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Thermal Hot Springs

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Thermal Hot Springs – Trends

Rupesh Penkar and Bell Tanyatanaboon of Bangkok-based Horwath HTL Health and Wellness explore the background of the global hot spring industry and its economic performance to determine the industry’s strengths, opportunities, and future trends.

Brief Background of Global Hot Springs

Hot springs are known historically as the first “spas” with roots tracing back to 3,000 B.C., alongside the beginning of ancient civilizations. The natural thermal springs of the Indus Valley, located in modern day Pakistan were the first evidenced multi purpose use hot springs (Erfurt-Cooper & Cooper, 2009). Many early civilizations were well aware of the benefits of water both heated and mineralized, the Romans, Egyptians, and Greeks were engaging in bathing practices that were well ahead of their time and that then largely died out in the following centuries. The Population of China and Eastern Asia, however, has long recognized the use of hot springs as a healing and health resource and their use continued throughout.

As the 20th Century began, there was a significant resurgence in the use of hot spring and thermal bathing as a method of cure and prevention. Famous spa towns came back to life as modernization lead the hot springs towards becoming commercial ventures. One such example in the Czech Republic is the well-known thermal bathing centre of “Karlovy Vary,” which became one of the leading thermal spring providers in the early part of the century and in 1911 A.D., it recorded a guest count of 70,935 guests, adding to its fame and attracting many European elites of the day. Throughout the 20th century, natural hot springs and their benefits were also rediscovered and developed in many countries famous today for their hot springs, including Hungary, Iceland, Portugal, China, Taiwan, and Argentina, while Japan and Tunisia took this a step further in setting up industries focused on hot spring tourism, regulated by regional offices and commissioned study and research (Erfurt-Cooper & Cooper, 2009).

Returning back in time, the Hebrews around 200 B.C. recognized the benefits of one of the world’s largest heated salt pools, the Dead Sea and this was used for body purification and continues to attract millions of visitors each year from around the world to experience the water. In the 16th century, the use of water for medical purposes could be clearly seen in Europe and the practices of “Balneotherapy,” later followed by hydrotherapy in the 19th century which gave easy access to ‘treatment’ for rich and poor alike. The world-renowned Dutch artist, Vincent van Gogh used hydrotherapy as a treatment after being diagnosed with acute mania and epilepsy (Viking, 1969; Fuller, 1990; Touchstone, 1990). Dipping the body into a large hot water tub several times a week was believed to help the body get rid of toxins according to Father Sebastian Kniepp, an early pioneer of hydrotherapy (Smith & Melanie, 2009). In the case of hot springs, the healing benefits actually come from the minerals contained in the water which is regarded as “Geothermal Mineral Water,” obtained from raindrops and/or snowfall flowing through the cracks of rocks near active volcanic areas or hot underground environments; the deposited water then absorbs minerals formed from underground heat and pressure and releases them back to the surface (Erfurt-Cooper & Cooper, 2009; GWI, 2015). Several types of mineral are usually found in hot springs and are known to provide different benefits to health, for example, Sulphur can improve skin conditions, Boron can enhance brain activity and give our bones more strength, Silica can prevent dementia, and Lithium can stabilize moods and lessen depression (Hotel Business Review, 2016). According to the World Health Organization (WHO), thermal spring waters are believed to positively impact different kinds of disease and conditions of fatigue such as joint, kidney, and respiratory problems, however, such health alleviations need to be confirmed by further scientific studies. Some other common benefits attributed to soaking in hot springs include strengthening the immune system, improving skin conditions, enhancing blood circulation, promoting detoxification, and relaxing mind and body. In pursuit of these health benefits, all types of people visit hot springs to not only deal with health problems, but also as a preventative measure in maintaining good health and vitality.

Although originally the main use of Thermal baths was for medical purposes, many people frequented thermal springs for social interaction and gathering as seen in Iceland which is home to an abundance of municipal thermal spring pools. According to the article “Iceland’s Water Cure: Can the secret to the country’s happiness be found in its communal pools?” by the New York Times Magazine, Icelanders have historically used public thermal pools as an affordable social space during long arctic influenced winters with no sunshine for 19 hours each day,
coupled with the fact that the country was forbidden from selling beer until 1989 limiting other traditional social venues. As a result of social and health benefits from immersion in thermal spring water, Iceland was ranked as the World’s Second Happiest Countries in 2015, which in turn helps the country attract more visitors annually (+29.8% visitors in 2015).

