

A previous study at the London Transport Museum found that the presence of character actors dramatically increased dwell times at exhibits (Ciesynski, McDonnell, Mordaski, & Rotier 2018). While the average time a guest spent in an exhibit was thirty seconds without actors, it was approximately four minutes with actors, a difference of 800 percent (Figures 2.2 and 2.3). Guests also reported a higher level of visit satisfaction when live interpretation was involved (Ciesynski, McDonnell, Mordaski, & Rotier 2018).

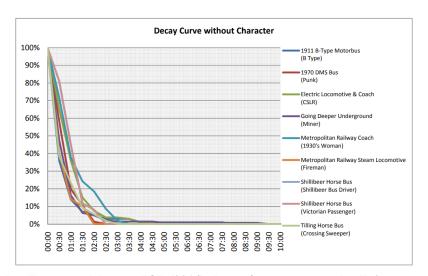


Figure 2.2: London Transport Museum IQP (2014) chart of average guest dwell time per exhibit without character actors

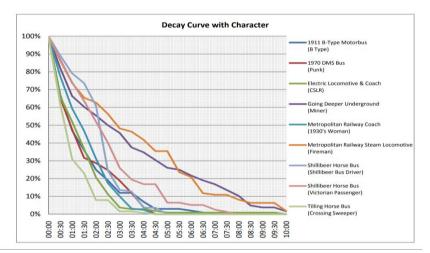


Figure 2.3: London Transport Museum IQP (2014) chart of average guest dwell time per exhibit with character actors at the London Transport Museum

In 2008, an independent museum consultant, Verity Walker, conducted an experiment showing the impact of actors on school-aged guests. Walker's aim was to find a more effective way of communication with school children, and she did so by taking them to a museum

experience on the life of Anne Boleyn. She gathered a single class of Year 3 children (i.e., ages 7-8) with multicultural and multilingual backgrounds and split them into two teams: one team meet with an actor portraying Anne Boleyn's 'cousin' and the other team went on a guided tour with a curator. The results were clear; the schoolchildren who went with Anne Boleyn's 'cousin' had a more compelling experience, resulting in more creative responses and clearer recollections of the trip (Jackson & Kidd 2008).

When evaluating live interpretation at a heritage site, it is vital to control what happens at each step (beginning, during, and after) of a performance, as well as how the visitors are drawn into it. It is important to understand how the event is "framed" (publicity, physical location, relationship to adjacent galleries or architectural spaces) and how the visitor is introduced to the topic. During the performance, one should observe how the actors draw in the audience, and how well they interact with these visitors. Finally, at the end, it is always important to answer guest questions, and allow particularly curious guests to have further interaction with the actors. (Jackson & Kidd 2008).

#### 2.3 Key Lessons for Conducting Visitor Evaluations

In museum and heritage site evaluations, key points emerge as those most important in gauging a museum's effectiveness in learning, as well as general enjoyment factor for the guest. According Bitgood and Shettel (1996), visitor studies encompass five aspects of museum operations: Audience Research and Development, Exhibit Design and Development, General Facility Design, Program Design and Development, and Visitor Services (Bitgood & Shettel 1996). Bitgood and Shettel's categories cover a wide range, since visitor studies are used to assess five operational aspects of museums. Museums should be evaluated on all aspects from aesthetic pleasure, to technological advancement, to general subjective opinion from visitors (Bitgood & Shettel 1996).

#### 2.3.1 Guest Opinions

The most direct way for an evaluator to understand what can be improved in the museum is to ask guests what they want. In order to discover what visitors are truly looking for, the most common and effective method is use of anonymous surveys. Due to the lack of name attachment, guests tend to be more honest in a survey than in a face-to-face interview. Also, surveys and questionnaires are easier to frame in a neutral tone, whereas spoken questions to an interviewee

can be laced with implicit biases (Lang, Reeve, & Woollard 2009). Through modern technology, surveys can now be translated into thousands of different languages, which allows the museum to collect a more diverse set of opinions. In these surveys, qualitative questions (i.e. "What did you like about the exhibit?" or "What was your favorite artifact in Room B?") are helpful for garnering generic and subjective knowledge regarding visitor opinion. That being said, quantitative data (i.e. "Approximately how many minutes did you spend in Gallery A?" or "How many different exhibits did you visit today?") is helpful for doing statistical analyses and number crunching regarding specific aspects of a museum (Diamond 1999).

In the heritage industry, surveys have more focus on how the content is presented than the contact itself. Since you cannot alter history, presentation of history is of the utmost importance. Therefore, it is in the interest of heritage sites to garner qualitative information about guest preferences in interpretation (details in section 3.3).

#### 2.3.2 Guest Tracking

Similar to consideration of flow, museum evaluators should pay close attention to the specific paths that guests take. This allows curators to understand which spots within individual galleries garner the most attention, and how they can better position items to maximize the aforementioned flow of visitors. Due to recent computer technology, visualization of guests' paths can be achieved in an easily-interpreted way (Figure 2.4).

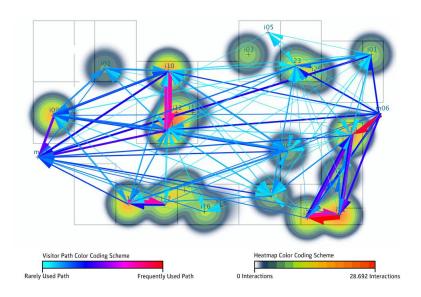


Figure 2.4: A computer program visualization of visitor flow in an Austrian museum gallery (Lang, Reeve, & Woollard 2009)

Previous museum studies - including a previous British Museum IQP (Savoy, Venkatesh, Walker., & Wolfang 2014) - have used the "Pen and Paper Method" to track where visitors walk. In this, observers select a random, predetermined-number visitor to track, in order to avoid implicit biases. Once that visitor enters the gallery, the observer notates the guest's path on a paper as they make their way through the exhibit, marking down other factors such as dwell time, or how long the guest spends at a single item. Once this data is recorded, it can be compiled into Microsoft Excel and Qualtrics, in order to achieve a comprehensible and visually-appealing analyzation of paths. Tracking randomly-selected guests allows for museum evaluators to observe average paths of their guests, which reveals which areas are most frequented. Also, by collecting additional information like dwell time, curators can find similarities between popular items, and therefore analyze what makes an aspect of a gallery engaging (Savoy, Venkatesh, Walker, & Wolfang 2014).

# **Chapter 3: Methodology**

The goal of our project was to evaluate the re-presentation of the Tudor Kitchens and identify the implications for the Core Story Project and the planned re-presentation of the Tudor State Apartments at Hampton Court Palace. We identified three project objectives:

1. Identify best practices and standards for interpretation in the heritage sector.

Appendix B shows a schedule for the completion of the various tasks.

- 2. Identify the goals and intended outcomes for the Core Story Project through on-site staff interviews.
- 3. Assess visitor responses to the re-presentation and interpretation of the Tudor Kitchens. We used a mix of methods, including in-depth interviews with museum staff and other experts, online surveys of heritage consumers, and visitor tracking, observation, and exit interviews. The relationship between the objectives and tasks are illustrated in Figure 3.1.

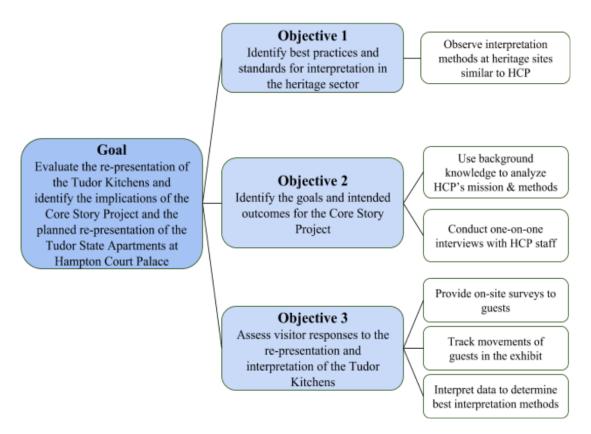


Figure 3.1: Flow Chart of our Objectives (Campolieta, Galvan, Johnson, & Wu 2018)

# 3.1 Objective 1: Identify Best Practices and Standards for Interpretation in the Heritage Sector

In order to evaluate the first phase of the Core Story, we first had to understand the best practices and standards for interpretation methods in the heritage sector. To achieve Objective 1, the team reviewed interpretation methods in the heritage sector, including the use of digital technologies, live interpretation and performance, and other innovative boundary-pushing approaches. We selected potential sites based on several criteria:

- 1. Popularity and attractiveness to guests;
- 2. Relatability to Hampton Court Palace (i.e. must be a heritage sector or other kind of historic site);
- 3. Includes live, digital, or other intriguing innovating approaches;
- 4. Reasonably accessible from London.

Preliminarily, we selected four historic sites and museums in the greater London area that we believe passed the above criteria (Figure 3.2).

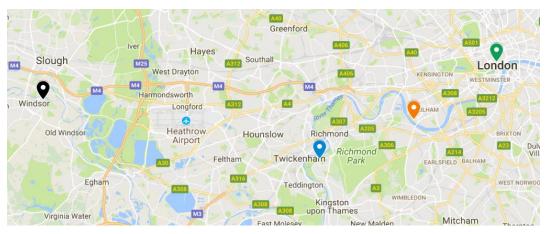


Figure 3.2: Map of the Heritage Sites and Museums We Visited Within London (Campolieta, Galvan, Johnson, & Wu 2018)

- 1. Ham House (Blue)
- 2. Fulham Palace (Orange)
- 3. Windsor Castle (Black)
- 4. National Gallery (Green)

We performed evaluations at each of the above-listed sites including Fulham Palace, Ham House, Windsor Castle and The National Gallery, which were applied later when making suggestions to HCP about future interpretive methods. Prior to visiting these places, we created a checklist of interpretation methods, including but not limited to traditional methods, audio-guided tours, live interpretation/actors, movies and videos, and touchscreen technology. We then recorded other, "boundary-pushing" interpretation approaches these sites had. For example, the British museum not only offers audio tours, but offers themed audio tours, catered towards different niche interests. This would be considered unique and "boundary-pushing", which we noted ("British Museum" 2018).

Additionally, we gauged the popularity of different observed interpretation methods. If any of these interpretive approaches appeared to be noticeably popular with guests, this was marked down. We took extensive notes about foot traffic towards certain places based on the methods used, as well as guest reactions to said methods. For instance, if more guests approached a period-clothed actor and had more visible positive reactions than guests who read from a sign, this was noted.

#### 3.2 Objective 2: Identify the Goals and Intended Outcomes of the Core Story Project

In order to fully grasp the thought behind and intended outcomes of the Core Story Project, we consulted with those at Hampton Court who were most involved in the representations and new practices.

#### 3.2.1 Analyzing Practices at Hampton Court Palace

Prior to any off-site visits or staff interviews, we first became accustomed to and observed curatorial methods at Hampton Court Palace itself. This task, which occurred in the earlier weeks of the project, served both observational and benchmarking purposes. We recorded what interpretation methods are being used at HCP, so we could compare them to what we found at other heritage sites. We noted which methods HCP used that are effective or ineffective at other heritage sites, and what HCP was lacking that worked very well for its competition. We noted in more detail what technology is used in the Tudor Kitchens, Service, and Base Court areas because, due to the recent Core Story Project renovations, interpretation methods were most advanced in those sections of the palace. Additionally, we interviewed staff to determine their goals and expectations for the Core Story Project, and conducted a site evaluation to familiarize team members with the palace before the interviews.

#### 3.2.2 On-Site Interviews

During our time at HCP, we interviewed staff members from different departments, in order to determine more clearly the goals and expectations for the Core Story and the rerepresentation of the Kitchens and Tudor Apartments. We were in extensive contact with two liaisons from Historic Royal Palaces: Catherine Buffrey, who is Head of Arts and Cultural Programming, and Aaron Manning, who is Creative Programming and Interpretation Manager. We planned to go through them to find staff members to interview. As said before, we planned to interview a more diverse set of people as far as jobs go at Hampton Court Palace. We interviewed people in many different positions at HCP in order to broaden our view of the Core Story Project. While we first interviewed Catherine, we also interviewed Liam Stanley, an Operations Manager, and Richard Fitch, Historic Royal Palace's Kitchen Interpretation Coordinator. Different questions were added for each individual interview as necessary. For instance, we interviewed Richard Fitch about specifics regarding questions asked to live interpreters.

#### 3.3 Objective 3: Evaluating Visitor Responses

In order to understand the mindset of the visitor, we adopted approaches that are common to other museum and heritage site evaluations, including visitor observation, tracking, and exit interviews (Bitgood & Shettel 1996). The on-site surveys and tracking occurred within the Tudor Kitchen area; the information discovered there also helped to suggest ways to encourage existing visitors to come back.

#### 3.3.1 Visitor Tracking

Where the questionnaire provides insight into visitor thoughts and opinions, tracking gives a direct look at visitor behavior. Through the usage of guest tracking, we were able to record paths taken by guests and dwell time at certain aspects of the exhibit, revealing what routes are most popular and what visitors are most interested in. Essentially, numbers collected from tracking were quantitative means of recording guest engagement. We used the "pen-and-paper" method of tracking, since we cannot record guests due to privacy issues, and many tracking software entails expensive licensing costs.

As mentioned previously, selection of visitors to be tracked was done in tandem with selection of visitors to be surveyed, on the same systematic basis of choosing every third person

to cross a specified threshold. Once the guest was randomly selected, we began a stopwatch that continued to run until the visitor exited the exhibit; we then took out our copy of the map (Figure 3.3). Using a pen, we marked with an "X" the entrance in which the person came, and traced a line following the path that was taken. When a guest stopped at something of interest (called a "station"), we wrote a number of seconds next to it to denote how long their dwell time was. By writing the exact amount of time the visitor looks at each item, we were able to produce mean dwell times and other statistics to present to our sponsor at the end of our project. Furthermore, we wrote down additional symbols if there are more factors in the guest's experience; this practice has been adopted from a 2013 IQP that also used guest tracking. In addition to writing the dwell time, "D" denotes a discussion between guests or a discussion between a guest and an actor, "P" denotes a photograph taken, and "T" denotes a visitor using museum technology to enhance the experience (i.e. watching a video, interacting with a touchscreen). When the visitor walked to leave the exhibit, we marked their exit of choice with a star; this is when we approached them with a questionnaire, detailed in the appendices. We tracked in pairs, with one member tracking the path on pen and paper, and the other timing the visitor dwell time. We staggered what time of day we came in, and had samples from every day of the week.

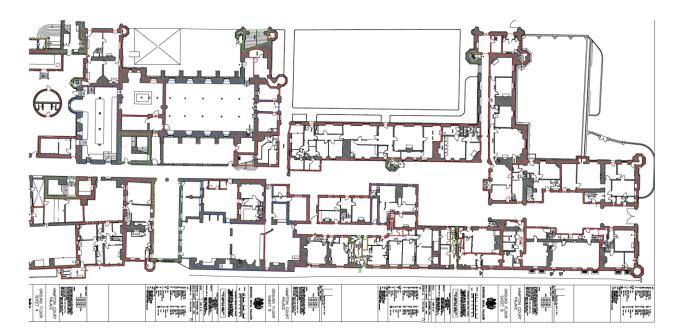


Figure 3.3 A Scan of the Tracking Map we used (HCP 2018)

Prior to actual tracking, we did test runs of this procedure, tracking one another and then partially tracking some guests. After a few runs of this, we were practiced enough to do it for the

full time guests were in the room.

Materials necessary for this tracking study were pens, multiple paper copies of the exhibit map, and our smartphones, which we used as our stopwatches (and then our survey platform).

#### 3.3.2 Exit Surveys

We also administered an exit survey following up tracking and observation. The exit survey was administered by us in person and includes specific questions geared towards the Tudor Kitchen experience. We constructed questions that allowed sufficient insight into the thoughts of the guest, using methods from previous museum IQPs as a baseline, which can be found in Appendix F. These preliminary questions were developed in consultation with HRP staff, as well as pretested and revised.

Questions were broken down into three sections: demographics, prior knowledge, and current experience. Demographics questions included age, number of people (children and adults) in the visitor's group, and if they are a member of HRP; these were used for sorting in data analysis, and also for HRP's use. Prior knowledge included questions regarding the visitor's prior experience (or lack thereof) visiting HCP, and how long ago it was. The third section subsisted of questions regarding the re-presentations and the Tudor kitchen experience, aiming to get into the details of how the visitor felt.

The same guests who are tracked are the ones who are surveyed; details about that are in section 3.4.1. To go about selecting guests to survey and record, we used this systematic approach to keep our personal biases out of the equation. We selected every third guest who entered the room after one tracking and surveying session had been completed.

We used our personal mobile phones for surveying purposes. When a randomly selected guest would go to exit the exhibit, we would approach them with the phone (with the survey readily pulled up), and recite a constructed script (Appendix F) to them.

#### 3.3.3 Data Analysis

We evaluated visitor responses to the re-presentation and interpretation of the Tudor Kitchens, as well as analyze HRP member responses to the online survey and guest tracking information. Additionally, we factored in our observations from competition heritage sites in order to provide Hampton Court Palace with informed and thorough suggestions on how to improve the Tudor Apartments in Phase Two of the Core Story Project.

We first used a combination of survey data and tracking data to discern which interpretation methods were most effective to guests. This was done by observing dwell time at various stations throughout the exhibit, as well as analyzing guests' rankings on level of effectiveness and interest for different methods. Additionally, we broke down data into different demographics and times of day to see if there were any discrepancies. This is detailed more in Chapter 4.

We used software for means of number analysis and graphic creation. Microsoft Excel has many useful features, such as number functions, graphs, and charts. Additionally, Qualtrics, the software used for survey distribution purposes, can easily be exported and sorted into either Google Sheets or Microsoft Excel, where data can be sorted in order to find similarities.

#### **Chapter 4: Findings and Analysis**

Our data collection concluded on Saturday, June 9th. As a team, we visited four Londonarea heritage sites and museums stated in Chapter 3 to identify interpretation standards in the heritage sector. We also took the time to identify the goals and intended outcomes of the Core Story Project through analyzing common interpretation practices at Hampton Court Palace as well as conducting on-site staff interviews. In total, we collected 160 tracks and 160 on-site surveys, exceeding our previously-set goal. Although four guests that were tracked refused to take our survey due to time constraints and five that we began to track turned around early on and did not complete their route through the kitchens, we administered the survey to additional guests that we did not track in order to have an equal number of people tracked and surveyed. Additionally, due to our staggered approach of collecting data in the morning, lunchtime, and late afternoon hours, we had sufficient sample representation from each day of the week and different times of day.

In analyzing the visitor exit surveys, our main goal was to discover which interpretation methods were most popular amongst guests, and if there were any patterns as to which groups of people enjoyed which methods. This way, we could best provide recommendations to Historic Royal Palaces regarding re-presentations of the Tudor State Apartments that would best please everyone. Additionally, we analyzed the following, per the specific request of our sponsor:

- How visitors responded to the digital interactions generally, and in relation to other forms of interpretation.
- The comparison between 'outdoor costume characters' and the 'historic cooks' team.
- A general summary of 'feelings' on the kitchens interpretation.
- If there was a noticeable difference between early morning / lunchtime / late afternoon in visitor experience.

#### 4.1 Standards for Interpretation in the Heritage Sector

During the time we took to visit heritage sector sites and museums in the greater London area, we noted interpretation methods at each site and compared them to those present at HCP. Overall, in comparison to HCP, Ham House, Fulham Palace, Windsor Castle and the National Gallery presented information with generally traditional methods. Similar to some sections of HCP, primarily plaques and explanatory signage were present at each of these sites. Of all four

sites we visited, Fulham Palace took the most understated approach in terms of interpretation. There were very few signs and plaques throughout the site, and absolutely no technology used in terms of interpretation. Windsor Castle and the National Gallery on the other hand, made use of some technology, in addition to signage, by having an optional audio guide available for use in a similar fashion to HCP.

Of the four sites we visited, we found the kitchens at Ham House to be a good comparison point for the re-presented kitchens at HCP. In a similar manner to the kitchens at HCP, the kitchens at Ham House also displayed a limited amount of food, cooking utensils, and supplies to encourage visitors to interact with their surroundings. Ham House takes a more obvious approach with interactives than the re-presented kitchens at HCP do, by including minimal signage to encourage guests to interact with their surroundings in the kitchens (i.e. a sign that says "Please Touch").

#### 4.2 Goals and Intended Outcomes for the Core Story Project

In terms of determining the goals and intended outcomes for the Core Story Project, we observed the interpretation methods currently on display in the re-presented kitchens and looked into what interpretation methods were present in the kitchens before the re-presentation took place. We also conducted on-site staff interviews to learn more about the intended purpose of the kitchen re-presentation.