**Top Hot Spring Destinations**

Hot spring destinations are situated throughout the world and offer different types of facilities and services; they have all continued to thrive inline with changing wellness travel trends and increased health awareness among travelers. The following table identifies the world’s most popular hot spring destinations mainly due to their history, healing benefits, and prevalence in tourist focused mediums, including travel websites, wellness magazines, and books.

<table>
<thead>
<tr>
<th>Hot Spring</th>
<th>Location</th>
<th>Water Element</th>
<th>Facilities and Selective Treatments</th>
<th>Special Features</th>
<th>Accommodation</th>
</tr>
</thead>
</table>
| Blue Lagoon           | Iceland     | • 37 to 39°C  
• Mineral salts, sulphur and silica-heavy mud | • In-water massage, steam, sauna and other spa treatment available        | • Wide variety of Blue Lagoon skincare products and clinic  
• Social gathering spot                                                          | Yes            |
| Beppu Onsen           | Japan       | • 39 to 43°C  
• Main mineral sulphur  
• Second largest hot spring water | • Small bathhouses  
• Beppu Hell Tour  
• Mud bath, steam bath, sand bath  
• Classic bath of 43 to 45°C | • Beppu hell tour/red pools  
• Consist of eight different springs                                               | Yes            |
| Peninsula Hot Springs | Australia   | • 34 to 43°C  
• Sodium chloride bicarbonate spring | • Bath house with sauna, family pools, massaging thermal mineral showers  
• Spa dreaming centre offering massages, private pools, and Shirodhara       | • Australia's first natural hot spring spa centre  
• Own branded spa products  
• Li’Ty massage treatment with Aboriginal massage techniques                    | Partner with local lodging providers                                        |
| Yambajan              | Tibet       | • Cooled water of originally 70°C  
• High content of sulfated hydrogen at 14,764 feet above sea level | • Simple hostels/guesthouse, open air swimming pool, geysers               | • Hydrothermal energy with amazing scenery  
• Active alkali-liquor geysers                                                   | Yes            |
| Banff Upper           | Canada      | • 37 to 40°C  
• Minerals sodium, magnesium, bicarbonate, calcium and sulfate | • Bathhouses, spa offering massages, scrubs, treatment                     | • Fairmont Banff Springs resort  
• Outdoor hot spring pools                                                       | Yes            |
| Tabacon               | Costa Rica  | • 25 to 50°C  
• Low sulphur content  
• 97% rain based and 3% magma based | • Spa, steam, sauna, massages, hydrotherapy and local treatments  
• 5 pools with one waterslide                                                   | • Tabacon Grand Spa Thermal Resort  
• Completely natural with water flowing by gravity                               | Yes            |
| Glen Ivy              | USA         | • 40°C  
• High concentration Sodium Sulphate and Calcium deposits | • Therapeutic red clay mud bath  
• Indoor Roman Baths, steam and dry sauna rooms, mineral water pools, aqua classes  
• Treatments available include facials and full body massage                  | • Nineteen unique pools which include multiple thermal mineral baths, hot and cold plunge pools at 13 degrees Celsius, saline pool and traditional lap pool | Yes            |

*Source: Property websites and Organic Spa Magazine*
Hot Springs in Different Countries

The importance of hot springs is often tied to culture, religion, and regulation. For instance, the Native Americans usually named a hot spring according to their spiritual belief in the healing power of thermal water, such as “Saratoga,” meaning ‘Great Spiritual Place for Medicinal Water’; this is now one of North America’s most famous spas. While in Confucianism-oriented countries, people believe in the purifying power of cleanliness so going to hot springs helps them with this internal and external cleansing. Health customs, laws, and regulations on hot spring operation vary from country to country. In Japan, visitors are generally not allowed to wear any clothes in a hot spring, but they must cleanse their body in a designated place before soaking in the springs. By contrast in western countries, the use of bathing suits varies by location, each particular hot spring establishment will display signage or educate guests in what dress code is appropriate before arrival and onsite.