#### **4.2.1 Interpretation Methods in the Kitchens**

Upon first look, we found a wide array of interpretation methods displayed in the represented Tudor Kitchens. The kitchens contain not only traditional interpretation methods such as signage, but also subtly make use of technological interpretation methods such as sounds and projections. We noted that traditional and non-traditional mesh well in this case of interpretation methods. Through providing both the traditional and non-traditional in terms of interpretation, the Tudor Kitchen experience at HCP is one that guests of all ages can enjoy.

Another interpretation method that we took note of after our first tour of the kitchens was the live cookery team on staff in the Great Kitchen. The cookery staff are costumed interpreters that cook food as the Tudors would have cooked for King Henry VIII in the 1500s. Not only does the cookery staff use real food and cook recipes from the time of the Tudors, but they are

very engaging and personable, encouraging guests to interact with them and join in on the cooking process.

Additionally, HCP offers a supplementary, digital activity called 'Time Explorers' that engages guests through mobile devices to take part in an interactive adventure throughout the palace. Similarly, we noticed that from May 29th through June 3rd only, the palace offered a family activity similar to a scavenger hunt called 'The Great Palace Quest' which was aimed towards families, but open for all to take part in. This activity also guided guests through the palace and encouraged them to be more engaged with not only the kitchens, but the entire palace and all the live interpreters and actors in it over all to promote learning about Tudor history through action and fun. Through general observation and taking the time to participate at least partially in each of the aforementioned activities, we were able to assess that activities such as 'Time Explorers' and 'The Great Palace Quest' are great alternative interpretation methods that engage and connect not only a younger audience to history, but entire families and older audiences that choose to participate as well.

#### 4.2.2 Goals and Expected Outcomes of the Core Story Project

We conducted a total of three on-site staff interviews at HCP. We interviewed Cat Buffery, Richard Fitch and Liam Stanley. Staff members gave similar answers, and overall, we learned that the goals and expected outcomes of the Core Story Project are the following:

- Create a historical experience guests can feel emotionally attached to.
- Implement new methods that will not take away from the authenticity.
- Make visitors feel as though they have "stepped back in time".

We learned from Cat Buffery, Head of Arts and Cultural Programming, that one of the many motivations for the re-presentation of the kitchens was to keep the kitchens current. It had been about 10 years since the last re-presentation of the kitchens, and HCP wanted to keep the kitchen experience updated and exciting for all. In terms of the Core Story Project, Cat's hope was that through these renovations, the stories from the lesser known stories of the cooks of the Kitchens during King Henry VIII would be brought into life. Visitors tend to want the technology throughout heritage sites to be subtle and classy and the live interpreters to bring their stories to life. Live interpreters using different kinds of stories throughout the palace helps visitors to encourage to learn.

Richard Fitch, HRP's Kitchen Interpretation Coordinator, informed us on how the visitation expectations throughout heritage sites have changed recently. Nowadays with other heritage sites, technology is an expectation instead of a bonus. By not labeling the cutting boards, visitors are supposed to have an idea already that heritage sites should already have technology all throughout the palace. With re-innovating the Tudor Kitchens, it is important to motivate the visitors who either consider themselves a "foodie", or a non-UK resident that is interested in food and cooking. Cooking itself is a way to really engage the family, both in knowledge through the parents and interests for the kids.

Liam Stanley, a Front of House/Operations Manager, talked to us about the importance of actors and technology interacting with its visitors. Actors help by getting rid of misconceptions that people can have and make interactivity enjoyable and encouraged. Throughout the world, there are a plethora of misconceptions that can be had, and it is important for the actors to be able to show the visitors the difference what's historically accurate and what is not. Additionally, he emphasized that it is important not to take away from the architecture for the re-presentation purposes. Additionally, he stated that though taking pictures may provide memories for the future, it takes away the opportunity for the visitor to engage in the environment. Nevertheless, HCP allows photography.

#### 4.3 Opinions of visitors about the site presentation and interpretation

In analyzing the data, we first set out to discover which interpretation methods guests found to be most interesting and most effective. We did so by looking into different categories of the survey data, and sorting it in different ways.

#### **4.3.1 Live Interpretation Methods**

During our exit survey analysis, we found that the live cookery team and outdoor actors combined were voted most interesting and most effective by guests, compared to all other interpretation methods combined. For instance, 72.9% of survey-takers ranked the actors and live interpreters combined "effective" at conveying information, whereas the percentage of that answer for the other four categories of interpretation methods combined was only 50.9% (Figure 4.1).

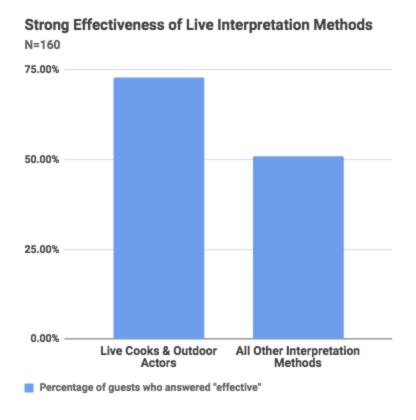


Figure 4.1 Percentage of surveyed HCP guests who ranked live cookery team and outdoor actors combined "effective", versus the percentage of guests who ranked all other methods combined "effective" (Campolieta, Galvan, Johnson, & Wu 2018)

We analyzed the live cookery team and outdoor actors separately as well; our sponsor specifically requested we do as such, to see if guests were particularly partial to one or the other. However, we found that there was not much a difference in popularity between the two. Typically, guests who liked or disliked one felt the same way about the other. In fact, over three-quarters of surveyed guests ranked the two the same level of effectiveness in conveying information (i.e. gave both live cookery team and outdoor actors a rank of "extremely effective", or "neutral", etc.) (Figure 4.2).

# Differences in Effectiveness Ranking of Live Cookery Team vs. Outdoor Actors

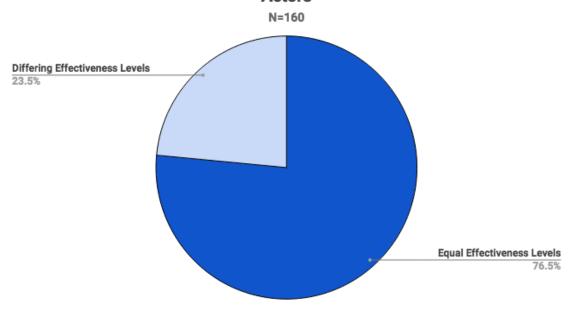
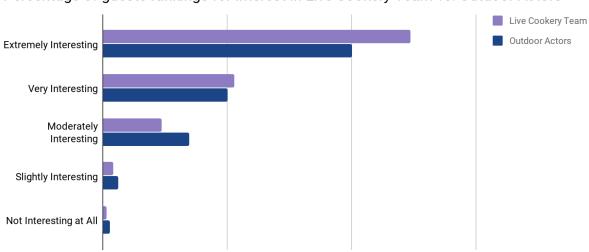


Figure 4.2 Percentage of surveyed HCP guests who ranked the live cookery team and outdoor actors equal or different levels of effectiveness in conveying information (Campolieta, Galvan, Johnson, & Wu 2018)

However, once we broke down specific responses to how interesting people found cooks versus actors, we did find some discrepancies in guest opinion between the two interpretation methods. When ranking how interesting and engaging they found these methods, 61.8% of surveyed guests ranked the live cookery team "extremely interesting", while only 50% of guests gave the outdoor actors this rank. Additionally, 17.4% of surveyed guests ranked the outdoor actors only "moderately interesting", while only 11.8% of responses for the live cookery team were made up of this rank (Figure 4.3). Overall, the data reveals that the cooks in the kitchen piqued the interest of guests over the actors in the court. This could be due to the fact that the live cookery team, though they are dressed in period costume, are not actors and speak to guests in modern English. They do not pretend to be from the 1500's, which, to many visitors, may make them more approachable.



Percentage of guests rankings for interest in Live Cookery Team vs. Outdoor Actors

Figure 4.3 Percentage of interest ranks for the live cookery team vs. the outdoor actors in HCP guest surveys where N=160 (Campolieta, Galvan, Johnson, & Wu 2018)

Additionally, prior to the release of the surveys when we were analyzing HCP methods, we went on a tour for visitors, consisting of the Master Carpenter's Court, the Kitchens, and the Wine Cellar, as well as several corridors. Guests were expected to guide themselves from section to section of the tour, with direction from actors on how to get there. We found that actor tours could be difficult to follow, due to the winding nature of the castle halls. Visitors are given little direction by actors on these tours; they are expected to get themselves from room to room without help, which can be difficult especially for those visiting for the first time. Guests may have leaned towards moderately effective for the outdoor actors due to the lack of guidance given on these tours.

Through analysis of different demographics (age group, number of adults in group, number of children in group, HRP member, etc.), no major trends came up; there was no statistically significant correlation between any of the aforementioned demographic categories and thoughts on actors/live interpreters at HCP. Therefore, data trends regarding the live cookery team and outdoor actors were formed of general guest consensus.

#### **4.3.2** Technological Methods

Along with the actors, technology was a main new interpretive method implemented in Core Story re-presentations; therefore, it was of interest for analysis. Overall in guest surveys, though "extremely interesting" and "effective" were selected most times, technology garnered

the most even split of different reviews from Hampton Court attendees. Though 29.5% of surveyed guests answered that they found technology extremely interesting, a close 26.9% of guests were only moderately interested by the technology. Additionally, technological interpretation methods (which includes sounds, projection, and audio guides) garnered the most "not interesting at all" rankings out of any method, consisting of 3.4% of the responses (Figure 4.4)

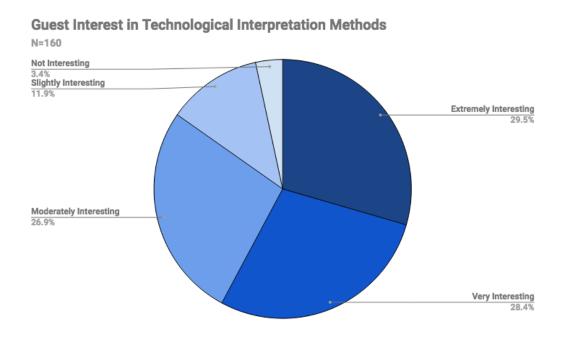


Figure 4.4: Guest Interest in Technological Interpretation Methods (Campolieta, Galvan, Johnson, & Wu 2018)

However, once we broke down the numbers into separate categories, we found that there was a significant discrepancy between ages when it came to their reaction to technological methods. People in the 55 and older age group showed less interest in technology than those in younger age categories, and found it to be a less effective interpretation method than more traditional methods such as text or signage. Figures 4.5 and 4.6 below highlight the differences in visitor response to technology based on two age groups: ages 16 to 54 and ages 55 and over.