According to Japanese hot spring regulations, hot springs in Japan are considered as “Therapeutic Springs” when the water above ground level has a consistent temperature of at least 25 degrees Celsius and contains certain concentrations of mineral elements. Regulations in Germany allow natural springs to be classified as curative when their surface waters consistently measure at least 20 degrees Celsius or above. With different rules and regulations across the globe, does this limit the growth of the industry? Or make it difficult for the consumer to understand the true benefits of thermal bathing? The following section provides information about the current economic situation of the global hot spring industry.

Global Hot Spring Economy

In 2013, the Global Wellness Industry recorded USD 3.4 trillion in total revenues; roughly 15% of this revenue was generated from Global Wellness Tourism (USD 494 billion), 2.7% was from the Global Spa Sector (USD 94 billion), and about 1.5% from the Global Thermal/Mineral Spring Sector (USD 50 billion) (Global Wellness Institute, 2014). The growth of Wellness Tourism is predicted by Stanford Research Institute (SRI) International to increase by 9.1% annually to reach USD 642 billion in 2016. Due to the constant growth of the Spa Industry, which has continued to increase by 7.7% each year since 2007, Horwath HTL Health and Wellness believes that the spa industry will achieve USD 117 billion this year. The investment in hot springs resorts has also grown by 10% from 2010 to 2013. Driven by wellness and medical tourism trends, the revenue from the Thermal/Mineral Spring sector is expected to grow at 5% CAGR from USD 50 billion in 2013 to USD 58 billion in 2016. Such projected growth can be attributed to the fact that visiting hot springs has been a significant ritual in many countries and increased the popularity of health and wellness tourism.
Who is Leading the Way in the Thermal/Mineral Spring Industry?

In many countries daily admission fees to enter hot spring centres and only use traditional facilities (e.g., hot spring pools) are quite low. Offering different types of spa services at a hot spring establishment as add-on services usually help hot spring businesses to earn more market share than those facilities without spa services. In 2013, 64% of the industry’s total revenue (USD 32 billion) was generated from hot springs with spa services, double the revenue amounts of the hot springs without spa services (Global Wellness Institute, 2014). To maximize the revenue of hot spring’s operations, it is recommended to offer a wide range of spa treatments in addition to the establishments main hot spring amenities.

Furthermore, in 2013, the Asia-Pacific region led the Thermal/Mineral Spring industry in terms of the number of hot spring establishments and total revenue, which were recorded at 20,298 establishments and USD 26.75 billion respectively, followed by Europe (5,035 establishments, USD 21.65 billion), Latin America and Caribbean (961 establishments, USD 0.87 billion), and North America (203 establishments, USD 0.49 billion) (Global Wellness Institute, 2014). Clearly, China was ranked first as its hot spring businesses generated the highest revenue both in the region and at the global level. China’s hot spring industry has been steadily growing since 2005 and the industry realized growth of 37% CAGR from USD 7.5 billion in 2011 to USD 14.08 billion in 2013, which gives a promising outlook to the industry (D’Hondt, Brien, Sigg, nad Voide, 2014). By the end of 2012, the total number of visitors to hot springs in China reached 60 million. In addition and according to the Global Wellness Institute, China is now spending approximately USD 19.5 billion per annum to implement 560 hot spring resorts and is planning to invest an additional USD 48.9 billion in developing 200 brand new hot spring properties.

Although China is known as the leader within the hot spring industry, Japan can also be regarded as one of the market leaders due to its long-term hot spring’s reputation and due to its highest number of hot spring establishments in the world; officially registered at 17,653 in 2013 (Global Wellness Institute, 2014), attracting over 140 million visitors annually (Messerlu & Oyama, 2004; Boekstein, 2014). In 2015, Japan welcomed roughly 19.4 million foreign visitors, which was a 47.1% increase from the previous year and the country is expecting to draw around 70 million foreign visitors, including up to 24 million repeat foreign visitors by 2020 spurred on by the upcoming Olympics in the same year (The Japan Times, 2016). Japan also targets to earn around JPY 8 trillion
from foreign tourists by 2020, which is more than twice the amount of foreign tourist spending in 2015 (JPY 3.48 trillion). The hosting of this world-focused event in the near future will undoubtedly mean an increase in inbound tourism and potentially an extended effect into all areas of tourism including hot springs.

Europe is the world’s second strongest region in the thermal mineral spring businesses. It is known to be home to several thermal mineral bathing sites that have gained global recognition, such as Marienbad in the Czech Republic, Baden Baden in Germany, and Montecatini in Italy. Currently, Iceland is a leading thermal mineral spring destination; it continues to grow rapidly with over 600 natural hot springs located around the country. One of the world’s most famous hot springs located in Iceland named “Blue Lagoon,” has now expanded its thermal spring pool to over 8,500 square metres, containing 9 million litres of mineral water. In conjunction with this, the property launched a skincare clinic on site offering different aesthetic treatments and services based around the healing and restorative effects of the hot spring minerals. As one of Iceland’s most visited tourist attractions, in 2014, Blue Lagoon attracted 700,000 visitors to the property (World Geothermal Congress, 2015). In the USA, many hot spring destinations are now undergoing major renovations meaning that the industry within the country can soon expect better facilities with new concepts matching modern health and wellness trends. Specifically, in California where hot springs and natural thermal pools have existed commercially for over a hundred years, this resurgence is generating significant addition to annual revenue. Some examples of commercially successful hot springs in California that have gone through this improvement process include Desert Hot Springs, Glen Ivy Hot Springs, and Sycamore Mineral Springs.

To account for such growth and in looking forward at the future of the global hot spring industry, the following section identifies the industry’s strengths, opportunities, and upcoming trends.

### Strengths and Opportunities of Global Hot Spring Industry

Based on the physical and economic background of hot springs, there are several strengths and opportunities associated with hot spring operations that can be used for furthering the growth of the industry and improving industry performance in the long term.

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<tr>
<th>Strengths</th>
<th>Opportunities</th>
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<tr>
<td>Inexpensive and sustainable to operate because the water is naturally occurring can be self-heated and used as a power source for other types of amenities.</td>
<td>More spending among health and wellness tourists, which can drive the growth of the global hot spring industry going forward.</td>
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<tr>
<td>Offers health and wellness benefits due to the many types of beneficial minerals found in the thermal water.</td>
<td>Remodel hot spring facilities by creating more innovative settings with comfortable accommodation and other necessary lodging components that can add more value.</td>
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<tr>
<td>Compared to other artificial and man-made spa facilities, its physical settings, and natural attributes can create a unique wellness experience.</td>
<td>Incorporate other types of spa services to create a more profitable facility since hot springs with spa services often gain more market share than those without other services.</td>
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<tr>
<td>Characterized by unique attributes, which have been created by various natural conditions. Each hot spring contains different mineral elements and has different temperatures.</td>
<td>Rediscover and improve thousands of undeveloped hot springs into commercial hot spring establishments.</td>
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<tr>
<td>Great family activity because it is an activity that is suitable for all ages.</td>
<td>Capture more younger guests in addition to baby boomers, inline with current health and wellbeing trends.</td>
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<tr>
<td>Earn higher operating margins and annual revenue growth due to lower operating and labor costs.</td>
<td>Can be used as one of the marketing tools to boost overall wellness tourism growth in a particular city or region.</td>
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Trends of Global Hot Spring Industry

The growing trend of fitness and wellbeing in the late 20th century continues to pull a large number of visitors to visit hot springs for health and wellness. Many people are now visiting hot springs not only to treat their sickness, but also to prevent ill health and maintain wellbeing. Horwath HTL Health and Wellness believes that the hot spring market’s growth will be influenced by the following trends moving forward.

- **Upgrading and Modernizing**
  In recent years, many European hot spring destinations have started to upgrade and made hot spring facilities more modern to accommodate current demands and wellness needs. Some of them are thus investing heavily in renovation and developing new exciting wellness offering combined with other sport and adventure activities.

- **Baby Boomers and Gen X as Major Guests of Hot Springs**
  Many people today pay more attention to their overall health and wellbeing as they start to age, especially those Baby Boomer and Gen X consumers who are approaching middle age. They are now more interested in indigenous and natural healing practices and traveling to places to satisfy their physical wellbeing. Most of the North American and European hot spring establishments have experienced growing demands from these consumers and the industry is expected to grow in the future as their consumers appreciate nature and look at the thermal bathing experience in a sustainable way.