### Visitors 16-54: Effectiveness of Technology

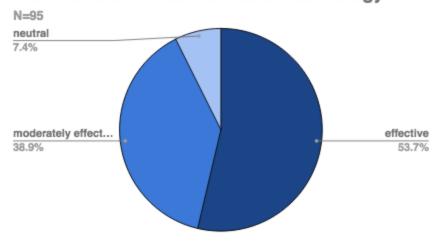


Figure 4.5: Effectiveness of technology in guests ages 16-54 (Campolieta, Galvan, Johnson, & Wu 2018)

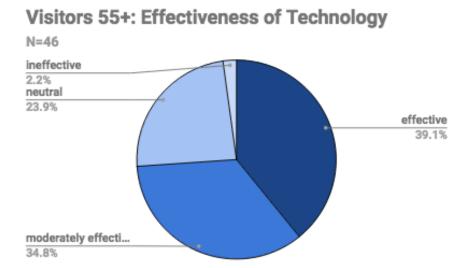


Figure 4.6: Effectiveness of technology in guests 55+ (Campolieta, Galvan, Johnson, & Wu 2018)

Overall, guests ages 16 to 55 were much more likely to give technological interpretation methods effective ratings, which Figure 4.5 illustrates. About 53.7% of guests surveyed in the 16 to 54 age group rated technological interpretations effective, and 38.9% rated the same methods moderately effective. In the 55 and over age bracket, only 39.1% of guests rated technological interpretation methods effective, followed by the moderately effective rating which 34.8%.

#### 4.3.3 Effect of Interpretation Methods on Guest Tracks

Overall, guest experience at HCP is greatly influenced by type of interpretation experienced. For instance, guests lingered in the exhibit for a mean of fifteen minutes when they interacted with both actors and technology, while only approximately seven a half minutes when neither were interacted with (Figure 4.7). Additionally, the average time of a visitor that did not interact with an audio guide, technology, discussion, nor took pictures was only six minutes and forty-six seconds, further enforcing the importance of these methods.

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Figure 4.7: Average dwell time of a visitor based on what/who they interacted with as they went through the kitchens (Campolieta, Galvan, Johnson, & Wu 2018)

#### 4.4 Behaviors and responses of visitors to the re-presentation and interpretation

Through analysis of our tracking maps, we were able to uncover trends in guest dwell time, behavior, and interest. We aimed to find similarities between visitors in order to comprehensively discover which points of interest in the kitchens (also known as "stations") were of the most interest.

#### **4.4.1 Dwell Time Patterns**

Through thorough analysis of the tracking data collected, we found that the total average dwell time in the kitchens to be extremely similar for visitors that entered the kitchen area from both the back and front entrances. In both cases, visitors who entered the kitchens from the back and front entrances spent an average of 9 minutes walking through the kitchens in total. Visitors that entered the kitchens through the side door tended to linger a few minutes longer than those who came in through the other two entrances. We found average dwell time for visitors who used the side entrance to be an average of 12 minutes.

While the overall dwell time did show correlation to the three entrances visitors used, we found room-based visitor dwell time to be independent of which entrance guests used, with the exception of the boiling room. In this case, visitors that entered from the side, 83.3% of whom had an audio guide with them, spent about 15% of their total time in the boiling house while

visitors that used the other two entrances spent only 3% to 4% of their time in the same room. Upon further evaluation, we discovered this trend to be caused directly by audio guides, which most visitors who entered from the side were in possession of. The first chapter of the audio guide begins in the boiling room, and guests would spend a fair amount of time listening to it. The amount of time spent in the second room (stations 2-3) is 15%-18%, the alley (station 4) is 3%-8%, the third room (stations 5-7) is 15%-18%, the fourth room (stations 8-10) is 7%-15%, the fifth room (stations 11-13) is 36%-40%, and the serving area is around 3% (Figure 4.8).

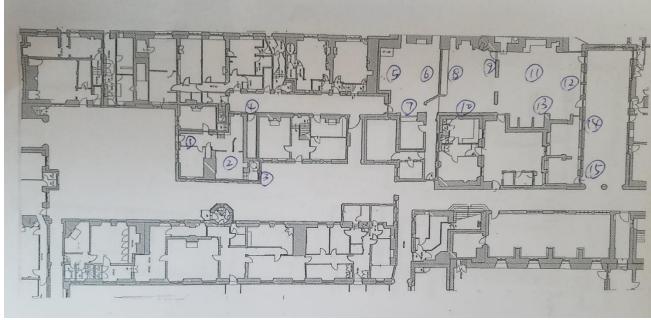


Figure 4.8: A scan of the official tracking map, with each station marked (Campolieta, Galvan, Johnson, & Wu 2018)

The most popular place for visitors is undoubtedly the fourth room which takes up around 40% of the total time, especially station 13 -- the fireplace that single-handedly takes up 15% of the total time, and based on our exit surveys, this is the place where visitors most feel they "stepped back in time".

#### 4.4.2 Guest Path Analysis

All visitors tracked that entered the Carpenter Court through the front entrance, excluding 5 guests who entered from the front and skipped the kitchen, entered directly into the boiling room through the main entrance to the kitchens. 4.4% of the 160 guests tracked that entered the kitchen area from the side chose to enter the kitchen from the main entrance through the Carpenter Court. We believe this is due to the fact that the majority of these guests were guided to pick up audio guides from the information area after entering the palace from Seymour Gate.

However, there was one visitor that chose to walk through the hallway and enter the kitchen from the back through the Serving Place. 40% of the 15 visitors that entered the kitchen area through the back walked through the hallway adjacent to the kitchen area to make their way to the Master Carpenter Court. They then began their journey into the kitchens through the main entrance leading directly into the Boiling House. Finally, 60% of those who entered the kitchen area from the entrance we designated the back entrance entered the the Great Kitchen directly from the Serving Place.

Of the total guests we tracked, 13.1% of guests tracked either skipped over the Tudor Kitchens and chose to go elsewhere in the palace or did not take a complete route through the kitchens. While 5% of visitors skipped the kitchens entirely, 8.1% only visited part of the kitchen, and exited after visiting only certain stations. Of the 13 guests who visited only some parts of the kitchens, 84.6% Used the main entrance from the Carpenter's Court to both enter and exit the kitchens. All 84.6% of said guests made it only to the end of the Boiling House / beginning of the Fish Court area before exiting. The remaining 15.4% of guests that opted not to walk the entirety of the kitchens entered and exited through what is generally considered to be the back of the kitchens through the Serving Place. These guests walked immediately into the Great Kitchens, took a partial route through to the second room of this section before exiting out the back of the kitchens the same way they entered.

The following analysis neglects the visitors who chose to skip the re-presented kitchens. As a team, we decided to omit the data regarding visitors who skipped the kitchens in regard to any further analysis in regard to visitor tracking due to the fact that said data would not reveal the visitor tendencies inside the kitchens that our project is focused on.

We looked into visitor's tendencies when they entered three rooms listed below with multiple stations that opened up opportunities for visitors to choose from. We examined all 149 visitors that made it through all three rooms and really focused on the first station visitors turned to right after they entered each room because the first station would most likely to be the most intriguing and grab visitor's attention the most. In addition, we also looked at stations that were neglected in the course of touring in each and explained the potential reasons for them to have missed these stations.

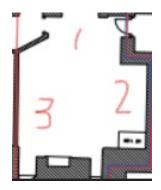


Figure 4.9 First Room in the Great Kitchen (Campolieta, Galvan, Johnson, & Wu 2018)

In the room with cutting boards, there are 35.33% of visitors that immediately turned to station 1, 50% that turned to station 2 and 14.67% that turned to station 3 (Figure 4.9). Because of the room arrangement, the table sits in the center of the room hinders visitors from approaching station 3 (cutting boards) immediately after they entered from the right top corner. This geography encourages visitors to visit station 2 first so they could circle back and exit from the top left corner. Based on the response we have acquired from the exit surveys, visitors stated that the cooking rack situated in station 2 was "something interesting to see" and "had room for them to take a step forward and look closely", which was the reason why they intuitively approached station 2 first. This caters to the ideal traffic flow of this room that prompts a clockwise movement around the table that sits in the center and allows visitors to get to numerous touchable objects and the interactive cutting boards without causing too much congestion.

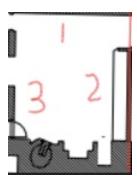


Figure 4.10: Second Room in the Great Kitchens (Campolieta, Galvan, Johnson, & Wu 2018)

Similar to the geographical arrangement of the room with cutting boards, the room with pots has three major stations that could potentially attract its visitors. 66.67% of visitors chose station 2 as their first stop while 23.94% went straight to station 3 and only 9.39% went to station 1 (Figure 4.10). In contrast to the room with cutting boards, the room with pots does not have a

table that restricts visitors potential paths. The majority of visitors chose to visit station 2 because "it was the closest" and "the pots looked interesting". However, after visitors had visited station 2 and station 3 and they approached the connecting entrance to the next room, 70.47% visitors ended up ignoring station 1 completely and entered the next room. Based on the exit surveys, the visitors either "took a quick glance" or "did not realize it (station 1) was there". Therefore, we would like to suggest that HCP should present important objects and props on station 3 or move station 1 entirely to the other side of the room to create more exposure and opportunities for visitors.

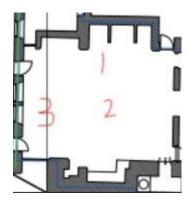


Figure 4.11: Third Room in the Great Kitchens (Campolieta, Galvan, Johnson, & Wu 2018)

The room with fire is arguably the most attractive room in the kitchen and enjoys the largest area. Because of the presence of the cookery team at station 2 and station 1, there was not a single visitor out of 149 visitors that went around to station 3 where the table and silverware were, and 33.56% of visitors went to station 1 (the fireplace) first while 66.44% went to station 2 first (Figure 4.11). According to our exit surveys, visitors responded "(station 2) grabbed my attention because there was a lot of people" and "I felt the heat and saw the fire, (and) thought it was pretty cool". The only possible improvement for the room with fire is to move station 2 a little bit closer to room 3 and away from station 1 because right now station 2 sits really close to the connecting entrance to the room with pots and the fire. When visitors gathered around it, it could really generate congestion. In addition, as we have mentioned before, visitors had the tendencies to linger the longest in this room and take their time. Therefore, we did not really notice a significant "skipover" of any stations. There were only 22.82% of visitors that exited without stopping in front of station 1, and 8.72% of visitors for station 2 and 12.75% for station 3 respectively.

#### 4.4.3 Effects of Audio Guides on Guest Behavior

A total number of 50 visitors brought an audio guide with them, and 110 did not. 32 visitors of those (64%) that had an audio guide with them either interacted with the technologies, had discussion with live interpreters or took photographs, while 56 visitors of those (51%) that did not have an audio guide with them either interacted with the technologies, had discussion with live interpreters or took photographs.

Additionally, there lacked a clear distinction between visitors that had an audio guide with them and those who did not. There was only a 1% difference between the two in terms of the dwell times for each station. Therefore, we have enough evidence to believe that the audio guides do not have significance on overall dwell time (Figures 4.12 and 4.13).

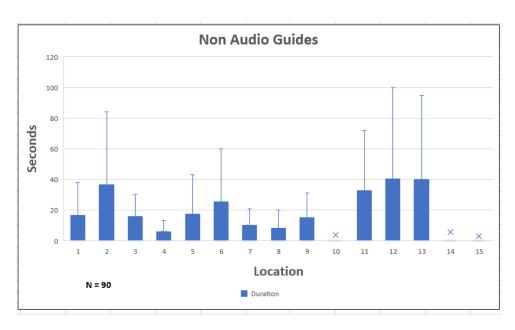


Figure 4.12: Dwell times at each station amongst people without audio guides (Campolieta, Galvan, Johnson, & Wu 2018)

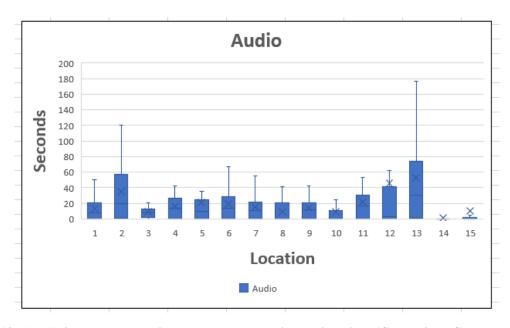


Figure 4.13: Dwell times at each station amongst people with audio guides (Campolieta, Galvan, Johnson, & Wu 2018)

25.20% of visitors that entered the kitchen area from the front were in possession of an audio guide. When visitors entered the Master Carpenter Court, they would either choose to go directly into the kitchen and end up not having an audio guide or go through the side door and come back to enter the kitchen, which would be considered "entered from the side". 20% of the visitors that entered from the back had an audio guide on them, and 83.3% of the visitors that entered from the side had an audio guide on them (Figure 4.14).

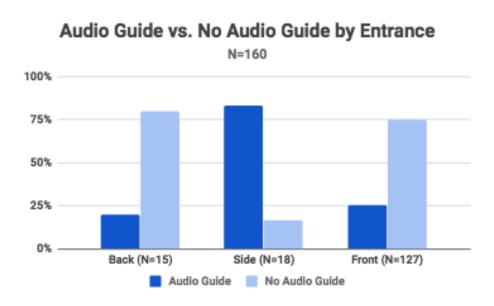


Figure 4.14: Chart displaying the percentages of guests who did and did not have audio guides, based on their entrance point (Campolieta, Galvan, Johnson, & Wu 2018)

We did not find a clear distinction in dwell times between visitors who used audio guides in comparison to those who did not. There was only a 1% difference between the two in terms of the dwell times.

Based on our personal experience with the audio guides and feedback we received from visitors that we surveyed, there are certain places where the audio guides encourage you to touch objects and talk to the live interpreters. However, looking at the statistics, the percentage of visitors that had taken photographs is 35.53%, 23.03% had used the technology and only 17.11% had discussions with live interpreters. We have also noticed that a lot of children (whom we could not track, but could observe) that were really interested in having conversation and interactions with the live cookery team while their parents stood watching, and based on our observations, a lot of visitors were interested in finding out what the live cookery team is doing while only a few actually ended up talking to them, at 17.11%.

The audio guides did not really discourage visitors from engaging in the environment around them as we would think. As a matter of fact, 46% of those that brought an audio guide with them that actually ended up taking photographs while only 30.39% of those who did not have an audio guide with them had taken any photographs. 32% of those that brought an audio guide with them used the onsite technology while 18.63% of those that did not have an audio guide with them did. Those with audio guide actually were just as willing to talk to the interpreters as those without audio guide (18% with audio guides v.s. 16.67 without audio guides). They wouldn't mind taking off their audio guides and engage in conversation with live interpreters. Unlike what we generally perceived, audio guides not only did not create obstacles for visitors to get involved with the environment, it also prompted visitors to interact and take advantage of the environment.

#### **4.5** General Feelings Regarding the Kitchens

Finding out visitors' emotional attachment to their Tudor Kitchen experience was of the utmost importance to HRP's Core Story Project. The surveys that were delivered to HCP guests over the course of our time spent at HCP contained three open ended, free response questions in regard to the guest's emotional connection to the kitchen re-presentation. These questions asked both how the Tudor Kitchens made visitors feel, where visitors first felt transported back in time, and what visitors enjoyed most about their experience in the kitchens. Guests had the option to respond to these questions with whatever answer came to mind, or not respond at all. Of those who did respond, many shared similar thoughts and feelings on their experience in the represented kitchens.

The feedback we received from these sections of our survey was generally positive, but in some ways differed from our original hypotheses. In terms of how the kitchens made visitors feel, our survey suggests that the main goal of the representation, which was to improve visitors' emotional connection to history and make guests feel as though they had been transported back in time, was accomplished. Of the 160 people surveyed, 136 responded to this question, 20 of which said the kitchens made them feel as though then went back in time or like they were really a cook for King Henry VIII. The chart below highlights the other responses we received from guests in regard to this question (Figure 4.15).

### How Did the Kitchens Make You Feel?

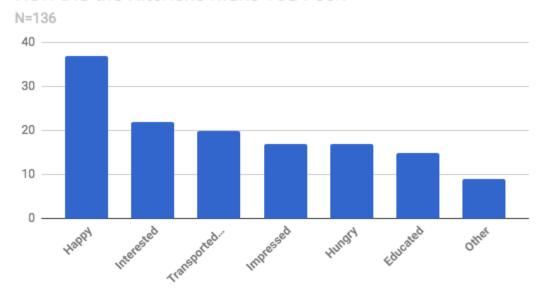


Figure 4.15 Responses to how the kitchens made guests feel, where N=136 (Campolieta, Galvan, Johnson, & Wu 2018)

Variations of happy (i.e. "content") had nearly forty responses from guests, while some variation of "transported through time" or "like a cook" came in at 15% of the total responses.

In terms of where guests first felt as though they were transported back in time, the greatest number of guests responded that the very beginning of the kitchens first caused them to feel as though they were present in the age of the Tudors. While 22% of responses conveyed this notion, the responses similar to 'upon witnessing the great fire' and 'upon entering the last room with the fire' were close behind with 20% and 18% of visitors freely stating those areas as where they first felt transported. The chart below highlights other responses that guests gave in regard to where they first felt as though they had gone back in time (Figure 4.16).

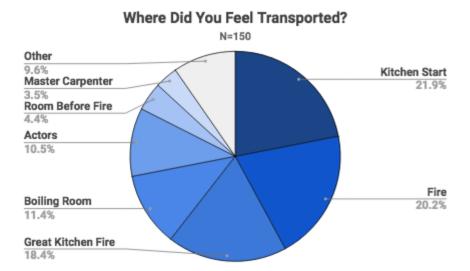


Figure 4.16 Where in the Tudor Kitchens guests first felt transported through time (Campolieta, Galvan, Johnson, & Wu 2018)

Answers among these include 'upon entering the boiling room' and 'after interacting with actors or interpreters'. Although a handful of guests chose not to respond, the results from this section of the survey suggest that HCP is providing a Tudor experience that is in line with their goal of authenticity which was mentioned to us by our sponsor, as well as in their mission statement. The re-presented kitchen experience is so true to what the kitchen experience would have been during Tudor times, and the majority of people can feel it immediately upon entering the kitchens, if not by the time they exit the Great Kitchen. Not only are HCP guests recognizing the authentic Tudor experience that HCP strives to provide, but they are also enjoying their overall experience, which the above figure makes evident.

Overall, there was a clear frontrunner in terms of what guests enjoyed the most out of their overall experience in Henry VIII's kitchens. Out of the 160 people polled, 78.1% chose to respond. Of the 125 who responded, 19.2% noted that the most enjoyable part of their experience was interacting with the live interpreters and actors. On top of this, 17.6% of guests mentioned that they most enjoyed the cooking demonstrations and real food that was present in the kitchens.

Fifteen people mentioned the kitchen's newly installed visuals, interactives, and props as being their favorite part of the kitchen experience, even further suggesting that the representation of the Tudor Kitchens was a success. It was also noted by a couple visitors that their experience overall was 'authentic' or 'realistic', which further confirms our earlier observation

that HCP guests notice and appreciate the authentic Tudor experience that HCP strives to provide.

#### 4.6 Time-Based Differences in Visitor Experience

Hampton Court Palace is open from 10am-6pm, but guest traffic flow is not even throughout the whole eight hours. Therefore, we wanted to analyze how time of day can affect a guest's experience.

#### 4.6.1 Survey Analysis Based on Time of Day

Upon further analysis of the survey data, we decided to see if any nuances in visitor experience could be noted based on the time of day that visitors were surveyed. Overall, we did notice a slight difference between those surveyed in the early morning and late afternoon vs. those surveyed during the lunch time hours. A few who were surveyed between opening time at 10 a.m. and 11:30 a.m. mentioned that their kitchen experience would be improved if actors or cooks has been present in the kitchens. This is due to the fact that the live interpreters in the kitchens do not begin work until 11:00 a.m., and even then, they only begin to bring out their cooking supplies and utensils at that time. The live interpreters do not make a more constant appearance until about 11:30 a.m., and the actors that are out and about the courtyard areas do not make their first appearance until 11:00 a.m. A few guests surveyed in the late afternoon/evening hours also had similar feelings to share, as well as neutral ratings in regard to effectiveness of actors and the live cooks. This is also due to the fact that the actors and live cookery team do not work until the palace closes at 6 p.m., and are gone for the day once the late afternoon/evening crowd begins to tour the kitchens.