- **Growth in Multigenerational Travel Creating Demand**
  As people demand more experiential travel, including adventure, health and wellness, and transformational activities; hot spring destinations have become one of the destinations of choice. In line with this new trend, Gen X and younger generations have also started experiencing hot spring as they are now recognizing the benefits and healing powers of hot springs.

- **Rise of Middle-class Driving Hot Springs’ Growth**
  Rising middle-class income, more developed infrastructures, and more affordable air travel has increased demands for wellness related tourism, particularly in Asia. Therefore, many thermal springs in countries like India, Indonesia, the Philippines and China are adding essential wellness components into their hot spring facilities, corresponding to the middle-class needs, such as having different choices of healthy, often organic food, exercise programs, and other beauty and spa treatments.

- **Innovative Marketing Strategies**
  The Government of some countries like Costa Rica and Iceland are aggressively promoting their countries as hot spring destinations, which are rich in biodiversity and geothermal resources to attract more international visitors. Other developing countries such as those within Africa are creating and offering unique thermal spring products combined with healing methods and remedies that can attract more international visitors to their hot springs.

- **More Private Acquisitions to Enhance Hot Springs’ Growth**
  To develop and improve hot spring facilities an investment company would aim to financially invest in the developed hot spring operations and create more superior hot spring establishments, which will increase the attractiveness of the property to the world market. A good recent example can be seen in Japan where Bain Capital Partners bought a 100% stake in Japanese hot springs and hotel operator, Ooedo Onsen Holdings in early 2015. Bain recognized the capability of the business, which is projected to reach revenues of USD 295 million (+30% from 2015), and took advantage of this growing trend in the hot spring industry.
Conclusion

Hot springs have a very long history in the spa world and soaking in hot springs has been recognized as a way to cure, prevent, and improve health. Hot springs can be found in every corner of the world, while China and Japan have traditionally been seen as the Global Hot spring’s Champions, generating more than 50% of the industry revenue. China is the leader in terms of the world highest revenue generation, but Japan holds the record for the world’s highest number of hot spring establishments. Until now, the hot spring industry has continued to grow and attract more and more visitors and is expected to achieve nearly USD 60 billion in revenues by the end of this year. Hot springs’ characteristics are unique in nature, making them stand out from other spas’ facilities and drawing people from across the globe. Opportunities are still out there as many hot spring locations are undeveloped and underdeveloped. As the statistics from the Global Wellness Institute show, hot spring establishments with other spa treatment options command more than double the revenue of the hot springs without optional services. Many hot spring operations can be further developed to include treatment provision with a goal to make them more profitable. Last but not least, hot spring operators should be aware of future hot spring trends, which will fuel industry growth, including how to attract their market segmentation, keeping up with facility development and renovation, and starting to renew their market strategy, and thinking of a cross-sector partnership.

By exploring the historical and economical background of global hot springs, we would like to conclude that as the wellness spending has been increasing globally, there is an opportunity for hot springs to gain higher global market shares, especially from European and North American visitors as they have a higher purchasing power. This can be observed by spa revenue growth in Europe and North America markets, which grew by 62% and 35% respectively between 2007 and 2013 (Global Wellness Institute, 2014), and the most recent numbers from ISPA 2015 show that spa revenue in the US grew by 5.3% to USD 15.5 billion in 2014 and number of spa visits increased by 6.7% to 176 million in 2014. Also, the average spend per guest in hot springs with other spa services typically exceeds USD 120, which is likely to be greater than the average daily guest spend at traditional US spas in 2014 (USD 88).
As a Consultant for Horwath HTL Health and Wellness, Bell is responsible for conducting market research and feasibility for wellness-oriented hospitality and mixed-use development projects. Her specializations include analyzing overall market situation, determining potential competitors and their performance, and recommending appropriate development strategies. Bell holds a Master of Science in Hospitality and Tourism Management from Purdue University, USA. Bell was also a co-author of the academic article “Conceptualizing Transformative Guest Experience at Retreat Centers,” published in the International Journal of Hospitality Management (IJHM) and “A Strategy of Duality: New Choreography for the Marriott/Ritz-Carlton Dance,” published in the Journal of Hospitality & Tourism Cases (JHTC).

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