#### 4.6.2 Tracking Analysis Based on Time of Day

Figures 4.17, 4.18, and 4.19 below show the dwell time that a visitor spent at each location within the Tudor Kitchens between the Early Morning (10 am - 12 pm), Lunchtime (12 pm - 2 pm), and Late Afternoon (2 pm - 6 pm). Throughout these times, the visitor experience at the Boiling House (2), the Pot within Boiling House (3), the Larder (4), the King's ingredients in Room 2 of the Great Kitchens (9), the Servant's ingredients in Room 2 of the Great Kitchens (10), 1st Window entrance in the Serving Place (14), and the 2nd Window entrance in the Serving Place (15). In the late afternoon, people spent a lot more time in the Boiling House and by the Big Pot (2 and 3). People would stay longer at the Larder (4) in the Early Morning and the

Late Afternoon than Lunchtime. During the early morning, there can often be a crowd gathered gathered at the Fish Court, which can result in a higher dwelling time. Visitors did not stay as long by the King's Ingredients (9) in the late afternoon than during the early morning and lunchtime. People stay a much longer time at the Servant's Ingredients in Room 2 of the Great Kitchens (10) during the early morning. People often stayed a much longer time by the windows in the Serving Place (14, 15) during the late afternoon than before. Many of these characteristic can be described by particular patterns throughout the day. Throughout the end of the day, people tend to take longer to explore the areas throughout the Kitchens. During the day, due to the large number of people, people feel more rushed to go through areas of the Kitchen. Near the end of the day, people can go at a more comfortable pace.

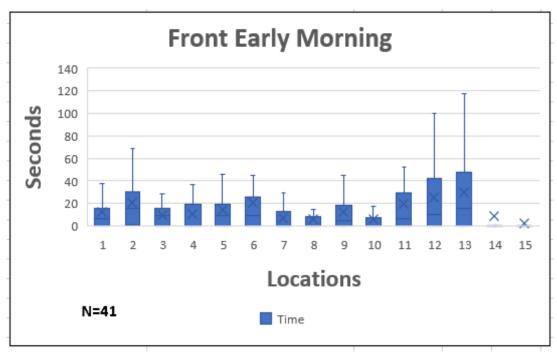


Figure 4.17: Box plot displaying average dwell time at different stations during the morning (Campolieta, Galvan, Johnson, & Wu 2018)

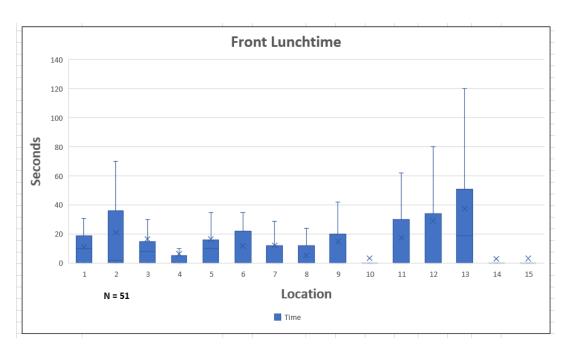


Figure 4.18: Box plot displaying average dwell time at different stations during the lunchtime (Campolieta, Galvan, Johnson, & Wu 2018)

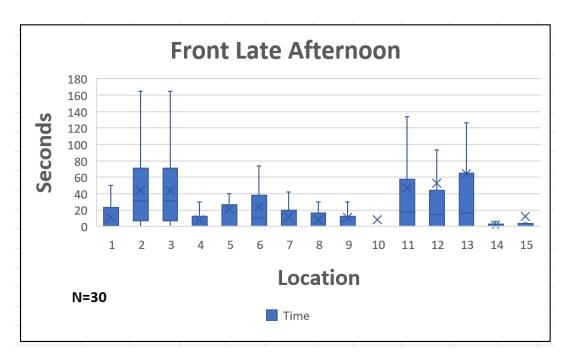


Figure 4.19: Box plot displaying average dwell time at different stations during the late afternoon (Campolieta, Galvan, Johnson, & Wu 2018)

#### 4.6.3 Music Festival Effect

During the first week of June, HCP began its summer music festival, which caused the entire base court and front entrance to be blocked off. Therefore, people were entering through a side gate that took them right into the Master Carpenter's Court, directly in front of the entrance to the kitchens. People during the Music Festival tend to spend a lot more time at the projection found in the Boiling House (Location 1) during the Music Festival than before the Music Festival. Before the music festival, people tended to miss looking at the Larder (Location 4) while the people during the music festival did notice it more. People spent a lot more time near the chopping boards (Location 6) and the pots (Location 7) during the Music Festival than before. The table with the King's ingredients had more dwell time before the Music Festival than during. The cooking tables (Location 11), the Great Fire (Location 13), and the second window in the Serving Place had a higher dwell time before the Music Festival than during (Figures 4.20 and 4.21). There are a few reasons that could explain all of these behaviors. Before the Music Festival started, the audio guides did not have the Tudor Kitchens as a choice to listen to. Now, the Kitchens have an audio guide for the Kitchens, but only for the English Language.

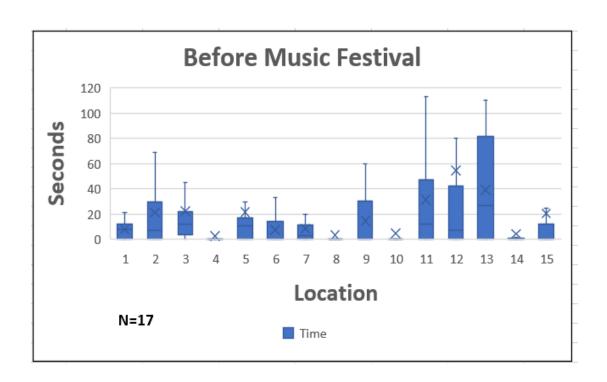


Figure 4.20: Average dwell time of visitors before the Music Festival (Campolieta, Galvan, Johnson, & Wu 2018)

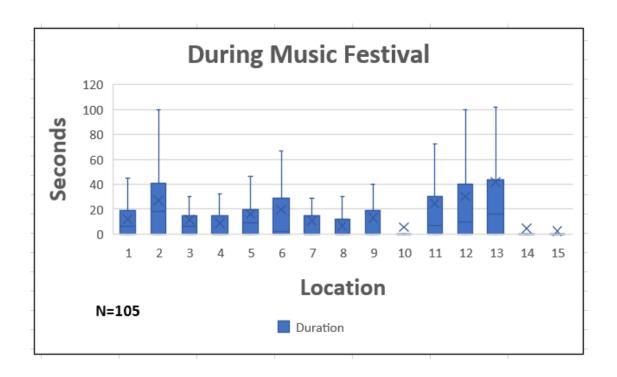


Figure 4.21: Average dwell time of visitors during the Music Festival

#### **Chapter 5: Recommendations**

Though the exit survey responses to the re-presentation of the Tudor kitchens were generally very positive, this feedback is still vital for future Core Story improvements. For instance, elements of the Tudor kitchens that garnered the most positive attention are noted as elements to implement in the Tudor apartments. Additionally, guest feedback from open-ended questions allows us to make informed decisions about what guests are looking for in future Hampton Court re-presentations.

A large part of the Core Story project was to "reward" every guest with a good experience, regardless of what interpretation methods they like most. In the Tudor kitchens, they did this by making sure many different types of interpretation methods were represented. Though few people put down "effective" or "extremely interesting" for every single method, even fewer people did not put down these answers at all; every guest seemed to find at least one type of method that they greatly enjoyed. Therefore, HRP should continue to take this "rewarding" approach when re-presenting the Tudor apartments. 73% of people said that they were extremely likely to recommend the Tudor kitchens to a family or friend, likely because nearly every guest found something that they specifically liked.

#### **5.1 Implementation and Improvement of Live Interpretation**

The largest trend in our data was the extreme popularity of actors and live interpreters, amongst all different groups of guests. Therefore, we suggest HRP take this into account when making changes to methods at the Tudor apartments, and even in further improving the kitchens. Though the palace begins admitting visitors at 10am, the live cookery staff does not begin work until 11am. Clearly, based on all the praise guests gave the actors, those guests who come for the first hour of the day are missing a vital part of the Hampton Court experience. We suggest that the live cookery staff begin working a half hour earlier, at 10:30 a.m., since they have such a big impact on the positivity of visitors about their time at HCP, and we noticed through tracking and observation that the most traffic flow through the kitchens takes place during the morning hours. In order to be considerate of the cost of live interpretation and the working hours of live interpreters and actors, we also suggest that the actors and live cookery team end work a half hour earlier than they do at the present if HCP decided to move the start time of the cooks and actors to 10:30 a.m.. Although the late afternoon/evening crowds would lose interaction time

with the live interpreters, we believe the cost outweighs the benefit in this case. The reward of having the morning crowds have more interaction time with the live interpreters will overall be a positive gain as many more people walk through the kitchens in the mornings than later in the afternoon.

Additionally, from our analysis of interpretation methods, we suggest that there be an actor with guests at all times on the 'Meet the Controller' actor tours. Our team took the Tudor kitchens tour early on enough in our project that, at that point, we could have very much been considered first-time guests. The lack of guidance in the actor tour seemed to assume some semblance of guest familiarity with the palace, which many visitors do not have. At the very beginning of the tour, we were led by an actor dressed as a member of King Henry VIII's court, but he departed after leading us to the first scene of other actors. Perhaps HCP can use this "member of the court" to lead guests from scene to scene, to avoid confusion.

As for the Tudor apartments, we recommend that HCP have a mix of the in-character actors and the more approachable live interpreters. Though some guests have more open personalities suited for interacting with full-on actors, easy-to-talk-to costumed interpreters ensure that there is somebody that nearly every guest is comfortable speaking with. These people (the live interpreters in particular) should be present for the entire time Hampton Court is open to the public (10am-6pm), since they have proven to be such a crucial part of the HCP experience. We also suggest that HCP find a way to incorporate the Tudor Apartments and the the live interpretation that may exist there into the 'Time Explorers' digital adventure or something similar as a part of the Core Story Project. Not only does this digital adventure encourage more engagement with the palace and all of its interpretation methods as a whole, but it also aids in encouraging the emotional engagement with history that the Core Story Project aims to provide. Additionally, the digital adventure or a similar, scavenger-hunt themed activity could help to bridge every facet of the Core Story Project in the palace from the Tudor Kitchens, to the Tudor Apartments and beyond and help them to act as one larger unit.

Additionally, we suggest that HCP be strategic about where they place their actors and live interpreters, since our tracking data shows that people are often drawn to them and will walk in their direction. In the current Tudor kitchen setup, all of the live interpreters (i.e. cooks making Tudor food at the table and a man turning meat over the fire) are in the same very close vicinity in the final room of the great kitchens. In fact, many guests on the exit survey stated that

they really first felt transported back in time to Henry VIII's kitchens upon seeing the cooks in the final room. Additionally, a few of our tracked visitors spotted the actors from afar upon entering the Tudor kitchens and skipped the first two rooms entirely. In order to control traffic flow and also ensure guests get the full experience, actors and live interpreters in the Tudor kitchens and Tudor apartments should be spread out throughout the area, strategically placed near aspects of the exhibit HCP wants to emphasize.

A common comment that we got from the visitor survey were that people often "felt hungry" throughout the Kitchens. Since the cooks are already trained, we recommend HRP to have the actors give out the made food to others through samples to bring the experience more to life. Before the actors give the food to the visitors, precautions can be taken to avoid an issue with allergens. For instance, putting up a sign on the table where the cooking is occurring listing out the name of the dish along with its contents would ensure guest safety.

#### **5.2 Improvement on Traffic Flow**

The location for visitors to obtain audio guides is in very close proximity to the side door to the Tudor Kitchens, and visitors have the tendency to enter the kitchen through the side door after they have acquired the audio guide. According to our findings, only 5.55% of visitors circled back and entered the kitchen from the back. However, the first two rooms of the kitchen area are quite small and having visitors coming from both sides would create unnecessary congestion. In order to promote a nearly "one-way" traffic that allows visitors to acquire the best experience while having the least hinderance, we would like to suggest that Hampton Court Palace could station a staff member or put up signs at the side door that directs visitors to enter the kitchen from the front. In addition, as of right now, the kitchen does not really have a designated entrance except on audio guides. On this technology, there is an order of exhibits that leads the visitors to enter the kitchen from the front, which is why we believe it imperative to encourage both visitors with and without audio guides to enter the kitchen from the front by placing signs at the entrance at base court (the entrance leading up the master carpenter court), the entrance at master carpenter court (front) and the entrance at serving area (back) to direct visitors to enter the kitchen from the front so that the least congestion would occur while having the least amount of visitors miss the kitchen by accident.

In addition, there is not much to be improved for the three major rooms (the room with cutting boards, the room with pots, the room with fire) except in the second room, since visitors have the tendency of neglecting the table stationed against the wall (station 1 as mentioned in **4.2.2 Guest Path Analysis**). We propose that Hampton Court Palace either rearrange the table to the other side of the room or just simply choose to present important objects on the other table in the room (station 2 as mentioned in **4.2.2 Guest Path Analysis**). As for the room with fire, the live cookery team operates too close to the fire place and the connecting entrance to the room with pots. Therefore, we think it would be a good idea to move the live cookery team somewhat away from the connecting entrance and the fireplace to avoid congestion at the entrance.

#### **5.3** Improvement of Signage

Throughout the kitchens there is a distinct lack of signage, so as to not take away from the authenticity. This, however, can lead to some confusion. We would like to recommend HCP to put up one or two signs before going into the kitchen that remind visitors that all objects are touchable and live interpreters are there for them to talk to. Signs across the Kitchens can be both informative and encourage visitors to engage with the technology. The usage of cutting boards (one of the most interesting technologies HCP provides onsite and really encourages visitors to try out) was only 23.03%, and we hope that putting up signs that encourage visitors would improve percentages such as the one mentioned. Guests who tried the cutting boards stated in their exit surveys that "it was really interesting how they used projection and sound to mimic the actual food making process" and "it was really fun my son enjoyed it a lot", so clearly the interaction percentage is not low because it was not interesting. Minimal signage, particularly at the front of the exhibit would not take away from the authenticity of the palace, but would improve the interactive experience.

# **Chapter 6: Conclusion**

Overall, the re-presentations of the Tudor Kitchens have proven to be a success for Historic Royal Palaces. The artful implementation of technology, coupled with engaging live interpreters and actors, captivated guests and truly brought their experience to life. We hope that our visitor evaluation only goes to improve guest experience at Hampton Court Palace for years to come.

#### References

- About Us. (2018). Retrieved March 24, 2018, from https://www.hrp.org.uk/about-us/
- Atkins, J.R., & Simon, N. (2011). The Participatory Museum. Santa Cruz: Museum 2.0.
- Bitgood, S. (2006). An analysis of visitor circulation: Movement patterns and the general value principle. Curator: The Museum Journal, 49(4), 463-475.
- Bitgood, S. (2013). Attention and Value: Keys to Understanding Museum Visitors: Left Coast Press.
- Bitgood, S., & Shettel, H. H. (1996). An Overview of Visitor Studies. The Journal of Museum Education, 21(3), 6-10
- Bosworth Battlefield experience. (2017). Retrieved April 01, 2018, from http://www.bosworthbattlefield.org.uk/
- Brears, P. (1999). All the King's Cooks: The Tudor Kitchens of King Henry VIII at Hampton Court (2nd ed.). London, UK: Souvenir Press.
- Ciesynski, J., McDonnell, C., Mordaski, M., Rotier, M. (2018). The Impact of Character Actors at the London Transport Museum. Worcester, MA: Worcester Polytechnic Institute.
- Diamond, J. (1999). Practical evaluation guide: tools for museums and other informal educational settings: AltaMira Press.
- Dodge, D. A., Bouwman, A. S., Pettitt, P. B. & Brown, T. (2012). Mitochondrial DNA haplotypes of Devensian hyaenas from Creswell Crags, England. Archaeological and Anthropological Sciences
- Evans, S. (2017, December 13). Digital museums -- How technology is bringing galleries back to life. Retrieved April 20, 2018, from https://www.verdict.co.uk/technology-museums-back-to-life/
- Falk, J. H., & Dierking, L. D. (1992). The Museum Experience. Washington, DC: Howells House.
- Hofstede, G. (1997). Cultures and Organizations: Software of the mind. New York: McGraw Hill.
- Hayes, A. (2017). Heritage and the Economy. Retrieved March 31, 2018, from https://content.historicengland.org.uk/content/heritage-counts/pub/2017/heritage-and-the-economy-2017.pdf

- Heier, A., Merkt, M., Schwan, S., & Weigand, S. (2011). Learning with videos vs. learning with print: The role of interactive features. Learning and Instruction, 21(6), 687-704
- Henry VIII. (2018). Retrieved March 25, 2018, from https://www.hrp.org.uk/hampton-court-palace/history-and-stories/henry-viii/#gs.PiquD7Q
- Henry VIII's Kitchens. (2018). Retrieved March 26, 2018, from https://www.hrp.org.uk/hampton-court-palace/explore/henry-viiis-kitchens/#gs.R2yTtV4
- Hidden history, discover the Lost Palace of Whitehall. (2017). Retrieved April 05, 2018, from https://www.hrp.org.uk/media-and-press/press-releases-2016/a-hidden-history-discover-the-lost-palace-of-whitehall/#gs.7xVey7I
- History of Historic Royal Palaces. (2018). Retrieved March 25, 2018, from https://www.hrp.org.uk/about-us/history-of-historic-royal-palaces/#gs.bVSFgA8
- Jackson, A., & Kidd, J. (2008). Performance, Learning & Heritage (pp. 10-18, Rep.).

  Manchester, UK: University of Manchester.
  - Kidd, J. (2011). Performing the knowing archive: heritage performance and authenticity, International Journal of Heritage Studies, 17:1, 22-35
- Krüger, H. (2009). Planning and layout of museums: The central importance of the room, International Journal of Museum Management and Curatorship, 3(4), 351-356
- Lang, C., Reeve, J., & Woollard, V. (2009). The Responsive Museum: Working with Audiences in the Twenty-First Century. Surrey (England): Ashgate.
- Murphy, A. (2015, December 01). Technology in Museums: Making the latest advances work for our cultural institutions. Retrieved April 17, 2018, from http://advisor.museumsandheritage.com/features/technology-in-museums-making-the-latest-advances-work-for-our-cultural-institutions/
- Rennie, L., & McClafferty, T. (1995). Using visits to interactive science and technology centers, museums, aquaria, and zoos to promote learning in science. Journal of Science Teacher Education, 6(4), 175-185
- Rohloff, I. (2009). Museum Gallery Layouts and Their Interactions with Exhibition Narratives and Space Use Patterns: An Investigation of the YCBA, the MoMA and the HMA Galleries: University of Michigan Library.
- Royal Collection Trust. (2017). Admissions to the Royal Estate in the United Kingdom in 2016/2017, by establishment (in 1,000)\*. In Statista The Statistics Portal. Retrieved

- April 12, 2018, from https://www.statista.com/statistics/373081/uk-royal-tourism-admission-numbers-by-establishment/.
- Savoy, G., Venkatesh, A., Walker, L., & Wolfang, E. (2014). New Methods in Understanding Visitor Experience: Evaluations of the Citi Money Gallery at the British Museum. Worcester, MA: Worcester Polytechnic Institute.
- The Story of Hampton Court Palace. (2018). Retrieved March 25, 2018, from https://www.hrp.org.uk/hampton-court-palace/history-and-stories/the-story-of-hampton-court-palace/#gs.0OpIGBY
- Wali, A. (1999), Destination Culture: Tourism, Museums, and Heritage. American Anthropologist, 101: 629-630.
- Williams, P. (2013) Performing Interpretation. Scandinavian Journal of Hospitality and Tourism 13:2, pages 115-126.
- Who We Are. (2018). Retrieved March 26, 2018, from https://www.hrp.org.uk/about-us/who-we-are/#gs.YxssHq0

#### **Appendix A. Sponsor Description**

Historic Royal Palaces is an independent charity organization, tasked with looking after six prominent historic palaces in the United Kingdom. Established by the British government in 1989, the Crown delegated the care of five unoccupied palaces in the greater London area to the organization: Tower of London, Kensington Palace, The Banqueting Hall, Kew Palace, and Hampton Court Palace (Figure 1). After becoming a not-for-profit in 1998, Historic Royal Palaces (commonly referred to as HRP) also took over management of Hillsborough Castle in Hillsborough, Northern Ireland (*About Us* n.d.).

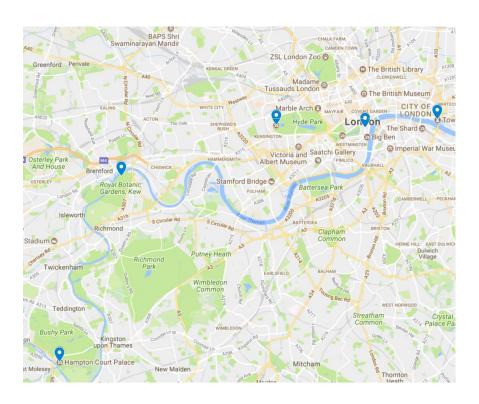


Figure 1: Location of the Five London Palaces in HRP's Care

The British Crown created Historic Royal Palaces as an Executive Agency under the Department of the Environment. Their initial job was to oversee and run the five aforementioned palaces in 1989, although said buildings had been open to the public since the 19<sup>th</sup> century. Six years later, in 1995, oversight of HRP passed to the Department of National Heritage, now known as the Department for Culture, Media, and Sport. However, on April 1, 1998 by way of Royal Charter, Historic Royal Palaces made the transition to independent charity with a Board of Trustees. Though they forewent significant government funding in favor of private sponsorship,

their responsibilities remained the same until April of 2014. It was then that HRP took administrative control of a sixth palace, Hillsborough Palace in Northern Ireland. Unlike the other palaces, which the Queen owns by "Right of Crown", the government bought Hillsborough Palace from the Hill Family in 1920 to use as a Government House. (*History* n.d.).

With headquarters located at Hampton Court Palace, Historic Royal Palaces operates within a region of England and Northern Ireland. During the 2016-2017 financial year, 4.427 million people visited the palaces and 91 million Euro was revenued (Figure 2). In addition, money from retail, functions & events, catering & other concessions, and sponsorship was £27.2 million of that figure. As an independent charity organization, HRP receives little direct funding from the government; the majority of said revenues are from admissions tickets and retail sales.

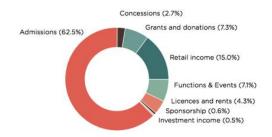
These funds mostly go towards upkeep of the buildings, as well as representations and interpretations, since these are the biggest expenses. However, due to donations from sponsors and money from memberships, the organization recently undertook a £12 million representation of Kensington Palace

Figure 2: HRP's Finances from 2016-'17

(*Trusts and Foundations* n.d.). Involved in palace preservation are 985 paid employees. Additionally, on top of its regular staff, Historic Royal Palaces has 338 volunteers that facilitate in its daily operations. As of 2015, it has a total of 80,000 members.

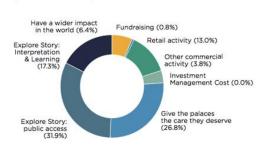
The goal of Historic Royal Palaces is "to help everyone explore the story of how monarchs and people have shaped society, in some of the greatest palaces ever built" (*Who We Are* n.d). Through diligent maintenance and careful preservation of priceless artifacts, HRP has managed to freeze time, in a way, for their guests. Palace rooms have been kept in such good





### Expenditure 2016/17

(Total £86 million)



condition that visitors are given an experience true to that of monarchs who walked the halls before them. Additionally, the organization includes many affiliated historians, who work to expand historical and architectural research (*Who We Are* n.d.). Their hard work, in recent years

has been paying off; attendance has been trending upwards at the majority of their palaces, most distinctly at Hampton Court Palace (Figure 3).

# Visitor trends

05     408       31     5       31     152	1 58	42 138	424 52 222 14
31 5	1 58	42	52
05 408	3 400	394	424
24 562	2 582	595	934
07 2,859	3,077	2,794	2,781
			2016/17 (000's)
	0's) (000's 507 2,859	0's) (000's) (000's) 507 2,859 3,077	0's) (000's) (000's) (000's) 507 2,859 3,077 <b>2,794</b>

Figure 3: Recent Trends in Attendance at HRP-owned Palaces

This organization endeavors to weave learning into everything it does. It aspires for every visitor to discover London and Northern Ireland's palaces and stories, and encourages them to develop a relationship with history. Most recently, Historic Royal Palaces created a Learning & Engagement Programme, with the aim of creating a dementia-friendly heritage site. Through this, guests gain a better awareness and understanding of dementia; additionally, the organization builds a business case for dementia-friendly heritage practice. Aside from dementia programs, HRP organizes various activities in order to interest children in history. These include interactive trails throughout the palace, creative workshops, storytelling, festivals on the grounds, digital missions, and more. The Learning & Engagement Programme also encourages schools and colleges to come and explore its stimulating content at all levels from nursery to A-level. In addition, podcasts and online courses are also offered at their palaces, since so much of their mission rests on stimulation of historical interest (*Policies* n.d.).

In order to achieve their goal and realize their mission, Historic Royal Palaces has focused substantive resources into maintaining Hampton Court Palace, the lavish former getaway point of King Henry VIII (*History and Stories* n.d.). Once a home for the king's court in the 16th century, the sizeable 750 acre grounds of Hampton Court Palace include several gardens (including a puzzle maze and over one million flowering bulbs) and a huge variety of wildlife (*Hampton Court Gardens* n.d.). The self-indulgent king greatly expanded the palace itself, overseeing construction of hallways lined with expensive paintings, large dining rooms that could court thousands of people, and kitchens fit to serve events of enormous size.

Recently, Historic Royal Palaces undertook renovations and re-presentations of Hampton Court Palace. Calling it their "Core Story Project", HRP has two phases planned out. During Phase 1, the efforts will go towards refurbishing Henry VIII's Tudor Kitchens, Service Areas and Base Court. In the following Phase 2, the remodeling efforts will be focused on the Tudor Apartments. The former will open on May 5, 2018, while the latter will be unveiled in either late 2018 or 2019. All of these efforts will include consideration of traditional methods as well as new digital technology, since other competitors in the heritage industry are using more advanced methods. In using new means of heritage display and representation, Historic Royal Palaces hopes to keep Hampton Court Palace "the greatest, most authentic Tudor experience in the world".

# Appendix B. Schedule of Project Objectives

	Week 1 (5/7)	Week 2 (5/14)	Week 3 (5/21)	Week 4 (5/28)	Week 5 (6/4)	Week 6 (6/11)	Week 7 (6/18)
Observe Heritage Sites							
Analyze HCP Methods							
HCP Staff Interviews							
<b>Guest Surveys</b>							
<b>Guest Tracking</b>							
Interpret Data				1			
Final Report Writing							
Final Presentation							

**KEY:** Dark Purple - Whole Week

Light Purple - Partial Week

Light Blue - Happening Continuously (i.e. analyzation, online data collection)

#### **Appendix C. Preamble Used Before Staff Interview**

Hello [Historic Royal Palaces/Other Site] staff-

We are a team of four University students from Massachusetts, USA. We are currently conducting research at Hampton Court Palace to better understand what guests are looking for in a heritage site experience. Interviews will be in-person, as well as semi-structured. We would like to ask you some questions about your experience working [at museums/in the heritage industry/etc.], and what guests seem to like the most. Would you be willing to talk with us? This is optional, and you have the right to review and/or withdraw your reponses.

If the staff says yes - "Thank you so much. Please do not feel pressured to answer in any particular way, we are not recording your name and will not be offended by any negative responses."

If the staff says no - "Okay, we understand completely. Have a nice day."

### **Appendix D: All Staff Interview Questions**

- 1. How long have you been working at [heritage site]?
- 2. What is your role at [heritage site]?
- 3. Has [heritage site] had any recent renovations, gallery changes, technology upgrades, etc.?
- 4. How have the interpretive methods changed in the time you have been working here?
- 5. Which interpretation method(s) (i.e. live performance, digitally-guided tours, etc.) are most popular with guests here?
- 6. What are the positive and negative impacts of having technology at a historic site (if applicable)?

#### **Appendix E: HCP Staff Questions**

- 1. How long have you worked at Hampton Court Palace?
- 2. What is your role here at HCP?
- 3. How do you feel live interpretation impacts the visitor experience here?
- 4. What are the positive and negative impacts of having technology at a historic site (or: what is the place of technology in a historic site)?
- 5. How have interpretive methods changed in the time you've been working here?
- 6. How do you think the re-presentation of the Tudor Kitchens will impact the guest experience?
- 7. What kind of impact do you think the new technology in the Tudor Kitchens has?
- 8. What is there to improve about the Tudor Apartments?

#### **Appendix F: On-Site Script**

Introduction - "Hi, my name is \_\_\_\_\_. I'm a University student working on behalf of Hampton Court Palace. We wish to know more about visitors and what you think about the exhibit. Would you be willing to take 5 minutes to answer a few questions? Your participation is entirely voluntary and all your responses will remain anonymous."

If guest says yes - "Thank you so much. Please do not feel pressured to answer in any particular way, we are not recording your name and will not be offended by any negative responses."

If guest says no - "Okay, we understand completely. Thank you and have a nice day."

# **Appendix G: Survey Questions**



Are you a member of Historic Royal Palaces?  O Yes O No
Have you ever visited Hampton Court Palace before?
O Yes, in the last 12 months
Yes, between 1 and 5 years ago
Yes, more than 5 years ago
O No, today is my first visit
Why are you attending Hampton Court Palace? Please check all that apply.
☐ To improve my knowledge of history
☐ It is a main tourist attraction in London
I am personally interested in Tudor history
☐ It is an enjoyable way to pass time
☐ To see old and interesting things
Other

Did you intend to visit the O Yes O No	e Tudor Kitche	ens specifically	?		
If yes, how did you hear	about it?				
<ul> <li>Hampton Court Pala</li> </ul>	ce's Website				
Advertisement					
O Leaflet					
O Poster					
Other					
O I did not hear about t	he Tudor Kitch	ens before comir	ng here		
Where were you when you				ens?	
How effective were the fo	ollowing in bri	nging the Kitch	ens to life?		
	ineffective	moderately ineffective	neutral	moderately effective	effective
Live Cookery Team	0	0	0	0	0
Outdoor Characters	0	0	0	0	0
Graphics and Text	0	0	0	0	0
Sound and Projection	0	0	0	0	0
Props and Utensils	0	0	0	0	0
Audio Guides	0	0	0	0	0

# How engaging were the following?

	not interesting at all	slightly interesting	moderately interesting	very interesting	extremely interesting
Live Cookery Team	0	0	0	0	0
Outdoor Characters	0	0	0	0	0
Graphics and Text	0	0	0	0	0
Sound and Projection	0	0	0	0	0
Props and Utensils	0	0	0	0	0
Audio Guides	0	0	0	0	0

# How would you rate your experience of the Tudor Kitchens?

- O Very Good
- O Good
- O Neither Good nor Poor
- O Poor
- O Very Poor

What would y	ou change or improve about Henry VIII's Kitchens?
How likely is i	t that you would recommend the Tudor Kitchens to friends or family?
O Extreme	
O Somewh	
	ikely nor unlikely
	at unlikely
O Extreme	ly unlikely
Which of the f	ollowing age groups do you belong to?
O 16-34	
35-54	
55 and c	ver
O Prefer no	ot to say